Our Tobacco Dilemma

N.C.'s top crop: part of our lives but bad for health

Nourished by North Carolina's peculiar combination of climate and soil, the first green shoots of this year's tobacco crop already tint newplowed seedbeds.

By summer's end, we will have reaped the harvest — leaves whose cured goiden color symbolizes what tobacco and its prime product, cigarettes, have meant to our economy and culture.

But this year, with conclusive new evidence that smoking robs people of their health, the harvest is beginning to represent something else.

Tobacco has become our dilemma, a matter of stark contradictions: It is a positive part of our cultural and economic lives whose end product — cigarettes — kills some of us.

Tobacco is directly a part of the lives of the estimated 1.8 million adult Carolinians — one of every three — who smoke cigarettes. Thousands of younger people, some below age 12, also smoke in North Carolina and South Carolina.

smoke in North Carolina and South Carolina.

Mostly, people smoke because they enjoy it.

"When I have a concert or after the first half
or after the concert, it's kind of a relief for me to
smoke a cigarette ...," says Leo Driehuys, 46,
music director for the Charlotte Symphony who
smokes a pack a day. "When I have an evening
off and I have a drink before dinner, I like to
smoke and talk to my wife. It gives a kind of
cozy feeling."

Tobacco touches everyone

Whether Carolinians smoke or not, tobacco touches nearly everyone's life in some way. Its impact is multiplied because the entire tobacco industry — from growing to cigarette manufacturing — is concentrated in North Carolina.

Tobacco is the base of our small farms, our top agricultural product, bringing in more than \$1 billion for growers in \$1 of North Carolina's 100 counties. More than 133,300 North Carolina families are associated with tobacco farms.

Waterbousemen sell the crop in 49 North Carolina Supports the country of the carolina families are associated with tobacco farms.

Warehousemen sell the crop in 49 North Carolina market cities. More than 27,000 North Carolina workers made more than half the nation's cigarettes last year.

Federal, state and local governments collect more than \$6 billion annually in tobacco-related

Tobacco money built Durham and Winstonsalem, a city where the smell of the leaf hangs in
the downtown air. Tobacco profits helped create
Wake Forest University, Duke University, Duke
Power Co., the N.C. School of the Arts.

That positive side of tobacco was the only one
most people knew until 1964, the year the first
U.S. Surgeon General's report on smoking confirmed some of smoking's hazards.
As a result, more and more smokers began to
quit, and the nonsmokers' movement grew. The
notion that North Carolina had a dilemma was,
however, seldom seriously addressed.

A frightening message

Two months ago came the latest findings in the 1979 version of "Smoking and Health: A Report of the Surgeon General." The message was clear and frightening.
"There can be no doubt that smoking is truly slow-motion suicide," Health, Education and Welfare Secretary Joseph Califano said in the report's preface.

preface.

"... When demographers look at death rates for diseases related to cigarette smoking, they identify 80,000 deaths each year from lung cancer, 22,000 deaths from other cancers, up to 225,000 deaths from cardiovascular disease and more than 18,000 deaths from chronic pulmonary disease — everyone of them related to smoking."

Among other conclusions, the national experts who prepared the surgeon general's report found that smoking:

that smoking.

• Causes lung cancer.

• Is the single most important cause of bron-

chitis and emphysema.

Is one of three key risk factors in heart al-tacks.

tacks.

• Can barm the fetus and the health and development of the baby in mothers who smoke.

In one section of the report, the Center for Disease Control in Atlanta calls cigarette smoking "the single most important factor contributing to premature mortality in the United States."

The report estimates that "...life expectancy at any given age is significantly shortened by cigarette smoking." For example, a two-packaday smoker between 30 and 35 has a life expectancy eight to nine years shorter than a nonsmoker of the same age. ne same age

Surgeon General Julius Richmond, the nation's top physician, points out another problem: "Each year, the health damage resulting from cigarette smoking costs this nation an estimated \$27 billion in medical care, absenteelsm, decreased work productivity and accidents."

The tragedy personified

The hazards are personified in James McManus, 62, a former painter and paperhanger from







Observer Pholos By BILL-BILLINGS (Top), MARK SLUDER (Lower Left), PHIL DRAKE (Lower Right

Tobacco warehouse, cigarette factory and ex-smoker with emphysema illustrate our tobacco dilemma

Monroe, in Union County, McManus (pictured on this page) has been hospitalized on and off for years with smoking-caused emphysema. Smoking 100 cigarettes a day (five packs) when he quit in culty and needs an oxygen tank to survive.

"James can't be helped too much now." says his wife, Glennic. "But if this (publishing picture of McManus using a respirator) keeps someone else from smoking, it will be worth it.

Despite the surgeon general's report, the to-bacco industry does not agree the case against

smoking is closed.
The Tobacco Institute, a Washington-based

lobbying group with 45 employees, spent \$4.5 million defending tobacco and smoking in 1977 — the last year for which reports are public.

"Many scientists are becoming concerned that preoccupation with smoking may be both unfounded and dangerous," the institute says, "Unfounded because evidence on many critical points is conflicting, dangerous because it diverts attention from other suspected hazards . . ."

Gov. Jim Hunt, who comes from Wilson, in tobacco-rich Eastern North Carolina, says we shouldn't "close our eyes to any potential health hazard from the excessive use of tobacco." But, he adds. "There are a number of things that I believe are more harmful — alcohol is one and cho-lesterol and sugar are also harmful in excess." The debate is over

For most North Carolinians, however, the de-bate about the hazards of smoking is over. Only about 1 in 10 people of 401 polled in a special three-county Observer survey disagreed with the conclusions of the surgeon general. Even a large majority of smokers said the surgeon gen-eral is right.

Most of us live in a state that depends on to-bacco. Most of us agree that smoking is bad for

Where we go from here is our tobacco dilem-

INSIDE



Who smokes why: A survey



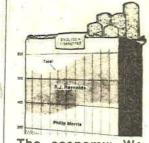
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The Charlotte Observer

RICHARD A. OPPEL, Editor ED WILLIAMS, Editor of the Editorial Page ROBERT SUAREZ, 'General Mo STUART DIM, Managing Edit

JACK CLAIBORNE, Associate Editor



Editor's Note:

The real story of tobacco must tell about people

A newspaper straddling the Carolinas, the greatest tobacco-producing area in the world, faces no simple task in exa-mining the dilemma of tobacco produc-tion and health problems caused by smoking.

tion and health problems caused by smoking.

It's not a matter of confronting the problem.

While some industry and political leaders still refuse to acknowledge a link between smoking and cancer, they are members of a shrinking minority.

Evidence has mounted steadily in the past 15 years. A survey we conducted for this special report demonstrates that even Carolinians, who stand to lose far more than the average American if the tobacco industry is damaged, no longer question the relationship.

No, the difficulty was not in confronting the problem. Nor was it in compiling vast information about smoking, smokers, nonsmokers, farmers, manufacturers, politicans, schools, cancer and research.

The real difficulty was in finding answers.

Observer editors met two months ago,

Observer editors met two months ago, following release of the second surgeon general's report, to plan an exhaustive look at smoking and cancer.

At that time, we felt a conscientious look at the information and arguments might produce a "blueprint" for the Carolinas to prepare for the day when, and if, smoking declined to a level that damaged the tobacco industry.

We found little evidence that the to-

we found little evidence that the to-bacco industry faces great danger.

We see no solution for the economic, health and other problems so comprehen-sive that it warrants description as a "blueprint." We do see some directions worth considering, and offer them for your consideration as an editorial on this base.

Because of historic, economic and cul-Because of historic, economic and cul-tural influences, tobacco and the Caroli-nas may be inseparable. If they are not, it is clear that the parting would come with great agony, with great human suffering. N.C. Gov. Jim Hunt has observed that the issue of manufacturing a product that can damage neath is not the only moral dilemma faced by Carolinians.

He's right. Questions of morality arise in considering government action that could put out of business the small farmer — who has been given incentive to grow tabases.

And what are our moral obligations to the tens of thousands of people who make a living through the manufacturing, sale and distribution of tobacco products? Yet, because we are Carolinians, we

have a special need to understand and deal with the health hazard represented by smoking. Tobacco so affects our future that we cannot deny the danger of smoking. We must prepare for tomorrow. In the past two months, more than 20 observer staffers reporters photocomes.

Observer staffers — reporters, photographers, artists, editorial writers, researchers and editors — have worked as a team to produce this special report.

We think it represents the most company to the product of the property of the product of th

prehensive look at the tobacco industry ever undertaken by an American newspa

we've tried to examine every side of

the smoking-and-cancer controversy.
Where there are conflicts between tebacco industry representatives and medical researchers, we've attempted to sift
through these claims and counterclaims

through these claims and counterclaims for the truth.

This effort has been led by Mark Ethridge III, The Observer's deputy metro editor. Ethridge has spent long days and weekends assigning articles, working with reporters and editing capy.

You'll see bylines and credit lines of many staffers here. A few warrant special mention:

al mention:
Bob Conn, The Observer's medical edi-

Bob Conn, The Observer's medical editor, pored over medical reports and tobacco industry publications and interviewed physicians and researchers to unscramble the thousands of pages written on smoking and health.

Howard Covington, from our Raleigh bureau, interviewed political and governmental figures and some business leaders. Don Bedwell, a business writer, spent days reporting and writing about the commercial and economic meaning of tebacco in the Carolinas.

Photographers Phil Drake, Gary Parker and Mark Sluder traveled many miles to show the people, the factories and the great farmlands that are a part of the tobacco story.

Ed Williams, editor of the editorial

bacco story.

Ed Williams, editor of the editorial pages, persuaded national columnists Tom Wicker, a former North Carolinian, and James J. Kilpatrick, a Virginian, to write columns on tobacco especially for The Observer. They appear on this page, along with Gov. Hunt's essay.

In the final analysis, this special report on tobacco and smoking is about people. You will see the pictures and names of scores of people in this report. Smokers, nonsmokers. Physicians, cancer victims, Farmers, lobbyists. Company presidents, factory workers.

In almost every case, they are Carolinians. This, after all, is about us.

Rich Oppel

To live with tobacco, we must face its dangers

A nation that guarantees its citizens a maximum amount of personal choice is likely to be a nation full of irrational acts and contradictory practices. That is the proof and the joy of freedom. It accounts for the peculiar position of tobacco in the United States. Consider:

 Hardly anyone believes smoking isn't hazardous to health. Most smokers want to quit. Yet U.S. cigarette consumption continues to climb.

Some anti-smokers call for the

government to end its tobacco pricesupport program. They either don't know or don't care that ending the program might well increase the pro-

duction of tobacco and lower its price.
Few North Carolinians want their children to smoke. Yet health N.C. publi less about the dangers of smoking than students could learn from the warning on a cigarette pack.

· Scientists have concluded that cigarette smoking is dangerous; few sensible citizens doubt it. Yet some politicians and tobacco-industry spokesmen treat that conclusion as if it were an old wives' tale.

Given those contradictions, it is not surprising that state and national policies on tobacco are less than models of clear thinking.

Some changes are needed to protect our citizens' health and our state's economy. The changes we recommend are designed to ensure individuals the right to make an informed choice about tobacco. They are:

1. North Carolina's political leaders should continue their efforts to diversify the state's economy. The achieve-ments of Gov. Jim Hunt and his predecessors in promoting diversification of industry are commendable. So are the efforts of agricultural research centers and county agents to help farmers produce other profitable crops. Those undertakings reduce the threat that a reversal in the tobacco industry could is disgraceful.

bring economic disaster to our state.

2. The federal government should continue research into how smoking contributes to heart and lung diseases. Cigarette companies should continue

funding research on safer cigarettes.

3. It is illegal to sell cigarettes to people under age 17 in North Carolina and under age 18 in South Carolina. Those laws are widely ignored. They should be strictly enforced.

4. The public schools fail in their job of health education if they do not teach students the hazards of smoking. Educators and medical experts should develop a model course on the effects of smoking on health - and parents should insist on its use.

5. The Department of Health, Education and Welfare should continue its program of educating the public about the hazards of smoking. Health officials should no more be content with quietly publishing facts about smoking than they were with quietly publishing facts about pellagra.

6. The federal government should not ban tobacco or stop its price-support program. Banning tobacco would lead to nationwide flouting of the law, making criminals of otherwise lawabiding addicts. As Tom Wicker notes elsewhere on this page, stopping the price-support program would have little, if any, effect on smoking.

7. People who enjoy smoking and accept the risk should be free to do so. Millions of smokers, however, want to stop but can't - they are addicts. The federal government should label ciga-rettes "addictive" and fund more research into ways to combat this and

other drug addictions. 8. Politicians spokesmen should stop denying that smoking is dangerous. Few people are misled by such self-serving know-nothingism. This unconvincing deceitJim Hunt



'I believe I have a duty to do all I can to keep our tobacco economy strong.'

Tobacco is an integral part of our economy, and it's important to each of us. I'm optimistic about its future.
For farmers, tobacco in 1978 meant more than a billion dollars in cash. About 270,000 people in North Carolina are engaged in production of tobacco, on about 52,000 farms.

52,000 farms.

Many of those farms are owned or run by relatively poor people. Tobacco is the one crop that can make their farms profitable; no other can bring as great a cash return. Most alternatives, such as corn or soybeans, would give only about a third or half as much. To convert completely to another crop would mean a loss of about \$5,000 to the average farmer.

Many tobacco gliotments are owned by

Many tobacco allotments are owned by elderly people who live on fixed incomes and lease their allotments. For them, to-bacco means independence and a chance for a decent living. for a decent living.

North Carolina is diversifying its agri-

North Carolina is diversifying its agriculture more than ever. We're a leader in the production of swine and poultry; we're making strong gains in sweet potatoes, pick-your-own vegetables and Christmas trees. Through the state universities and agricultural extension, we're continually surveying new crop alternatives and other enterprises. But the world demand for tobacco is strong; we should remain the leader in production.

Sales of tobacco accounted for 32.8 percent of all cash crop receipts in North Carolina in 1977. When you add the wages and salaries of people employed in processing and manufacturing leaf tobacco, ever \$1.3 billion flowed through our economy from the tobacco industry.

Figures for 1977 show an average yearly, employment of 26,800 in tobacco

manufacturing in our state. The sigarette industry in 1977 had an average wage rate of \$5.62 per hour — the second-highest industrial wage in the state. The Philip Morris plant in Cabarrus County will mean more high-wage jobs.

I worked hard to recruit Philip Morris, and I spent many hours trying to find ways to keep the Liggett tobacco factory operating in Durham. I'm now working with our commerce department to bring another tobacco operation from a foreign country to North Carolina; it would make cigarettes for the export market.

I believe I have a duty to do all I can to keep our tobacco economy strong, just

to keep our tobacco economy strong, just as any governor would do for his state's chief product. That's why I've urged U.S. trade ambassador Robert Strauss to do all he can in the Tokyo round of trade negotiations to remove barriers to American tobacco exportation.

While I'm completely committed to maintaining the economic health of our tobacco industry, I don't believe we should close our eyes to any potential health hazard from the excessive use of tobacco. I emphasize excessive, for there are several things that I believe are more harmful—alcohol is one; cholesterol and sugar are also harmful in excess.

I believe we should inform our young people of the possible dangers of excessive use of tebacco, being careful to talk about facts, not propaganda. We shouldn't encourage young people to smoke when they aren't of an age to make decisions for themselves. I believe it's appropriate for parents to urge them not to smoke.

But, after the facts are made available,

people should be allowed to decide for themselves whether to smoke. The feder-al government shouldn't be allowed to regulate this part of our private lives, any more than it should tell us whether we should eat dessert or have a cocktail. There are simply limits to which the federal government should involve itself in our choices about how to live our lives.

And we must keep reminding people that tobacco is vital to our economy and to the well-being of many people who are poor, blacks or Indians with few other opportunities. They benefit most from the tobacco price-support program: that's why I care so deeply about that

I'm confident that tobacco will continue to be the most important crop in North Carolina for a long time, and that the world market will remain strong. At the world market will remain strong. At the same time, we must continue to work hard to bring a variety of industry to North Carolina and to locate it in areas where people haven't had chances in the past to take manufacturing jobs. We must continue to seek new alternative agricultural enterprises. We must continue research into better strains of tobacco, and into less harmful cigarettes. We must keep our eyes open to new facts.

But we shouldn't forget, nor should we let the federal government forget, the livelihood that tobacco brings to the people of North Carolina and the South. To fail to stand strong for our people and our economy would be the poorest sort

N.C. Gov. Jim Hunt grew up on a to-

Tom Wicker

'The farmer shouldn't be left holding the bag if his market disappears.



my children to abstain.

In view of all that, I might be expected to favor a ban on smoking, or an end to the government's price support for tobsc-co, or some other Big Brotherly stroke. But I don't, and not just because an expatriate Tar Heel I'd like to spare my native state's biggest cash crop.

I'm opposed to a ban on smoking because I've read all about Prohibition and because I lived through Ralph Nader's efforts to strap us all into seat belts. Nor has public reaction to the ban on saccharin been lost on me.

A ban on cigarettes wouldn't work any

A ban on cigarettes wouldn't work any better than those other well-meant efforts. And if it didn't, people's determination to beat the ban, the black market that would inevitably develop, the gangsterism that would flourish around it, would only increase the disrespect for law that's already epidemic in this course. law that's already epidemic in this coun-try. Congress would refuse to pass such a ban anyway, and rightly so.

I oppose ending the price support program, too, although purists complain of the contradiction between it and the govthe contradiction between it and the government's efforts to discourage smoking. But the world is full of contradictions, which is what makes it bearable. And it isn't really as if the government were thwarting its one aim — discouraging smoking — with its other program — crop loans as a form of price supports.

Putting an end to the crop loan program would not put an end to tobacco growing abroad. It would not even put an end to tobacco growing here at home. It would create a free market in tobacco and that would only make the business more hexardous for small farmers, put many of them out of business, and probably swell the profits of corporate farms and foreign exporters.

many of them out of business, and probably swell the profits of corporate farms and foreign exporters.

Production conceivably could go up, at least temporarily, since the price support program now requires participants to limit production.

But the best reason for maintaining price supports is that for years now the public has demanded tobacco in various forms (a demand stimulated by cigarette manufacturers, not by tobacco farmers) and the government has encouraged farmers to grow the stuff — through research and agricultural education as well as price supports. As a consequence, more than a half-million families in this country — about 182,000 of them in North Carolina — are associated with tobacco farms, all of them acting in good faith in what always has been a legitimate business.

Investments have been made, careers planned, lives shaped on that fact. The economies of at least 10 states depend heavily on tobacco farming — none more so than North Carolina. All of that would be profoundly and unfairly disrupted by ending the price support program — particularly when such a move probably would have little if any effect on smoking, the real target.

On the other hand, I heartly approve of government efforts to reduce the num-

ber of smokers, as a legitimate public health project. That raises a possibility health project. That raises a possibility ominous to the tobacco grower — that through accumulating evidence of health hazard, or growing success in educating the public about that hazard, or both, smoking might decline so much that cigarette manufacturers would shift into other lines. They are diversifying already, as a hedge against the future.

with that possibility in mind, tobacco state legislators and the U.S. Department of Agriculture might do well to begin thinking of ways to divert, over time, their states' economies and many of their citizens' farms into other pursuits. Low-interest state or federal loans, for example, might be made available to tobacample, might be made available to tobacco farmers needing capital for a move
into some other kind of agriculture, or
for different forms of land use. State agricultural colleges might encourage and
educate students to look to other crops.

The tobacco farmer shouldn't be left holding the bag if in some not-impossible future his market disappears.

And here's a friendly suggestion from one who's always been proud of his home state: Some North Carolinians most heavily benefiting from federal tobacco price supports — not just farmers but warehousemen and other businessmen wight tone who serve the industry — might tone down their fashionable cries of outrage about "big government" and "federal in-terference." Nobody owes more to both than tobacco men.

Tom Wicker, an associate editor of the New York Times, is a native of Hamlet.



James J. Kilpatrick

'By what authority has Califano made himself the great nanny of us all?'

WASHINGTON — Two months have passed since HEW Secretary Joseph Calipassed since HEW Secretary Joseph Can-fano produced his 15th anniversary edi-tion of "Smoking and Health." That re-port has been giving me a slow burn. It deals with every issue in this field but

the key issue:

How did smoking get to be Joe Califano's business in the first place?

The anniversary edition is as thick as two building bricks and equally indigestible. It is replete with tables, charts, graphs and bibliographies. It is a massive,

stupefying, encompassing piece of work.
But it never bothers to justify the role
of government in undertaking to persuade people to stop smoking. If the government's campaign of behavioral modification can't be justified, it should be stopped. By what authority has Califano made himself the great nanny of us all? Califano hasn't the slightest doubt or

reservation about his mission. He tells us he does not mean to use "coercion." ish the thought! But he does mean to use every technique of persuasion, education, advertising and publicity to modify the behavior of one-third of the adult population. He means to change the personal habits of 54 million men and women. His mission is "to help them stop smoking," and he means to spend tax funds toward that end. So presumptuous a solicitude, with our money, is almost enough to

make some of us who have stopped smoking take up the habit again. The rationale that ordinarily is ad-vanced for the government's pushy inter-vention in our private lives is that smoking causes lung cancer; lung cancer victims have to be hospitalized; hospitalization often involves public funds; therefore, Califano is justified, etc. This is the same rationale by which professional do-

gooders justify laws requiring helmets for motorcyclers and airbags in automobiles. But this line of reasoning is fatally defective. Every terminal ailment under moon or sun may require hospitalization.
We all will die sometime, smokers and
nonsmokers alike. The kinds of lung cancer attributed to cigarette smoking constitute but a part of the 350,000 deaths from cancer annually, and all malig-nancies combined produce less than half the deaths that result from heart disease. The point is that nearly 2 million people die every year, willy-nilly; it's absurd to suppose that government, in some godlike role, has a duty to wipe out mortality and lead us into everlasting life, simply to cut down on hospital costs. Neither is it the function of govern-

ment to read us sermons and lectures, and to subject us to behavioral modification, on the grounds of "working days lost" or "life expectancy reduced." In a free society, industrial production is not

primarily the responsibility of the state, but of the private marketplace. What we do with our lives and bodies — where do with our lives and bodies — where we find our pleasures, how we exercise our tastes — is our business, not Joe Califano's. The proper role of government is not to inhibit our liberties, but to make our liberties secure.

This is what a free society is all about. So long as an individual's habit causes no significant harm to anyone else, the state has no right to reshape him in ways that are thought to be more wholesome. There is no evidence that John Doe's smoking is a danger to public health or to public safety. John's own personal health, I submit, is John's own responsibility.

I am not recommending that anyone take up smoking. I quit 20 months ago when I concluded that the pleasure of a good cigarette was outweighed by the damage done to my lungs by inhaling a bet because the but they was my decihot, abrasive gas, but that was my deci-sion. Unlike Califano and the anti-smoking fanatics, I have not tried to impose my value judgment on another soul. The government ought to leave a free people alone! Let us find our own way to heaven or to hell.

James J. Kilpatrick, a nationally syndi-cated columnist, was for 16 years the edi-tor of the Richmond (Va.) News Leader.

OUR TOBACCO DILEMMA: Mark Ethridge III, editor; Rose O'Donnell, layout and design; Nancy Niland, copy-editor. Others who deserve mention: John Daughtry, Bob De Plante, Stuart Dim, Joe Distelheim, Luisita Lopaz, Roser Milesal, Den Sturkey, Ed Williams.

We smoke less and fear it more

By RON FEINBERG

Every day, about one-third of all adult Carolinians cigarettes and suck smoke into their lungs, in search of the satisfaction smoking can bring.

Most, according to a special survey conducted by The Observer, wish they didn't.

The survey found that 75 percent of smokers have tried to quit — many succeeding for more than a year before smoking again. And most smokers are convinced smoking is dangerous. Sixty-three percent agree or strongly agree with the 1979 U.S. Surgeon General's report that evidence of the hazards of cigarette smoking is "overwhelming." rette smoking is "overwhelming." But they keep on puffing.

Bill Ward, 35, assistant director of quality control for a textile mill in Wingate, started smoking after joining the Navy in the early 1960s, quit in 1969 for four weeks, and started back after gaining 10 pounds.

He smokes about a pack of Winstons a day even though he agrees with the surgeon general about

"Well, I'm not absolutely stupid," he says.
"There's a chance you can smoke and won't get sick.
It's a heck of a gamble. If you lose you'll probably be dead, but I've established a habit that's extremely hard to break.
"And the plain fact in Legionarmship and the plain fact in Legionarmship."

"And the plain fact is I enjoy smoking," he adds. "There's no two ways about it, I simply enjoy smoking,"

The Observer survey was conducted in early February in Mecklenburg. Union and Gaston counties. Telephone interviews with 401 persons, 18 or older, became the sample base, meaning the error factor for the survey is plus or minus 5 percent.

More than half the 401 persons interviewed — 59 percent — said they had smoked at one time or another. Thirty-five percent now smoke, 24 percent smoked and quit, and 41 percent have never smoked.

Over the last three decades, there has been a general but erratic decline in the percentage of people who smoke in the United States, according to polls by the National Clearinghouse for Smoking and Health and the American Institute of Public Opinion

the Gallup Poll).

The surveys vary a little. But generally they show that 44 percent of all adults smoked in 1944, 42 percent in 1955, 40 percent in 1968, 43 percent in 1971, 40 percent in 1974, 38 percent in 1977 and between 33 and 36 percent in 1978. That's about 54 million dult smokers teach with the survey of the surv adult smokers today. The largest declines came after the 1964 and 1967 surgeon general reports that connected smoking with lung cancer, then heart disease. Anti-smoking television commercials started regularly during that paried during that period

Nobody's typical

If the percentage of smokers is the same in the Carolinas as across the nation — and The Observer survey indicates it is — 1.2 million adults smoke in North Carolina and about 600,000 in South Carolina.

There are no typical smokers. Age, educational level, race and income don't have much to do with who does or doesn't smoke, according to The Observer survey.

The characteristics most smokers seem to share

other than cigarettes — are a nagging fear they are endangering their health and a desire to quit.

Twenty-five percent of smokers strongly agree with the surgeon general's findings, 38 percent agree and 15 percent disagree or strongly disagree.

But nonsmokers and former smokers are likely to be even more convinced of the dangers. Fifty-two percent of all nonsmokers and 43 percent of all former smokers strongly agree with the surgeon general. And only 4 percent of nonsmokers and 7 percent of all former smokers disagree with the findings.

Quitting, the survey showed, is a long, hard bat-

tle. Forty-one percent of those who have ever smoked don't smoke now, but that probably includes people who simply experimented with cigarettes and didn't

who simply experiments continue.

Of current smokers, 75 percent tried to quit and failed. Sixteen percent of those were able to quit for less than a week, 19 percent lasted a week to a month, 19 percent for a month to six months, 11 percent for six months to a year, and 28 percent longer

Concern about health was the reason most often cited for quitting. Thirty-eight percent of smokers who quit or tried to quit said they stopped for health reasons. Two percent said they quit because smoking was too expensive.

was too expensive.

Eighty-seven percent of former smokers — the successful quitters — had stopped completely and abruptly — cold tirkey.

Seventeen percent who tried to quit and failed said they started back because it made them nervous not to smoke, 13 percent said they just couldn't break the habit, 11 percent said they resumed because they gained weight, and 7 percent said they missed the taste. The rest cited reasons that included foolishness, the need to camouflage the odor of alcohol and the the need to camouflage the odor of alcohol and the influence of friends.

'I'm addicted'

Floyd Holshouser, a foundry worker who lives in Monroe, quit smoking in 1975 after his doctor discovered what Holshouser calls "blistering" on one of his lungs. For 10 months, he managed to do without cigaritation of the state of the control of the state of the sta rettes before starting again.

"The problem cleared up, but I was very tense, "The problem cleared up, but I was very tense, nervous all the time," he says. "I don't know what's in cigarettes, but there's something that relaxes me, and I find it hard to do without it."

Holshouser says he thinks smoking is hazardous to his health, but he can't do without cigarettes.

"I started back against my doctors orders," he said. "I'm addicted. I have to smoke."

Like Holshouser many employer said habit is the

Like Holshouser, many smokers said habit is the reason they smoke. In fact, habit is almost as important as enjoyment as a reason people smoke, the sur-Forty-four percent of current smokers interviewed

Forty-four percent of current smokers interviewed in The Observer survey say they smoke because they enjoy it. 39 percent say they smoke from habit and 13 percent say they smoke to relax.

The Tobacco Institute, a Washington-based industry lobbying group, used a recent national advertisement to describe why people smoke. Smoking is "a small ritual that welcomes strangers, provides companionship in solitude, fills 'empty' time, marks the significance of certain occasions and expresses personal style," the ad said.

Most smokers in The Observer survey say they don't light up at any particular time, 11 percent say they smoke only after meals and 6 percent say they smoke only after meals and 6 percent say they smoke only when they are nervous.

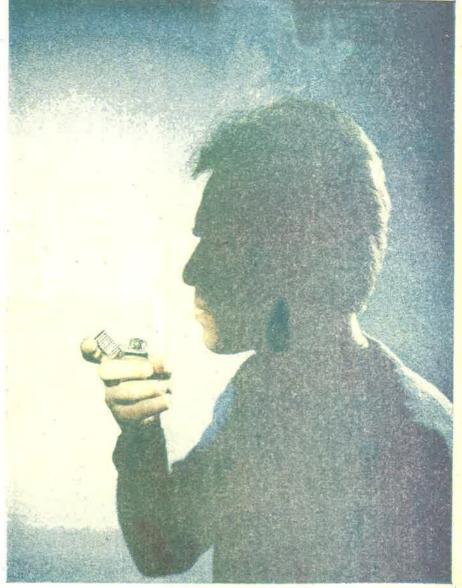
About half the smokers in The Observer survey say they smoke between a half a pack and a pack of cigarettes a day. About 17 percent say they smoke more than two packs a day.

Filter cigarettes are far and away the favorite of surveyed smokers — preferred by 89 percent. Sixteen percent say they smoke low-tar "light" brands.

Smokers get started early in life. Five percent lit up for the first time before they were 12. 7 percent between 12 and 14, 18 percent between 15 and 17. Nineteen percent started smoking between 18 and 21.

The Observer survey deals only with adults. But there is ample evidence smoking among young people is widespread. Nationally, the surgeon general estimates 6 million people between 13 and 19 smoke — and there are 100,000 smokers under 12.

A 1978 study by the Charlotte Drug Education Center indicated slightly more than 50 percent of all girls in Charlotte-Mecklenburg junior and senior high schools have at least experimented with cigarettes, compared with 44.6 percent of all male students. The survey says about 20 percent of all fifth through 12th



Observer Photo By GARY PARKER

There are no typical smokers. Age, educational level, race and income don't have much to do with who does or doesn't smoke, according to The Observer survey.

graders smoke at least once or twice daily.

Ronnie Cromer, 17, a senior at West Side High in Anderson, S.C., started smoking regularly when he was 16 and recently quit after he coughed up blood.

"My father has smoked all his life," he says. "It came naturally. Besides, everyone was sort of doing it. I liked smoking in a way. I really don't know how to describe it."

Here are other survey stellation which

Here are other survey statistics which compare smokers to nonsmokers:

 Smokers are much more likely to have personal doctors who smoke. Twenty-four percent of smokers say their doctors smoke, compared to 8 percent for nonsmokers and 6 percent for former smokers.

 Smokers are about twice as likely to be mar-ried to people who smoke than are nonsmokers and former smokers. Otherwise, marital status and smoking appear unrelated. Sixty-three percent of smokers are married and 62 percent of nonsmokers are mar-

People who quit smoking are slightly more likely to have relatives who suffer from a smoking-related disease. Twenty-eight percent of former smokers have relatives with such diseases, compared

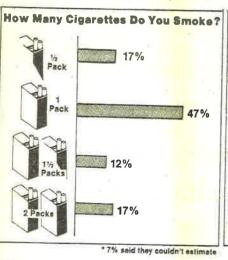
to 20 percent of current smokers

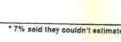
to 20 percent of current smokers.

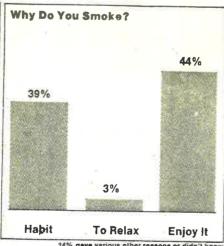
• Although former smokers tend to be somewhat better educated than smokers, education levels don't relate strongly to whether people smoke. Ten percent of smokers are college graduates, compared to 14 percent of nonsmokers and 29 percent of former smokers. Twenty-nine percent of smokers have less than a high school education, compared to 30 percent for nonsmokers and 23 percent for former smokers.

Former smokers are a little more likely to have higher incomes than smokers and nonsmokers but the differences aren't great. Forty-two percent of smokers say they earn less than \$15,000 annually, compared to 44 percent of nonsmokers and 29 percent of former smokers. Eighteen percent of smokers say they earn more than \$25,000 annually, compared to 12 percent of nonsmokers and 24 percent of former smokers.

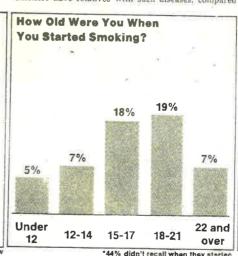
Men are slightly more likely to be smokers than women. Seventy-two percent of men and 49 per-cent of women say they have smoked at one time. Forty-six percent of men and 32 percent of women say they smoke now.



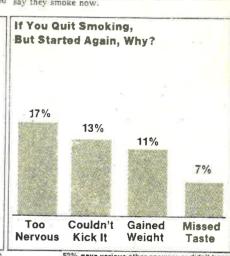




14% gave various other reasons or



*44% didn't recall when they starte



52% gave various other answers or didn't know

Earliest tobacco ad, from Lorillard, 1789.

From Indians, the gift of tobacco

Tobacco has its roots buried deep in American history.

Europeans discovered the weed when Christopher Columbus stum-bled onto the New World in 1492 and spotted the natives drawing smoke through their nostrils with a Y-shaped pipe called a tabaca.

Columbus and the explorers that followed tried the stuff inside the Indians' pipes, liked the sensation and thought the people back home might be willing to pay for their

The puffing started — in France Portugal, 1558; Spain, in 1556; Portugal, 155 1559, and England, 1565.

At first, only the nobility smoked, stuffing ground bits of to-bacco in a long, slender pipe. The practice flourished, despite the efforts of King James I, who for-bade the use of the "sot-weed."

A few innovative conquista-dores, tired of the pipe, tried wrapping their tobacco in rolls and began exporting their find — cigars — to those who could pay the price in Senie the price in Spain.

The beggars of Seville, unable to afford such luxury, settled for discarded cigar butts, shredded and rolled into scraps of paper.

These poor people's smokes ere known as papeletes or ciga-

The smoking of cigarettes — the word is an adaptation of the Spanish cigarro meaning little cigar — became common in Eu-rope around 1855 when French

and British soldiers picked up the

habit from Turkish officers during the Crimean War.

In 1884, the industry got a major boost when Washington Duke's tobacco company in Dur-ham introduced the first effective cigarette rolling machine at its Durham factory.

After a slow start, cigarettes gained respectability in the United States around the turn of the cen-

R.J. Reynolds Tobacco Co. of Winston-Salem introduced the first blend cigarette in 1913. A mixture of bright, burley, Maryland leaf and imported Turkish tobacco, it was called "Camel" and quickly became one of the first national brands.

By the Roaring Twenties, men

and women were puffing in earnest, enjoying their cigarettes with bathtub gin.

Cigarette sales in the United States increased about 600 percent between 1915 and 1930, 110 per-cent during and after World War II, then dipped in the early '60s after reports connecting cigarette smoking with lung cancer.

Sales picked back up by 1965, reached 500 billion cigarettes a year by the end of the decade and peaked at 650 billion a year by the mid-1970s.

Last year, Americans bought 615 billion cigarettes — 7 billion of them foreign brands, according to the U.S. Department of Agricul-

- Ron Feinberg



Everybody else was doing it...

'I'd watch my father smoke while I was growing up. It looked like he enjoyed smoking so much that I knew I had to try.'

- Betty Arrowood



'I know I should have never started. But all my friends I'm trying to stop. I really don't know why I ever started.'

— Carelyn Wahlrab



'My friends were smoking, everyone was smoking. I guess I sort of got sucked in.

— Doug Dillenbeck

By RON FEINBERG

Bits of ash float across Carelyn Wahlrab's down jacket, coming to rest in the creases of her blue

slacks.

She nervously flicks at a cigarette, knocking more ashes onto her clothing and the tile floor at Eastland Mall, where she spends Saturday afternoons.

Smoking is what Saturdays are all about for Carelyn, 17, and her friends at Independence High School in Charlotte.

It's a rise of passage, part of

School in Charlotte.

It's a rite of passage, part of growing up, something that goes along with makeup and dating, and borrowing the family car.

Youngsters have been sneaking off with their friends for years to secretly puff on their first cigarettes — Carelyn did. Now her parents know she smokes.

But most aren't sure why they start.

Carelyn talks about it being the thing to do, that all her friends smoke. Psychologists talk about

"People start smoking because they want to belong," says Dr. Ju-dith Flaxman, an assistant profes-sor of psychology at UNC. Dr. Flaxman has been working

with smokers for years, examining why they smoke to help them

quit.
"A teenager will have a friend
"A teenager will have a friend who smokes, someone they like and respect. They'll tell them to come on and start smoking. They don't want to be thought of as a sissy. They want to belong," Dr. Flaxman asys.

Peer pressure

Douglas Dillenbeck of Matthews agrees. He started smoking as a

agrees. He started smoking as a teenager because of peer pressure. "My friends were smoking, ev-eryone was smoking, I guess I sort of got sucked in," says Dillenbeck, 33, a manager with a Charlotte

loan company.

Psychologists agree peer pressure is the main reason people start.

start.
But there are other reasons.
In a study included in January's surgeon general's report, a group of psychologists report "the establishment of smoking can be seen as the result of initial experimentation with cigarettes repeated sufficiently often to acquisition of a habit and for addictive processes to take hold.
"Among the major variables

"Among the major variables contributing to initiation are social pressure and imitation of peers or family members who smoke. Variaimly members who smoke. Variables influencing the decision to smoke include ... adolescent rebellion, imitation of adult behavior, and the impact of advertising."

Dr. Flaxman says, "Teenagers find anything adults do — smok-

ing, drinking, sex — alluring and attractive. They want to be adults, so they act like adults."

Betty Arrowood, 41, of Hartsville, S.C., watched her father smoke and listened to her mother warn her not to smoke for years.

"She made it such a big issue, and I had just enough hatefulness

"She made it such a big issue, and I had just enough hatefulness in me to ignore her," Mrs. Arrowood says.

She started smoking when she was 18, quit briefly when she was pregnant, and now smokes about 1½ packs a day.

"I'd watch my father smoke while I was growing up. It looked like he enjoyed smoking so much that I knew I had to try."

When Mrs. Arrowood was a teenager, cigarette advertising wasn't aimed at women as it is today.

wasn't aimed at women as it is today.

"Teenage girls are a whole new market. Advertising campaigns are being directed at them and the number of girls smoking is increasing," Dr. Flaxman says.

"Those advertisements that show beautiful couples in lovely surroundings offer a positive association" with smoking, she explains. "Young girls identify with the women in the advertisements. They want to be like them. So

They want to be like them. So they smoke."

More girls try it

According to the National Clearinghouse for Smoking and Health, 20.2 percent of all females between the ages of 15-16 smoke, compared with 18.1 percent of males of the same age.

In Charlotte-Mecklenburg, acording to a study done by the Charlotte Drug Education Center in 1978, 50.3 percent of all female junior and senior high school stu-

in 1978, 50.3 percent of all female junior and senior high school students have at least experimented with smoking. This compares with 44.6 percent of all male students. In the tobacco survey conducted by The Observer in Mecklenburg, Gaston and Union counties, 27 percent of smokers interviewed said they began smoking because of peer pressure, 8 percent said they smoked to appear older, and 2 percent said they started as a way to rebel against parental auway to rebel against parental authority. The rest cited other rea-

Carelyn Wahlrab crushes her

Carelyn Wahlrab crushes her cigarette out, tossing the butt into a nearby trash can.

She leans against the guardrall around Eastland Mall's ice skating rink, and tries to explain why she started smoking when she was 13.

"I know I should have never started. But all my friends..."

Her words stop. She pulls a slender plastic smoke filter from her pocket and points to it.

"Ya know, my boss gave me this to help me stop smoking. I'm trying to stop. I really don't know why I ever started."

SMOKERS ...

By Kathy Haight



Cass Ballenger

"I tell my daughters the reason I keep smoking is I don't want to be a burden to them in my old age," says state Sen. Cass Ballenger, 52, of Hickory. Although Ballenger, a Re-

publican, says this jokingly he admits that in the back of his mind there's some truth his words. Ballenger remembers

when he puffed his first cig-

"I think I set the woods on fire behind my house when I was 5," he says. "I was influenced by an evil older brother."

He began smoking serious-ly in the service when he Ballenger, who now

smokes about a pack of Merits a day, believes, "I really have smoked too long (37 years) already to prove a great deal by quitting now." Ballenger isn't concerned about the recent U.S. Sur-

General's report on smoking.
"It doesn't affect me one

way or the other," he says.
"It's got to the point where government studies say you shouldn't eat eggs, drink liquor, eat steak. If you cut all that stuff out, are you going to live to be 200?

adays. I hope my smoking will cause me to die of a heart attack at a ripe old age of 65. I think it's a pathetic system where people live past their useful life."



Calvin Brown

"I think I started probably in my senior year of high school," says lawyer Calvin Brown of Charlotte, 43, who smokes a pack of Pall Mall Gold 100s each day.
"And that was in 1954..." cause all my buddies had treated evolving. My

dies had started smoking. My older brother was in college and he started smoking and he had a big influence on

... I've just formed habit and that's all it is - a pure habit.
"When I get up in the

morning I start and I smoke all day 'til I go to bed at night, and that's crazy I guess."

Brown calls the surgeon general's recent smoking report "frightening ... You're endangering your health even greater than what he said the first time." Although he worries about

cancer and heart disease, Brown has made no decision about quitting.
"I want to, yes. I think about it every day — about

quitting, but I light up another one."

Is he addicted?

'Yeah, I am.'



Betty Chafin

"It was cool then," says Betty Chafin, Charlotte's mayor pro tem, reflecting on why she started smoking in college.

Today, Ms. Chafin, 37, agrees she is hooked although she now lights up less than a pack of Merits a

day.
"It's just so much a part "It's just so much of other habits," says Ms. Chafin, who particularly en-joys a cigarette after a meal or at a coctail party. "You know, if you have a drink in one hand, you feel you have to have a cigarette in the other hand," she explains. "When I'm at home in a leisurely mood, I don't smoke much

The surgeon general's reworry about port made her her own health and the health of others. "There's no doubt in my mind that smoking is had for my health." ing is bad for my health," she said. "I worry most about the young people that are starting to smoke.
"I am aware that heart

disease runs in my family. Both of my mother's parents died of heart disease.

died of heart disease.

"I've tried cutting down, which is what I'm doing right now," she says. "I said I'd quit the first of the year and then we started our (police) wiretap hearings and I said, Well, I'll have one, and then another." then another.'

Is she addicted?
"That sounds so awful ... I guess I am because I haven't quit."



Leo Driehuys

Leo Driehuys, music director for the Charlotte Symphony, began smoking at 26.
"I'm surprised that I started that late," he says, "because I'm from a family

both smoked. In the profes sion where I am, sometimes there is a lot of tension. Once I took a cigarette just for fun — then the habit be-

Driehuys, 46, smokes a pack of Carlton a day.

"When I have a concert or after the first half or after the concert, it's kind of a relief for me to smoke a cigarette When I have an evening off and I have a drink before dinner, I like to smoke and talk to my wife. ing. I don't know how to say it." It gives a kind of cozy feel-

it."
"I think the doctors are absolutely right that it's a bad habit. But you need a lot of will power to quit."
Like other smokers, he worries about cancer."Of course," he says. "Everyone can get it."

can get it."
Driehuys plans to quit.
"Absolutely. You always
promise yourself to quit on
the last day of the year but
it didn't work this year. I am
aware that it is not very
good for your health."



Tommy Faile

"I've been smoking probably about 32 years," says country music star Tommy Faile of Charlotte.

Now smoking two packs of Vantage a day, Faile, 50, started "because the other kids were doing it — it was sort of a sneaky thing to do.
"I don't know," he says

when asked why he smokes. "Everything's bad for you now. You just kind of hope nothing will happen to you and keep on going.
"When I'm traveling by
myself, I smoke. When I'm
working, I smoke more,
after coffee and so forth.

"I think everyone ought to quit, including me. They're not good for you. I have a little bronchial trouble and it just aggravates it. I went to the doctor and he told me if

I didn't completely quit it'd never go away." Cancer and heart trouble worry him.

worry him.

"But, like my dad's 82
years old and smoked 60
years or more and never had
any trouble — worked in a
textile mill too." textile mill, too.'

Faile would like to quit smoking.

"You always say, 'I'm going to quit.' You always say, 'One of these days.'"



Maxine Gill

"I was 25 when I started and I didn't know what I was getting into," says Maxine Gill, member of the Rock

Hill City Council.

"... I'm 57 and within the last six years I've quit off and on just to prove I could. I know that I should, and I think it's one of those things you just have to talk yourself into."

yourself into."

After smoking for 30 years off and on, she now lights up a pack a day of Benson & Hedges Lights.

The surgeon general's report has made some impression on her, although she has "mixed emotions should be a some impression on her, although she has "mixed emotions should be a some impression on her, although she has "mixed emotions should be a some impression on her, although she has "mixed emotions should be a some impression of the source of th

"... mixed emotions about most government remost government re-ports... because you can make figures do what you want to. But it does make sense that you can't let smoke in and out of your lungs for 30 years and not feel some repercussions from it

"I've already got ... high blood pressure and cancer of the intestines, and I still don't quit. I'm stupid. I had an operation three years ago for that (cancer of the intes-

tines) and they got it." She also had a stroke in 1969.
"I'm all the walking reasons why one shouldn't smoke."



Carrie Graves

"I think I smoked my first one when I was about in the 10th or 11th grade in school and it just seemed to be an exciting thing to do," remembers Carrie Graves, a Charlotte community leader. smoke mainly

reason that I like to smoke," says Mrs. Graves, who lights up two packs of Salem Lights a day.
Mrs. Graves usually has

her first smoke when she gets up in the morning. "If I'm on the phone, I tend to light up a cigarette, if I'm in the car, I light up a cigarette. When I finish eating, I have to smoke a cigarette. I'm addicted to it. Sometimes I just go crazy for a fix.

Mrs. Graves thinks the Mrs. Graves thinks the surgeon general's report is probably true but, "I don't know. I see that all the things I like to eat and the air and everything is hazard-ous to your health ... I was almost afraid to sit down and eat."

down and eat."

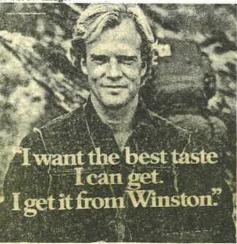
She thinks about quitting now. "I used to didn't think about it. It's not because of the surgeon general's report.

It's like was talk to kide and. It's like we talk to kids and we tell then it'd be better we tell then it d be better not to smoke ... and it's kind of hypocritical to tell a kid you're better not to smoke and you're standing there with a cigarette in your hand."

Power, wealth, sex and glamor sell cigarettes ...



1940: Hollywood stars such as Humphrey Bogart and Mae West added a glamorous touch to smoking's appeal, transforming the cigarette's



Today: The Winston ads are descendants of the successful Marlboro Man ad campaign, which sold the cigarette on its ties to the rugged Westerner who smoked it.

. But how they affect a smoker's well-being is a worry.



1939: The selling point in this Life magazine ad was how soothing cigarettes were for one's nerves.

Does your wife worry

about your smoking?

Jaitch to Girardo!

1919: A Saturday Evening Post ad hints

and appeals to cigar smokers to switch to

that smoking can "get on your nerves,"







Today: Ads use the tar content of cigarettes as a selling point to those worried about tar.



Today: The low-tar cigarette must fight the claim that it has less taste than its high-tar competition.



1949: A Ladies Home Journal ad sought out the woman smoker for Herbert Tareyton cigarettes.

Bob James

"I was about 12 years old (when I started smoking), and I've been smoking a long time," says the Rev. Robert James, executive presbyter of the Mecklenburg Presby-

hardly remember, but I think it was just the 'in thing to do. My friends in the school grades, they were smoking. We thought it was a smart thing to do grown-up.

James has asked himself many times why he smokes.
"It's a nauseous nuisance,"
he says. "I don't know. It's habit. I think you would have to say it's an addiction. (I smoke) because I thoroughly enjoy cigarettes and haven't found the courage to quit." would have to say it's an

James, who declined to give his age, smokes less than a pack of L&M filters a

day.
"... I have noticed that there are times of the day (when I usually smoke), like in the mornings following a cup of coffee, when I first get to the office. Another time for me is following stress situations:

'I am concerned, yes, (about cancer and heart dis-ease) not just for myself but for many others.

"... I keep telling myself
I will (quit). I would say I
have a strong dependency on cigarettes. I think I should quit. I think all of us should quit."



AND MORE SMOKERS

W.M. Lentz

Like many smokers, Lincolnton Mayor W.M. Lentz started smoking to look grown-up. He's been smoking ever since.

"I've been smoking for the smo

something like 60 years," muses Lentz. "I'm almost 76 and started when I was 18 or 19 when I was in col-

Or 15 Marie lege."

Lentz smokes a pack of Salems a day. "I light one without thinking," he says. "Frankly, just subconciously I try to limit myself to an average of one an hour. I think it does ease some tension." sion.

The surgeon general's report hasn't influenced him

'I've never had a short-"Tve never had a sinteness of breath or any pulmonary illness," he says. "I'm too good a Presbyterian. What will be will be. I'm a firm believer in the doctrine of predestination."

Nor is he worried about

Nor is he worried about cancer and heart disease. "I don't worry period. I do the best I can do, at least I think I do... I think you can eat yourself to death quick as you can smoke yourself to death, and drinking the same way."

ing the same way."

He doesn't plan to quit. "] tried it one time and I gained so much weight I had to buy all new clothes and couldn't afford it.
"I could stop right this

minute if I wanted to
You know everything you do
is immoral, illegal or unhealthy."



Bob Miller

Dr. Bob Miller, Charlotte orthopedic surgeon, picked up the cigarette habit during

his second year of college.

"I had a roomate that smoked. He had polio — was paralyzed from the waist down — and the first thing he did in the morning when the alarm went off, he started smoking a cigarette. I think I started smoking with

Miller, 55, blames habit for why he continues to smoke 1½ packs of Merit Menthol a day.
"I get up early in the morning, and my quiet time

morning, and my quiet time is between quarter after 6 'til 10 'til 7, and I smoke a couple cigarettes with coffee." Miller has tried to quit — unsuccessfully. "The - unsuccessfully. "The usual time I would break down was right after I finish operating," he says.

The recent surgeon general's report contained no star-tling revelations for Miller. Although he worries about cancer and heart disease, the guess I don't worry very seriously."



Jim Richardson

Jim Richardson, postmaster for Mount Holly, says peer pressure probably started him smoking at age 15.

"A lot of the kids that I are around with smoked."

ran around with smoked," said Richardson, a smoker for 37 years who now lights up 1½ packs of Viceroys daily.

daily.
"I smoke now because of habit," he says, "and it's something that I enjoy even though I realize smoking probably is not the best

probably is not the best thing for you.
"I don't have a particular time (when I smoke more). Smoking a pack and a half a day, it's pretty regular. I enjoy smoking after I eat more than any other time." Richardson, 52, wonders why the surgeon general's report can't be more absolute in its findings. "I personally in its findings." In personally

in its findings. "I personally feel that smoking is a bad habit and would injure your

health, whether the surgeon general says it or not." Richardson, chairman of the N.C. Social Services Commission, is concerned about cancer and heart dis-"not only from smoking but from everything else." Yet, he hasn't given much thought to kicking the habit even though, he agrees, he's probably addicted.

"I probably addicted.
"I probably am, yes, and addicted because I really haven't given it a serious effort. I think I could quit tomorrow if I wanted to."



Janet Volz

Janet Volz, who anchors WBTV news, was hooked once she learned to inhale.

"I started when I was in college and girls in my dorm were smoking," says Miss Volz. "I had never had a cigarette before. I would smoke the other girls. I didn't know how to inhale and once I learned to inhale, I was

learned to inhale, I was hooked . . . It's a nasty, smelly, dirty habit."

Miss Volz would not reveal which brand she smokes, but said she inhales about 1½ packs a day.

"When I'm at home, I don't smoke as much. As soon as I walk in the newsroom with all the pressure, I start smoking. When your deadline is approaching, and you seem to have 50 million things to do, and the pressure is mounting — that's sure is mounting — that's when you seem to smoke

The surgeon general's re-port "reaffirmed my belief that if you're pregnant, you shouldn't smoke. I have already made up my mind that if I am ever lucky enough to

have a child some day, I would quit. I wish I had never started.

"If I get it (cancer or emphysema) some day I'm sure I'll be kicking myself and

saying, 'Boy, were you stu-pid to smoke cigarettes.'
"I'm a nervous wreck whenever I've tried to quit. I can't say that I couldn't stop. I could stop if I really wanted to."



Sarge Waldrep

Gaston County Sheriff C.L. "Sarge" Waldrep quit — almost — after he had a heart attack in August 1978.

"The doctor suggested I not smoke anymore. I prayed about it, and I all of a sudden quit. I started sucking suckers. I gained

weight ... "
Three months after the heart attack, Waldrep found heart attack, waldrep found a pack of cigarettes in his office. "It stayed there for a day," he said. "I looked at it and I took one, and it was the best cigarette I had tasted The next day I smoked another one."

Waldrep took his first puff at 14 because his friends smoked and he thought it was a grown-up thing to do. Now, he smokes a pack of Vantage a day.
"I can only give you one

Vantage a day.

"I can only give you one reason why I do and it's a stupid reason — I just do. I get pleasure out of it. I find myself under pressure. I think it's just habit to me."

The surgeon general's re-

The surgeon general's report, "makes me look like more stupid than what I was. It's given me more of a desire to stop. But there's a thing about it that I always but it off until temperous. put it off until tomorrow.

"I have some concern about my heart because I quit smoking after a heart attack. I've yielded to the flesh more than the spirit of Cod I guese." God I guess."



Winston Churchill

Winston Churchill, late British prime minister, rationed himself to 15 cigars a day. He wrote: "How can I tell that my temper would have been as sweet or my companionship as agreeable if I had adjured from my youth the Goddess of Nicotine?"

Other famous smokers from "The Book of Lists":

• Sigmund Freud, founder of psychoanalysis, smoked as many as 20 cigars daily, even after he got jaw and palate cancer.

• Ulysses S. Grant, Civil

Ulysses S. Grant, Civil
 War general and U.S. president, smoked 24 cigars the second day of the Battle of the Wilderness in Virginia.
 Thomas Marshall, vice

president under Woodrow Wilson, coined the phrase, "What this country needs is a really good 5-cent cigar."
 Sir Walter Raleigh, En-

glish navigator and passion-ate pipe smoker, was doused with water by a servant who believed his master was on fire. Margaret Smith Taylor,

wife of Zachary Taylor, 12th
U.S. president, smoked a
pipe in the White House.

• Mark Twain, author,

smoked cigars. He said quitting was easy — he had "done it 100 times."

Smoking And Health

The evidence of danger keeps piling up

"Cigarette smoking is a health hazard of sufficient importance in the United States to warrant appropri-ate remedial action."

- 1964 U.S. Surgeon General's Report Luther Terry, M.D., Surgeon General.

"The scientific evidence on the health hazards of cigarette smoking is overwhelming."
— 1979 U.S. Surgeon General's Report
Julius Richmond, M.D.

Assistant Secretary for Health and Surgeon General

Since the original U.S. Surgeon General's report in 1864 deemed cigarette smoking a health hazard, the warnings have gotten progressively stronger, through a succession of surgeons general in different

That first report, based on 6,000 scientific arti-That first report, based on 0,000 scienuic aru-cles, said cigarette smoking causes lung cancer and chronic bronchitis, but that it was unclear whether smoking causes coronary artery disease. The report said bluntly that other charges had not been proved.

Today, thousands of additional research projects—producing 30,000 studies that form the base for 1979 surgeon general's report—provide indisputable new evidence about the hazards of smoking. But the report is not a blanket indictment.

Surgeon General Julius Richmond says the report presents strong conclusions where they are warranted by the accumulated evidence. It provides alternative working hypotheses when the available facts are not sufficent to warrant conclusions. It suggests fu-ture lines of inquiry where there are gaps in existing knowledge."

The links to disease

But experts have said dozens of conclusions are warranted, as study after study links the amount of cigarettes smoked with extent of disease. Some of those conclusions:

- For every preventable death from highway ac-cidents, there were approximately two deaths from lung cancer which could have been prevented if the victims hadn't smoked cigarettes.
- Cigarette smoking is one of the three key risk factors in heart attacks and sudden heart failures.
 Smoking multiplies the effect of the two other major factors, high blood pressure and high cholesterol.
 - Smoking is one of the key causes of cancer of

Interagency effort produced smoking report

Each section of "Smoking and Health: A Report of the Surgeon General" was prepared by experts in the field — experts on whom the government relies for all federal health research and

For instance, the Center for Disease Control For instance, the Center for Disease Control—
the same organization that figured out what
caused legionnaire disease — prepared the section
on mortality. The section on cardiovascular diseases was prepared by the National Heart, Lung
and Blood Institute, which handles all government grants for heart disease.

The Food and Drug Administration researched the section on the interaction of cigarettes with drugs and foods. The agency rules on the safety of drugs and the purity of foods.

In all, 10 agencies were involved in preparing

The agencies based their work primarily on studies — more than 30,000 in all — already completed at universities and research facilities around the world. Some agencies used outside experts to prepare their sections.

the mouth, windpipe and esophagus, and works with alcohol to multiply the risks.

- Cigarette smoking may be even more impor-tant than stress in causing ulcers.
- Cigarette smoking is the single most important cause of bronchitis and emphysema. That risk is even greater for those exposed to substances such as cotton dust in the textile industry.
- Cigarette smoking during pregnancy has an adverse effect on the fetus, the health of the baby and the future development of the infant and child.
- By reducing the body's natural defense mechanism, smoking increases the chances of influenza and other infectious diseases.
- Cigarette smoking can reduce the effectiveness of some drugs.
- Cigarette smoking can act with chemicals found on the job to produce adverse effects or even multiply them.

The effect of cigarette smoking on health is over-rhelming.

"... Smoking is the largest preventable cause of death in America," Health, Education and Welfare Secretary Joseph Califano said when the 1978 report was released in January. "When demographers look at death rates for diseases related to cigarette smoking, they identify 80,000 deaths each year from lung cancer. 22,000 deaths from other cancers, up to 225,000 deaths from cardiovascular disease, and more than 19,000 deaths from chronic pulmonary disease—everyone of them related to smoking." - everyone of them related to smoking."

Said Surgeon General Richmond: "Each year, the health damage resulting from cigarette smoking costs this nation an estimated \$27 billion in medical care, absenteeism, decreased work productivity and acciThe report said "... life expectancy at any given age is significantly shortened by cigarette smoking." It said a two-pack-a-day smoker between 30 and 35 has a life expectancy eight to nine years shorter than a nonsmoker of the same age.

The degree of risk from smoking depends on the type of cigarette, the amount smoked, the number of years of smoking and the degree of inhaling.

An extensive study often cited in the surgeon general's report gives some idea of the risk. The study, started in 1951 by the British Medical Association, monitored 34,400 male doctors. The most recent report, published in 1976, included 20 years of observations involving 10,072 deaths.

Smokers were 50 percent more likely to have

For lung cancer, smokers had a death rate 14 For lung cancer, smokers had a death rate 14 times greater than nonsmokers. That means, in an average year nonsmokers died of lung cancer at a rate of 10 deaths per 100,000 people, while smokers died of lung cancer at a rate of 140 per 100,000 people. For doctors who smoked more than 25 cigarettes a day, the rate was 251 deaths per 100,000 smokers.

Higher death rates

For cancer of the esophagus, the death rate for smokers was 4.7 times higher than for nonsmokers. The smokers' death rate was 24.7 times higher for chronic bronchitis and emphysema, 2.5 times higher for fatal ulcers, 6.6 times higher for aortic an-

"The risks of overall mortality and specific mortality from lung cancer and coronary heart disease were lower in those smoking lower 'tar' and nicotine cigarettes than in those smoking higher 'tar' and nicotine cigarettes," the surgeon general said.

But he adds, the risks for those people "were still significantly higher than in nonsmokers.

ning in 1951

Dr. Cuyler Hammond, of the American Cancer

Society, studied the effect of low-tar-and-nicotine cigarettes, and found overall death rates 52 percent higher for smokers of low-tar-and-nicotine cigarettes than for nonsmokers. The death rate was 64 percent higher for smokers of medium-strength brands, \$1 percent higher than nonsmokers for smokers of high tar and nicotine cigarettes.

But people smoking low-tar cigarettes tend to oke more, and when that happens, their advantage

Smokers can reduce their risk of problems by quitting before disease symptoms appear. In such cases, the damage that smoking does largely disappears over a decade, with some effects beginning to disappear within days. However, once symptoms appear, the damage may be permanent.

Of course, thousands of people smoke and appear to suffer no ill effects. Scientists say that is because cigarettes affect different smokers differently and be-cause not all disease shows up by the time of death. But the odds of getting some diseases are so much greater for smokers that the surgeon general has con-cluded the evidence of the hazards of cigarette smoking is "overwhelming."

Agreement on smoking's danger

Scientists could devise tests which would likely prove exactly how cigarette smoke causes lung cancer and other diseases in humans. But researchers say those kind of experiments would be unethical because they would involve trying to induce potentially fatal cancer in humans. Doctors are close to unanimous in agreeing smoking is dangerous to health.

Dr. William Kannel, medical director of the Framingham Heart Study, which has monitored heart dis-ease in that Massachusetts community since 1949,

"How can we yank saccharin and other chemicals off the market on the basis of animal evidence while products like tobacco, where evidence is far greater, are allowed to continue on the market?"

Dr. Thomas James, professor of cardiology at the University of Alabama at Birmingham, adds, "No one can remember admitting a nonsmoker to the myocardial infarction research unit."

The medical sections of this special report on Our Tobacco Dilemma were prepared by The Observer's Medical Editor, Robert Conn., 39. His column, "Science on the Move," has appeared in The Observer weekly since November 1963.

The final version of Smoking and Health won't be The final version of Smoking and Health won't be published until May. To get a copy then, write to the Superintendent of Documents. Washington, D.C. 20402, or to the Office of Smoking and Health, Room 116 Park Building, 5600 Fishers Ln., Rockville, Md. 20857. The cost has not been set.

Cancers of all kinds traced to smoking

The surgeon general's report re-veals new evidence than links smoking to many forms of cancer.

Although experts haven't established how it happens, cigarette smoking is a cause of cancer of the mouth, windpipe and esophagus. It also is associated with cancer of the bladder, kidney and pancreas, the report says.

Pipe and cigar smokers have al-

most the same risk of mouth, wind-pipe and esophageal cancer as ciga-rette smokers. The risk from those three cancers is even greater for smokers who also drink alcohol.

The cancer section of the surgeon

The cancer section of the surgeon general's report was prepared by the National Cancer Institute.

The National Center for Health Statistics reported 3,351 deaths in 1976 from cancer of the larynx; the American Cancer Society estimates 10,400 cases, with 3,500 deaths predicted this year.

A study of 34,400 British doctors, reported in 1976, recorded every-

reported in 1976, recorded every-thing that happened to their health over 20 years. Thirty-eight doctors died of larynx cancer. Cigarette smokers were 13 times more likely

smokers were 13 times more likely to be victims than nonsmokers.

The likelihood that smokers will get cancer of the laryax is actually greater than the mortality studies suggest, because 60 percent of those who get cancer of the larynx are cured — that is, they survive at least five years.

Experts have calculated the

Experts have calculated the chance a male smoker will develop cancer of the larynx is 16 times that of a nensmoking man. For vomen who smoke, the risk is nine times greater. A person who smokes more than 35 cigarettes a day and drinks heavily runs a risk of cancer of the larynx 22 times greater than nonsmokers and non-drinkers.

drinkers.

Generally, the risk increases with the number of cigarettes smoked each day and the number of years of smoking. But smoking filter cigarettes cuts the risk by between by one-fourth and one-half.

And quitting helps. The risk of developing cancer of the larynx diminishes steadily after smokers quit. After smokers have quit for 10 ears, their risk approaches that of hose who have never smoked. Oral cancer — including cancer

of the lip, tongue, floor of the mouth, gums and throat — parallels windpipe cancers in relation to eignerette smoking.

Oral cancer is significantly associated the control of the contro

clated with smoking pipes, cigars and chewing tobacco. The health statistics center says 8,114 persons died from oral can-cers in 1976. The American Cancer Society estimates 24,400 cases, with The 20-year study of British doctors shows 38 doctors died of oral

cancer and that smokers were 13 times more likely to die than nonstudy of 239,000 U.S. veter-

ans, smokers were about four the more likely to die of oral cancer. The National Cancer Institute add to the risk of oral cancer.

add to the risk of oral cancer.
Cigarette smoking can lead to
often-fatal cancer of the esophagus,
the surgeon general's report says.
Federal statistics show that 7,224
people died of esophageal cancer,
and the American Cancer Soclety
estimates that 7,500 of the estimated 8,400 people who get the disease this year will die.
Of the 34 400 Feitigh doctors 65

Of the 34,400 British doctors, 65 died of this cancer, and smokers were 8.75 times more likely to die of it than nonsmokers. Among the 239,000 veterans, 111 died, with smokers about six times more likely to be victims than nonsmokers.

Again, the rate of cancer increased as the number of cigarettes smoked increased.

Researchers have not proved cig-

Researchers have not proved cigarette smoking causes cancer of the bladder, but have found a strong association between the two.
Bladder cancer killed 9,673 persons in 1976, federal statistics show. An estimated 35,000 people will get the disease this year; 10,000 will die.

In the studies of British doctors.

10,000 will die.

In the studies of British doctors
and U.S. veterans, smokers were
about twice as likely as nonsmokers
to die of bladder cancer.

Other studies showed the number

of cigarettes smoked daily - and during a lifetime — had a direct re-lationship to the risk.

For those who quit smoking, the risk approaches that of nonsmokers

after seven years.

People who smoke and work with dyes, rubber, leather, print, petroleum and other organic chemicals have an increased risk of blad-

der cancer, the report says.

Kidney cancer, which will kill an estimated 7,500 of the 16,500 people it strikes annually, killed 141 persons in the U.S. veterans study, with smokers somewhat more likely to die than nonsmokers. The report does not show results from the British doctors study for this type of cancer, but overall tallies show smokers are between 1.42 and 2.46 times more likely to die from kidney cancer than nonsmokers. Evidence also shows the amount of cancer increases with the amount smoked daily.

Pancreatic cancer has one of the Pancreatic cancer has one of the highest mortality rates of all cancers. It killed 19,738 people in 1976, according to federal statistics. About 20,200 of the estimated 23,000 people who get the disease this year will die. In North Carolina, it killed 468 persons in 1977.

The veterans study and about a half-dozen studies worldwide indicate smokers are about twice as likely to die from cancer of the pancreas than nonsmokers.

pancreas than nonsmokers. Studies also show the risk of pan-

creatic cancer increases with the number of cigarettes smoked. A two-pack-a-day smoker has five times the risk of pancreatic cancer

times the risk of pancreauc cancer as a nonsmoker.

Pancreatic cancer is linked to the amount of fat and the amount and type of proteins in the diet, but whether these are as important a risk factor as smeking is not clear.

Cause Of Death Heart disease killed smokers 1.6 times more often than non-Aortic aneurysm killed smokers: 6.6 times more often than nonsmokers Stomach ulcers killed smokers 2.5 times more often than nonsmokers Respiratory Tuberculosis killed smokers 5.5 times more often than nonsmokers Lung Cancer killed smokers 14 times more often than non-Oral Cancer killed smokers 13 times more often than nonsmokers Esophageal cancer killed smokers 4.7 times more often than nonsmokers Emphysema killed smokers 24.7 times than nonsmokers

The British Medical Association studied 34,400 British male doctors for 20 years,

BRITISH DOCTOR'S STUDY

Ulcers have been linked to smoking

The frequency of ulcers

number of cigarettes

smoked each day

increased in relation to the

If you think stress is the major factor in ulcars, the surgeon general's report has news for you. The major factor may be smoking, although scientists can't explain precisely why.

The National Institute of Ar-

thritis. Metabolism and Digestive Diseases, which prepared the section on ulcers in the surgeon general's report, esti-mates about 10 percent of Americans will suffer from ul-Americans will suite 10th un-cers during their lifetimes. That adds up to 2.5 million ulcer patients each year, in-cluding 400,000 who require hospitalization and 150,000

who need surgery.

The results of most studies of smoking and ulcers are

of smoking and ulcers are "strikingly consistent," according to the report.

• A key 1966 study compared 100 ulcer patients to people without ulcers, and found 90 percent of ulcer patients smoked, compared to 60 percent of nonulcer patients. About 61 percent of ulcer patients smoked a pack a day, compared with 36 percent of the control group — a contrast so striking that the odds are only one in 100 it occurred by chance.

In that study, smoking was the only variable related to ulcers. There was no relation to stress, whether from family, job or finances.

• A study of 36,656 per-

But the difference was actually even more marked. Some of those told to quit did not. Of those who quit, 86 percent showed marked healing. Curiously, the healing rate of 24

of those who continued to

sons, reported in the Feb. 28, 1974, issue of the New England Journal of Medicine, nonsmokers also included in the study was 58 percent, the gland Journal of Medicine, found that men who smoked same as the smokers. The researchers offered technical ex-planations for that, but no firm got ulcers 2.1 times more often than nonsmokers, and women conclusions. who smoked got ulcers 1.6

Smokers also run a greater risk of dying from ulcers than nonsmokers. The institute team examined

times more often. The frequency of ulcers increased in relation to the number of eigarettes smoked each day, the number of years of smoking, and degree of inhaling. The institute team examined four studies of the relationship between smoking and ulcer mortality and found that, "In general ... male cigarette smokers have more than a twofold greater chance of dying from ulcer disease than nonsmokers."

But the relationships don't and degree of inhaling.

● In another study, researchers took 80 smokers with fresh ulcers and advised 40 to quit. After four weeks, 75 percent of those told to quit showed marked healing of the ulcer, compared to 58 percent of those who continued to

But the relationships don't show how smoking leads to ul-cers, and pinning that down is proving difficult for research-

One way to prove it would be to show smoking increases ulcer-causing acid in the stom-ach or decreases secretion of bicarbonate, which is the

body's way of neutralizing ex-cess acid and protecting the in-testine from ulcers.

Repeated studies comparing

stomach acid secreted in smok ers and nonsmokers got differ-ent results, with most showing no increase in acid.

But four studies have indi-cated that smoking decreases bicarbonate output, which could play a role in intestinal ulcers. One study even showed the effect in nonsmokers who were asked to smoke

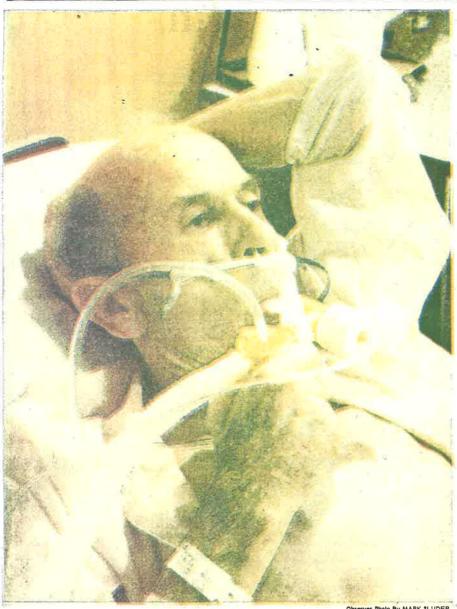
The team also found increasing evidence that smoking increases the amount of material from the intestine (including bile) backing up into the stom-ach, perhaps because smoking interfers with operation of a valve between the stomach and intestine.

The institute team terms the blocking of bicarbonate in the intestine "a plausible but unproven mechanism" for development of intestinal ulcers" and says the backing up of in-testinal materials into the stomach "could be relevant" in development of stomach ulcers.

If a smoker develops an ulcer, will it help to stop smoking?

Studies are mixed, but it

probably does help. The report concludes that cigarette smok-ing "probably retards the heal-ing rates" for both stomach and intestinal ulcers.



James McManus, 62, of Monroe has emphysema. He needs help to breathe.

Body's natural defenses can't stand up to smoke

body's natural defense system, making smokers more vulnera-ble to disease, says the surgeon general's report.

In a section prepared by the National Institute of Allergy and Infectious Diseases, doctors say the adverse effect of smoking on the body's basic defense system "has been well documented in both animal studies and in man."

The report says cigarette smoking harms the tiny, hairlike cilia that sweep the respiratory tract clean of foreign particles. It also impairs white blood cells — alveolar macrophages — that work in the lungs as a primary defense against toxic compo-nents of tobacco smoke and diseases such as the bacteria, sta-phylococcus. Smokers have more of the cells, which release enzymes that can damage surrounding tissues.

Smoking also inhibits formation of antibodies, key elements of the body's immunity system.



Smoking also inhibits formation of antibodies, key elements of the body's immunity system.

All those factors lead to in-

creased disease in smokers.
For instance, a study reported For instance, a study reported in the 1969 issue of the American Journal of Epidemiology found the incidence of influenza was 21 percent higher among smokers than nonsmokers. And smokers had more flu that was not quite bad enough for people to consider themselves "sick."

The report also examines the question of a tobacco allergy and concludes there is no proof that people are allergic to cigarette tobacco or smoke. The report notes, however, that "many physicians are convinced that tobacco products can and do tobacco products can and do act" to cause allergic responses.

And, the report adds, it's "generally accepted" that "to-bacco and/or its products can

bacco and/or his products can exacerbate underlying allergic conditions in both smokers and nonsmokers."

There is plenty of evidence, say institute researchers, that tobacco smoke can "trigger or aggravate asthamtic symptoms."

For smokers, cigarettes cut short the breath of life

Cigarette smoking is the single most important cause of two major lung diseases — chronic bronchitis and emphysema.

The more cigarettes people smoke, the higher the odds emphysema and bronchitis will kill them, according to the U.S. Surgeon General's report.

Cigarette smokers had 24 times the death rate from bronchitis and emphysema as nonsmokers, according to a study of British doctors cited by the National Heart, Lung and Blood Institute, which produced the section on noncancerous lung diseases for the surgeon general.

Chronic bronchitis and emphysema killed 1,068 persons in North Carolina in 1977, a death rate of 19.32 per 100,000 people — up from an average of 17.7 for the past five years, according to state statis-

Joseph Califano, secretary of health, education and welfare, says 19,000 Americans die from smoking-related bronchitis and emphysema each year. The problem is disability and sickness as well as

Chronic bronchitis and emphysema rank second only to coronary artery disease as a cause of disability, the surgeon general's report says.

And one study quoted in the report notes, "A number of recent studies have established a higher prevalence of respiratory symptoms in adolescent, teenage and young adult smokers as compared to nonsmokers."

In a finding of considerable importance to the textile industry and textile workers, the report notes:

"Exposures to cotton fiber, asbestos and coal dust in particular appear to act in concert with cigarette smoking in promoting the development of pulmonary disease."

That means cotton dust and cigarette smoke can combine to cause a greater risk of lung problems in workers who smoke than workers who don't. As a result, textile workers may have a higher death rate from lung diseases than most people.

Estimates vary on how many Carolinas textile workers suffer from brown lung, or byssinosis, a disease many scientists say is caused by cotton fiber dust. Industry officials say only 1 percent of the 150,000 cotton mill workers in the state have the disease, while U.S. Labor Secretary Ray Marshall estimates 150,000 of the nation's 800,000 cotton workers have the illness to a degree.

In an important indication of the relationship be-tween smoking and lung problems, British research-ers monitored 34,400 male doctors for 20 years. Chronic bronchitis and emphysema killed 254 of

ers monitored 34,400 male doctors for 20 years. Chronic bronchitis and emphysema killed 254 of them.

Among nonsmoking doctors, the annual death rate from those two diseases was 3 per 100,000 nonsmokers. Among former smokers, the rate was 44 per 100,000. Among all smokers (including cigars and pipes) the rate was 50 per 100,000.

The rate increased sharply according to the amount smoked each day — computed by the number of grams of tobacco smoked rather than number of cigarettes. The death rate was 38 per 100,000 for 1-14 grams, 50 per 100,000 for 15-24 grams, and 88 per 100,000 for 24 grams and above. (A regular Winston cigarette weighs about 0.8 grams.)

Researchers have examined air pollution, occupation, socioeconomic conditions and genetics as possible factors in chronic bronchitis and emphysema — and found smoking is still the most important.

Doctors looked at lungs during autopsies of 300 residents of St. Louis, a high-pollution city, and Winnipeg, Canada, a low-pollution city.

residents of St. Louis, a nigh-pointion city, and whiningeg, Canada, a low-pollution city.

Nonsmokers in St. Louis had more emphysema problems than nonsmokers in Winnipeg, indicating pollution can cause emphysema. But among smokers, the incidence of severe emphysema was four times higher in St. Louis, indicating "tobacco smoke may have a cumulative or synergistic effect with air pollution exposure." lution exposure.'

Experts concluded that any increased risk of bronchitis and emphysema because of air pollution, is small compared to that due to cigarette smok-

What about the effect of job or income?
Researchers cited a 1977 report of a continuing study of 9,226 residents of Tecumseh, Mich.
"Most of the differences in the prevalence of chronic bronchitis in subjects of differing occupational, educational or income classes were attributable to differences in smoking habits," the report said.



Photos From NARCOTICS EDUCATION INC.

Healthy lung; smog causes black spots.



Lung of a smoker with emphysema.

Studies on identical twins show some people have a genetic predisposition to chronic bronchitis and emphysema, but smoking increases the risk.

A Swedish study looked at situations involving sets of twins where one twin smoked and the other didn't. Researchers separated the sets of twins into those which had an inherited predisposition to cough and those that didn't.

In 497 cases the sets of twins showed no inherited predisposition to cough. In those cases, 12 percent of the twins who smoked had coughs—a rate three times higher than that for those twins who didn't smoke.

In 41 cases the twins had a genetic predisposition to cough. In those cases, 37 percent of the smoking twins had a chronic cough, compared the the 24 percent who twins who didn't smoke.

Though symptoms of lung disease begin disappearing once smokers quit, studies indicate the lungs of former smokers aren't as effective as those of peo-ple who have never smoked.

Even after 10 years, doctors can measure a difference in amount of emphysema between those who once smoked more than a pack a day and those who smoked less.

Why does smoking cause lung deterioration?
There are several theories.
One is that emphysema is irreversible destruction of lung tissue, which deprives the lungs of elasticity and the ability to respond to increased oxygen needs. Scientists attribute the lungs' elastic properties to the presence of the protein elastin. Enzymes released in the lungs may destroy elastin.

Ordinarily, there's a delicate balance in the lungs between chemicals that stimulate and inhibit enzyme production.

But studies have shown that, for several reasons, the lungs of smokers have more of one of the de-stroying enzymes than the lungs of nonsmokers.

Scientists have produced emphysema in animals with the human chemical, elastase. Other studies show cigarette smoke in humans attracts white blood cells into the lungs and immobilizes them. Other studies show cigarette smoke forces cells to release

The evidence that smoking causes excessive amounts of the enzyme, which leads to lung destruction, is not considered definitive.

Smokers are taking a big chance with their hearts

ters are much more likely heart attack, but those factors smoking more than a pack a consmokers to have heart are not as important. The other The surgeon general's rej than nonsmokers to have heart attacks and sudden heart failures, according to the surgeon gener-

Smoking, high blood pressure and high cholesterol three most important risk factors for heart attacks, according to the report's section on cardiovascular diseases.

In North Carolina in 1977. heart attacks killed 8,217 persons

— 18 percent of the state's

46,493 deaths. Studies in the report indicate:

 Men who smoke more than two packs of cigarettes a day are more than twice as likely to have fatal heart attacks as nonsmokers. But the risk for those who quit drops gradually to about the same as for nonsmok-

nicotine cigarettes have a higher risk than nonsmokers, but they lesser risk than those who nave a lesser risk than those who smoke high tar and nicotine ciga-rettes," according to experts from the National Heart, Lung and Blood Institute who prepared

The report's subsection on heart attacks focuses on studie showing that smoking, high blood pressure, and high blood cholesterol are about equal risk

factors include high stress, per-sonality, diabetes, obesity, gout, use of birth control pills, physisonality, diabetes, obesity, gout use of birth control pills, physical inactivity and family history.

In one study cited in the re-port, Dr. Cuyler Hammond of the American Cancer Society and his

colleagues ob-served the medi-cal histories of 356,534 men and 445,875 women in 25 states for six years. There were 14,819 heart attack deaths. Among the findings:

• Men be

tween 40-49 who smoked more than two packs a day had 5.5 times the rate of fatal heart attacks of nonsmok-ers; those who smoked 10-19 cig-arettes had 2.6 times the death

rate of nonsmokers. Women between 40-49 who smoked 20-30 cigarettes daily had 3.62 times the heart attack death rate of nonsmokers; those who smoked 10-19 cigarettes has twice the death rate.

A 1970 study of 3,263 male California longshoremen lumped nonsmokers with those smoking less than a pack a day and still found twice the deaths from heart attacks among people

says researchers conclude that smoking is "dose-related" to heart attacks "in terms of years of smoking, number of cigarettes smoked per day and the habit of inhaling. The association is generally consistent, reproducible and predictive.

and predictive."

That means the more you smoke, the longer you smoke and the more you inhale, the greater your risk of heart attack.

"Smoking is causally related to coronary heart disease in the common sense of that idea, and for the purposes of preventive medicine," the surgeon general's

One way smoking causes heart

attacks is by accelerating hard-ening of the arteries. Heart attacks are caused when an artery supplying blood to the heart is completely blocked, cut-ting off the flow of blood to a portion of the heart muscle and killing the muscle. A major source of information

on hardening of the arteries — atherosclerosis — came from autopsies on people who did not die of coronary artery disease. Dr. Oscar Auerbach conducted autop-Oscar Aueroach conducted autopsies on 1,372 persons at the Orange, N.J., Veterans Administration Hospital, and reported in 1965: "The percentage of men with an advanced degree of coronary atherosclerosis was higher among cigarette smokers than

a day. among nonsmokers, and ... the problem report percentage increased with thyms the

Amount of cigarette smoking."
Among nonsmokers, 62.9 percent had no or only slight hardening of the arteries, and 15.3 ening of the arteries, and 15.3 percent had advanced cases. Among those smoking more than two packs a day, only 18.7

percent had none or slight hardening of the arteries, 35.4 percent had moderate hardening, and 45.9 percent had severe hardening of the arteries.

The institute says animal experiments on why hardening of the arteries occurs "must be re-garded as unsatisfactory." So, while doctors are sure smoking helps harden the arteries, they still don't know how.

Oxygen cut off?

The institute also noted that researchers have speculated nicotine and carbon monoxide might aggravate the cutting off of oxygen to the heart muscle, another important element in heart at-

They concluded that more research on the specific relation-ships of nicotine and carbon monoxide to heart attacks "would be particularly useful." Nicotine increases the heart rate. Carbon monoxide decreases amount of oxygen available to

Smoking is the most important contributor to another heart

- irregular heart rhythyms that can lead to sudden death. About 55 percent of cases occur in people who have no his-tory of heart disease.

Cigarette smoking was the most potent contributor to sudden death from irregular heart rhythm, according to a 1975 study of 1,838 New York male civil servants and 2,282 men in the Framingham, Mass.

The report offers several theories but no firm conclusions on why cigarette smoking causes sudden death. One theory suggests smoking further inhibits inadequate blood supplies to por-tions of the heart muscle. That in turn sets off fatal irregular heart thythms

Smoking also is involved in aortic aneurysms — weak spots in the walls of aortas. The weak spots burst, leading to hemorrhage and often, death.

Two studies related the inci-dence of aneurysms to the num-ber of cigarettes smoked, and found pack-a-day smokers were four or five times more likely to die from aneurysms than were nonsmokers. Two-pack-a-day smokers were seven or eight times more likely to die from aneurysms than nonsmokers.

eurysms than nonsmokers.
Dr. G.C. McMillan of the National Heart, Lung and Blood Institute, offers several theories why smoking causes aneurysm, but says there is little evidence to support them.

The report also concludes that

May help cause the intense heart pains called angina pectoris "but the findings are inconsis-tent."

 Probably does not cause strokes, either those caused by blocking of arteries supplying blood to the brain or by intrace-rebral hemorrhages, in which blood leaks into the brain tissue. blood leaks into the blain usage But in women, it may play a role in another kind of brain hemor-rhage, called a subarachnoid hemorrhage, in which blood flows into the brain's internal

. Te a key factor in causing e is a key factor in causing circulatory problems in the arms and legs and frequently leads to gangrene. The danger is particu-larly strong for diabetics who

"There is no reasonable doubt that cigarette smoking as a risk factor for these cardiovascular diseases has been proven," the report says. "Its dimensions as a risk factor for them have been established for the American peo-

In a foreword to the report, Health, Education and Welfare Secretary Joseph Califano says smoking is related to 225,000 deaths from cardiovascular disease - including heart attacks - every year.

Smoking And Health

Smoking adds to your chances for lung cancer

Documenting the connection be-tween lung cancer and smoking was the strongest single element of the 1964 U.S. Surgeon General's

of the 1964 U.S. Surgeon General's report.
In a section prepared by the National Cancer Institute, the 1979 surgeon general's report states the case even more strongly.

"For every preventable death from highway accidents, there were approximately two deaths from lung cancer which could have been prevented" if the victims hadn't smoked cigarettes, the report says.

nave been prevented in the virtums hadn't smoked cigarettes, the report says.

The National Center for Health Statistics recorded 86,267 lung cancer deaths in 1976, compared with 46,700 from automobile fatalities. The American Cancer Society estimates 112,000 cases with 97,500 deaths this year.

In North Carolina, 2,006 persons died of lung cancer in 1977, an annual death rate of 36.3 per 100,000 people and one that is increasing. Lung cancer killed 145 persons in Mecklenburg County last year, compared with 78 auto deaths, 61 killings, 47 suicides.

Study after study shows the risk of lung cancer increases directly with the number of cigarettes smoked. Taken together, the studies indicate people who smoke the page 19 feet 19

studies indicate people who smoke two packs of cigarettes a day run a risk of getting lung cancer about 20 times greater than the risk for

"Cigarette smoking is causally related to lung cancer in men," the 1964 report said. "The magnitude of the effect of cigarette smoking far outweighs all other factors."

smoking far outweigns an cause factors.

"The data for women, though less extensive, point in the same direction."

The National Cancer Institute now says, "In the fifteen years since the 1964 surgeon general's report was published, these con-clusions have been confirmed by numerous investigations in many countries"

Meanwhile, lung cancer has continued to rise sharply.

In 1950, amid the first public indications of a link between cigarette smoking and lung cancer, doctors reported 18,313 lung cancer, doctors reported 18,313 lung cancer.

cer deaths. In 1964, deaths hit 45,838. Last year, there were 92,400 lung cancer deaths.

Since population has been increasing more slowly, the increases mean a skyrocketing morecreases mean a skyrocketing mortality rate from lung cancer from 19.9 deaths per 100,000 men in 1950, to 64.5 per 100,000 men in 1976. For black men, the rate was even higher — 93 deaths for 100,000 men in 1976.

For white women, the death rate has gone from 4.7 lung cancer deaths per 100,000 women in 1950, to 19.5 in 1976. For black women, the 1976 rate was 17.4 lung cancer deaths per 100,000 women.

The report says those figures demonstrate that there is a seri-

ous, increasing problem with lung cancer among women. It says "increases in lung cancer mortality among women cannot be explained" by the fact that more and more women are working and might be exposed to cancer-causing chemicals in the workplace.

The National Cancer Institute says the overall continuing climb in mortality rates is probably

in mortality rates is probably caused by cancer catching up with "older persons who use nonfiltered high-tar-and-nicotine cigarettes and who have done so for the ma-jority of their lives."

In Britain, lung cancer rates have started to decline in men under 60, which doctors attribute to reduced consumption of cigarettes and switches to filter and low-tar cigarettes.

The 1979 cancer institute report

uses nine prospective studies where researchers monitored medical histories and recorded the causes of death. Among the stud-

les:
A 20-year study of 34,400
British doctors, reported in 1976, found 441 deaths from lung cancer. Overall, smokers were 14 times more likely to die from lung cancer than nonsmokers.

Doctors who smoked between one and 14 cigarettes a day had a lung cancer death rate about eight times higher than nonsmokers.

times higher than nonsmokers. Those who smoked 15 to 24 cigarettes daily had a death rate nearly 13 times that of nonsmokers. Doctors who smoked more than 24 cigarettes daily were 25 times more likely than nonsmokers to get lung cancer.

more likely than nonsmokers to get lung cancer.

• An 8½-year study of 239,000 American veterans included 1,256 lung cancer deaths. The ratio: a death rate 12 times greater for smokers than for nonsmokers.

Smokers who begin puffing early in life are much more likely to die from lung cancer than those who start later, studies show.

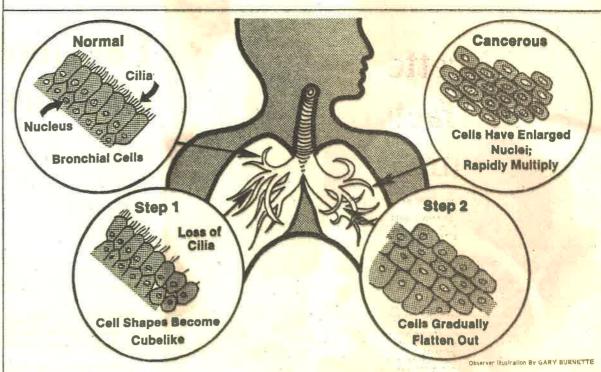
In the veterans study, those who began smoking after 25 had 52 times the lung cancer mortality risk of nonsmokers. The risk was almost two times greater for smokers who started between 20 was almost two times greater for smokers who started between 20 and 24 than for those who started after 25. The lung cancer mortality risk was almost three times greater for those who started between 15 and 19 than for those who started later.

How smokers inhale also helps determine their lung cancer risk. "Inhalation of smoke well into

"Inhalation of smoke well into "Innatation of shider well inner the lungs is the major mechanism whereby lung tissue is exposed to carcinogens which ultimately produce lung cancer," the National Cancer Society notes.

Generally, studies show those who say they inhale deeply have up to 17 times the lung cancer death rate of nonsmokers. Those who say they inhale lightly run a lung cancer death risk about eight times greater than nonsmokers. Some researchers have sug-

A Normal Cell Becomes Cancerous



How cancer creeps into smokers' lungs

How does cigarette smoke cause lung

Dr. Edward Landis Jr., a leading Char-lotte pulmonary disease specialist, described the ways scientists believe lung cancer devel-

the ways scientists believe lung cancer develops from smoking.

Virtually the entire respiratory system is lined with slender column-shaped cells with hairlike cilia at the ends. The cilia clean pollutants from the lungs.

But irritation from chemicals in tobacco smoke gradually causes the cells to change. First, they lose their cilia and begin to look more like cubes than columns. As the irritation continues, the cells grow more and more irregular. Eventually the cells "begin to flatten out and look like skin cells," Landis says. That stage is called squamous metaplasia and it often occurs more or less simultaneously at about 50 sites in the lungs.

At that point, the cells are not cancerous.

At that point, the cells are not cancerous. But it's a danger sign "we see frequently in smokers," Landis says. The cells indicate cancer may follow after a period of months or years of additional exposure to smoke.

Finally, squamous cells lose all control i become "frankly malignant and inva-e," Landis says.

That is squamous-cell cancer, the leading

kind of lung cancer.

The cells clearly look abnormal to the

practiced eye. Often, they get into the blood-stream and spread elsewhere — sometimes to the brain.

The time it takes for squamous metapla-sia to become squamous-cell cancer varies, from a few months to 20 years or more. So does the time it takes to go from that first tiny patch of actual cancer to death.

One major reason is that the effectiveness of the body's natural cancer-fighting system

varies from person to person. That system is supposed to recognize and kill cancer cells, but "in some people, it doesn't work as well," Landis says. Why jan't clear. While the cancer is still microscopic, it is

100 percent curable. But once symptoms appear, it's often too

Those symptoms include spitting up blood, unexplained pain, or a visible tumor on a chest X ray, Often, Landis said, squamous-cell cancer is not detectable on X ray until it is too late.

He said the five-year survival outlook for patients who already are spitting up blood or are in pain is "10 percent, or thereabouts."

The survival rate once a tumor shows

The survival rate once a tumor shows on a chest X ray depends on the size and location of the camer, it cancer on an outgoing portion of the lung, discovered when it's an

inch or less in size usually means survival chances are good after surgery to remove the lung section. But if the spot has already grown to 1½ or 2 inches, or is in a central area of the lungs, the death rate skyrockets.

Landis said lung cancer can be detected early by analysis of cells in sputum, but that's an expensive process.

Landis said the relationship between squamous-cell cancer and smoking is "95 percent or better." In the past three or four years, he can't recall treating a single case of squamous-cell cancer where the person did not smoke.

"We're seeing were all the time." he said.

"We're seeing more all the time." he said.

Landis says if a person quits smoking
while there is still only squamous metaplasia
in the lungs, the problem may regress and
the lungs might return to near-normal. But no one knows when the damage is irreversi-

About 70 percent of lung cancer is the squamous-cell variety, Landis said. Treatment focuses on surgery, if possible. Drug treatment is rarely successful.

Other forms of lung cancer include adenocarcinoma, small-cell or oat-cell cancer, large-cell cancer and aiveolar-cell cancer. The reaction between the cancers and smoking is not as clear.

gested lung cancer might be due to inherited factors or environ-mental factors other than smok-ing. But studies of identical twins with similar environmental and genetic backgrounds support evi-tages that employing causes lung dence that smoking causes lung

cancer.

Low-tar-and-nicotine cigarettes help reduce smokers' lung cancer

Dr. Cuyler Hammond, vice president for epidemiology and statistics of the American Cancer Society, and his collegues compared lung cancer death rates for people who smoked high-tar cigarettes with death rates for low-tar cigarette smokers. rette smokers.

Among men, lung cancer mortality rates for low-tar cigarette smokers were 20 percent lower than those for high-tar cigarette

smokers. Among women, low-tar smokers had a 40 percent lower death rate. Hammond found the advantages

of low-tar-and-nicotine cigarettes disappeared for smokers who sim-ply increased the amount they

smoked after switching.

Smokers can reduce their risk of lung cancer by quitting — although 15 years after quitting former smokers still have death rates higher than people who never smoked, according to the report.

Air pollution may contribute to

lung cancer, researchers say.
Lung cancer death rates are
higher in urban areas than in rural
areas so "it is possible that there
is an interaction between the carcinogens in cigarette smoke and other compounds in the ... atmosphere."

their risk of

spontaneous

-abortion,

premature

death of the

infant during the first days

birth and

of life.

But cigarette smoking remains the most important cause of lung cancer, and "in the absence of cigarette smoking, the combined effects of all atmospheric agents do not increase the death rates for lung cancer more than a very few cases per 100,000 persons."

The surgeon general's report notes that pipe and cigar smokers have lung cancer death rates higher than nonsmokers "but substantially lower than those of cigarette smokers... There is little evidence that lung cancer is associated with the use of chewing to-bacco or snuff."

People in certain occupations

People in certain occupations run higher risks of lung cancer, al-though the report notes "workers can substantially reduce or elimi-nate the potential for harmful oc-cupational exposures by eliminat-ing cigarette smoking ..."

For example, asbestos workers who smoke are 92 times more likely to develop lung cancer than nonsmokers who don't work with asbestos. Workers mine asbestos in Jackson and Yancey counties in North Carolina-

And the lung cancer risk for uranium workers who smoke is four times greater than for uranium workers who do not smoke.

The National Cancer Institute concludes the section by noting:
"Fortunately, lung cancer is largely a preventable problem. Significant reductions in the number of deaths from lung cancer can be achieved if a significant portion of achieved if a significant portion of the smoking population can be persuaded to stop smoking, and if a reduction can be brought about in the number of young people who take up smoking."

Pregnancy and smoking can be a tragic combination

In the 1964 surgeon general's report, the effect of smoking on and infant health

kissed off in a single page.
Researchers have learned a lot since 1964.
In the 1979 surgeon general's In the 1979 surgeon general's report, a 94-page section on pregnancy and infant health declares "cigarette smoking during pregnancy has a significant and adverse effect upon the well-being of the fetus, the health of the newborn baby and the future development of the infant and child."

The latest research corroborates The latest research corroborates findings from the late 1960s that smoking mothers substantially increase their risk of spontaneous abortion, premature birth, and death of the infant during the first days of life.

In addition, doctors are finding "evidence of long-term impairments in physical growth dimin-

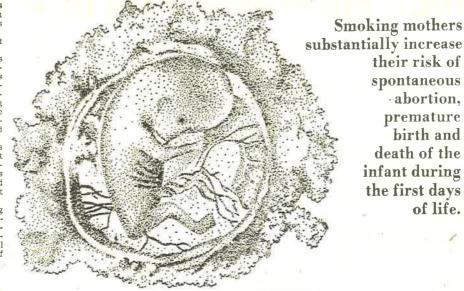
ments in physical growth, dimin-ished intellectual function, and deficiencies in behavioral development" for children of smoking mothers, the report says.

Reports differ

Reports differ on whether those gaps are eventually closed, but new studies indicate some children

new studies indicate some children of smoking mothers remain physically and mentally stunted as late as age 11.

The section on smoking and infant health was prepared for the National Institute of Child Health and Human Development by the institute's staff and faculties at Johns Hopkins School of Hygiene and Public Health and the Loma Linda University School of Medicine.



Researchers say 45 studies involving more than 500,000 births confirm that babies born to smok-Institute researchers found the likelihood of low birth weight diinkelinood of low birth Weight di-rectly relates to the amount a woman smokes. For instance, in a study of mothers who weighed less than 120 pounds, about 6 per-cent of nonsmokers had low birth ing mothers average about a half-pound lighter than babies born to nonsmokers.

Low birth weight increases the Low birth weight increases are likelihood of a variety of central nervous system problems — including cerebral palsy, poor motor coordination and learning disability. The lower the weight, the weight babies, compared to 10.2 percent of those who smoked less than a pack a day, and 15.8 percent of mothers who smoked more

than a pack a day.

A smoker who quits for pregnancy reduces her chances of delivering an underweight baby to about the same as those for non-smokers.

The studies led the institute to conclude maternal smoking is the

conclude maternal smoking is the sole reason for underweight for 21 to 39 percent of all babies who weighed less than 5½ pounds at

The researchers concluded, looked at all children born in Based on 10 studies, that lower birth weights could not be explained by shorter pregnancies among smokers than nonsmokers.

That means, the institute says, That means, the institute says,

"Lower birth weight for smokers infants must be due to a direct re-tardation of fetal growth." In other words, the infants were sim-ply small for their age, rather than premature.

The results are less clear about whether the retardation of growth and development is long-term or permanent.

J.B. Hardy and E.D. Mellits reported in the Dec. 23, 1972, issue of Lancet, a medical journal, about 88 pairs of children matched by race, age of mother, educational background, sex and birthday. On the average, children of mothers who smoked showed significantly lower birth weights, heights and head circumferences than children of mothers who did not smoke.

Lag continues

By age 7, children of smoking mothers were still behind in each measurement, but the differences weren't significant.

In another study, D.G. Dunn and three colleagues reported in issues of the Canadian Journal of Public Health that significant differences between children of smoking and nonsmoking mothers remained at age 6½, and "there was no evi-dence that the children of smoking women 'caught up' in growth with the nonsmokers' children."

A third study — called the British Perinatal Mortality Study —

tion due to smoking in pregnancy were found and this deficit in-creased with the number of ciga-rettes smoked during pregnancy"

rettes smoked during pregnancy" at both ages, the report says.

Not only were the smokers' children shorter, they were "between three to five months retarded in reading, mathematics and general ability."

The institute's report also cites studies showing the risk of spontaneous abortion and fetal death, as well as deaths during the first days of life, increases as maternal smoking increases.

The report cites one study which found pregnant women who smoke are 80 percent more likely to experience spontaneous abortions than nonsmoking women.

women. And a 1976 study in Washington County, Md., showed the infant death rate per 1,000 births was 23.5 for nonsmokers, 28.2 for smokers of less than a pack a day, and 31.8 for smokers of a pack a day or more.

"In other words, smoking increased the risk by 20 percent and heavy smoking increased it by 35 percent," the study said.

Maternal smoking can be a direct cause of fetal or newborn death in an otherwise normal infant primarily because smoking deprives the child of adequate ox-

The cigarette: chemical factory in miniature

The National Cancer Institute describes the lighted cigarette as a "unique chemical factory generating more than 4,000 known com-

The factory operates at high temperatures — the burning tip reaches as high as 1,900 degrees

F.
By the time smoke reaches the inhaling tip, the temperature is down to about 100 degrees.
The intense heat affects the way the chemicals act. So do the myriad combinations and reactions of those 4,000 compounds. Scientists don't fully understand all these effects.
Here's some of what's in that

Here's some of what's in that

GAS

Carbon monoxide and carbon dioxide. Cigarettes with perforated filter tips may have unusually low levels of carbon monoxide, a poisonous gas that kills by asphyxiation.

tion.

Nitrogen oxides. Tobacco smoke contains nitric oxide, a toxic chemical; nitrogen dioxide, an irritant, and nitrous oxide (or nitrogen monoxide), an anesthetic.

Nitrosamines. A family of compounds known to cause cancer in animals. Cellulose acetate filters remove these compounds from the smoke; chargoal filters don't smoke; charcoal filters don't.

Hydrogen cyanide, the cigarette's major killer of cilia in the lungs. It's highly poisonous and can bring on respiratory arrest. It's used as a rat poison and insectivities.

 Sulfur compounds, including hydrogen sulfide, a poisonous gas; carbon disulfide, a poisonous solvent, and sulfur dioxide, a safer chemical used to make pharmaceu-

Aldehydes and ketones, including formaldehyde. They inhibit the movement of tlny hairlike cilia

that help clear foreign particles from the lungs.

Alcohols. Cigarette smoke contains methanol, ethanol (drinking alcohol), propanol and at least 10 other alcohols. Alcohols can react with other chemicals under high temperatures; scientists don't ow all the results of those re-

PARTICLES

PARTICLES

Particles, taken as a group, make up the "tar" of cigarettes. Filters and low-tar cigarettes have cut the tar average by more than half since 1957.

Nicotine. The nicotine average in cigarettes has been cut

more than half in the last two

decades.

Scientists disagree about whether nicotine is carcinogenic, but agree that nicotine decomposes into several chemicals that may

Nitrosamines. These are the only known carcinogens found only in tobacco. They're much most prevalent in cigars, chewing tobacco and snuff.

Aromatic amines may be the reason for the association between bladder cancer and smoking. They include two known bladder carcinates a fine to the carcinate and the carcinates are also the carcinates and the carcinates are also the carcinates are carcinates and the carcinates are carcinates and the carcinates are carcinates are carcinates and the carcinates are carcinates and the carcinates are carcinates and the carcinates are carcinates are carcinates and the carcinates are carcinates are carcinates and the carcinates are carcinates are carcinates are carcinates and the carcinates are carcinates and the carcinates are carcinates are carcinates are carcinates and the carcinates are carcinates are carcinates are carcinates and the carcinates are carcinates ogens found in trace amounts in

 Alkanes and alkenes. They come from the waxy coating on leaves. These chemicals may slow tumor development.

 Aza-arenes. Traces of several carcinogenic aza-arenes have been found in tobacco smoke. Some are mutagens, capable of inducing ge-netic charges. netic changes.

netic changes.

• Carboxylic acids. More than
50 varieties have been identified,
accounting for up to 7 percent of
smoke particles. They're also
called fatty acids. It's still to be
determined the role these chemicals play in causing cancer from
tobacco, but fatty acids are tumor
promoters in other types of studies.

 Metals. Tobacco contains minerals from the soil, from ferti-lizers, and from sprays, particularly calcium, magnesium, potassium and sodium. Traces of 76 metals have been discovered in cigarettes and 30 — including arsenic and nickel — show up in smoke.

Arsenic has plummeted in cigarettes are nesticities have charged

rettes as pesticides have changed, but there's still between one-half Carbon monoxide Carbon dioxide Nitrogen oxide Ammonia **Nitrosamines** Hydrogen cyanide

Nitriles Sulfur compounds Nitromethane Nitrobenzene Amines Hydrocarbons

Benzenes Polynuclear aromatic hydrocarbons

* * THE CHARLOTTE OBSERVER Sun., Mar. 25, 1979

Isoprenoids **Alkenes** Alkanes Aromatic amines

Pesticide residues Radioactive compounds Carboxylic acids Flavor enhancers Preservatives

and one part per million. Some ar-senic in cigarette tobacco is trans-ferred to lungs, some to be depos-

Tars

Ketones

Alcohols

ited in body tissues. (The industrial exposure limit of

eight-hour shift.)
Nickel in all forms is carcinogenic.

Radioactive compounds. Several radioactive compounds have

Nicotine

210. Analysis of human tissues indicates the lung, blood and liver of smokers contain higher concentrations of polonium than those of

Radioactive polonium has been

· Agricultural chemicals. Agricultural chemicals. Stricter controls on insecticides have changed these residues. For instance, DDT used to be present at 10 parts per million on tobacco. Today, it's less than one-half part

Complex things are wrapped up in small packages

What's in a cigarette?

Well, there's tobacco, and paper to wrap it, and usually a fil-

That's what's visible.
In fact, scientists have discovered more than 4,000 compounds

many could be among the compounds in cigarettes.

Many could be among the compounds that make tobacco unhealthy.

Tobacco plants vary widely in chemical makeup — with minerals, soil properties, moisture supply temperature and light affect. ply, temperature and light affecting composition and quality.

There's even variation within an individual tobacco plant.

Nicotine content is highest on the high leaves of a plant. Sugar content is higher in the middle leaves. Acid is highest on the lowest leaves.

reaves. Acid is nignest on the low-est leaves.

Factors that promote good burn-ing will result in lower nicotine and cyanide, more carbon monox-ide. The higher the leaf on the stalk, the worse it will burn.

The National Cancer Institute says residues from herbicides, fer-tilizers, resticides and insecticides

tilizers, pesticides and insecticides may affect what's in the tobacco

But cigarettes are more than to-

Casing solutions to hold the blends together and improve fla-vor and burning. These typically include sugars, syrups, licorice and

Casing additives, when burned, roduce undesirable as well as derable products. Licorice, for intance, is thought to be linked with polynuclear aromatic hydrocarbons, which are under study to determine what role, if any, they

cer Institute.

have in lung cancer.

Moisture retainers keep cigarettes moist, enhance flavor.

Flavor-enhancing additives such as fruit extracts, methol oils and aromatics.

"The flavorings normally used ... are usually selected from substances generally considered safe to humans, even though such definitions do not guarantee that subsequent ... (burn products) are safe," says the National Cancer Institute.

• A wide variety of paper, with additives.

Even the paper's porosity affects the burning quality.

For instance highly porous test
puper delivered the same nicotine,
but less tar, acetaldehyde, acrolein, formaldefryde, carbon monoxide and hydrogen cyanide.

• Filters. Charcoal filters remove some toxic gases; cellulose
filters tend to remove the acids.

New preparation techniques,
such as freeze drying, can also
change the product. Freeze drying
reduces nicotine, but leaves the
same amount of acctaldehyde and

same amount of acctaldchyde and formaldehyde.

Some jobs are putting smokers in double jeopardy

Workers in some industries including textiles - run a greater risk from smoking than most peo-

ple.
One problem is that some chemfcals in the work place can con-taminate tobacco products, en-abling the chemicals to enter the body through inhalation, ingestion body through inha or skin absorption.

The National Institute for Occupational Health and Safety reported about workers whose cigarettes had been contaminated with Teflon. When the Teflon was heated by the burning cigarette, one worker "... experienced shiv-ering and chills which lasted ap-proximately six hours, beginning one half-hour after this incident," researchers said.

The problem disappeared when smoking was banned in the work area, and handwashing was re-

quired before smoking.

Another difficulty is that some of the same toxic chemicals in cig-

of the same toxic chemicals in cig-arette smoke occur at some jobs, meaning workers run the risk of higher-than-usual exposure. Smoking produces carbon mon-oxide, for instance, so people who smoke and work in an industry that produces large amounts of carbon monoxide may be in extra

In one experiment, nonsmoking blast furnace workers showed concentrations of 4.9 percent of carboxyhemoglobin in their blood by the end of their shifts. That compared to concentrations of 7.4

Smoking can compound the effect of some hazardous substances, including cotton dust which is common in textile plants. The surcommon in textile plants. The surgeon general's report cites studies
showing cotton workers who
smoke have more byssinosis, or
brown lung disease, than nonsmoking cotton workers.

Brown lung symptoms include
chest tightness, cough and shortness of breath and the disease can
lead to chronic obstructive lung
disease.

Researchers have found that ini-

percent in heavy smokers who worked at the biast furnace. That's an important difference, because levels above 5 percent can be dangerous for people with heart disease.

Smoking can compound the affects of smoking and cotton dust are simply combined. As byssinosis progresses, the effects of the two become worse than if they were simply added together. Researchers have found similar effects for coal dust

and chlorine.

Cigarette smoke can actually combine with toxic agents found at work to cause problems greater than the two elements individual-

ly.
Some asbestos workers suffer from asbestosis, a nonmalignant respiratory disease. But in smokers, asbestosis can lead to lung

In one experiment, scientists ob-served 11,656 workers who installed insulation containing asbestos. Over five years, there were 134 lung cancer deaths among 9,591 smokers, compared to 2 deaths among 2,066 nonsmokers. The institute concludes that

The institute concludes that, "workers exposed to tobacco smoke and asbestos experience far greater levels of lung cancer than would be expected from the contribution of either tobacco smoke or asbestos alone."

researchers also have found that smoking can contribute to industrial accidents. The institute now recommends that workers in certain kinds of industries, including coal mines, refrain from smok-

Work around these chemicals? The National Institute for Occu-

pational Safety and Health has depational Sajety and Health has de-termined that these are among the chemicals that can enter the body through eigarette smoking; formal-dehyde, boron trifluoride, organo-tin, methyl parathion, dinitro-ortho-creosol, carbaryl, inorganic fluorides, inorganic mercury and lead.

Other chemicals found in tobac-co smoke and the work place in-clude acetone, aldehydes, arsenic, cadmium, formaldehyde, hydrogen cyanide, hydrogen sulfide, lead, methyl nitrite, methylene chloride, nicotine, nitrogen dioxide and phe

If you work with any of these chemicals, you might ask about smoking around them.

Put this in your pipe...

Smoking pipes and cigars is far safer than smoking cigarettes, according to the surgeon general.

Pipe and cigar smokers have only slightly more cases of fatal heart disease, chronic bronchitis, emphysema — and disease in gen-eral — than nonsmokers, the report says.

But death rates from oral and related cancers for pipe and cigar smokers "equal or exceed those for cigarette smokers," the report

Even though pipe and cigar smokers run less risk of dying of lung cancer than cigarette smok-ers, the risk is still greater than for nonsmokers.

The risk increases with the amount smoked. One study found amount smoked. One study found men smoking more than four ci-gars or 10 pipes daily had "signifi-cantly higher" death rates than men who never smoked. Those smoking less had death rates similar to nonsmokers.

The report's section on nonciga-rette tobacco use, prepared by the



Center for Disease Control in Atlanta, cites one study showing cigar smokers are five times more than nonsmokers to die likely than nonsmokers to up from oral, windpipe or esophageal cancer. The study showed pipe smokers are 3.5 times more likely to die from these diseases than nonsmokers. Cigarette smokers died of the diseases about five

times as often as nonsmokers. The risk of dying of lung cancer is clearly less for pipe and cigar smokers than for cigarette smokers — although the risk is greater than for nonsmokers. One study found pipe and cigar smokers, died

of lung cancer 5.8 times more often than nonsmokers. By comparison, cigarette smokers died from cancer at a rate 14 times greater than nonsmokers.

The surgeon general's report The surgeon general's report finds little evidence to indict chewing tobacco and snuff (pulverized tobacco that's snifted or "dipped" between lip and gums).

But after the surgeon general's report appeared, Dr. Edwin Joy, chairman of the department of oral surgery at the Medical College of Georgia, reported snuff increases the risk of oral cancer.

Drugs and cigarettes don't mix

Smoking cigarettes may reduce the effectiveness of some drugs, according to the Food and Drug Administration (FDA).

And smoking can compound possible hazards from some drugs, according to the FDA, which prepared the section of the surgeon general's report on interactions beween smoking and food and

The report found that some drugs — including the common prescription painkiller Darvon and a family of drugs called theophyllines, used to treat asthma and bronchitis — act differently on

One study rated Darvon ineffective in ordinary doses for 10 per-cent of nonsmokers, 15 percent of light smokers and 20.3 percent of heavy smokers. Researchers think one reason is that smoking somehow decreases the pain threshold
— in other words, smokers can
take less pain than nonsmokers.

But simply taking more of a drug isn't a solution for smokers. An overdose of Darvon, for instance, is dengerous and patients are routinely warned not to ex-

Some drugs, such as phenacetin, (one of the key drugs in popular painkillers such as Empirin) are burned up faster in a smoker's body, meaning the smoker gets less effect from the drug, researchers believe.

One drug widely used to treat blood pressure may be count-eracted, by the nicotine in ciga-rettes, studies have shown.

Nicotine increases heart rate blood pressure, and heart's output of blood. The drug Inderal is sup-posed to decrease heart rate, blood pressure and heart output. But several studies showed smoking after taking Inderal increases blood pressure. That alarmed the FDA, which said, "The possibility that smoking reverses or blocks, even in part, the anti-hypertensive effect of (Inderal and drugs like it) ... is obviously ... a matter for concern."

But smoking has no known effect on some commonly used drugs, including Valium, studies have found.

The report notes that cigarette smoking increases the odds that

birth control pills will lead to car-

A 1973 report from the Collaborative Group for the Study of Stroke in Young Women found, "women who took the pill and smoked one pack of cigarettes had a 200 percent increased risk of a stroke" over women who took the pill and didn't smoke.

The FDA also cited a study showing that women between 39 and 45 who snoke and take estrogen have a substantially higher risk of a heart attack than those who don't smoke.

The FDA said smokers need to let their doctors know they smoke because cigarette smoking alters the results of diagnostic medical

The report quotes some evidence that smokers absorb nour-ishment from food differently than nonsmokers. For instance, non-smokers use proteins significantly more efficiently than smokers, and smoking lowers both blood and tissue levels of vitamin B12, probably because the vitamin is used up countering the effects of the cyanide in tobacco smoke.

If you can just learn to smoke young cocoa beans...

Is there a safe way to smoke?

Doctors and health researchers
answer "no" — smoking any cigarette containing tobacco is more dangerous than not smoking.

Scientists carefully refer to low-tar-and-nicotine cigarettes only as "less hazardous." But the word on these cigarettes, which are taking a steadily increasing share of the market, is encouraging:

Latest studies show they do reduce your risk of cancer and chronic lung disease.

As the tar and nicotine con-

As the tar and nicotine content drops, safety increases—provided the smoker doesn't smoke more cigarettes.

But even the highest-tar-and-

But even the highest-tar-andnicotine cigarettes on the market
today — Players regular (35 mg
tar and 2.5 mg nicotine), English
Ovals king and Bull Durham king
filter — have less tar than the average cigarette of 25 years ago.

Last year, Dr. Gio Gori of the
National Cancer Institute said tar
and nicotine in some brands are so
low a smoker could consume 15 to
23 cigarettes daily of brands such

23 cigarettes daily of brands such as Carlton, Now, Strides, Carlton Menthol and Now Menthol before equaling the "two-a-day" risk level for cigarettes made before

The decline in tar and nicotine in American cigarettes during the past two decades is a major reason why the lung cancer death rate in some age groups is beginning to level off, says Dr. Cuyler Ham-mond of the American Cancer So-ciety.

ciety.

Many younger smokers have never used the unfiltered high-tarand-nicotine brands of the '50s.

When the first reports on smoking and health began appearing in 1954, only 1 percent of all cigarettes had filters, (Parliament, in 1931, was the first cigarette to have a filter) and the average cigarette contained 2 mg of nicotine and 36 mg of tar, wrote Dr. Julius and 36 mg of tar, wrote Dr. Julius Richmond, the U.S. Surgeon Gen-eral, in the current "Smoking and Health."

By the time the first surgeon

general's report on smoking and health appeared in 1964, filter cig-arettes took 60 percent of the market; the average nicotine con-tent was 1.3 mg; the average tar content 23 mg

tent was 1.3 mg; the average tar content 23 mg.

In 1977, the surgeon general said, filter cigarettes were 90 percent of the market, the average tar content was 17 mg, the average nicotine content 1.1 mg. Thirty percent of the market was taken by cigarettes with less than 15 mg of tar.

The reduction has been accom-

The reduction has been accomplished, the report says, by modifying the filter, reducing the to-



Even the lowest yield of cigarettes presents health hazards very much higher than would be encountered if (people) smoked no cigarettes at all'

— Julius Richmond Surgeon General

bacco protein in cigarettes and changing the way tobacco is

(One way cigarette companies got low-tar cigarettes was by puf-fing up the tobacco, so a cigarette has 8 to 10 percent less tobacco. Less tobacco means less tar and nicotine.)
"The \$64 question is: How

harmful is nicotine?" asks the Cancer Society's Hammond, a leading figure in establishing smoking's health hazards. "People don't want to smoke nicotineless cigarettes any more than they would want to drink whisey with-

out alcohol
"If nicotine is safe at low levels," he said, "then they can make

a safe cigarette. Taking out the tar

as sate etgarente. Taking out the tar is no great problem."

But nicotine, a key reason ciga-rettes are addicting, is also a pos-sible source of some cancer-caus-ing chemicals, and scientists aren't sure whether any nicotine at all is

Surgeon General Richmond also reports, "In addition to tar and nicotine, cigarette smoke contains a gaseous phase with numerous components such as hydrogen cyanide, volatile aromatic hydrocarbons and carbon monoxide.

"Carbon monoxide, in particular, has been identified throughout this report as a possible critical factor in coronary heart disease, atherosclerosis and sudden death,

Richmond said the case for reduced tar and nicotine cigarettes has not been proved. People who switch "should be warned that, in shifting to a less hazardous cigarette, they may in fact increase their hazard if they begin smoking more cigarettes or inhaling more deenly.

deeply.

"And most of all they should be cautioned that even the lowest yield of cigarettes presents health hazards very much higher than would be encountered if they smoked no cigarettes at all . . ." Hammond cites three different

sorts of studies as "pieces of a jig-saw puzzle" showing low-tar, low-nicotine cigarettes are less hazardous:

A million-person, 12-year

study he did for the American Cancer Society found "very con-siderable evidence of a lower lung cancer death rate in low-tar-andnicotine cigarettes.'

nicotine cigarettes."

Hammond didn't publish the study for six years. One reason was his belief that people who switch to low-tar, low-nicotine brands "include those who never did smoke very much as well as people who have been trying to

give up and never been able to quit."

But the results, which have held up through 13 years, continue to show smokers of high-tar ciga-rettes had the highest lung cancer

rettes had the highest lung cancer death rate, medium-tar cigarettes were in the middle, low-tar the lowest.

• Projects where dogs smoked filterd and nonfilterd cigarettes through a hole in their throats. Without the filter, there was great damage to the dogs' lungs from cancer and noncancerous lung diseases. The dogs smoking filter cigarettes had little evidence of damage. No dog exposed to low-tar

arettes had little evidence of damage. No dog exposed to low-tar
cigarèttes developed cancer.

• A recent report in the New
England Journal of Medicine
showing fewer of the biological
changes in the cells of the lungs of
smokers that frequently lead to
cancer.

"All three types of evidence show the same thing — that's what convinces me so strongly," said Hammond also found that will

male smokers of high-tar-and-nicotine brands had nearly twice the death rate of nonsmokers (a ratio of 1.96 to 1), male smokers of low-tar brands showed a ratio of 1.66 to 1.

In another study, however, he showed increased smoking of low-tar cigarettes could be more dangerous. For instance, he found 60 percent more lung cancer deaths among male smokers who consumed 20-39 low-tar-and-nicotine cigarettes than among those who smoked 1-19 high-tar-and-nicotine cigarettes. cigarettes. Among women in the same comparison, the lung cancer death rate was more than twice as

But, he said, that probably doesn't happen often. In the million-person study, "We asked the question on five different occasions, and there was not a general

sions, and there was not a general tendency to increase smoking," Hammond said. "The majority was smoking about the same."

Cigarettes that don't contain to-bacco have not caught on anywhere. The commercially produced tobaccoless cigarettes include "Free," which contains "absolutely no nicotine" and is made from "the tender outer layer of the cocca bean." according to the manufacturer, International Brands Inc.

the manufacturer, International Brands Inc.
Celanese Fibers Marketing Co. in Charlotte makes a tobacco supplement called Cytrel that's included in 70 percent of British brands that contain supplements. But sales amount to less than 1 percent of the British cigarette market, and are declining.

How much of what you're smoking is tar and nicotine?

Here are the latest Federal Trade Commis-sion cigarette ratings. The brands are listed in some properties of the properties of the followed by the nicotine value. Hard packs generally have lower levels be-cause the ciparettes in them are shorter than those in soil packs.

Albine king filter menthol, 14 milligrams for and 0.5 milligrams nicoline.
American Lights 120 mm filter, 3 and 0.7.
American Lights 120 mm filter menthol, 9 and 0.7.

Belair kind filter menthol, 15 and 0.5.
Belair kind filter menthol, 15 and 0.5.
Belair 100 mm filter menthol, 16 and 1.1.
Benson & Hedges regular filter (hard pack), 17
Benson & Hedges kind filter (hard pack), 17
Benson & Hedges 100 mm filter (hard pack), 17
Benson & Hedges 100 mm filter menthol (hard pack), 17
Benson & Hedges 100 mm filter menthol (hard pack), 17
Benson & Hedges 100 mm filter, 17 and 1.1.
Benson & Hedges 100 mm filter, 17 and 1.1.
Benson & Hedges 100 mm filter, 17 and 1.1.

Berson & Hedgas 100 mm filter meinfol, 17 and 3 merson as Hedgas 100 mm filter meinfol, 17 and 3 mill Durham king filter, 30 and 2.0.

Suill Durham king filter, 30 and 2.0.

Carnel regular, 23 and 1.4.

Carnel king filter, 19 and 1.3.

Carlon king filter, 1 and 0.1,

Carlon king filter, 1 and 0.1,

Carlon king filter, 1 and 0.1,

Carlon king filter, 14 and 0.4,

Carlon king filter, 10 and 1.1,

Carlon 100 mm filter, 1 and 0.1,

Carlon 100 mm filter, 1 and 1.1,

Chesterfield king filter, 17 and 1.1,

Decade king filter filter, 17 and 1.1,

Evel 100 mm filter, 10 melhous 1.2 and 0.8,

Duffaulking filter menthol, 12 and 0.8,

Duffaulking filter filter deckt, 16 and 1.1,

Evel 100 mm filter, 16 and 1.0,

Evel 100 mm filter, 16 and 1.0,

Evel 100 mm filter, (hase sack), 16 and 1.0,

Evel 100 mm filter, (hase sack), 14 and 1.0,

Eve 130 mm filter menthol (hard pack), 15 and 1.1 Fact kins filter, 12 and 0.8. Fact kins filter menthol, 13 and 0.9. Fallma kins, 28 and 1.1 Fallma kins, 28 and 1.2 Fallma kins, 28 and 1.2 Fallma kins, 28 and 1.2 Fallma kins, 28 and 1.3 Fallma kins, 28 and 1.5 Fallma kins, 28 and 2.5 Fallma kins, 28 and 29 and 28 and 29 a

Alariboro kino filter (hard sack), 17 and 1.0.
Alariboro king filter menihei (hard pack), 14
Alariboro king filter, 17 and 1.0.
Alariboro king filter, 17 and 1.0.
Alariboro king filter, 17 and 1.0.
Alariboro king filter, 18 and 1.1.
Alariboro (10 mm filter, 18 and 1.2.
Alariboro (10 mm filter, 18 and 1.3.
Alariboro (10 mm filter, 11 and 0.7.
Alariboro (10 mm filter menthol, 17 and 1.3.
Alariboro (10 mm filter menthol, 18 and 2.7.
Alariboro (10 mm filter menthol, 18 and 2.7.
Alariboro (10 mm filter menthol, 11 and 2.7.
Alariboro (10 mm filter menthol, 17 and 1.3.
Alariboro (10 mm filter menthol, 18 and 2.7.
Alariboro (10 mm filter menthol, 18 and 2.7.
Alariboro (10 mm filter menthol, 18 and 2.7.
Alariboro (10 mm filter) (10 mm

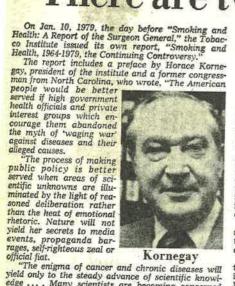
Auditibler King filter menthol. IJ and 8.7. Newsort is filter menthol, thard peckly, 17 and 1.7. Newsort Lights king filter menthol, 18 and 1.3. Newsort Lights king filter menthol, 10 and 0.8. Newsort II of the menthol, 10 and 1.4. New bids of the menthol in and 1.4. New bids filter menthol (hard back), 1 and 0.1. Oals king filter menthol (hard back), 1 and 0.1. Old Gold Straights regular, 20 and 1.2. Old Gold Straights king, 25 and 1.5. Old Gold Straights king, 25 and 1.5. Old Gold Straights king, 25 and 1.5. Old Gold Straights king, 25 and 1.5.

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Players regular, 35 and 2.5.
Railoiph king, 34 and 1.6.
Railoiph king litter, 17 and 0.2.
Railoiph little king litter, 17 and 0.2.
Railoiph little littl

In the face of increasing medical evidence against smoking, the tobacco industry continues to remind us...

There are two sides to every issue — even this one



rages, sell-righteous zeal or official fiat.

"The enigma of cancer and chronic diseases will yield only to the steady advance of scientific knowledge... Many scientists are becoming concerned that preoccupation with smoking may be both unfounded and dangerous — unfounded because evidence on many critical points is conflicting, dangerous because it diverts attention from other suspected hazards...

"It is time for all parties to this controversy to admit that there is much that is unknown. Doing so will encourage research to reduce the deficit in our knowledge and increase our understanding."

Here are excerpts from that report, in the words of the Tobacco Institute, an industry group:

Despite millions of dollars spent since that time both by the government and the tobacco industry on smoking and health-related research, many questions about the relationship between smoking and disease remain unanswered. Now, as in 1964, there are sta-tistical relationships and several working hypotheses, but no definitive and final answers.

Despite claims to the contrary, no one - in government or industry — can explain the reported asso-ciations of smoking with lung cancer, heart disease, emphysema, low infant birth weight, and yes, even

No one knows why — or how — a cancerous growth begins, whether it is in the lung, pancreas or

No one knows why the walls of human arteries become clogged with lipids or how clots that can lead to strokes get their start. No one knows why pregnant women who smoke have lighter infants on the average than women who don't smoke, or why some women, whether or not they smoke, have smaller infants.

Scientists have not proven that cigarette smoke or any of the thousands of its constituents as found in

any of the thousands of its constituents as found in cigarette smoke cause human disease. Nor have scien-tists demonstrated that the healthy nonsmoker is harmed by his neighbor's cigarette smoking. But because some agencies in the U.S. govern-ment, members of the medical profession, and others who just don't like cigarette smoke act and react as

if all the claims about smoking are scientific certain-ties, the Tobacco Institute sets forth here certain evi-dence which relates to such judgments . . .

Public smoking

Other people's smoke has never been shown to use disease in nonsmokers.

cause disease in nonsmokers.

Scientists, researchers, government officials and even some well-known anti-smoking spokespersons have stated that smoking in public places does not harm the healthy nonsmoker. Some persons may find the tobacco smoke of others annoying in some circumstances.

Some persons who favor banning tobacco smoke in public places cite an article published last year claiming that exposure to cigarette smoke resulted in changes in the exercise performance ability of patients with severe angina pectoris. What is usually ignored is that this study is subject to severe criticism for faulty design as well as unsupported conclusions based on patients' self-described symptoms.

Some nonsmokers claim to be allergic to tobacco smoke. However, neither cigarette smoke nor any of the components as found in cigarette smoke has been demonstrated to be a human allergen.

Another claim frequently made by anti-smokers, that children are harmed by their parents' smoking, is mainly based on several studies published in the latest 1960s and 1970s suggesting that cigarette smoke may be responsible for adverse effects in children. However, questions have been raised about both the experimental methods and the reliability of

both the experimental methods and the reliability of the conclusions. Moreover, a number of recent studies have failed to demonstrate adverse effects in children of smoking parents

Overall mortality

The use of results from flawed population studies to frighten people by attributing large numbers of deaths yearly to smoking may be misleading and is

most regrettable.

Assertions that nonsmokers as a group live longer than smokers are based on studies that were poorly designed and statistically flawed. For example, they involved samples not representative of the general U.S. population. Despite these problems, data from C.S. population. Despite these problems, data from the reports are still used to support a variety of claims about smokers' mortality, including the charge that several hundred thousand Americans die each year because they smoke. With such use — and missuse — of data, it is probably not surprising that a caveat in the 1964 surgeon general's report is often overlooked: "Statistical methods cannot establish a causal relationship...." causal relationship

Women and smoking

Inconsistent findings from studies of smoking women and their children make it impossible to draw convincing conclusions from the data

Although the abbreviated 1977-78 HEW report to Although the abbreviated 1977-78 HEW report to Congress concludes that cigarette smoking is "probably causally associated" with increased perinatal mortality, it relies on data which indicate that any claims of a causal relationship have a highly questionable foundation. The data suggest that such factors as history of previous pregnancy loss and hospital pay status (public vs. private) have greater effects on pregnancy outcome than maternal smoking ... Oral contraceptives: The scientific literature does not support the claim that oral contraceptive users

who stop smoking decrease their disease rates signifiwho stop smoking decrease their disease rates signifi-cantly ... Concern has been expressed that the re-ported statistical relationship between oral contracep-tive use, smoking and illness may cause scientists to overlook other factors that may explain this relation-ship.

Cancer in the work place

The almost exclusive focus on individual smoking habits in the study of disease may have delayed needed research into possible occupational and environmental causes.

rommental causes.

The announcement last September by HEW Secretary (Joseph) Califano that at least 20 percent of all cancers may be occupationally related brought angry denials from anti-smoking researchers and organizations whose own estimates differed significantly from the new estimate. The authors of the report referred to by the secretary actually estimated that between 21 and 38 percent of all cancers were occupationally related. They attributed a sizable proportion of all occupational cancers to asbestos exposure and noted that "perhaps the most important lesson to be learned from the asbestos story is that a major health disaster can develop while its early manifestations are lost by being attributed to other factors."

Lung cancer

The failure to consider critically 1) important diag-nostic advances, 2) changes in the reported frequen-cies of lung cancer cell types and 3) trends in ciga-rette consumption and lung cancer mortality data raises serious questions about any conclusions regard-

pes was observed in 1977 orted increase in the lung cancer Because of this reported increase in the lung cancer cell type not generally associated with cigarette smoking, serious doubt is cast on the role of smoking in the development of this disease.

Other cancers

The establishment of any relationship between smoking and cancers of the larynx, esophagus and bladder must involve considerable guesswork, be-cause of the vastly different incidence patterns, and trends of these diseases and multiple suspected

Incongruities in the trends of incidence rates for other cancers' ... are almost impossible to reconcile with the cigarette smoking causal hypothesis

Moreover, new evidence indicates that a number of these cancers may be associated with alcohol consumption and that the association of alcohol with cig-arette smoking may not only compound the relation-ships but may hide other correlations. In addition, recent work has implicated occupational ex and nutritional factors in the etiologies of the

Cardiovascular discuse

A fair appraisal of the evidence, examined in its entirety, indicates that the risk of coronary heart dis-ease is strongly associated with genetic and lifestyle factors.

ease is strongly associated with genetic and lifestyle factors.

In 1977, the director of the governmental agency responsible for cardiovascular research told a Congressional committee that "we still don't know the etiology of arteriosclerosis and hypertension" and that his researchers were still testing the "hypothesis... that lowering cholesterol and cessation of smoking will delay or prevent the onset of heart disease." Meanwhile, statisticians were finding that death rates for heart disease continued the decline that began in the late 1960s — in all age groups, in both sexes and in both whites and nonwhites.

There was new evidence in 1976, 1977 and 1978, that lifestyles, personality patterns and hormonal imbalances are implicated in coronary disease.

An important development in cardiovascular research was reported in 1977, by a group of researchers who reported that they were unable to duplicate their previous findings, which they said had suggested a causal role of carbon monoxide in the development of cardiovascular disease.

Chronic Pulmonary Disease

Chronic Pulmonary Disease

The uncertainties and unknowns in the medical understanding of chronic obstructive pulmonar ease permit no firm conclusions about smoking.

Chronic bronchitis and emphysema are highly complex and poorly understood diseases. Despite serious gaps in the medical knowledge in this area, claims abound that these diseases are caused by claims abound that these diseases are caused by smoking. The validity of such claims is challenged by a recent National Most smoothing. The value of such chains is chairenged by a recent National Heart, Lung and Blood Institute statement that "the exact etiology of emphysema and other chronic lung diseases is unknown..."

The Tobacco Institute in December issued another oklet: "The Smoking Controversy. A Perspective." Here are excerpts:

Dr. Sherwin Feinhandler, cultural anthropologist

Dr. Snerwin Feinhandier, cultural anthropologist on the faculty of the department of psychiatry at the Harvard Medical School ... has found recurring instances where the denial of pleasure was, at bottom, an attempt to seize or maintain political power. This was true of ancient dietary laws, sexual taboos, restrictions on the theater and Prohibition, Dr. Feinhandler says. Others would say it is true today of anti-tobacco programs.

Initially, their "war against cancer" concentrated an medical research.

on medical research . . . Then it degenerated war against cigarettes, with untold billions of ings each year about the alleged health hazards of smoking. Now it has further degenerated into a war gainst smokers, waged through vilification, banish-nent from public places, denial of employment, and

The more elusive victory appears, the greater the resort to harsh and unjustified means, including the denial of personal rights and the stretching of

The efforts to deny the right to pursue the satisfactions of smoking add up to nothing less than tyranny by a minority of anti-smokers.

It is relevant to note that many, if not most, of the frames of the constitution or involved the research.

It is relevant to note that many, if not most, or the framers of the constitution enjoyed the use of to-bacco as well as tea. How indignant they would have been at any attempt to infringe on that personal right through taxation, restrictions and prohibitions!

Thank you, they do care if you smoke

By FRYE GAILLARD

It's hard to mistake how Brenda Morrrison feels about it. Behind her desk at McDougail Honda, a Charlotte car dealer where she's a title clerk, there's a wall full of signs proclaiming her commitment to smoke-free air.

to smoke-free air.

"KISSING A PERSON THAT
SMOKES," says one, "IS LIKE
LICKING AN ASHTRAY." Another is more serious: "I Have An Allergy To Smoke. Thank you for not."

Explains Ms. Morrision: "About 90 percent of the people that come in here are very cooperative. But the other 10 percent will come in here and smoke, and by the time they leave, I'll be gasping."

In Charlotte, as elsewhere, sentiments such as Brenda Morrison's are becoming more and more com-

In Charlotte, as elsewhere, sentiments such as Brenda Morrison's are becoming more and more common. They reflet a serious and growing discontent among nonsmoking Americans — a rapidly increasing tendency to assert their opposition to tobacco fumes.

Since 1973, at least 32 states and the District of Columbia have passed laws to reduce smoking in enclosed public areas. North Carolina and South Carolina have no such state laws, but Charlotte is among more than 500 cities and counties nationwide that restrict public smoking.

"I think in the last five years the whole national course has changed from catering to smokers to saying, 'Hey, there are a lot of other people who need clean air,' "says Tammy Lesesne, a drug education counselor in Charlotte.

Ms. Lesesne, 32, an ardent nonsmoker, has posted a bright yellow sign on her living room door with a message that screams in bold block type: 'NO SMOKING, LUNGS AT WORK.'"

Although she has mellowed some in the last year, Ms. Lesesne remembers when she was "absolutely unintimidatable" when she would ask people not to smoke.

"I remember one man on an ele-

vator got so mad he just turned around and refused to talk to me," she says. "He kept on puffing on his cigar, but he wouldn't answer me. He said, "What about my right to smoke?" I told him, 'I have to breathe this air."

Ms. Lesesne agrees the results of such pushiness have been mixed.

Ms. Lesesne agrees the results of such pushiness have been mixed.

"Some smokers have become more considerate," she says. "But others seem to have hardened."

One who has — or who at least believes the pendulum has swung too far in the direction of nonsmokers — is Ronald Flint, a Goldsboro businessman.

Along with two business associates, he has founded the National Smokers Rights Association to lobby against new legal restrictions on smoking.

"We're not out to step on otherpeople's rights," says Flint, a smoker for 34 years who now runs through three packs a day of L&M Lights. But he says there is a national campaign under way — spearheaded by the U.S. government — "to make smokers feel like second-class citizens." second-class citizens.'

Flint's organization may seem a feeble antidote to anti-smoking efforts of the U.S. Department of Health, Education and Welfare and

Smokind Thank you far NOT! ISSING A PERSON THAT SMOKES IS Observer Photo By PHIL DRAKE

more than three dozen national citizens groups across the country. But Flint and people like him have a powerful ally. It's called the Tobacco Institute — the North Carolina-based lobbying arm of the tobacco industry.

Alarmed by the potential longrange effect of legal limits on smoking, the institute has mounted a public relations campaign to defeat such restrictions.

In a carefully phrased "Word

In a carefully phrased "Word To Smokers" advertisement during

February in several national magazines, the institute wrote: "If you've ridden any planes lately, you've found yourself banished to the back of them, last to be served, last to leave It's easy to get the feeling you're being picked on, and made to feel-like a social outcast." social outcast.'

The ad went on to say that a pair of Seattle restaurants decided to segregate smokers, and non-smokers soon found that nonsmok-

ers didn't want such segregation.

"So take heart," the ad continued. "Most nonsmokers think smokers are OK and they like to be around us... That doesn't mean that the tiny minority of. anti-smokers are going to go away. They won't ... We don't know what to do about these antismokers any more than you do smokers any more than you do — except to treat them all with the courtesy and kindness we deserve from them. It works with our friends, the nonsmokers; it may

Brenda Morrison says about 90 percent of the people are cooperative. But the rest will come in here and smoke, and by the time they leave, I'll be gasping.'

also work with the anti-smokers."
The tobacco industry has poured millions into such public relations.

millions into such public relations. In California alone, opponents of Proposition 5 — a sweeping smoking ban in most public places — spent \$5.6 million to successfully defeat it. Most of the money came from large tobacco companies.

A similar fight is now looming in Dade County, Fla, and the battles are becoming familiar. Since 1973, when Arizona passed the first statewide legislation to limit public smoking, hundreds of similar bills have been introduced throughout the country.

They have not fared well ever since 1975, when Minnesota passed a Clean Indoor Act that nonsmokers' groups regard as model legislation.

In 1977, for example, a study by the Public Health Service's Center for Disease Control in Atlanta re-vealed that 133 bills to limit smoking were introduced in 44 smoking were introdustates. Only 12 passed.

The only recent attempt to push through such a law in North Carolina came in 1975, when state Sen. McNeil Smith, D-Greensboro, drafted an unsuccessful bill to limit smoking in certain public

Another recent failure came last year in Mecklenburg County, where the county commissioners refused to ban smoking in major stores and public buildings throughout the county.

"This is a difficult area to push the rights of nonsmokers," con-cedes Larry Stearns, a leader in the Charlotte chapter of GASP (Group Against Smokers' Pollut-ion).

"Most smokers are sensitive people, and many of them have become more considerate. But there is attil a problem, and I think it will be with us for a

The law in tobacco land does little to curb the habit

In the Carolinas, few laws restrict smoking.

People under 17 may not buy cigarettes in North Carolina. Violators face fines of up to \$500 and jail terms of up to 6 months.

In South Carolina, cigarettes may not be sold to anyone under 18, and violators face jail terms of up to a year and fines of up to \$100 — half of which goes to any informer in the case.

The federal Civil Aeronautics Board (CAB) requires airplanes to set aside a section for nonsmokers.

New regulations suggest seating cigar and pipe smokers as far from nonsmoking sections as pos-

In Charlotte, smoking is forbid-den on elevators and city buses. Retail stores that employ more than 25 or are designed for more than 20 customers must post no-

smoking signs.

Smoking is forbidden in public or private hospitals, except in offices, waiting rooms, or patient's rooms where the attending physician box gates recruisions or patient's cian has given permission.

Violations of Charlotte's no-

smoking ordinances are punishable by maximum fines of \$50 and jail terms of up to 30 days.

People attending events at the Charlotte Coliseum are asked not to smoke. But Manager Paul Buck said compliance is "strictly volun-

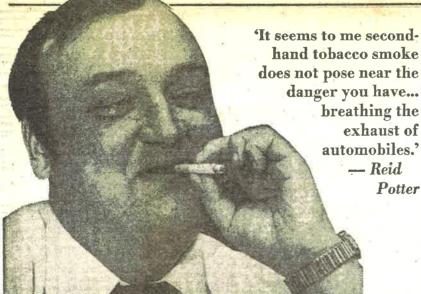
Those opposed to smoking have complained over the years that enforcement of no-smoking laws has been lax. About three years ago, GASP (Group Against Smokers' Pollution) tried to force better enforcements. forcement - swearing out war-

rants against about a dozen busi-nesses without no-smoking signs. Most posted signs before their cases came to court.

cases came to court.

In one of their most publicized cases, GASP leaders brought charges against 7-Eleven clerk Patricia Ann Lyons in 1976 for selling cigarettes to minors. Ms. Lyons was convicted but not

"We have raised the issue, and succeeded in persuading a number of businesses to post signs," says Larry Stearns, GASP cofounder. "But there's still a problem."



Observer Photo By MARK SLUDER

'I don't regard myself as militant (but) I've gotten to the point where I'm less interested in the other guy's comfort.' - Larry Stearns



A smoker's view:

It's my body; this is the crutch I need

By NANCY NILAND Observer Staff Writer

Reid Potter considers himself a sensible man who also happens to smoke. So he's not oing to get belligerent when mebody asks him not to light

On the other hand, the 33year-old lawyer figures his right to smoke in public is at least as defensible as a non-smoker's right not to breathe somebody else's smoke.

"If I want to smoke, I think I should have that right," Potter asys. "And smoking has become right."

But his personal feelings about smoking often war with his understanding of the law— he's aware that the government legally can regulate smoking in

Like many smokers, Potter got started in high school be-cause "everybody else was doing it." Soon, he was smok-

ing 1½ packs a day. His brand is Raleigh Lights.
Four years ago, he stopped for about five days.
"My insomnia was cured," the bachelor recalls. "When I woke up in the mornings, I felt like getting out of bed. It seemed like I could get a lot more work done.'

But he started again late one afternoon at a conference.

"Somebody offered me a cigarette, and I lit it up ... by the

Whatever his personal feelings, regulating smoking in public places doesn't bother Potter's legal sensibilities — he feels it probably comes within the state's power to regulate matters of public health.

But Potter is irritated by what he thinks is the government's schizophrenia — bans on television tobacco ads, re-quired warnings on cigarette packs and subsidies of tobacco

It's somewhat hypocritical to ban smoking in public places because it's adverse to public health, and then not take steps to prohibit the sale and distri-bution of cigarettes," he says. Potter is really annoyed by

smoking bans in movie houses, where those "ludicrous signs" flash on the screen and ask people not to smoke "for the convenience of our patrons."

Well, he's a patron, too, Pot-ter figures, and it's not to his convenience not to smoke. As a result, he walks up and down the aisle, puffing a cigarette in the back, hoping the manage-ment doesn't find him out.

Why not have smoking sections in public places such as movie theaters and restaurants, wonders Potter.

Efforts to ban smoking in public revolve around the issue of second-hand around second-hand smoke, Potter

third inhalation, I was a says, and he sees that as a sec-goner."

"It seems to me that second-hand tobacco smoke does not pose near the danger that you have in the city air breathing the exhaust of automobiles," he says. Groups such as GASP (Group Against Smokers' Pollution), a militant nonsmokers' rights organization, "are miss-ing the forest for the trees."

Since Potter's secretary there's been no prob lem at the office, but his dependence on smoking has affected his social life — just as many nonsmokers socialize with other nonsmokers, Potter socializes with other smokers.

Potter feels few smokers actively don't fight back when a nonsmoker asks them not to light up because they are defensive about their habit — he calls it his crutch. Many go to great lengths to satisy their nonsmoking companions — and their need to smoke.

A young woman he didn't know very well invited him to dinner. He went to her home and began to light up. She asked him not smoke in her

"I didn't have any adverse reaction to that," he says. "So I just went out to the backyard for a cigarette. I spent half of my date in the backyard — by myself."

A nonsmoker's view:

We've been passive for much too long

By NANCY NILAND

The way Larry Stearns figures it, your smoking is bad for his health. And he doesn't mind telling you so.

More and more nonsmokers are

speaking out for what they consider their right to clean air and more smokers are getting burned about the whole thing.

Smoking is not a right, insists

Stearns, 40, a physiology teacher at Central Piedmont Community College (CPCC). Like driving a car, it's a privilege that government can—and — regulate.

On the other hand, Stearns isn't bout to risk a punch in the nose

"If I have the law on my side, I'll say something" to someone whose smoke is bothering him. "If not, I'll suffer in silence ... or leave."
Stearns began smoking as a teenager because a friend he admired

"I didn't like the taste of tobacco so much," he recalls. "I liked the wooziness it gave you."

Wooziness it gave you."

Soon, he was smoking 1½ packs a
day. In 1962, when he was 23, he
quit as part of a general physical fitness program that included a lot of
bicycle riding and a lot of dieting.

The vanity of a high school star

athlete was piqued — Stearns had al-ways considered himself a pretty good "physical specimen" and his out-of-shape body was beginning to bother him.

He was also influenced by reports in Science magazine and the Journal

various diseases. As a graduate student in zoology at Clemson University in Clemson, S.C., Stearns had access to many early reports on smoking and health.

His wife, Martha, quit with him a good thing, he says, because he's not sure he could stay married to a smoker. Besides, quitting together made it easier. Mrs. Stearns, 39, savs she had

Mrs. Stearns, 39, says she had smoked off and on about five years when she joined her husband's quitting effort. They have two children, a boy, 5, and a girl, 2½.

But Stearns didn't try to get anybody else to quit until 1975, when doctors removed a malignant tumor

from his nasal cavity. The tumor wasn't related to smok

ing, but the surgery left Stearns with a smoking problem — he can't filter air as effectively as before, so smoke or dirty air is a real problem for him.

or dirty air is a real problem for him. Nowadays, if you walk into an elevator with a cigarette and Larry Stearns wants to ride that elevator, he'll hold the door open, point to the "No Smoking" sign, and ask you to put the cigarette out.

About three years ago, Stearns began finding it increasingly difficult to breath as he delivered his lectures or amplied toward class from his

or ambled toward class from his

or ambied toward class from his third-floor office at Garinger Hall. "The building is poorly ventilated," says Stearns, "When people smoked, the tobacco fumes would become very bothersome. I decided to regis-ter a complaint."

of the American Medical Association that smoking was being linked to ard Hagemeyer, and eventually secured a ban against smoking on the third floor of Garinger. But Hagemeyer, he says, required considerable persuading.

The process left Stearns more con-

vinced than ever that nonsmoking Americans had been passive and si-

hent far too long.

Along with former postal worker
Bill McCracken, Stearns helped
launch a Charlotte chapter of GASP (Group Against Smokers' Pollution)
— a militant nonsmokers' organization dedicated to the proposition that
no one should be required to inhale the by-products of burning tobacco unless they chose to do so.

Many smokers are defensive about their habit. Stearns feels, and "proba-

their habit, Stearns ieets, and "proba-bly are insecure. And if you threaten them, they react with hostility. "If I'm greeted by a hostile re-sponse, I will usually ask the person why they are hostile, and try to get them to caim down. If I'm unsuccess-ful, I just leave." ful, I just leave." It's not just strangers he confronts

about smoking. Although most of had friends don't smoke, "I have lost friends when I said, in my own home, 'I wish you'd not smoke.' " Stearns admits that in the beginning, it was hard for him to "come up with the courage" to ask strang-

ers to stop smoking. "I don't regard myself as militant," he says. But, "I've gotten to the point where I'm less interested in the other guy's comfort."

Your cigarette can be a pain in the nose to me

By ROBERT CONN

The proverbial smoke-filled room isn't a great threat to healthy nonsmokers, according to the U.S. Surgeon General's report. A roomful of smokers can pro-

duce enough carbon monoxide to lead to slight, temporary deteriora-tion of reflexes and mental alert-ness in nonsmokers. But the effect isn't normally enough to impair a nonsmoker's ability to drive a car, for example.

The report does conclude that smoke from cigarettes causes problems for unhealthy nonsmokers and makes some healthy non-smokers uncomfortable.

The section of the surgeon gen-

real's report on involuntary smoking was prepared by the Center for Disease Control in Atlanta and written by Dr. David Burns of the pulmonary division of the University of California at San Diego.

Researchers have found that leads of carbon monoyide and

levels of carbon monoxide and other chemicals in cigarette smoke increase in rooms where smokers congregate. The concentrations are higher than expected because smoke from the tip of a clgarette
— called sidestream smoke — has
more nicotine, carbon monoxide
and ammonia than the smoke that comes from the end of the cigarette for inhaling.

Nonsmokers absorb those chem-

icals — but usually not in danger-ous levels.

It takes a lot

For instance, A.M. Ray and T.H. Rockwell, writing in the Nov. 5, 1970, "Annals of the New York Academy of Sciences," reported that high levels of carbon monoxide translate into a reduction of decision of the New York Nov. 1981, 19

ide translate into a reduction of driving ability. But the carbon monoxide in smoke-filled rooms ordinarily isn't enough to cause those problems in nonsmokers.

And J.P. Cano led a team that studied nicotine in urine among nonsmokers aboard a submarine. In that closed environment, nonsmokers showed a rise in nicotine

levels, but the amount was less than 1 percent of the amount in smokers.

Burns also notes that carcino-gens — cancer-causing agents — are found in the clouds of smoke in a smoke-filled room, but says it is not established that these chemicals "can act as carcinogens at these levels delivered by inhala-

Studies differ on whether smoke in a smoke-filled room alters the heart rate, blood pressure and other bodily functions of non-

smokers.

Several researchers have found that high levels of carbon monoxide — like those present in smoke-filled rooms — can cause problems in unhealthy nonsmokers.

lems in unnealthy nonsmokers.
W.S. Aronow and his colleagues studied two smokers and eight nonsmokers with angina pectoris, a heart ailment. The subjects exercised on a treadmill after a period in uncontaminated air. They exercised exists after exposure to 15

in uncontaminated air. They exercised again after exposure to 15 cigarettes smoked over two hours in a well-ventilated room, and again after exposure to 15 cigarettes in an unventilated room. The level of carbon monoxide in the hemoglobin in the blood rose from 1.25 percent in the uncontaminated air to 1.77 percent in the ventilated smoking room, to 2.28 percent in the unventilated room. The federal quality standard is 1.5 percent. Excess carbon monoxide levels reduce the blood's oxygencarrying capacity. carrying capacity.
Pain of angina began 22 percent

rain of angina began 22 percent sooner after exposure to the unventilated room and 38 percent sooner after exposure to the unventilated room. The pain also came at a lower heart rate.

Aronow also gave patients with chronic lung diseases exercise stress tests and found their breath-

ing became labored sooner after exposure to a smoke-filled room. Burns reports several investiga-tors have found a significant relationship between parental smoking and respiratory illness in children — but it's unclear if that's the re-

sult of smoke in the house or the fact that parents who smoke cough more and spread germs.

"The relationship between parental smoking and infant infection was greater when both parents smoked and increased with increasing number of cigarettes smoked each day," Burns said

"The existence of a true tobacco allergy has not been established," Burns says, but people with a "history of allergies to other sub-stances are more likely to report

the irritating effects of tobacco."
When 250 nonallergic patients in a 1968 study were asked about their reactions to cigarette smoke, 69.2 percent reported eye irrita-tion, 31.6 percent headaches, 29.2 percent nasal symptoms and 25.2 percent coughs.

Not just subjective

Reactions were not just subjective. Researchers examining people complaining of eye irritation found flowing tears and other objective signs of physical irritation. In a 1975 survey by the National Clearinghouse for Smoking and Health, researchers asked a national sample to agree or disagree with the statement: "It is annoying to be near a person who is

with the statement: "It is annoying to be near a person who is smoking cigarettes."

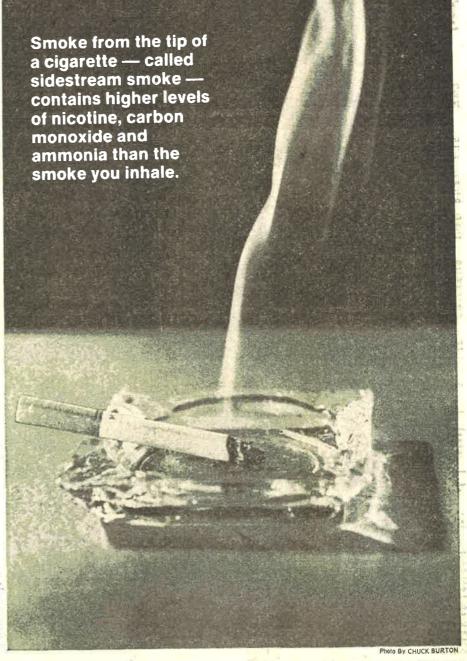
Of those who had never smoked, 77 percent of the men and 80.5 percent of the women agreed. Just more than a third of the men and women who smoked agreed it was annoying.

A 1971 study sponsored by the

A 1971 study sponsored by the Federal Aviation Administration and several other federal agencies surveyed airplane passengers on military and commercial aircraft — all of which were well venti-

— all of which were well venti-lated.

"In spite of the low level of measurable pollution," the study said, "over 60 percent of the non-smoking passengers and 15 to 22 percent of the smokers reported being annoyed by the other pas-sengers's smoking."



Bill McCracken: 'I'm not an aggressive person'

Reluctant warrior

Former letter carrier now delivers anti-smokers' messages

By FRYE GAILLARD

Bill McCracken shudders when he thinks of it — the July night in 1977 when he and his wife spent an evening at Charlotte's Sandpiper Restaurant, putting away the seafood and inhaling, for several hours, the tobacco smoke of their fellow pattons. fellow patrons.

By the time McCracken got home, his sinuses ached and his breathing was labored. He soon passed out and was rushed to Mercy Hospital in a neighbor's

wan.

When he got there, doctors gave him shots of Adrenalin, Benadryl and cortisone — attacking the symptoms of one of the worst reactions to tobacco smoke many of them had ever seen.

He's entitled

Because of that sensitivity —
and the growing conviction he's
entitled to untainted air space —
McCracken has become Charlotte's
most militant and aggressive
champion of nonsmokers' rights.
He seems a reluctant warrior,
however, as he settles himself on
a couch and begins to reflect on
the whole experience. Hands folded in front of him, his eyes fixed
relentlessly on a tuft of carpet, he
speaks softly and with a catch in speaks softly and with a catch in

"It's incredibly hard for me," he says. "I don't like conflict. I'm not

find myself walking away from situations, rather than forcing the

issue."

That's not the picture of Mc-Cracken that most people have.
It's been less than three years since he became president of the Charlotte chapter of GASP (Group Against Smokers' Pollution).

During that time, GASP has mounted an aggressive defense of a very simple principle: that if you don't want to smoke, your lungs and sinuses shouldn't be defiled by the fumes of others.

In 1975, McCracken began wearing a face mask to protect himself from the smoke of his fellow workers at the Charlotte post office, where he was a letter carrier. His supervisor, O.B. Sloan, called a meeting to discuss the situation, and McCracken claims that before the meeting ended, Sloan deliberately blew cigar smoke in his face. his face.

McCracken filed an assault complaint against Sloan, asking for \$75,000 in damages and launching his career as a militant nonsmoker. The case was thrown out of court, the judge unpersuaded by arguments that in McCracken's case, smoke is a serious weapon.

McCracken, who retired on a McCracken, who reured on a disability pension not officially re-lated to his reaction to smoke, ap-pealed. This month, the N.C. Court of Appeals upheld the lower court ruling. It's one of a number of symbolic legal actions in which

he's been involved over the last

several years.

Acting as head of GASP, Mc-Cracken has gone to court against convenience store clerks who sell cigarettes to minors, against Char-lotte businesses that don't post no-smoking signs, and, most recently, against Mecklenburg County offi-cials for falling, he says, to protect the rights of nonsmokers. "We tried to use the laws now on the books to call attention to the problem," McCracken says.

"We were successful in getting some stores to put up (no smoking), signs. And with the help of the media, we have pointed out that there is a problem. But the problem has not gone away."

Stricter laws

Part of the solution, McCracken believes, would be a more strin-gent ban on public smoking. He and GASP last year tried to per-suade Mecklenburg County com-missioners to pass a sweeping pro-hibition against smoking in public places.

places.

Commissioners rejected the nosmoking ordinance in what McCracken termed "a major disappointment?" He says he's complling — with the help of GASP's 300 members and active supporters — a mailing list of nonsmoking voters who can pressure future commissioners.

For those activities McCracken.

For those activities, McCracken,

century of his life was relatively unaffected by controversy and public notoriety. The change, he says, has been dramatic and diffi-

"I had to get an unlisted (phone) "I had to get an unisted (phone) number," he explains with a sigh. "People were calling me at all hours of the night. I got used to crank calls, people saying all kinds of things. I finally took the GASP sticker off my car because people were dumping ash trays on it, or writing obscenities.

"I admit I've occasionally made a public spectacle of myself when somebody would get belligerent after I requested that they not smoke. There have been scenes, and they have been hard on Sue, my wife (who doesn't smoke). It's put a definite strain on our marriage."

Because of the emotional drain of such situations, McCracken says, he's deliberately lowered his says, he's deliberately lowered mis-profile in the last year, quietly or-ganizing nonsmokers to flex their political muscle in the next local election. But even if his name is less often in the headlines, friends think it's unlikely he'll ever shut up entirely.

"He's very stubborn," says Mc-Cracken's fellow GASP founder, Larry Stearns, a professor at Cen-tral Piedmout Community College, "I've never known him to back down on his principles. I guess you could say he's dogged."

You're paying a lot more than you think for that pack

Smoking's 'hidden costs' drew the government into the fight

The money you put in that vending machine to buy a pack of cigarettes is not the only cost of smoking.

There are many hidden costs as

EN BE

In the foreword to the U.S. Sur-In the foreword to the U.S. Sur-geon General's report, Joseph Cali-fano, secretary of health, educa-tion and welfare (HEW), estimated that treating smoking-related health problems accounts for \$5 health problems accounts for \$5 billion to \$8 billion of the nation's 5205 billion annual health care bill, "not to mention the cost of lost productivity, wages and ab-sentecism caused by smoking-re-lated illness — an (additional) an-nual cost estimated at \$12 (billion) to \$18 billion."

Those hidden costs are a major reason why the federal govern-ment is involved in its anti-smok-

are not merely personal and private. Those consequences, economic and medical, affect not only the smoker, but every taxpayer"

Those costs include health insurance, fire insurance, disability pay-ments and other private and tax-payer-supported programs.

The surgeon general's report doesn't include a specific section on the hidden costs of smoking. But other organizations and agencies have made such calculations. Some examples:

 Smoking causes 12 to 13 per-cent of all fires and 30 percent of reason why the reagral government is involved in its anti-smoking campaign.

'No person, given these staggering costs, can reasonably conclude
that smoking is simply a private
concern,' Califano said. 'II is
demonstrably a public health problem also . . . The consequences
fires and 30 percent of
cent of all fires and 30 percent of
fire demonstrate, according to HEW's
office of smoking and health. In
1974, the latest year for which
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fire deaths were smoking-related. So far in fiscal 1979, one of five fire deaths has been related to smoking.

• The Public Health Service has estimated workers miss as many as 77 million work days— 19 percent of all workdays lost— from smoking-related problems, said Ronald Wilson, chief of the health status and demographic neath status and demographic analysis branch of the National Center for Health Statistics in Hyattsville, Md. Wilson prepared the morbidity section of the sur-geon general's report.

geon general's report.

Those estimates may be low.
Wilson repeated the study and
found smokers now account for 21
percent of all workdays lost, and
calculated that if all workers were out at the same rate as nonsmokers, there would be 81 million

fewer days lost.
The number of days lost among

smokers and former smokers "was markedly higher than among workers who had never smoked," Wilson said.

He found the rate of days out was 33 percent higher among male smokers than nonsmokers, 45 percent higher among female smokers and 42 percent higher among former smokers, male and female.

The heaviest smokers reported the highest rates of work loss," he

Wilson said his 1965 Health Interview Survey found smokers spent 15 percent more days in bed because of illness or injury than people who had never smoked.

And the amount of days in bed "tended to increase as the number of cigarettes smoked increased," said Wilson, who counted the heaviest smoking a person report-ed. Smokers also tended to spend

more time in the hospital.

That means smokers and former smokers spent 145,894,000 extra days in bed, based on calculations assuming "that smokers and former smokers would experience the same rate of bed disability if they did not smoke as did those who did not smoke as did those who had never smoked cigarettes."

Among male workers between 17 and 44, those who never smoked averaged 3 days out from work each year, former smokers aver-aged 4.2 days, smokers, 5.5 days.

Among male workers, 5.5 days.

Among male workers 45-64, nonsmokers averaged 4.4 days missed, former smokers 5.5 days, current smokers, 4.5 days. Many former smokers had developed chronic bronchitis and emphysema and had stopped smoking.

Wilson also measured long-term disability — whether a person is restricted in work or recreation:

"For most age and sex groups, a

"For most age and sex groups, a

higher proportion of current smokers and former smokers re-ported they have a limitation of activity than do persons who never smoked, although the differences are not always striking."

He said one factor narrowing
the difference is the fact that a

higher proportion of smokers had

died.

"In addition, the group of former smokers is made up of two very different kinds of people very different kinds of people—
those who quit smoking before
there was any noticeable deleterious impact on their health and
those who quit smoking because
of poor health."
Wilson found that of those between 17-44, about 8 percent of
nonsmokers, 9.4 percent of former
smokers and 9.8 percent of smokers were chronically disabled.

ers were chronically disabled.

ers were chronically disabled.
For those between 45 and 64,
22.3 percent of nonsmokers were
disabled, compared with 24.7 percent of the former smokers and
62.2 percent of the current smokers. 26.2 percent of the current smok-

- Robert Conn

For those trying to quit, a message from the trenches

Reason and passion may provide pow-erful motivations to quit smoking, but in

erful motivations to quit smoking, but in the end the addicted alone resolves the issue—sometimes with a higher power. I should know.

I have not lost, but I have not won. For that reason I did not want to lie in the bed I had made, a public announcement that I had forever quit smoking, with the honest report I promised.

How, with many depending on me, with the prayers of many, with many possibly concluding that if Gary had not succeeded they could not, either, could I

posency concluding that if Gary had not succeeded they could not, either, could I confess the hard facts?

In the beginning, I broke. On the third day when no words would come at deadline, I smoked. My head reeled. I almost fainted.

I bear active.

Four days later, under the same cir-cumstances, the same thing happened. A smokeless week, I had been told, would smokeless week, I had been told, would put me over the hump. I succeeded for two weeks and broke on the night of the 15th day during a frustrating personal situation; over the next two days, I smoked 10 cigarettes.

I began again.
Telling myself to forget all the promises about three days, a week, two days, whatever, I've had more nonsmoking than smoking days since, but I have not yet completed a smoke-free month.

My only success has been not to smoke in public.



Smoking just one cigarette brings on depression, self-loathing. The sense of defeat is enormous. Defeated men win no battles. - Kays Gary

Mild exercise has helped. During my longest no-smoking period acquaintances told me I looked better and was more lively. That has not happened in the days following a break-over. Smoking just one cigarette brings on depression, self-loathing. The sense of defeat is enormous.

Defeated men win no battles.

The degree to hear no more, to write

The desire to hear no more, to write

no more about smoking is everwhelming. Yet, this cannot be.

Smoking is an insanity. Many are af-flicted. Some will escape its grasp. Some will die in it.

Yet, my mail encourages me. Hundreds of long-time smokers are quitting or have

Personal letters insist overwhelmingly that quitting smoking by going cold tur-key is the key. A rare few insist they did it by methodically cutting down, some-times with a complicated formula.

Rare, as well, were those who con-fessed long-time losing struggles despite prayer, despite knowing about smeking's

destruction and the problems it visits upon family, upon friends.

Unanimously — and this was deeply moving — all fervently wished me success, whether they had succeeded or were still struggling. There was assurance of prayers. Their expressions were of confidence. I could not fail because so much and so many depended upon my success. Whatever happened to me, came the message, would determine what would happen to uncounted numbers.

Those who know my long-time enslavement have made a simultaneous re-

I nose who know my long-time en-slavement have made a simultaneous re-solve to quit. Among them was Jack Pen-tes, a design artist who, with admitted repidation, decided that if Kays Gary could do it he could do it.

trepidation, decided that if Kays Gary could do it he could do it.

Jack did it. Not one slip. His wife, Ruth, exuits that his beard no longer smells like a landfill.

Others pledged gifts to Holy Angels Nursery, to be delivered after 100 smoke-free days. Some suggested a Quitters Club with get-togethers.

Nobody wants to be alone — yet kicking the habit can be a lonely undertaking. I cannot congratulate myself, as can so many others. There is no victory, even when three packs of cigarettes become one cigarette or when three smokeless weeks are broken by smoking four cigarettes. Victory is a state of mind. It is achieved despite all temptations, frustrations and crises when tobacco becomes an object, not of fear or release, but of indifference.

indifference.
Today I will not smoke.

DEAR KAYS.

Your fight is inspirational

I am so proud of your determination to stop smoking. I am hoping your wonderful victory will inspire (a relawonderful victory will inspire (a relative) as well as many others who read your column. I don't think this will be easy without God's help. You will need to talk with Him constantly, asking for strength and will power. Your devoted wife should be a great source of inspiration, So hang in there as we follow your account of self-discipline with your drug problem. We love and admire you.

MARY LOU DAVIS

Old Farm Road Charlotte

Your cigarettes vs. my weight

I used to smoke, 39 years ago. A pack a day. But when I got married I quit cold turkey. I got another problem. Fat. I became huge, enormous and three years ago I had heart failure. The doctor asked me if I smoked. I said, "No." Then he said to live I would have to lose 100 pounds. By the help of God I did that but I have been at a standstill for a year. I need to take off 57 pounds more. Will you accept my challenge, my weight against your cigarettes? Maybe this will give me incentive. I believe together we me incentive. I believe together we

Mount Holly

Straw broke smoker's back

I almost swallowed my Kent Golden Light as I read your column today. I actually put out the Kent and made it through the remainder of the column

without any desire.

Your decision has had the effect of Your decision has had the effect of being the proverbial straw that broke the camel's (in this case Kent's) back. Though at times I could actually eat one, filter and all, like halfway through the Sunday sermon, the following are my reasons for laying them

down:

1. The hypocrisy of it. 2. My smoking and its profound effect on my three sons. 3. My darling wife who three sons. 3. My darling wife who has prayed many prayers for my deliverance and who now needs help to help get her prayers answered. (For a while I thought that her prayers my prayers and the laying on of hands by fellow-believers might give me supernatural deliverance. Now it seems I must lay this down as a sacrifice because it had become an idol in my life). 4. The noticeable deterioration, ever so slowly, of my health in the past five years.

past five years.
Thanks for your column ... the Thanks for your column.. the catalyst for my own deliverance at just the right time, as you are prone to do. Your influence is profound and by your proposed published reports of your health progress, many will be given the incentive to stop now, whereas they had believed it was too lafe.

J.F. FUNDERBURK

Pageland, S.C.

With God's help we'll lick it

My daughter and I have decided to quit smoking today at 1 p.m. Like your-self, it is absolutely necessary for life. Maybe one day at a time or even five minutes at a time with God's help we'll

Your sharing with us, no matter what the feelings are, can help all of us. NADINE KEATING

Keep thinking about 1980

I started praying for you the second paragraph into your column. May it help to know of the great support you have to encourage you to be successful in this most difficult effort to stop

If this new year seems overwhelming, think of 1980 when you will be healthy and proud. You will feel great and love life even more, which for you would be an extraordinary achievement.
BETTY BRADLEY

Beresford Road Charlotte

You really know how I feel

Following your column and a call from my daughter urging me to stop smoking (like you) after 40 years, I said I would and meant it. I burned a carton and a half of cigarettes in my fireplace to keep me from reaching and getting one to go with my Saturday morning to keep me from reaching and getting one to go with my Saturday morning coffee. By I p.m. Saturday, feeling like a mental case. I went to the nearest store and bought a carton of my best little "friends." Sunday I read your column and thought, "Man, he really knows how I feel."

If you stop for two weeks, that's over the hump. I've stopped twice, once for eight months, once for over a year and I felt so much better. I will stop. That's a promise.

Charlotte

Health worries aren't enough

CYNTHIA C. TEAT

Charlotte

Night visitor helped him quit

During the mid-50s as a youngster of 23, I began my third effort to stop smoking. I eventually broke the habit, and after 22 years have no desire to smoke. My success was due to a frequent visitor who came nightly in the quent visitor who came nightly in the beginning to allow me to smoke while dreaming, experiencing the sensations of smoking and also the dreadful pain on realizing I had not and perhaps could not stop smoking. Words cannot describe the joy and encouragement I felt when the visitor would awaken me to show me that I had added another short piece of time to the cumulative time without smoking. He still visits when I am troubled. I have learned his name and it is ancient. He is "The Dreammaker," and I hope he visits you.

Charlotte

PRESSLEY F. BEAVER

Tobacco is an addiction

Glad to read you're hanging in there in the fight to quit smoking. Shortly after you began the struggle, I did also. It's been most encouraging to me to know that at least one other person in the world understands how hard it is to carly and it trained it anyhow. quit and is trying it anyhow.

It seems to me not enough is known It seems to me not enough is known about tobacco addiction, in many cases parallel to drug addiction and alcoholism. I wonder if some day tobacco may not be considered the most serious addictive problem of them all. I hope the day will come when some of the tax money for cigarettes will be used for research in understanding the carriers mobilems they cause for so used for research in understanding the serious problems they cause for so many of us, just as now happens with part of the liquor taxes. In my county there are no group programs to make quitting easier even though I have requested one from the Mid-State Lung Association.

In any case, knowing what you're going through helps me in my struggle, even though we'll probably never meet.

NAME WITHHELD BY REQUEST

'My father died of lung cancer at 48. He never met even one of his daughters-in-law much less his grandchildren. The irony is that we raised the product that probably killed him ... I wince each time I recall this.'

I stopped **\$153.30** ago

After 12 years I chose to quit smoking 10 weeks or 70 days or 1,780 hours or 210 packs or 4,200 cigarettes or \$153.30 ago. My self-discipline is now self-satisfaction. Hurray for me and hurray for me ray for you!

I added two articles to my decision

I added two articles to my decision before the final hour. They were not to use family or friends to vent my withdrawal tensions and not to substitute food for cigarettes. I can't really tell you that I feel like a new person, but I can tell you that cigarettes no longer determine my daily routine. And I feel good about myself. I not only defied those who ignored and sneered at my intentions but I accomplished a very difficult feat, basically by myself and certainly for myself—a feat my doctor father termed "probably the most important decision of your life."

LINDA SLUDER LARKIN Alexandrie, Va.

I was a slave to the habit

"I had cut down a thousand times but had never tried to quit until 1970. One Saturday night I quit on moral grounds when, in preparation for teaching my church school class, I realized I was a practicing idolater, a slave to my habit.

practicing idolater, a slave to my habit. I was scheduling my life around the next cigarette — taking a 10-minute break during a movie, longing for the preacher to get to the last "Amen." That was it. I was not going to be a slave to anything. The surgeon general, cancer society, Readers Digest. etc., were all beside the point. I said, "Lord, I can't stop smoking but You can help me. He did and I did. I have had nine good cough-free years. By the way, It's 2 o'clock in the morning but you've been on my mind all day and I had to you.

JOHN BROCK

Extra pounds are worth it

I wrote a couple of times in January, never quite believing I would make it through the month. I'm proud to say I did make it through February and so far have not smoked since Jan. 31. It has not been easy and I have gained four very unwanted pounds. My husband says he can no longer hear me breathing all over the house. He's quit, too, but says he bummed a few during the month. I'm afraid if I keep gaining I'll get discouraged and start smoking again. I fight it by exercising more and telling myself that extra pounds are better than the emphysema I've already sot. I hope other "quitters" are doing well. It is a good feeling. Haven't even worked up a decent cough since Jan. 29. BETTIE MENDHENKE

A memory of 20 years

About 20 years ago we were seated next to each other at a Charlotte banquet. I was in the agony of breaking a 2-3 pack a day habit. What I remember most is that you were vowing over and over to quit smoking. I see you finally got around to it. There ain't no easy way. It's one day at a time. Cold turkey. But more important, two or three years down the road when you think you've got it whipped you'll decide to puff on a pipe, take a drag from a fag or chompon a cigar just to see what it's like after all that time. Don't. I tried that and was back on them worse than before. It was almost a year before I managed to quit a second time.

Good luck.

Good luck.

Dr. E.C. HART



Two coughs, a hack and a wheeze means they want king regulars. One cough and a wheeze means menthol lights. Three coughs, low tar. A gasp and two hacks ...

The Rule Book was a big help

My habit was 25 years old and I had my naou was 20 years old and I had two good reasons for giving them up. My husband never smoked and I was a source of irritation to him. I also had bad headaches. I really wanted to kick the habit. the habit.

the habit.

One night I prayed for God to make cigarette smoking repulsive to me. I was abie to duit the next day with no desire to smoke. Believe me, when all else to smoke. Believe me, fails, read the Rule Book.

rails, read the Rule Book.

I had been a believer in prayer but this was a true blessing for me to be able to give them up and not gain weight nor have any of the bad nerves MRS. JACK M. STEPHENS

Fort Mill, S.C.

Advice, prayers and good wishes

On your decision to kick the habit.
Tons of advice. Thousands of good
wishes. How many prayers. Here are
two. From us, to Him, to you. Please
help Kays to make the grade. The road
is rough as we know so well. We have
travèled it, too. But now everyone
knows and he can help so many who
are trying too.

JEFF AND MARY

Charlotte

JEFF AND MARY

My father died of lung cancer

For 20 years, from 16 to 36, I was a For 20 years, from 16 to 36, I was a consummate user of tobacco products. I quit and restarted many times. The number 48 kept floating in front of me. My father died of lung cancer at 48. He never met even one of his daughters-in-law much less his grandchildren. The irony is that we raised the product that probably killed him. We were Virginia tobacco farmers. I wince each time I recall this. We may have contributed to

tobacco farmers. I wince each time I recall this. We may have contributed to
someone else's poor health or death.

Today I'm 50. I have out-lived my father by two years. They say if you stay
away from cigarettes 10 to 15 years
your body is restored to pre-tobacco
days. Could be I play a strenuous game
of tennis and you know what else? I
think I stand a pretty good chance of
looking my grandchildren in the face.

NAME WITHHELD BY REQUEST
Charlotte

Boy, wasn't he surprised!

I smoked 41 years and quit cold tur-key so it can be done. I quit in March 1976 after oral surgery. I really sur-prised my husband.

Mooresville MRS. GENE STARNES

Charlotte

Smoking: How To Quit

Face it, there's just no easy way to break the habit

By BILL SEDDON Observer Staff Writer

It happens to everyone who quits smoking: You're bursting with pride and telling everyone in with pride and telling everyone in sight. Then you run into a smart aleck. "That's nothing!" he snorts. "I've quit thousands of times."

But no matter what anyone tells you, quitting smoking is something.

If you don't believe it, ask Char-lotte lawyer Winfred Ervin Sr. Fifty to 60 times a day, Ervin attaches a One Step At A Time fil-ter to a low-tar-and-nicotine (5 mg ter to a low-tar-and-income (5 ing tar, 0.4 mg nicotine) True ciga-rette. Straining for satisfaction and drawing in mostly air, he puffs away like it's the last ciga-rette he'll ever smoke.

rette he'll ever smoke.

He's been doing this for more than two years — almost all of that time using filter 4, which removes 90 percent of the cigarette's tar and nicotine. It's supposed to be the "final step."

"I guess I'm just kidding myself," Ervin says.

He's not alone.

He's not alone.

Psychologists say it's as hard for heavy smokers to quit as it is for heroin addicts to get off the needle. For every proud story you hear from a successful quitter, the U.S. Office of Smoking and Health says, there are three or four who tried and failed. That's why experts advise: If at first you don't succeed, quit, quit

And don't get down on yourself if you fail.
"There's a danger in failing,"

says Dr. Robert Shipley of the Duke University Medical Center. "Some people get pretty nasty

For free advice and literature on how to quit

Society. In Charlotte, call 376-1659 from 8:30 a.m.-4:30 p.m. weekdays. Information includes films on how to stop smoking, literature, posters, booklets and speakers.

• The Duke Cancer Information Service in Durham. From North Carolina, the toll-free number is 1-800-672-0943. From South Carolina, call 1-919-286-2266, tell them your name and number, and they'll call you to reduce toll charges. Both numbers are answered 9 a.m.-4:30 p.m. weekdays. After hours, the phone is answered by a recording device, and they'll call back the next working day.

The local unit of the American Heart Association. In Charlotte, call 374-0632 from 9 a.m.-5 p.m. weekdays.
 The local unit of the American Lung Association. In Charlotte, call the Metrolina

with themselves about it. They say, 'I never succeed at anything.'
"That in turn makes it less like-

"That in turn makes it less likethat they will succeed at other
things in the future — trying to
control their eating or drinking or
whatever. So people who try to
quit smoking have to be prepared
for failure. A lot of people don't
like to talk about that, but given
that more than half the people
fail, it's important."

Still. the government estimates

fail, it's important."
Still, the government estimates some 30 million Americans have quit smoking since the U.S. Surgeon General first warned of its health hazards in 1964.
And, the government estimates, 90 percent of the some 54 million Americans now smoking have

Lung Association at 537-5776 from 8:30 a.m.-4:30 p.m. weekdays. There's an answering device at other hours.

Clinics in the Carolinas include:

Clinics in the Carolinas include:

Seventh-Day Adventist Church and Metrolina Lung Association Clinic: Held about four times a year in Charlotte, the clinic's cost is \$5. Five 1½-hour sessions at night include films, doctors' lectures and group support. Call Metrolina Lung Association, 537-5776 weekdays from 8:30 a.m.-4:30 p.m., or the Carolina Conference of the Seventh Day Adventist Church, 535-6720 from 7:30 a.m.-5:30 p.m. Monday through Thursday.

Behavior change and self control program: Duke University Medical Center's program includes aversive therapy, cognitive psychology, selfhypnosis, relaxation training. Group treatment is \$145, individual treatment, \$50 a session (usually six sessions). The fee is negotiable for those unable to af-

ford group treatment. No guarantees. Call 1-919-684-2887 weekdays, from 8 a.m.-4:30

• Kip Center for the Control of Smoking: Five daily sessions, one hour each. Cost is \$350. Treatment includes aversive therapy, including electric shock. Money returned if you smoke two cigarettes in presence of therapist at end of program. If you quit but start smoking again within a year, you can take the program again free. Clinics are held sporadically in Carolinas cities. Call 1-803-799-8376 anytime.

• Quit Smoking Center of North Carolina: In Durham at the Wellons Village Shopping Center, the cost for the Kip-like program is \$250 for individuals, \$395 for couples. Money-back guarantee if you don't quit after one week. Further treatments offered free for one year. Call 1-919-683-2021, weekdays from 9 a.m.-9 p.m. . Kip Center for the Control of Smok-

weekdays from 9 a.m.-9 p.m.

product manager Jack Towne re-cently mentioned McPherson as one of the one million people who supposedly have quit by using the Many methods boast high suc-Many methods boast high suc-cess rates based on short-term quitting. Experts advise viewing such claims with healthy skepti-cism. And few — if any — insur-ance plans will pay for the clinics. In December 1976, Michael Mc-Pherson of Newport, in Carteret County near the coast, wrote to-

Pherson of Newport, in Carteret County near the coast, wrote to thank Teledyne Water Pik, makers of One Step At A Time filters: "This year your company has allowed me to have the best Christmas I've had in 11 years. That's how long I've been smoking... I've gone two weeks without a cigarette and for me that's a milestone... Now I'm free."

Citing that letter, One Step

But McPherson says he resument smoking a week after he wrote the letter. "I decided I enjoy smoking," he says.

Experts say no claim of success should be made until a person quits for one year. Even then the claims may be suspect, because some who resume smoking won't Two other cautions about quit-

ting:

You may gain weight. Quitters have increased appetites and tend to nibble snacks to keep their

minds off smoking. Gains vary widely, but Lippard says 10 to 12 pounds is average. Many clinics include counseling on how to watch your weight, and most peo-ple can take off added pounds through diet and exercise after quitting.

quitting.

• If you're a woman, the odds are you'll have a harder time quit-

are you'll have a narrot time duting and are more likely to fail.

Researchers aren't sure why, but women often suffer harsher withdrawal symptoms — head-aches, nausea, constipation or diaracters, nausea, constipation or diaracters. rhea, drowsiness or insomnia, fa-

rhea, drowsiness or insomnia, fatigue, irritability, restlessness or an inability to concentrate.

Some quitters suffer no such symptoms; others recover from their addiction in a few days—usually after nicotine is washed from the body. But for some, physical withdrawal may take weeks. And the psychological craving for cigarettes may last years.

years.

Now for the bright side: You can quit smoking. Experts say almost everyone can.

And the key to all methods is motivation. You must want to

You may decide smoking's a filthy habit; you may be pestered by your family; or you may want to quit, as the American Lung Association advises, "just for the health of it."

But face it: If you buy filters with little holes on top to let smoke escape, and then you stick as finger over the hole, nobody's going to vote you most likely to succeed.

Cold turkey

Experts say you're likely to fail if you try to quit any way other than cold turkey.

That means quitting at a given moment. One moment you're a smoker, next moment you're not.

you're not.
Its long-term success rate (25 to 30 percent, experts say) is nothing to cough at. Here are

Pick a time when you're not under unusual pressure.

· Begin each day by telling yourself. "I choose not to smoke." If the thought of never smoking is too awesome, promise not to smoke for the next day, or the next hour.

 Drink eight 8-ounce glasses of water or fruit juice a day the first few days to wash nicotine and other water-soluble components of cigarette smoke from your body.

Avoid spicy foods because they contain alkaloids that stimulate cigarette cravings.
 Stay away from coffee, tea, cola and liquor for the same reason. Avoid heavy, satisfying meals and don't loiter at the table.

Don't relax in your favor-

ite easy chair, where you're used to smoking, and don't watch TV all night; try hobbies to keep busy.

Keep sugarless gum, carrot sticks, celery sticks or fruit
handy for when you crave a
cigarette. Try walking and
deep-breathing exercises to

calm yourself.

Brush your teeth when you want a cigarette. This makes your mouth feel clean and helps kill the craving to

Change your daily routine.

Take a different route to work, or do household chores in a different order.

Shower before going to bed at the end of your first smokeless day. Go to bed 30 minutes early — your nerves are probably edgy, and you can use the extra rest.

are probably edgy, and you can use the extra rest.

• If a real crisis develops, tell yourself. "I choose not to smoke for one minute longer." Cigarette cravings peak at 17 seconds and dwindle off after 37 seconds, according to J.E. Lippard, director of the Metrolina Lung Association. "When a minute's up you can say, "That wasn't too bad, I can do it another minute.' Each time you deny yourself a cigarette you build up willpower."

• On the third smokeless

On the third smokeless On the third smokeless day start taking whole wheat grain and vitamins, especially vitamin B, which seems to offset nervous strain. "After the third day everything is downhill," Lippard says. "You haven't got it whipped but you're well on the way."

Tapering off

to help you taper off.

tried to quit or would try if they thought they'd succeed.

If you want to try, there are dozens of ways. As Metrolina Lung Association Director J.E. "Buddy" Lippard puts it, "There's as many ways of quitting smoking. as a country dog's got of getting home."

home."

Some of the more popular methods include group clinics, which emphasize the health benefits of quitting; hypnotism, which implants anti-smoking suggestions in

your subconscious; aversion thera-

which uses electric shocks and other unpleasant sensations to make you hate cigarettes; and var-ious pills and filters that promise

For most people, quitting gradually is harder than going cold turkey.
"Tapering is like cutting orr a dog's tail a little at a time," the Metrolina Lung Associa-

the Metrolina Lung Association's J.E. Lippard says.

Probably the most important element is choosing the
exact day when you will quit
aitogether — and then sticking to it. Many taperers forget
about the end date and smoke
as much as when they started.

Some tapering tips: Some tapering tips:

Buy cigarettes a pack at time. This makes getting garettes more bothersome

and expensive.

Smoke your regular brand for two or three days, then switch to one with about a third less tar and nicotine. Switch to a still-lower brand a

few days later.

• Make getting at cigarettes inconvenient.

rettes inconvenient.

Wrap paper around your cigarette pack. When you smoke, mark the time and — on a scale from 1 to 5 — how much you need and enjoy it. Eliminate cigarettes you don't need.

On your end day, throw away your cigarettes and go cold turkey.

Commercial clinics

Mose Loftin, 57-year-old president of the Dillard Paper Co. in Charlotte, is a member of the board of directors of the Metroli-

na Lung Association.

He's also a smoker — two
packs a day for 35 years.

"It's been a sore spot for me for a hell of a long time," he

He tried to quit many times. He tried to duit many times. Seven years ago he bet friends he could quit — and lost \$70. Four years ago he went through a Lung Association clinic. A year ago he went to a hypnotist.

"I just never quit. I got down to just a few cigarettes a day, but after three or four days I was back up to normal."

About two months ago, Loftin signed up for a one-week clinic offered in Charlotte by the Kip Center for the Control of Smoking, a franchise named after founder Kip Russo of Hawaii and started two years ago in Hawaii. It uses aversive conditioning to make smoking disgusting, suppos-edly forcing clients to lose their desire for cigarettes.

Clients are put in a 7-by-8 foot plastic tent. Electrodes are at-

tached to their arms. They light four cigarettes, place three in a butt-and-ash-packed ashtray, and puff the fourth without inhaling.

Smoke envelops them. Each time the smoker exhales he must lean over the ashtray's monstrous mound of butts and allow the smoke and ashes to billow into Each time a smoker does any

thing associated with smoking he is shocked with 20 to 30 volts — uncomfortable but not painful.

Diane Fields of Lexington, S.C., who operates the Charlotte franchise, acts as friend and counselor and tells clients to call for support when they can't suppress the urge to smoke, and if necessary to come to the clinic and sniff the

On the third day, after nicotine supposedly has left the client's system, he must purf quickly and inhale until he gets sick or can't tolerate any more. Usually his hands and legs get numb, he breaks into sweat, his heart pounds and he feels awful.

Remember this next time you feel like you want a cigarette,'
Ms. Fields advises.

Ms. Fields has treated about Ms. Fields has treated about 200 people, and says 90 percent have quit. She says she's given two refunds, and two persons have taken the program again successfully.

The Quit-Smoking Center of North Carolina opened in Durham in December. It charges \$250 and uses methods similar to Kip's.

A 1978 review of numerous studies, published by the U.S. Center for Disease Control in Atlanta, concludes electric shocks don't deter smoking for long.

But, a report by the U.S. Office of Smoking and Health cites reent studies showing 54 percent quit rates short-term and 36 percent long-term (two to six years) for aversive conditioning pro-

for aversive conditioning programs using rapid smoking.

But doctors say the method may be dangerous. It produces dramatic effects on respiratory rate, heart rate and blood presented. sure, and is not advised for those with heart, lung or circulatory problems.

Clinics using it usually ask potential clients if they have heart problems and advise some to see

a doctor before enrolling.

A reporter watched in January
while Loftin went through his
fourth day at the Kip clinic in Charlotte.

Loftin was confident he'd fi-nally broken his long habit. But because he'd failed before, he hadn't told his wife, Vangie, who's bothered by smoke, that he was in the program.

Loftin, however, was smoking again by mid-February.

"I stayed off pretty good for a while, but now I'm smoking about six a day," he said. "When that week ended at Kip I thought I was off them, but I guess I must not have been completely or else I wouldn't have broken."

Praising the Kip program for helping him cut down, Loftin said he planned to try it again. And he had stopped smoking in his home.

QUITTERS ...



Jim Atkins

"I prayed and simply gave

"I prayed and simply gave it over to the Lord."
That's how Gastonia lawyer Jim Atkins, 47, says he kicked his cigarette habit six years ago after 27 years.
"I'd had a bleeding ulcer and I hadn't quit then even though I was risking bleeding to death by cigarettes," he said. "I was smoking three packs a day and I'd tried Life Savers and I'd tried stronger filters and going a little longer each day without smoking.

without smoking.
"And I was talking to my pastor one day and he said,
'Is there anything you
haven't given up to the Lord?' And I said, yes, my Lord? And I said, yes, my cigarettes. And he said, 'Do you want to give them to Him?' And I said yes. And he said, 'Well tell Him.' And I said, 'Lord, I give you my cigarettes.' And I never

smoked another one.
"I don't think smoking is
slnful per se. But something that becomes so important to you that you can't quit, that you haven't allowed that to be yielded or surrendered to the Lord, then I think that is

Atkins advises those who want to stop smoking to "let the Lord take care of it, as with all things."



John Belk

Former Charlotte Mayor John Belk remembers how his doctor scolded him after he lit a cigarette after an ex-

mination in 1958.

"That's' one of the worst things you can do," Belk says his doctor told him.

"I had a bleeding ulcer and I went to the doctor. I'd

just bought two packs of cigarettes. I handed him the two packs of cigarettes and I Belk spent a week in the

Belk spent a week in the hospital until his ulcer stopped bleeding. "I was flat, on my back," he recalls. "I got rid of the bleeding ulcer and the cigarettes. too." got rid of the bleeding liter and the cigarettes, too." Belk, president of Belk Stores Services, had smoked for 20 years and was puffing three packs of Pall Malls a

day.
"I just quit," he says.
"That was it. I just knew I
had to quit smoking... I
just decided to quit, like you
decide to go to the movies.
"I was a slave to them. I'd

and light a cigarette to find out why I was awake. I still miss them, I enjoyed them very much. I still want a cig-arette today. It's kind of a nervous habit."

Belk, 58, advises potential quitters "just to stop. It's just deciding what to do."



Sarah Boyd

Sarah Boyd remembers

July 31, 1977.
She had a heart attack—
and quit smoking 1½ packs
of Vantages a day. She did it cold turkey in the hospital. Today, Mrs. Boyd, 44, is a secretary and receptionist for the American Heart Associa-

tion in Charlotte. "After you have a heart attack, it's quite painful. And you know that smoking's going to make you hurt more

and so you don't do it."

Mrs. Boyd had open heart surgery in October 1977. She believes smoking didn't directly cause her heart prob-- "I have atherosclero

sis, hardening of the arteries. It's an inherited disease." When she came home from the hospital, Mrs. Boyd had to find a substitute for smoking. She chewed gum "'til my jaws hurt. "You get all the ashtrays out of the house and keep

out of the house and keep away from it as much as possible. The doctor even told me not to let anybody in the house that smoked. "It's a way of life, smoking. And after you've done it for 25 years, it's very hard. And when people start feel-ing better (after hospitaliza-tion) is when they start empling seain." smoking again.



Charles Deal

"I thought it was ludicrous to let the government benefit from my weakness," says Charles Deal, 48, editor and publisher of The Hickory News, who chucked his Mariboros in June 1963 after

marioros in the root area moking two to three packs a day for 15 years.

"I gave the excuse — I was living in Florida at the time — that they had just gone up on the tax about 5

"I ate a lot of candy and chewed gum - probably drank more coffee," remembers Deal.

"I probably had withdraw-"I probably had within awal symptoms for six to nine months. I found out I had used it very much as a crutch. I found out I couldn't the story without

even start a story without lighting up. My work really suffered.
"It seems like you just have to make up your mind. I think if you have the character, you can do it. I think the will is the whole thing."



Ron Hatley

Ron Hatley, 38, quit smok-ing three years ago because he got tired of his wife's yel-ling and his constant cough-

ing.
"I got to the point I was coughing a lot, short-winded and all of the things that went along with smoking," says Hatley, part-owner of Sailing Endeavors Ltd. in Charlotte.

Charlotte.

Hatley, 38, had been smoking two packs of Raleighs a day for 15 to 20 years and was able to quit after he met Stan Reiziss, director of the Hypnosis Interesting and Information. struction and Information Center in Charlotte.

"I laid down comfortably
on a couch," says Hatley
"and looked at a spot on the

ceiling and he went through a routine, told me to relax ... It's basically just a relaxation and a count-down into the hypnotic state. was agonizing when went through the process of cutting down. I just got tired of counting cigarettes and being aware of smoking and

being addicted to it. "I think a lot of it was I was ready to quit, and I needed a tool and I used that (hypnosis). I'm not real heavy on will power, so I have to have a crutch, not a crutch but a tool."



Joe Hudson

the Union Board of County Commissioners, quit a 33year-old smoking habit after ne attended a smoke-filled he attended a smoke-filled meeting in Raleigh two

years ago.
"It was really bad," says Hudson, 47. "You could look across the room and couldn't see anybody. It was awful.

see anybody. It was awful. Everybody was smoking. Everybody was using it as a crutch."

Hudson quit "because I thought they were hurting me. I quit on Saturday and went to church on Sunday and couldn't smoke there and went to a movie and couldn't smoke there and couldn't smoke there and didn't let anybody know 'til couldn't smoke there and didn't let anybody know 'til I thought I had it licked. I quit chewing tobacco at the same time I quit smoking. I ate more and I still eat more

and I've gained 15 pounds.

"It's amazing how much better you feel. You don't cough and carry on any more. If you want to quit you just got to quit. There's no magic formula. You just make up your mind and quit."



Maurice Kamp

Dr. Maurice Kamp quit because he couldn't justify smoking and being in the health business.

health business.

Kamp, 72, former Mecklenburg County health director, kicked the habit about
eight years ago, after 35
years of smoking a pack a
day of Chesterfields and

day of Chesterfields and Lucky Strikes.

"I knew all the proper reasons to quit but I just never could do it," Kamp says. "It was an addiction. I was sick of it and I had the foolish notion that I could smoke cigars and it wouldn't be as harmful I changed. be as harmful. I changed from cigarettes to cigars.

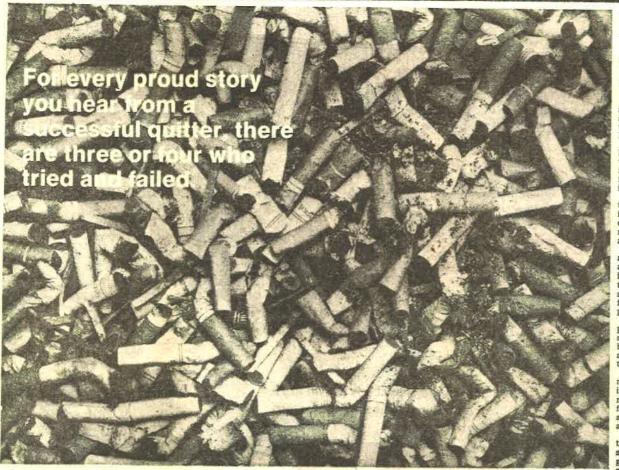
"Like all addictions, you look for substitutes and ex-

took for substitutes and ex-cuses and it's all poppycock. The only way I've found is never to start smoking." Kamp remembers what it was like to withdraw, giving

was like to withdraw, giving up cigarettes and cigars at once. For two weeks, he says, he was on edge.

'You go through withdrawal... I felt nervous. I was irritable. I was hard to get along with. I had a bag of hard candies in my drawer and I would suck on those damn candies."

Today, Kamp describes himself as an anti-smoking zealot: "I raise hell with people smoking around me."



Observer Photo By PHIL DRAKE

Does knowing why you're hooked help?

It's tobacco - not the act of

It's tobacco — not the act of smoking — that makes cigarette smoking addictive, according to the 1979 U.S. Surgeon General's Report on Smoking and Health. The report cites the Royal College of Physicians in London, which calls tobacco smoking "a form of drug dependence different from, but no less strong, than that in other drugs of addiction." in other drugs of addiction."

There is much direct evidence that cigarette smoking necessarily involves tobacco and probably nic-otine," the report says. "Cigarettes made of nontobacco materi-

als ... are not popular ...
"Low or no-nicotine cigarettes
allow their smokers to go through
all the motions of smoking. Lighting, handling and puffing can be the same as with usual cigarettes, so the opportunity for visual, ol-factory and oral gratification is present."

Present."
Nicotine — the most powerful
pharmacological agent in cigarette
smoke — increases pulse rate,
blood pressure and the amount of
adrenalin and other chemicals in the bloodstream.

For novices or in large doses, For novices or in large doses, nicotine can cause nausea or vomiting, the report says. But nicotine may also "have a facilitating effect upon learning and memory in animals and possibly in humans," according to several studies.

The section on addiction, written by Dr. Murray Jarvik, professor of psychiatry and pharmacology at the University of California at Los Angeles, says the evidence that nicotine is the vital ingredient

Jarvik said physical changes occur in people who try to quit, indicating they suffer true with-

drawal, not just psychological. Changes occur in brain waves, including a significant slowing of brain activity, after subjects are deprived of tobacco for 24 hours. The effect is reversed after smokers have two cigarettes within

five minutes. five minutes.

Other physiological changes in-clude weight gain and blisters in the mouth, nausea, headache, diar-rhea, increased appetite, drowsi-

ness or insomnia, restlessness and inability to concentrate.
What about long-term effects—effects that would explain the high relapse rate of quitters?

"By far the most common and clinically the most important symptom to appear following withdrawal from tobacco is craving for tobacco," Jarvik says.

"The best estimates indicate

"The best estimates indicate that 90 percent of all smokers in withdrawal will verbalize their need for cigarettes. Moreover, among smokers who have been abstinent for five to nine years, one out of five report that they continue to have at least an occasional craving for tobacco."

Jarvik says there is "consider-

sional craving for tobacco."

Jarvik says there is "considerable evidence" that gradual withdrawal from tobacco is even more difficult than abrupt withdrawal.

"Partial abstinence from smoking leads to more, rather than less, discomfort in withdrawal. The result is a partially abstinent smoker is in a chronic state of withdrawal."

Nonprofit clinics

About four times a year the Metrolina Lung Association and Seventh-Day Adventist Church cosponsor stop-smoking clinics in Charlotte. They cost \$5 and average about 100 participants. Sessions are held on five con-

secutive weeknights. Participants are urged to quit cold turkey, but those who want to

pants are triged to duit cold turkey, but those who want to taper off are helped.

Participants use a buddy system, similar to Alcoholics Anonymous, in which each person helps and gets help from another participant.

Participants are divided interess an ex-smoker is team leader. Each night everyone tells how many cigarettes he or she smoked that day, and each team's total is added. Teams compete to see which gets to zero cigarettes first.

Clinics also include films, lectures and tips on how to psych yourself up and avoid pitfalls most smokers face. When crav-

most smokers face. When cravings become great during the day, participants call buddies

r encouragement. The Metrolina Lung Association's J.E. Lippard says about 90 percent quit after five days. He estimates 60 percent are still off cigarettes a year later.

For \$145, you can enroll in

Duke University's Bad Habits Clinic, designed to help people overcome smoking, insomnia, overeating, tension and bad habite

habits.

Smokers meet in groups of four to eight for 1½ hours weekdays and the following Monday. Several methods are used: self-hypnosis, relaxation training, aversive therapy, group discussion and support and cognitive psychology—which Dr. Robert Shipley of Duke University Medical Center describes as "cleaning up your crazy thoughts about smoking. crazy thoughts about smoking.

"Most people are fairly ambivalent about smoking," he says. "Part of them wants to says. "Part of them wants to quit and part not, When they're tempted to have a cigarette this debate goes on in their heads. There's a whole host of ration-alizations that are used to allow one to have a cigarette. We teach individuals ways to deal with them."

Clients are told not to smoke between sessions. On about the third day, they're given cigarettes. "We have them face the wall, smoke at their normal rate and concentrate on all the negative sensations," Shipley save.

Most look forward to smok-

Most look forward to smoking, but are disappointed.
"It hurts their throat, their mouth tastes terrible, their chests are tight and their nose gets clogged up," he says.
Shipley says almost everyone quits by the end of the clinic. But he says the important thing is that about 60 percent aren't smoking a year later.

Hypnosis

Sharli Drew, a Charlotte homemaker and two-pack-a-day smoker.

maker and two-pack-a-day smoker, quit cold turkey several times — once for a whole year.

"But the whole time I stopped I always wanted one," she says. "I was always leaning over trying to inhale someone else's smoke."

A year ago, Mrs. Drew went to Charlotte hypnotist Stann Reiziss. She hasn't smoked since.

Hypnotism is an increasingly popular quitting tool, although experts disagree on its value. Some say it's not an effective way to control behavior, but can help individuals do what they want to do.

Robert Shipley, the Duke psychologist, says there is no evidence hypnosis affects smoking. But he thinks it can help those able to go into strong hypnotic trances.

But Reiziss, a PhD in educational psychology, says only a light trance, which almost everyone can achieve, is necessary to help people

For years, hypnotists tried to make people think they hated ciga-rette smoke. It didn't work. So now a Relgiss focuses on the

benefits of quitting.

"You are your body's keeper,"
Reiziss tells a hypnotized client,
"Your body is innocent and help-less. It's at your mercy. If you con-tinue to put poison in your body, it

can't help it. You owe your body respect and attention. As soon as you stop smoking you're thinking more clearly, you view things in a proper perspective, you're feeling more energetic, more physically attractive"

Reiziss, 36, says 95 percent of his several hundred clients a year quit smoking. But he only accepts clients referred by doctors, and he screens out those who want to quit only because of nagging spouse

Relziss gives clients a 24-hour ration of cigarettes — usually a fourth their normal amount, but no more than 18 — which he says is enough to avoid physical withdrawal symptoms. Then he concentrates on making smoking "a totally conscious act."

When clients smoke, they are allowed to do nothing else. If the phone rings, they must either ignore it or put the cigarette out. If they're driving and want a cigarette, they have to pull over to the side of the road. They must focus all attention on the cigarette.

"People soon realize the ciga-rette is not helping them to relax," Reiziss says.

Each day he gives clients hyp-notic suggestions to make the pro-gram easier. He says most quit smoking after three to five consec-utive daily sessions, for which he charges \$45 each. The first seesion takes about an hour, the others about 45 minutes.

He teaches clients self-hypnosis to reinforce his suggestions and to keep people from relapse.

Commercial products

Drugstores offer inexpensive drugs and devices to help you

quit smoking.

The One Step At A Time filter system sells for about \$10, including four filters designed to wean you from smoking in eight weeks. Filter 1 reduces tar and nicotine 25 percent; filter 2, 50 percent; filter 3, 70 percent, filter 4, 90 percent. You're supposed to use each filter two weeks writting a tree tree.

You're supposed to use each filter two weeks, quitting after two weeks on filter 4. But many people don't, and the company now markets filter 4 in separate packages.

Based on "extensive telephone surveys," product manager Jack Towne estimates a quit rate of 20 percent — better than it sounds since few people usually are able to quit smoking gradually.

The company claims to have

smoking gradually.

The company claims to have helped a million people stop smoking, but acknowledges it now sells as many filter 4s as complete systems — a fact critics say shows the system doesn't work for most people.

Two other popular stopsmoking aides are Bantron and Nikoban, pills that contain the same key ingredient — the drug lobeline, touted as a nicotine substitute.

Obtained from dried leaves and herbs, lobeline has many of the same autonomic effects as nicotine —the physical effects over which you ordinarily have no control such as blood pres-sure or breathing. John Parker, a pharmacologist, for Purex Corp, which markets Bantron, says lobeline is about a tenth as potent as nicotine and is not addictive in small doses (2 mg in Bantron, 5 mg in Nikoban).

Lobeline serves as a crutich and helps people withdraw from their nicotine addiction, Parker says.

Purex claims it helps most people quit smoking in five to 10 days. Parker says surveys suggest 50 to 60 percent suc-cess after two or three months.

"Long-term Id say 25 to 30 percent success. But I don't have any data to back that up because we've never done long-term followips."

Some researchers say lobeline is no more effective than a placebo. A review of studies published by the U.S. Department of Health, Education and Welfare last year notes widespread claims lobeline satisfies nicotine craving, but says flatly, "There is no evidence to support the is no evidence to support this contention."

The U.S. Food and Drug Administration is expected to announce whether it considers the drug safe and effective. If it doesn't, lobeline could be benned.

... AND MORE QUITTERS



Dave Lawrence

David Lawrence Jr., 37, executive editor of the Detroit Free Press and former editor of The Observer, remembers one Christmas 1976 present as the beginning of the end of his 20-year, three pack-a-day habit.

The gift, Water Pik One Step At A Time Filters reduces tar and nicotine intake

over an eight-week period.

"By the end of eight weeks, says the theory." explained Lawrence in a 1978
Observer column, "quitting will be a lot easier. It wasn'

for me."
When he reached the last filter, Lawrence quit cold

"The first days and weeks were the toughest," he said. "It was almost impossible to dictate a letter, to be in a meeting over a few minutes. I was target in the said."

heeting over a few minutes. I was tense, irritable, too tough on people.
"I did not feel better, although I did not have to
clear my throat of phlegm
eyery morning. every morning ... Food did not taste better. I wanted a cigarette worse.

The only advice ... is "The only advice . . . is it's a one-day-at-a-time sort of thing. I made it a practice of telling everyone I met at the time that I was quit-



Jacci Lewis

Manualynn "Jacci" Lewis a free-lance artist, took an unusual approach to kicking the habit - she smoked and drank herbal teas.

"... When I'd get the urge or be under extreme pressure or duress, I started smoking herb teas ...," says Ms. Lewis, who smoked a pack of True Green cigarettes a week for about a year. "I mix them all together and roll them like an old-

er and roll them like an oid-fashioned cigarette."

She quit because she felt cigarettes were affecting her lungs and reading compre-

"I'm getting away from them (the herbal cigarettes) now. If I had a pipe I think I'd do it more often. If you do it in public people frown and you have to go through a lot of explanations so I just do it occasionally now."

She also drinks herb teas

to calm her nerves.
"I read somewhere (that)
if you can, eliminate all the toxins from the body. I went

toxins from the body. I went on several juice fasts and drank celery and garlic juice and mineral water.

"I got the urge strongly (to smoke)," she says. "You definitly feel withdrawal. At first I was just eating profusely, but now it's tapered off and I feel more energetic."



Doug Mayes

A report on smoking by British doctors, his father's heart attack and a \$2 bet prompted Doug Mayes, 57, a WBTV personality, to quit smoking. He remembers pre-

cisely the day and time: Nov. 13, 1954, at 9:30 a.m. "It (the British report) had been in the news that week and a group of us were in the control room . . . We made a \$2 bet hat we could out smaller that we could made a \$2 bet that we could quit smoking, says Mayes. "My dad had just had a major heart attack, and he was a chain smoker, and I thought it might bolster his attempts to stay off. "It chewed yum and I

"I chewed gum and I chewed candy. I stopped about two weeks before Thanksgiving, and I gained some weight and had to go on a diet. But I felt it was worth it."

Mayes soon realized feed tasted better: "After about three days, I began to taste pickles. I discovered tastes in cheese and pickles that I'd never tasted. 'I do believe you just have

"I do believe you just have to make up your mind (about quitting). It is a matter of will power. You have to de-cide this is what you want to do."



Doris Pickett

A \$1,000 offer from her husband prompted Doris Pickett of Statesville to quit smoking. She collected the \$1,000

oking.
She collected the and a \$4,000 bonus.
"He'd already quit," said "He'd already quit," than I Mrs. Pickett. Mrs. Pickett. "He had a worse time quitting than I did. When he offered me the \$1,000, I just reached over and put out the cigarette and

I've never smoked another. That was July 3, 1969, after Mrs. Pickett had smoked for 33 years. The 59-year-old Mitchell College political science professor was smoking two packs of Salems a day.

day.

Joseph Pickett, 64, a
Mitchell history professor,
gave his wife \$5,000 when
she quit. "He told me if I'd
invest it I could have that
much and I did, in the stock
market."

market."
"I wanted her to quit,"
Pickett says, "And that's a
very persuasive way of
doing anything. And I must
say, she quit right then."
Although she no longer
craves cigarettes, "I love to
smell them, but I don't really
want to smoke. I look back
on it. What a dirty habit it
was and I always had a hole
in my good clothes."



Dennis Rash

Dennis Rash, 39-year-oldpresident of NCNB Development Corp., knew he had to quit smoking when the el-evator broke and he had to climb 16 flights to his office leaving him huffing and puf-

leaving him huffing and puf-fing.
Shortly after he caught his breath that day in March 1968 Rash read about a Flor-ida case in which the family of a man who smoked and died of cancer sued the American Tobacco Co.
"In that article were pic-tures of healthy mix lunes

tures of healthy pink lungs and the unhealthy black dis-eased lungs of the decedent," says Rash, who smoked two packs a day of Marlboros and other brands for eight

years.

Rash did two things to quit: "Hyperventilating — not just breathing deeply, but literally gasping four to five times whenever I wanted a cigarette, and I tried to break all the associations with smaking.

tions with smoking.
"You have to do it cold turkey," he advises . . "I do think you need to force yourself to drain off some of that energy — walking or running. You really have to force yourself to think good health."



Willie Stratford

Willie Stratford, who smoked for 30 years, thanks his mother for helping him to quit five years ago.

"When my son graduated from Air Force school, my mother and I went to the graduation," recalls Strat-ford, 55, a U.S. Postal Service manager who smoked 2½ packs a day. "My moth-er said, 'Your chest is just going up and down and up

going up and down and up and down and everybody's looking at you."

"And occasionally my breath became shorter and I'd wheeze a lot. One morning — and I had quit nineteen thousand times before — as I said my prayers, I said a prayer, made the sign of the cross, threw the cigarettes in the trash can and I haven't smoked since.

haven't smoked since.
"I said, 'Hell, I ain't going te do it ne more, and I said, 'Thank you, Jesus.'

'Thank you, Jesus.'

"When I decide to do something I just do it. It's kind of an artesian well of strength that you draw on and it just gives you the strength to go on.

"I think that the human mind can do anything it wants to do. I think It can draw on the artesian well of strength — this inner strength that we have. We don't need a crutch."



Jean Webber

Jean Webber quit to prove to her husband she could. "My husband said, 'Well, "My husband said, 'Well, Jean, you should stop,' " Mrs. Webber, 40, of Char-lotte, recalls. "He had stopped several months be-fore that. And I said, "Oh. I'll stop, And he said, "You'll

"... I just threw the cig-arettes in the trash can. I haven't had a cigarette in my mouth since." never stop.

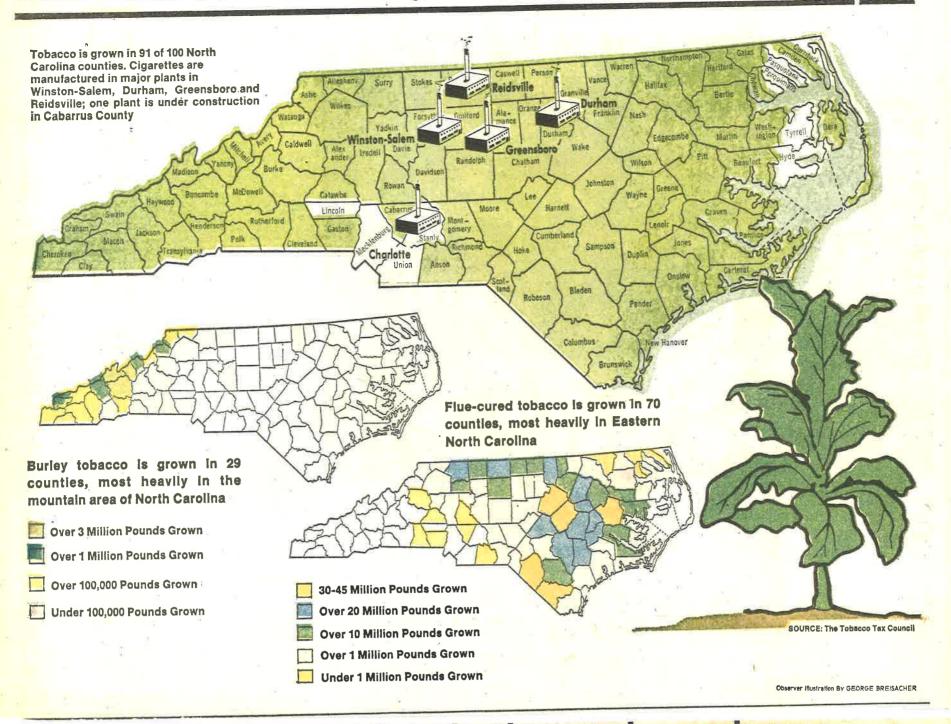
That was two years ago.
"I started jogging a week later, and I could only go a haif a block ... And I was determined to keep up with that so I went out every day

that so I went out every day and now I jog anywhere from 2½ to 5 miles a day."

Mrs. Webber, 40, president of AMICO Inc., a Charlotte computer card manufacturing company, didn't think about smoking when she decided to quit after smoking for 20 years, inhaling a pack a day of a low-tar-and-nico-tine brand.

"I think when you make up your mind to do something and have a strong motivation factor — that's what gets you over the hump."

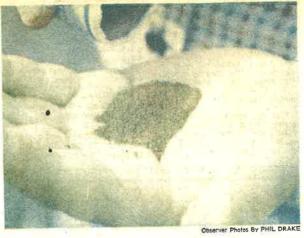
The Tobacco Economy

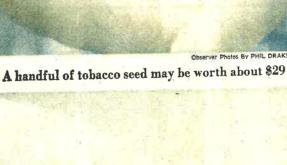


It's our lives wrapped up in those tobacco leaves



Smaller farmers like Bill York need price supports







Without them, 'I'd have to kiss my farm goodbye'

By LaFLEUR PAYSOUR

By LaFLEUR PAYSOUR
Observer Staft Writer

Bill York is a third-generation tobacco farmer. In his six years of tending a swatch of Iredell County tobacco land, he's learned to live with the uncertainties of farming.

"You just never know what's gonna happen next and how much you'll suffer because of it."

But York's not just talking about the weather. He's never been a cigarette smoker, but he fears the federal government's anti-smoking campaign will filter down to his rung on the tobacco production ladder and affect his livelihood.

Specifically, York fears the gov-

Specifically, York fears the government will end its 45-year-old tobacco price support program which guarantees minimum prices for tobacco — even inferior

which guarantees minimum prices for tobacco — even inferior grades — sold on the auction house floor.

During the 1978 season, York, 27, grew only 17 acres of tobacco. Like most small-scale farmers, he said, he never made enough money to run a sophisticated operation like his larger competitors.

With less money invested in machinery, fertilizer and pesticides, his crop is often inferior to the leaf that comes from the wealthier farms.

leaf that comes from the weather.

"That's why small farmers need price supports," York said. "It helps us .. keep up with the big operators .. If they vote (the program) out, I'd have to kiss my farm goodbye."

But price supports are just as important to large-scale farmers.

"In bad weather years we need

But price supports are just as important to large-scale farmers.

"In bad weather years we need price supports to get by," said Chester Worthington, 43, who runs a 600-acre tobacco farm near Greenville, N.C.

"I don't care how much tobacco you produce, if it's not good enough to sell, you're in trouble."

Tobacco is North Carolina's No. 1 cash crop — and one of the few that allows farmers to turn a decent profit on small tracts of land. On the 1978 markets, tobacco brought more than \$1,200 an acre compared to the \$160 an acre carnings for peanuts, \$140 for cotton and \$92 for soybeans.

"When you look at the figures," he said, "it's obvious that I couldn't make a living off any other 'crop... not with the (17 acres of tobacco) land I've got."

If York were forced to switch to other crops, he said it would be years before he could make enough money to offset the "incredibly high" cost of converting his farm operation. Conversion is costly because it's impossible to modify tobacco harvesting equipment and storage and curing barns so they can be used for other crops.

"Td have to start from scratch," crops.
"I'd have to start from scratch,"

"I'd nave to start from scratch," he said. "And if I did, what would I do with the \$20,000 worth of (tobacco) equipment I've already got? ... I'd have to buy all new machinery and hire a whole new set of field hands.

There's gold in the soil of tobacco land

It is a rare combination of

It is a rare combination of soil and climate that makes North Carolina's flue-cured tobacco a treasured ingredient in cigarettes.

The conditions produce in the tobacco leaf, a unique combination of sugar and nicotine — the substances generally regarded as those which give North Carolina tobacco its flavor and aroma.

Because that sets it apart from tobacco grown elsewhere in the world, North Carolina tobacco commands the world's highest prices.

"There's no way the govern-ment could give me a subsidy big enough to help me make the change. No way."

Tobacco farmer Joe Coleman of Tabor City on the South Carolina line in Columbus County is in similar shape. Although he's a diversified farmer with 45 head of cattle, 100 acres of soybeans and 65 acres of corn, most of his income control of the country of the c comes from his 36 acres of tobac-

Although it would be easier for Although it would be easier for him to get out of the tobacco business and fall back on his other crops. Coleman says he would suffer a major income loss if he made the switch. He's also convinced it would be impossible for the government to force farmers into crop conversions because of the dwindling availability of farmland.

"When you deal with other crops, volume is the name of the game," said Coleman, 51. "My farm is a medium-sized operation ... you need thousands of acres to make any money ... and there's just not enough farmland around for every farmer to have that much."

Many tobacco farmers are confident the government will make no effort to drive them out of business and the control of the con ness — principally because it would result in higher welfare ex-penditures and a loss of the sub-stantial revenues from tobacco

"The (federal) government has never had a balanced budget... but it got over \$6 billion last year off tobacco taxes." Coleman said. "... I don't think they'll put us out of business."

He's convinced there's a way to keep smokers and tobacco growers healthy.

"... Just tell us what's in the tobacco that causes cancer and we'll breed it out."

Tobacco economy has become N.C.'s lifeline

By HOWARD COVINGTON

The tobacco industry says "North Carolina Grows

The tobacco industry says "North Carolina Grows on Tobacco."

It's more than that. The state depends on the stuff like a pack-a-day smoker.

North Carolina farmers grow two-thirds of the country's flue-cured tobacco — the main ingredient in cigarettes. North Carolina workers manufacture more than half the 680 billion cigarettes made in the country each year. And the nation's largest tobacco company, R.J. Reynolds, calls North Carolina home.

Tobacco money bullt Durham and Winston-Salem, a city where the odor of the golden leaf hangs in the downtown air and tobacco blossoms decorate bouquets of brides and socialites.

Tobacco profits helped create Wake Forest University, Duke University, Duke Power Co., The N.C. School of the Arts and the Duke Endowment, whose gifts help Carolinas colleges flourish.

gifts help Carolinas colleges flourish.

From the State House to the court house, "the political power of tobacco interests is uncontested," says N.C House Speaker Carl Stewart of Gastonia.

For example:

The N.C. General Assembly has passed only one major tax relief program in recent years — an \$11-million rollback of the manufacturers' inventory tax, expected to benefit the tobacco industry most.

Speech writers for the state's top health official, Human Resources Secretary Sarah Morrow, have been told it "isn't politically smart" to include references to smoking-related health problems.

The N.C. chapter of the of the American Cancer Society does not participate in the national organization's anti-smoking campaigns.

nization's anti-smoking campaigns.

• Unlike most medical groups, the N.C. Medical Society accepts cigarette advertising in its monthly

Journal.

The source of tobacco's power is the money it makes for just about everyone involved.

Planted on only 350,000 acres, or one-half of 1 percent of the state's available farmland, tobacco is the leading cash crop, bringing in more than \$1 billion for sharecropper farmers and large mechanized producers alike.

lion for sharecropper farmers and large mechanized producers alike.

When today's seedlings are full grown this summer, they will prove a money-maker for farmers in the 91 (of 100) counties where tobacco is grown, the warehousemen who help sell the crop in 49 market cities, the 27,000-plus workers who manufacture about 358 billion cigarettes in North Carolina yearly, and even state, federal and local governments that collect more than \$6 billion annually in tobacco-related tayes.

North Carolina collects more than \$18 million a

North Carolina collects more than \$18 million a year from cigarette sales taxes alone.

Mayodan, in Rockingham County, collects rent — \$3,000 a year — from the tobacco allotment assigned to local parkland.

RJR Industries Inc., 41st on Fortune magazine's list of America's top 500 firms and the umbrella company for R.J. Reynolds Tobacco Co., last year paid \$6.6 million in property taxes to Winston-Salem and Foresth County, it's home has to Winston-Salem and Forsyth County, its home base.

Nobody knows the total

There are no accurate figures on how many people are involved in the growing, harvesting and marketing of the state's crop.

A 1975 Research Triangle Institute study conducted for the industry-sponsored Tobacco Tax Council in Richmond found tobacco is responsible for the equivalent of about 110,000 full-time jobs, of a total state employment of 2.6 million and compared with about 252,000 who work in North Carolina's textile industry.

Council economist Glenn Chappell said the 110,000 figure is the cumulative work time North Carolinians devote to all phases of the business, from the dawn-to-dusk farmer to a sales clerk in down-town Charlotte who rings up the sale of a pack of cigarettes at North Carolina's lowest-in-the-nation prices.

prices.

Altogether, the council industry study said, the tobacco industry generates about \$6.6 billion a year for the state's economy. State Commerce Department researchers say that in 1975 the tobacco industry produced \$3.8 billion in finished products out of the \$31.5 billion in total goods produced in the entire state.

state.

The bulk of the state's crop is grown in the Piedmont and eastern counties. Cured in barns and known as flue-cured (also bright and Virginia), it has

known as flue-cured (also bright and Virginia), it has a unique flavor and aroma that make American cigarettes some of the most popular in the world.

In mountain counties, growers produce burley tobacco, a heartier, darker leaf that is hand-harvested and air-dried in open barns. North Carolina produces about 27 million pounds of burley a year — 4 percent of the nation's total — compared to about 800 million pounds of flue-cured. Burley is used in cigarettes as well as in pipe and chewing tobacco.

Each year the U.S. Department of Agriculture tells more than 133,300 North Carolina farm owners how many pounds of tobacco they can grow themselves or lease to someone else in their county to grow in their name. In exchange for this control on supply, the government guarantees growers it will supply, the government guarantees growers it will buy at a set price any tobacco they can't sell on the open market.

It's as good as gold

Because of the guarantee, a farm owner's allot-ment is more than just authorization to grow tobac-co. Bankers use it as collateral on farmers' loans. Local officials set property values based partly on a farmer's allotment

Allotments also mean additional income for farmers or former farmers who don't grow tobacco but who lease their allotments to other growers — often son University extension tobacco specialist Ben

Profit from tobacco helped create Duke University, Wake Forest University and Duke Power Co.



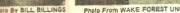


Photo From WAKE FOREST UNIVERSITY

for as much as 40 percent of the final tobacco sales

for as much as 40 percent of the final tobacco sales price.

"Most of them that own these allotments are elderly and living on small, fixed incomes," Gov. Jim Hunt sald recently. "That income is absolutely vital to them being able to get along."

Because allotment rents are not recorded and there has not been an effective census of tobacco growers since mechanization brought major changes to the tobacco farm earlier this decade, no one knows for sure how many allotment holders actually grow tobacco. But the number is declining.

Mechanization made it advantageous for growers to rent allotments from others and consolidate them into large tracts on which mechanical harvesters can be used most efficiently.

be used most efficiently.

John Cyrus, an N.C. Department of Agriculture tobacco specialist, said only 52,000 farmers grow the tobacco assigned to 115,000 farm owners who hold flue-cured allotments.

The Tobacco Tax Council estimates that the equivalent of 64,000 people earned full-time livil-hoods growing and harvesting the crop in 1975, but there are no current firm figures.

"We really don't know how many people are involved in harvesting tobacco," says Dr. Joseph Chappell, an N.C. State University economist (no relation to the Tobacco Tax Council's Glenn Chappell).

He estimates that three-fourths of the state's tobacco is grown by half the 133,338 farm owners who had allotments in 1978.

In turn, mechanization has meant new industries and new hysiness for North Carolina.

In turn, mechanization has meant new industries and new business for North Carolina.

Since the early '70s, farmers have flocked to machinery dealers and bought the large, awkward-looking tobacco harvesting machines that cost between \$20,000 and \$30,000.

In 1971, only 43 mechanical harvesters rolled across North Carolina tobacco fields. Last year, more than 3,000 harvested nearly 40 percent of the 350,000 acres devoted to tobacco in North Carolina, according to N.C. Agricultural Extension Service.

Harrington Manufacturing Inc. of Lewiston, in Bertie County, and Long Manufacturing Inc. of Tarboro, in Edgecomb County, were among the first to build harvesters for farmers throughout the southeast. The models are based on a prototype developed at N.C State in Raleigh.

is stored in more than 38,000 shiny, aluminum bulk-curing barns that cost from \$8,000 to \$10,000 each and which have quickly replaced the once-familiar tall wooden barns. Among the manufacturers is Pow-ell Manufacturing Co., a Bennettsville, S.C., subsidi-ary of Charlotte's Rowe Corp.

The tobacco these machines pulled from the stalk

Tobacco was one of the last of America's large cash crops to fall to the machine. But the machines displaced few workers. Many blacks and young whites, traditional field workers, had already left the farms for other jobs.

Growers who still harvest by hand depend on sharecroppers, family members and any hired labor they can find. Farmers often go to the cities for workers or, in some instances, hire migrant workers from Mexico who have never seen a tobacco plant, said N.C. State's Chappell.

"To some extent, tobacco mechanization came along and saved the family farm rather than de-stroyed it," says Dr. Walton Jones, economist with the N.C. Department of Natural Resources and Community Development.

Paper capital

Beyond the farm, tobacco is woven into the economic, political and social fabric of the state.

In Pisgah Forest, a mountain town just outside Brevard in Transylvania County, 2,800 people work in the plants of the Ecusta Paper and Film Group, which produces more cigarette paper than any other place in the world.

Ecusta, the area's largest employer, sells papers to be a product the world.

cigarette manufacturers whose product goes around the world. At home, the company pumps \$40 million in wages into the local economy.

At the other end of the state, North Carolina's ports in Wilmington and Morehead City move about half the state's tobacco crop, either as raw leaf or cigarettes, onto ships for export.

Tobacco not only is North Carolina's leading export commodity, it reduces the nation's export deficit. The U.S. exports about 80 billion cigarettes and about twice as much raw tobacco as it imports.

about twice as much raw tobacco as it imports.

There are 120 North Carolina companies hiring about 6,000 people who do nothing but prepare the raw leaf for cigarette production.

The large cigarette production.

The large cigarette plants in Greensboro (Lorillard), Reidsville (American), Durham (American and L&M) and Winston-Salem (R.J. Reynolds), provide jobs for 27,000 workers whose wages average more than \$6.62 an hour, near the top for North Carolina wage earners. Philip Morris is bullding a plant in Cabarrus County. It is expected to open by 1982 and eventually employ as many as 2,000. It will be able to produce up to 80 billion cigarettes a year — a little less than 10 percent of U.S. demand.

Gov. Jim Hunt said he's trying to convince a foreign cigarette manufacturing firm, one that will make cigarettes for sale abroad, to locate in the state.

Though there are no cigarettes made in Mecklenburg County, and the closest tobacco plant is miles away, Charlotte's trucking industry has grown right along with tobacco.

A study by Tobacco Institute, an industry group, found in 1975 that tobacco creates 2,000 jobs in the motor freight and railroad-businesses.

The leaf's the thing in South Carolina

By CHARLES E. SHEPARD

Observer Rock HB Suresu

It's been decades since tobacco overtook King
Cotion as South Carolina's top cash crop, but its importance to the state doesn't compare to what tobacco means to North Carolina.

South Carolina, like a developing nation, experts only the raw product, tobacco, not the finished product, clearettes.

cigarettes.

uct, cigarettes.

S.C. tobacco farmers pocketed \$207 million in 1978, for more than 150 million pounds of tobacco. Although that's less than a fifth North Carolina's amount, S.C. farmers treasure their flue-cured leaf. The state's \$171-million tobacco sales in 1977 placed it behind only North Carolina and Kentucky and slightly ahead of Tennessee and Virginia.

As South Carolina's traditional leading cash crop, tobacco garnered \$35 million more in 1977 than the No. 2 two crop, soybeans. That year, tobacco yielded about 34 percent of money made in S.C. crop sales. In North Carolina it yielded about 56 percent.

Soybeans beat tobacco

Preliminary figures indicate soybean sales edged out tobacco by \$2 million in 1978. But farmers needed 1.47 million acres to grow the soybeans, only 71,000 for tobacco.

Last year will be remembered as the year South Carolina lost a chance to break North Carolina's monoply on tobacco manufacturing in the Carolinas.

A year ago — despite last-minute efforts of S.C. politicians — Philip Morris decided to build a \$100-million eigarette plant in Cabarrus County, N.C., instead of near Columbia.

"The only thing South Carolina does is grow the tobacco, such as the such carolina does is grow the tobacco, such as the such carolina smoke the tobacco, "says Susan Johnson, tobacco marketing specialist for

says Susan Johnson, tobacco marketing specialist for the S.C. Department of Agriculture. In 1978, some 23,800 farms in about 20 of the state's 46 counties held tobacco allotments. But Clem-

trell estimates there are only 7,000 growers, many

trell estimates there are only your growths, many leasing others' allotments.

Virtually all South Carolina's tobacco farms lie along the state's coastal plain, mostly in the northeastern Pee Dee region. That fact — and the absence of a tobacco manufacturing industry — mold the pol-

of a tobacco manufacturing industry — mold the politics of tobacco in the Palmetto State.

Horry County, home of Myrtle Beach and the Grand Strand beaches, is the capital of S.C. tobacco. About 17,200 acres were harvested in 1977, and, according to U.S. Department of Agriculture statistics, the county's 38.8 million pounds of harvested tobacco placed it second only to Pitt County, N.C., in fluctured tobacco production in 1977.

The Holliday brothers, John and Joseph — said to be owners of the state's largest tobacco allotment — live in Galivants Ferry in Horry County.

Those familiar with tobacco farming in South Carolina estimate the brothers' allotment at 650 acres, a figure the Hollidays won't confirm or deny.

"It's something we would rather not talk about," John Holliday says with a laugh. "It's considerable. It's pretty large."

Behind Horry In 1977 S.C. tobacco acreage came

Behind Horry in 1977 S.C. tobacco acreage came Florence (12,800), Williamsburg (8,490), Marion (6,020), Dillon (6,010) and Darlington (5,870) counties. All the state's 10 tobacco markets and 41 ware-

houses are in those six counties. Tobacco experts say loss of the dependable tobac-

Tobacco experts say loss of the dependable tobacco dollar would be disastrous for the Pee Dee. Especially hard hit, they say, would be the small family farm, unable to raise the money to finance a quick shift to another crop. Most of the state's tobacco farms fit that description, they say.

"You would probably see a mass auctioning of farms if you did away with tobacco in South Carolina," says Kittrell, of Clemson's Pee Dee station in Florence. "You would probably see a lot of bankruptcy sales. Lending institutions would be very reluctant to finance growers. It would be chaos." Clemson's economists make similar predictions for

the tobacco-producing region, but say the effect would be minor on South Carolina's economy.

The loss of tobacco, says James Hite, professor of Agricultural Economics, "would make a difference, but it really would be noticed overall in the state."

Hite's studies show tobacco contributed about one-half of 1 percent to the gross state product in 1975, accounting for \$68.2 million of the state's \$12.4 billion dollars, in 1973 dollars.

Tobacco does not muster staunch statewide support the way it does in North Carolina. That's evident in the cigarette taxes in the two states: North Carolina levies a 2-cent-a-pack tax, South Carolina demands 7 cents — raised from 6 cents in July 1977.

An uphill fight

"Every time we try to get something for tobacco.

"Every time we try to get something for tobacco, we've got an uphill fight." says John Holliday.

Robert Leak, director of the S.C. State Development Board, believes that was key to Philip Morris's decision to build in North Carolina.

Leak argues that spreading such investments around to other states — "Oh, my gosh, it's enormous," he bubbles when asked about the economic effect of a new plant — would win the cigarette instance.

around to other states — "Oh, my gosh, it's endimous," he bubbles when asked about the economic
effect of a new plant — would win the cigarette industry more support in Congress and state legislatures such as South Carolina's.

"They would say, 'You guys haven't done anything to help us down there,' says Leak, recalling
S.C. officials' efforts to persuade the firm to locate in
South Carolina. "And we would say, 'Well, you
haven't done anything to help us."

Even without a cigarette plant, South Garolina's
tobacco growers and experts are usually quick to assert that they, not their northern neighbors, produce
the nation's best flue-cured leaf. But they also admit,
when pressed, there's really little or no difference.

"When I'm in South Carolina, I say we grow the
best tobacco," says Kittrell, a North Carolina native
who left N.C. State in 1975. "In North Carolina," he
adds with a chuckie, "well, if I went back there I'd
say North Carolina was better."

Tobacco is bringing us art and education

By DON BEDWELL
And JACK CLAIBORNE
Observer Staff Writers
When Gov. Jim Hunt dedicated

when Gov. Jim Hunt dedicated
R.J. Reynolds Industries' world
headquarters in Winston-Salem
last year, he alluded to the monument-building that has become a
tobacco-industry tradition in North
Carolina.

He noted that Payrolds had

Carolina.

He noted that Reynolds had helped launch the N.C. School of Performing Arts, helped charter the Winston-Salem Arts Council and sponsored a state contest to generate art for its headquarters.

As steel has in Pennsylvania, industries traditionally contribute to

dustries traditionally contribute to the culture and education in states where they flourish. And if not to-bacco, another industry no doubt would play the role in North Caro-

But it is tobacco in North Carolina and Reynolds is not alone in an industry whose profits have helped shape our cities, utilities, culture and higher education.

Tobacco fortunes have even changed the face of the land, creating Duke Power Co. to harness

the Catawba River into lakes that helped attract industry to the rural Piedmont.

Piedmont.

The story doesn't end with North Carolina tobacco pioneers such as James Buchanan (Buck) Duke, whose American Tobacco Co. fortune helped launch Duke

Co. fortune helped launch Duke Power Co., or with Reynolds founder Richard J. Reynolds.
Only last year, North Carolina newcomer Philip Morris USA sweetened its announcement of a new Cabarrus County cigarette plant last year with a \$100,000 donation to the National Humanities Center at Research Triangle Park near Raleigh.
The firm, which has tripled its charitable contributions over the past five years, matches employee contributions to schools up to \$10,000 and has begun matching contributions to hospitals and cultural organizations. Lorilland,

tural organizations. Lorillard, American Tobacco Co. and the Liggett Group match alumni con-tributions to colleges and universi-

Just as myriad Carolinas cities grew up around textile mills, such

communities as Kinston and Williamston were born or hastened to maturity by the expansion of to-bacco facilities.

When the colonial legislature tried to establish minimum standards for growing and exporting tobacco, it authorized the creation of warehouses for product inspection. Those warehouses sometimes became the nucleus for a town, attracted a country store, a church,

pecame the nucleus for a town, attracted a country store, a church, perhaps a school.

The introduction of mass production and its concentration of power created investment capital that helped underwrite the state's growing textile industry.

that helped underwrite the state's growing textile industry.

The Dukes, who built American Tobacco Co. into a trust that controlled 75 percent of the nation's tobacco manufacturing until it was dismantled by the Supreme Court in 1911, also built some of the first plants in the state to make denim. Duke tobacco money built Duke

University and its medical school.
Land and cash from R.J. Reynolds
and his heirs moved Wake Forest
from Wake County to Winston-

Salem and financed the campus The \$400-million-plus Duke En-

dowment sustains Duke, Davidson College, Johnson C. Smith University in Charlotte and Furman University in Greenville, S.C. The endowment has built hospitals, churches, orphanages and re-tirement homes throughout the Carolinas.

Income from Reynolds founda-ions helps support Wake Forest University.

The Z. Smith Reynolds Foundation made a series of grants to the state's Division of Archives and and History to finance collection, preservation and publication of colonial records to study state history, scholarship and culture.

In 1976, Liggett gave the state 71 acres north of Durham that in-cludes Stagville Plantation, an unciudes Stagvine Familiation at aspoiled pre-Civil War tobacco plantation. It is considered an architectural treasure and a social and cultural windfall that provides first-hand information about Southern slavery.

Tobacco inspires art, such as Pauline Dove's "Back of R.J.'s" from the Springs Mills Traveling Art Show. Tobacco also helps finance art, such as these dancers from the N.C. School of Performing Arts.





Observer Photo By OZIER MUHAMMAN

The Tobacco Economy

Industry giant stashes its eggs in many baskets

By DON BEDWELL

WINSTON-SALEM — Richard Joshua Reynolds wouldn't recognize the worldwide enterprise that grew from his plug chewing to-bacco business launched in Forsyth County more than 100 years ago.

R.J. Reynolds Industries has grown into the South's largest corporation, a diversified giant ranking at the top of the nation's cigarette manufacturers with four of the top 10 brands — Winston, Salem, Camel and Vantage.

It also ranks as a financial powerhouse among the nation's consumer products firms, reporting profits of nearly \$442 million on sales of \$6.6 billion last year.

Its recent purchase of Del Monte Corp. will boost it from No. 41 to about No. 26 on Fortune's list of America's top 500 industrial companies. Its cash and borrowing capacity has been estimated at more than \$1 billion over the next five years.

In North Carolina alone, the firm spends more than \$600 million every year in payrolls for 18,000 employees, taxes, dividende methods for the second second

dends, purchases of goods and services and civic contributions.

Reynolds is, as one executive described it, "an enormously powerful financial machine."

Yet, in recent years, most of that machine's profits have been directed into businesses unrelated to tobacco — foods, shipping, energy and packaging.

Tobacco generates those profits, observed one Reynolds official, "and you can't reinvest in the tobacco business because that's pretty well stagnant."
(Reynolds isn't the only tobacco

(Reynolds isn't the only tobacco manufacturer diversifying — Philip Morris has acquired Miller Brewing, a California homebuilding company and a Wisconsin tissue-paper mill. American Brands Inc. has James B. Beam Distilling, a stapler company, Acushnet sporting goods, a hand-lotion firm and two food companies.

(Lorillard is a division of Loews (Lorillard is a division of Loews)

(Lorillard is a division of Loews Corp., which owns CNA Financial and subsidiaries that develop and operate residential and commercial property. The Liggett Group owns the company that makes J&B scotch and Wild Turkey bourbon, the Alpo dog food company and a Pepsi-Cola bottling company in California. California.

(Brown & Williamson, a wholly owned subsidiary of B-A-T Indus-tries of Britain, has interests in Gimbels and Saks Fifth Avenue department stores.)

Diversify, diversify

A 16-year acquisition program has diversified its operations, as Reynolds:

Created RJR Foods Inc. by

buying — for Reynolds stock and \$160 million cash — four firms that produced such brands as Hawaiian Punch, Chun King Oriental and Patio Mexican foods and My-T-Fine pudding.

Paid \$500 million in cash and stock for the parent firm of Sea.

stock for the parent firm of Sea-Land Industries. The acquisition made Reynolds the nation's largest

made Reynolds the nation's largest shipping firm.

Acquired American Independent Oil Co. (Aminoil), which produced crude oil in the Mideast, for \$55.5 million cash in 1970. Six years later, it added Burmah Oil Co.'s U.S. properties for \$522 million in what then was the largest cash transaction in U.S. history.

Swapped Reynolds stock for Filmco, a manufacturer and supplier of viny! packaging films. Filmco was added in 1967 to the 50-year-old RJR Archer aluminum packaging business, traditional

packaging business, traditional

Reynolds tobacco packager February's takeover of Califor-nia-based Del Monte, combined with RJR Foods subsidiary. will make Reynolds the United States' largest fruit and vegetable canner

Reynolds gave Del Monte stock-holders \$621 million in cash and preferred stock for the company, which will operate under its traditional name and current management. Del Monte will give Rey-nolds a national market for its own brands.

The Del Monte acquisition will boost Reynolds's employment from 34,000 to 77,000.

And it will add more than \$1.5 billion in annual sales, boosting nontobacco interests to nearly half the total business volume.

the total business volume.

Tobacco, though, apparently
will continue to provide the bulk
of Reynolds's profits, as it has
since Richard Joshua Reynolds

since Richard Joshua Reynolds first cranked up operations in his "Little Red Factory" in 1875. And Paul Sticht, 61, who in 1973 came out of early retirement from Federated Department Stores to accept Reynolds's presidency, disputes any notion the company plans to turn its back on tobacco.

'Tobacco will survive'

"It's preposterous to think we've lost interest in something that's worth \$4 billion (in annual sales)," says Sticht, firing up a pipeful of a Reynolds test-blend tobacco.
"I really think tobacco will survive and prosper, After all, it's

vive and prosper. After all, it's been under attack for hundreds of

years."
Sticht is expected to step up to the firm's chairmanship when veteran Colin Stokes retires in April.
Despite the worldwide scope of its operations, Reynolds has committed a big chunk of expansion to the city where it was born. Winston-Salem, 80 miles north of Charlotte, is the base of its tobacco manufacturing, a city that gave its name to two cigarette brands, a city that's home to 12,000 employees.

a city that's home to 12,000 employees.
Sticht's own office is on the fifth floor of Reynolds's angular, glass-sheathed \$40 million world headquarters building dedicated only a year ago.

Downtown, where the sweet fragrance from Reymolds's tobacco plants lies heavy on the air, a steel frame soon will grow into the 16-story Reynolds Plaza office tower. That building will open next year alongside the landmark 22-story Reynolds Building, whose revolutionary 1929 design was repeated early in the 1930s with New York's Empire State Building.
North of town, adjoining Reynolds's Bowman Gray research center, a \$35-million research and development facility soon will rise to serve subsidiaries.

to serve subsidiaries

Tobacco research will emphasize the search for new blends and brands, not seek a medically safer cigarette; that research, paid for by Reynolds and other cigarette manufacturers, is conducted through trade organizations.

The new research facility is designed to keep the firm competitive for a domestic cigarette mar-

itive for a domestic cigarette market growing at an infinitesimal rate. (Reynolds's share of that 615-billion-cigarette-a-year market has grown to about a third, though its Winston brand hasn't regained the top ranking it lost to Philip Morris's Marlboro in 1976.) Recognizing the faster growth of international business, the firm bought MacDonald Tobacco Inc. (Canada) for \$75 million cash, and more recently established R.J. Reynolds Tobacco International as a separate corporation.

Reynolds Tobacco International as a separate corporation.
Yet Reynolds's investment in domestic tobacco facilities has been modest compared to the money it has sunk into other enterprises, some of which have yet to provide a satisfactory return.
Cigarette profits, for instance, will underwrite the \$670 million Revnolds is investing in new con-

Reynolds is investing in new con-tainer vessels for its Sea-Land sub-

cligarette profits will provide cash for the \$580 million slated to develop Aminoil's domestic oil production. Following Ruwait's nationalization last year of Aminoil's operations, Aminoil has turned to developing its reserves in the United States.

Reynoids officials insist that any threat to smoking didn't dictate

threat to smoking didn't dictate the diversification, but they say their firm will survive no matter what happens to tobacco.

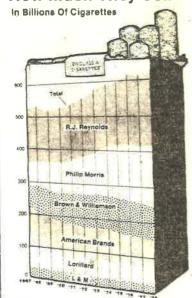
"An absolute ban on smoking would affect millions of people, including hypothesis of thousands of the same and t

including hundreds of thousands of tobacco farmers and their families," says Sticht. "And of course it would affect us.
"But we'd still be around."



Although Reynolds is diversifying, there's company is cigarettes - which generate \$4 billion in sales every year. Lawrence Beckner (above) inspects cigarettes as they come from the R.J. Reynolds manufacturing plant in Winston-Salem, while Lorene Murphy (left) keeps an eye on the packaged product.

The U.S. Cigarette Market: **How Much They Sell**



TOP 10 CIGARETTE BRANDS

% of 1. Mariboro 16.8% 2. Winston 14.2% 3. Kool 10.1% 9.1% 4. Salem 5. Pall Mall 6.2% 6. Kent 7. Benson 4.5% & Hedges 8. Camei 4.3% 9. Vantage 3.1% 10. Merit 2.9%

Observer Illustration By GEORGE BREISACHER

One company hopes to diversify out of the business altogether

Even in a tobacco industry committed to diversification, Liggett & Myers is an extreme

versification, Liggett & Myers is an extreme case.

The Durham-based firm, whose newer brands such as L&M, Lark, Decade and Eve haven't been able to replace the declining Chesterfield label that helped make it famous, plans to diversify right out of the business and right out of North Carolina.

The parent Liggett Group wants to shed its cigarette interests to concentrate on nontobacco products including J&B Scotch and Wild Turkéy bourbon, Alpo canned dog food and Blue Lustre Dirt Buster outdoor cleaning system.

Liggett, whose market share of the nation's cigarette business has declined to 3½ percent, sold its international tobacco business last June to Philip Morris Inc. for \$108 million.

And directors are expected to vote later this

And directors are expected to vote later this month on selling the domestic cigarette business that launched it in 1822.

It could take another month for federal regulations are selling to the could be selling to the could

lators to rule on the \$200-million sale to Dolph Overton, who directs an international construc-tion firm out of Smithfield — a Johnston Coun-ty community 55 miles from L&M's Durham headquarters.

headquarters.
"I feel there's a big opportunity here," says
Overton, 52, whose C&O Development Co. runs
a Mideast construction business.
Since many smokers are switching to new

low-tar brands, Overton says, an ambitious firm

can capture a larger share of the market.
Overton says he will continue L&M's manufacturing operations in Durham, comforting news in a town where the firm employs about

2,500.

Liggett plans to move its corporate head-quarters from Durham, its home since 1970, to offices in Montvale, N.J.

Created in a small tobacco shop in Belleville, Ill., Liggett & Myers was part of the American Tobacco Trust until the Supreme Court broke

With \$284 million in 1978 tobacco sales, Liggett has continued to turn a profit in recent years despite a declining market share. But its slide from third to last place among the six major U.S. cigarette manufacturers inspired Esquire magazine last year to label it "a hapless quire magazine last year to label it "a hapless corporate entity."

Protecting its corporate flanks, the Liggett

Protecting its corporate flanks, the Liggett Group has diversified into a multitude of nontobacco ventures, and plans more of the same if the tobacco sale wins approval.

Today, Liggett's 10 subsidiaries produce wine and alcohol in New York City, pet food in Allentown, Pa., sporting equipment in Opelika, Ala.; cereal and popcorn in Cedar Rapids, Iowa, home cleaning products in Indianapolis and fashion accessories in Providence, R.I.

— Don Bedwell

Officials:

By MARK SCANDLING
Special to The Observer

Lt. Gov. Jimmy Green, who owns tobacco warehouses, has been smoking 20 to 30 cigarettes a day for 35 years.

"It's just a habit I acquired and I enjoy it, so I keep smoking," he says. Green, who smokes low-tar, low-nicotine Real, knows smoking

"I guess everyone worries a little bit about getting cancer from the tar, nicotine, charcoal and whatever else they tell us is in cigarettes, but I really don't worry that much about it," Green says.

Secretary of State Thad Eure says he's a "great cigar chewer"



SOURCE: The Tobacco Industry

Jimmy Green

and he enjoys cigarettes, especially

in pressure situations.

"But I never smoke at home because my wife (Minta) disapproves of it," Eure says.

Eure, who takes several days to finish a pack, began smoking when he was 14.
"Of course, my daddy told me all about the dangers of smoking. He told me it would ... shorten my life.

my life.
"But there was a justice of the



Thad Eure



my daddy's warnings seem like water on a duck's back," Eure Says.
N.C. Agriculture Commissioner
Jim Graham didn't start smoking
until he enrolled at N.C. State University in 1938. Now he smokes

Who smokes?

five or six cigars a day and puffs his pipe an hour or two.

"I enjoy smoking," Graham says. "It is a poor man's luxury and a rich man's therapy."

and smoking are linked. "The government has been studying it for 15 years, and the evidence still isn't clear." He says anti-smoking legislation would destroy individuals. al liberties.

Some nonsmokers in state government are: Gov. Jim Hunt, Insurance Commissioner John Ingram, Chief Justice Susie Sharp, gram, Chief Justice Susie Sharp, Natural Resources and Community Development Secretary Howard Lee, Human Resources Secretary

Dr. Sarah, Morrow, Commerce Secretary D.M. "Lauch" Faircloth, Labor Commissioner John Brooks, Cultural Resources Secretary Sara Hodgkins, Revenue Secretary Mark Lynch, and Transportation Secretary Thomas Bradshaw Jr.

North Carolina's U.S. senators North Carolina's U.S. senators and representatives: Republican Sen. Jesse Helms (less than a pack of unfiltered Luckies a day), Democratic Sen. Robert Morgan (an occasional cigar), Walter Jones, D-1st District (1½-2 packs a day, various brands), L.H. Fountain, D-2nd (several cigars a day), Charles Whitley, D-3rd (quit 1½-pack-aday Kool habit in 1963).

Ike Andrews, D-4th, (2 packs a day of filtered Carltons or Salems, plus a pipe), Stephen Neal, D-5th



Jim Hunt



John Ingram

(used to smoke 2 packs a day of Camels and Winstons. Now smokes sometimes), Richardson Preyer, D-6th, (an occasional "discreet" cigar), Charles Rose, D-7th (used to smoke but doesn't now). W.G. Hefner, D.8th, (light smoker of Vantage and cigars), Jim Martin, R.9th, (never smoked), James Broyhill, R.10th, (light smoker 'til he quit in early '70s), Lamar Gudger, D.11th, (quit about 15 years ago).

Industry's front line of defense in the tobacco wars

campaign asks

for tolerance of the smoker —

and doesn't treat

the health issue

WASHINGTON — "Dollar for dollar, they're probably the most effective lobby on Capitol Hill," is how Sen. Edward Kennedy, D. Mass., puts it.

"One of the most lethal trade associations going," is how Dr. Sidney Wolfe, director of Ralph Nader's Health Research Group,

puts it.

Both were describing the Tobacco Institute, the major defender in Washington of tobacco interests.

In the past few years, as the evidence against cigarettes has mounted, tobacco's problems have grown. So has the industry-sponsored Tobacco Institute.

In 1958, when it was formed, the institute had about a dozen

the institute had about a dozen employees. It stayed that size until the 1964 U.S. Surgeon General's report on smoking and health, the first major shot in a continuing battle over the health question.

After that report, the institute began growing steadily. By 1977 it had 45 employees. Last year it added 30 more and more are planned this year.

Its budget has grown, too. In 1973 it was \$2 million, a figure that more than doubled to \$4.5 million in 1977 — the last year for which reports are available

The operation has gotten so big it will move this spring from a \$15,000-a-month suite in Washing-

on's fanciest business section to larger offices a few blocks away.

Much of the institute's effort aims at convincing people the case against cigarettes has not been made — and the institute has taken some liberties with medical studies in that process.

But there has been a shift the

past couple of years in its public relations emphasis.

Last year, for instance it spent more than \$700,000 on a magazine advertising campaign that featured two-page, color pictures of lush, green tobacco fields. The thrust of the ads was that tobacco is an important part of the economy, an important part of the country's heritage and that the tobacco price support program keeps small, family farms in business.

Tolerate smokers?

This year, a campaign is under way that will cost even more. It is aimed at seeking tolerance from nonsmokers. Health is not mentioned in el-

"We recognize the difficulty in a paragraph or two of being able to make the points needed to get our position across (on health)." Kornegay, a former Democratic congressman from North Caroli-na's 6th district.

"The subject is so enormous even in a 30-minute speech you can't adequately treat it," he says. "Maybe it's just a frustration on our part. We're just hollering down a well."

The institute says what evidence there is against cigarettes has been

there is against cigarettes has been "politicized."

"We think we've been picked on and abused and singled out for vindictive treatment," Kornegay says. "The answer to the (health)

says. "The answer to the (nearmy problem can only be found by the scientists in the laboratory, not by politicians in the political arena."

Kornegay's senior vice president for public relations, William Kloepfer, says, "You don't try to combat the belief smoking is bad

(about nonsmokers and anti-smokers)

(about nonstrickers)
In the expressive jargen of jarz,
In the expressive jargen of jarz,
In the expressive jargen of jarz,
If you've ridden any planes
lately, you've found yourself
banished to the back of them, last
to be served, last to leave.
Here on the ground there's a
sudden sprouting of "No Smoking"
signa. And if, by mistake, you
happen to light up in the wrong
place, you get a sharp reminder,
annoyed frown or cold shoulder.
When that happens, it's easy
to get the feeling you're being
picked on, and made to feel like a
social outcast.
But there's another side to

But there's another side to

and anti-smokers)

The point is that most nonmokers think smokers are O.K.
and they like to be around us—
when the choice is left up to them.
So take heart.
That doesn't mean that the
tiny minority of anti-smokers are
going to go away. They won't.
Some of them have very sensible
reasons for objecting. Smoke
bothers them as much as
he bothers we much as
he bothers we much as
he bothers wa mokers. And then
there are people, perfectly
rational about everything else,
who turn kind of paranoid when a
smoker approaches.
We don't know what to do
about these anti-smokers any
more than you do—except to
treat them all with the courtesy
and kindness we deserve from
them. THE TOBACCO INSTITUTE
1776 K St. N.W., Warmagen, D.C. 20006
Freedom of choice
is the best choice.



Aword to nonsmokers The Tobacco And most of you nonsmokers understand that. It would be a dull world if everybody liked th same things.

The trouble is that some Institute's new his art, "If you don't ungersta it, I can't explain it." That's the way it is with advertising

it, I can't explain it."

That's the way it is with smoking.

If you've never smoked, it just looks puzzling—the whole rivual of lighting, puffing. What's the point?

There's really no way to explain it.

We've all heard from the people who think the 60 million American smokers ought to be, like you, nonsmokers. But even those people know there's something going on that smokers like. Maybe that's the key to the whole tobacco thing from the beginning. It's a small rivual that welcomes strangers, provides companionship in solitude, fills "empty" time, marks the significance of certain occasions and expresses personal style.

For some people. And by personal choice, not for you. That's the way it ought to be. Whether, your preference is carrolliuice or bottled water, beach buggies or foreign cars, tobacco smoking or chewing gum or none of the above. Personal style.

What we're saying is that, like jazz or chamber music, some people like it and some don't.

THE TOBACCO INSTITUTE



for you. You work hard to prevent

that mind-set from being the cause for political action."
Since 1973, at least 32 states and the District of Columbia have passed laws to reduce smoking in enclosed public areas. The Caroli-nas have no such state laws, but Charlotte is among more than 500 cities and counties nationwide that restrict public smoking.

restrict public smoking.

Among the industry's biggest concerns today are the more than 60 similar anti-smoking bills pending in 38 communities and states.

"The emotionalism there is ram-

As a result, the institute has opened 10 field offices to fight those anti-smoking proposition.

kloepfer claims the institute's efforts to fight anti-smoking legislation is not aimed at keeping the

sale of cigarettes high. The mission is "not to try increasing the market but reducing prejudice," he

says.

Kloepfer says prejudice against cigarettes results from "a serious cigarettes results from "a serious ailment in the country today" which he calls "fume-a-phobia." He says the country is in the midst of a health fad, points to jogging as an example and says — with some humor — "People are trying to live forever."

When the institute does try to combat the evidence that cigarette smoking is hazardous, it runs into problems.

Take for instance a report it prepared in January called, "Smoking and Health, 1964-1979, The Continuing Controversy:

the Continuing Controversy:

final two page report was issued
the day before the last, most damtaging surgeon general's report, it
purports to be a documented rebuttal of the case against ciga-

The institute report is peppered with out-of-context quotes from scientific papers and preliminary conclusions from research projects whose final conclusions are not quoted by the institute.
Some examples:

• In trying to poke holes in the statistical link between smoking and poor health, the institute report says there are "incongruities" that raise questions about the entire method used to prove the link.

It cités as examples two studies It cites as examples two studies showing that men who smoke cigars and pipes had lower death rates than those who smoked no tobacco at all. How could that be, if tosacco is unhealthy?

It also cites a study asying that giving up smoking did not cut extra-high death rates.

In both cases, the institute cited reports done in 1956 and 1964. And in both cases, the researchers

The trouble is that some people (unit-mokers, as distinguished from nonsmokers) don't like those who march to the sound of the different drummer, and want to hiarass smokers and, if possible, to separate them from your company in just about everything. And the further trouble is that even the tolerant

everything.

And the further trouble is that even the tolerant morsmokers, and that's most of you, are honestly annoyed by the cocasional sainf of tobacco smoke that's a little too per waite. It annoyed by the allowed a tiny handful of intolerant anti-smokers, and a small group of discourteous smokers, to break up the enjoyable harmony we find in each other's personal style. Maybe if we ignore them both, they lig o away and leave the rest of us to go on playing together.

kept monitoring their study groups and made later reports. Death rates higher

Those later reports showed that cigar and pipe smokers did in fact die at higher rates than nonsmok-ers and that people who gave up smoking reduced their extra-high death rates to a level similar to nonsmokers.

Asked about the cigar and pipe study, Ann Duffin, the institute researcher who prepared the report, said: "So knock out one incongrui-

In the case of the study of smokers who quit, she said: "Let's say I goofed, apparently, and didn't research it far enough."

She wouldn't have had to go

Federal price support programs saved the farmer

Depression-era Congresses created agricultural price support programs as a way to stabilize income for small farmers and help them stay in business.

Until then, farmers' income was subject to sharp. However the stay in th

subject to sharp fluctuations—depending on the amount produced each year and the quality.

The tobacco price support program began in 1933.

The program sets minimum government-guaranteed prices for the different grades of tobacco for farmers who agree to government-

set production limits.

If supply is greater than demand or the leaf is inferior and doesn't sell on the open market for at least a senny per pound more than the support price, a farmers' cooperative buys it at the support price using money from federally guaranteed loans. The cooperative stores the tobacco until a buyer is found.

Eventually, most tobacco finds a

Eventually, most tobacco finds a buyer — often on the international market for a price equal to the support price.

Through 1977, the last year for which figures are available, the program had cost the government \$52 million in the difference between what it paid for tobacco and what it collected for it, including interact.

cluding interest.

That is one-tenth of 1 percent of the cost of all government agricultural price support programs. Ad-

ministering the program cost \$5.6 million in 1977.

In 1978, about 57 million pounds of flue-cured tobacco — 5 percent of the nation's crop —

ended up in storage, bringing the total to about 507 million pounds.

The support price for the 1978 season averaged \$1.21 a pound for the various grades of flue-cured tobacco. The average open market selling price was just over \$1.35 a pound for all grades. The 1979 support price will average about \$1.29.

The program is credited with keeping farmers going in 1976 and 1977 when bad weather slashed the quality of tobacco.

far. The institute maintains an extensive library with the writings of over 3,000 researchers, including the later works she did not

 Another part of the institute report deals with the increase in a type of lung cancer, adenocarcino-ma, being found these days. The institute report claims the type is not normally associated with smoking.

It quotes a New York researcher, Dr. Ronald Vincent, on why the invesce is conving. The re-

the increase is occuring. The report says Vincent's team considered various ways tobacco could account for the increase and quote him saying he had been "unable to equate the histology of lung canalization of the constant of the constant

equate the histology of lung can-cer with any of these factors."

If that leaves readers with the impression Vincent does not think smoking is linked to the type of cancer now showing up more often, they should read the next sentence of his report, which the institute did not quote.

"Consistently each year, over 85 percent of all patients who have lung cancer have been smokers.

lung cancer have been smokers, regardless of the (type) of their tumor." He adds, "... We are unable to disassociate smoking as a causative factor with any of the

presently defined pathological cat-egories of lung cancer."

Ms. Duffin concedes she proba-bly should have continued with the full quote but does not think the way she wrote it does Vincent

an injustice. He disagrees.

Knowing when to stop

"You have to admire the Tobac-co Institute for knowing when to stop a quotation," he said.

• In several places the institute quotes the 1964 surgeon general's report to its apparent advantage.

The centerpiece of the institute argument on tobacco and health is traceful to a the criticities argument on the context of the

its assault on the statistical associ-ation between smoking and ill health. The institute believes a sta-tistical association is insufficient evidence.

"Long forgotten in any claims of high mortality ratios and/or excess deaths in smokers is the careful caveat written into the first surgeon general's report by its authors," the report said. "They said, "Craitities," methods, cannot estable Statistical methods cannot estab-lish proof of a causal relationship in an association. The causal significance of an association is a matter of judgment that goes be-yond any statement of statistical probability."

Taken by itself that caveat — or warning — seems to support the institute position. But what follows in the surgeon general's report is an explanation of the factors that must be taken into consideration if a scientist is to consideration if a scientist is to conclude that a statistical association is strong enough to show a cause-and-effect relationship.

The report says researchers should consider the consistency, strength, specificity, temporal relationship and coherence of an association. It then noted some of the pitfalls — tobacco is a complicated agent, humans are variable

creatures.

But despite the pitfalls, the surgeon general concludes: "It is to be noted clearly that the committee's considered decision to use the words 'a cause,' or 'a major cause,' or 'a significant cause,' or 'a cause al relationship' in certain conclusions about smoking and health affirms their conviction.'

nation's schools.

"We approach smoking from the basis of teaching students to be responsible for their actions," says Rosalie Bryant, Charlotte-

Mecklenburg's elementary health and phsyical education specialist.
"We say, 'These are the facts, the
decision is yours.' We let them de-

cide whether it's worth taking a

Dr. Christopher Fordham, dean

"I would not be inclined to sin-

gle out tobacco as a great evil, be-cause I don't think it works well

that way," Fordham says. "If you just say it's a no-no, you tend to build up guilt reactions and a backlash."

of the UNC Medical School in Chapel Hill, agrees with that ap-

Where tobacco rules, how do we teach our children? in ninth, when it's taught by health teachers. While Charlotte-Mecklenburg teachers are more explicit than others in the state in describing the harmful effects of cigarettes, they follow the basic philosophy that has taken hold in most of the ration's schools.

By MARK NADLER

Although the U.S. Surgeon General has concluded there is "over-whelming" evidence of the dangers of cigarette smoking, North Carolina's top educators aren't telling students that smoking is dangerous.

The N.C. Division of Public In-

struction is developing new health curriculum guidelines for state schools this fall — and those guidelines probably won't include unequivocal statements about

smoking's dangers.
"I don't think we're going to be that emphatic," says George that emphatic," says George Shackleford, a health consultant in the N.C. Department of Public Instruction. "I think we're going to have to have some clearer-cut evi-dence about the hazardous aspects

of smoking.' Shackleford said some education

Shackleford said some education officials are unconvinced by the U.S. Surgeon General's report.

"Some people in the state are saying some of these reports coming out are not valid," he says.

Telling students about the dangers of cigarettes is a touchy problem for educators in North Carolina, where tobacco plays a key role in the economy.

key role in the economy.

"We're still debating this a
great deal," Shackleford says.

"Where do you put the limit when you're talking about education and economics? It's hard to go into a rural area and tell the children not to smoke when Daddy is growing tobacco to put food on the table."

Some states are experiments with all-out campaigns to prevent children from picking up the cigarette habit.

North Carolina's policy is to dis-courage students from smoking during their "growing years" — in late elementary school, Shackle-ford says. "And there should be a reemphasis in grades seven through nine."

So what if all the kids at school are doing it?

You're 13, in funior high school, eager to prove your independence from parents and teachers, eager to be liked by others your age. A friend dares you to sneak behind the school with her to prove you can smoke without getting caught.

What can you say?
There's a way out if you don't want to want And, a current research project shows, it Your response: "Oh, you go ahead if that's how you get your kicks. I used to play games like that in elementary school."

The dilemma and the response are examples from a continuing experiment in which a Harvard-Stanford research team found that peer pressure, the a key factor that persuades many youngsters to start smoking, can also be used to persuade kide

that smoking is bad.

The team found that high school kids

could defuse peer pressure among junior high students, indeed virtually immunize these children — at the age when many young-sters start — against future pressure to

broke.

Dr. Alfred McAlister, an assistant professor of behavioral sciences at Harvard, said the project uses high schoolers as leaders to the project uses high schoolers as leaders to the broken to present the property of teach younger kids how to respond to pressures such as advertising and dares. Some examples:

Situation: "Suppose around with some kids who smoke, and they ask you if you want a clgarette. Maybe they're acting like they'll be better friends with you if you smoke. What should you tell them?

Response: "You go shead and smoke if you like. I tried it and I just don't like it. What's so great about it, anyway?" • Situation: "Suppose you're reading a

magazine and you come on an ad that is trymagazine and you come on an ad that is trying to make you think a woman is more liberated if she smokes. What would you say to
yourself if you saw the ad?"
Response: "'I say, 'She's not really liberated if she's hooked on tobacco.'"

Situation: "Suppose you can see the cigarettes in a teacher's pocket. You know he smokes and it might give you the idea that it's OK for you to smoke, too. What can

you say to yourself?"

Response: "I'll tell you what I think:
"There's another adult who got suckered ink:
smoking when he was younger. I'll bet he
tries to quit every New Year's."

McAlister said the project not only produced a significant difference in the number of youngsters who smoke, but also a spillover effect: Youngsters resisted peer pressure to smoke marijuana or use alcohol.

But what makes North Carolina's policy different is that education officials in Raleigh don't think teachers should tell high school students that existing research proves smoking is dangerous. And the policy doesn't require schools to address the hazards of

cigarettes at all. The absence of a strong state policy means some school systems, such as those in Charlotte-Mecklenburg and Cabarrus County, tell students about smoking's dangers, while others — particularly in to-bacco-dependent areas — tell children very little.

'To be completely honest, we're not doing anything right at the moment," says Benita Valentino, health education coordinator for Northampton County schools in the tobacco-growing northeast part of the state, next to Virginia.

smoking education program," she says. "I haven't had a single request from teachers for smoking information."

The tension between education and economics is also great in Winston-Salem, heart of the cigarette manufacturing industry. One local educator familiar with the smoking education program said

Protein grows in tobacco leaf

Researchers at N.C. State University working with federal scientists extracted a high-quality protein from tobacco leaves

The same amount of protein can be extracted from an acre of less-expensive soybeans as from an acre of tobacco, so the commercial value to working farmers is in doubt.

the course guidelines "don't really come right out and say cigarettes are harmful."

The educator, who feared being fired if identified, said smoking education is "a very sensitive issue here, and probably receives less emphasis than in other areas. It's not something we're going to spend a lot of time on, due to the local economy and the structure of the tax base."

North Carolina also has a severe shortage of instructors trained to teach health subjects, including the effects of tobacco.

For example, Durham County's smoking-education program is limited to six or seven days in ninthgrade health.

'One of the problems we have is that we don't have many health educators," says Health and Physical Education Director Herman Gatling. "What is done is based on

who is teaching, and in most cases

it's taught by physical education teachers." But while it's counterproductive Charlotte-Mecklenburg educato lecture high school students about smoking, Fordham says, teachers shouldn't ignore the evi-dence that cigarettes are dangertors think smoking education should start in kindergarten and ous.
"The surgeon general says that unequivocally," Forham says.

should start in kindergarren and be expanded every year. In ele-mentary schools, classroom teach-ers handle health education, in-cluding smoking. Smoking is brought up again for "Every pack of cigarettes says that." a week in seventh grade and again

Cigarette tax is a boon for smugglers

North Carolina's 2-cent tax on a pack of cigarettes has created a lucrative business for organized crime - cigarette smuggling.

Racketeers have found it profit-le to buy cigarettes in North Racketeers have found it profit-able to buy cigarettes in North Carolina, where the lowest-in-the-nation tax means the price is often less than 40 cents a pack. They smuggle the cigarettes into high-

tax places such as New York City, where the tax is 21 cents higher and a pack is 70 cents and up.

and a pack is 70 cents and up.
Racketeers profit by avoiding
the higher taxes. That costs the
high-tax states an estimated \$400
million a year in lost revenue.
An estimated 40 percent of cigarettes wholesaled in North Carolina end up in smugglers' hands.

Industry's learning different languages

By HOWARD COVINGTON And ROBERT HODIERNE

RALEIGH — The day after the United States normalized relations with China, three Chinese officials concluding a business trip boarded an airplane home, their travel bags stuffed with American cigarettes. Those cigarettes were a symbol for the thousands of North Carolinians whose lives depend on tobacco. Not since Sir Walter Raleigh convinced Queen Elizabeth 300 years ago that the plant was a marketable product has the future growth of North Carolinia's tobacco industry relied so heavily upon the smoking habits of the rest of the world.

And the future looks good.
In contrast to its domestic market, where sales are static at about 615 billion cigarettes annually, America's tobacco industry is finding rich new markets abroad, where smokers bought 3.6 trillion cigarettes last year.

And industry people and lawmakers from tobacco

And industry people and lawmakers from tobacco states believe they can protect the industry from further anti-smoking efforts at home, that tobacco will weather this storm.

"There is no doubt these media blitzes have cut the consumption of tobacco," says N.C. Agriculture Commissioner Jim Graham. "This is a direct threat to the economy of North Carolina.

"But tobacco was here before Joe Califano (secretary of health, education and welfare) or Jim Graham came along, and I predict people will be smoking, chewing and dipping long after all of us are gone."

"I think there is going to be a market, and a significant content of the same along."

"I think there is going to be a market, and a sig-nificant market, for a long, long time to come and maybe forever," says Gov: Jim Hunt, who has en-couraged manufacturers to expand their plants in North Carolina.

Philip Morris, the nation's fastest-growing ciga-rette manufacturer, has taken him up on it. Work has started on a new Philip Morris plant in

Work has started on a new Philip Morris plant in Cabarrus County, expected to open by 1982 and eventually employ as many as 2,000. It will be able to produce up to 60 billion cigarettes a year — a little less than 10 percent of U.S. demand.

"We have tremendous confidence in the industry," says Hugh Cullman, chief executive officer of Philip Morris USA. "We are building the Cabarrus County plant because of future domestic needs and future foreign needs."

'The industry will still grow'

John Maxwell Jr., of Lehman Brothers, the industry's best-known Wall Steet analyst, has predicted "the industry will still grow, but at a slow rate." The New York Times reported last month that all six major cigarette companies make money and that R.J. Reynolds, Philip Morris and American Brands realize profits of more than 20 percent from tobacco reve-

The federal government's anti-smoking campaign

The federal government's anti-smoking campaign poses the most serious threat to the domestic industry. Health, Education and Welfare (HEW) officials will spend \$29 million this year to help Americans stop smoking.

One visible product is the 1979 U.S. Surgeon General's report on smoking and health. Another is the first anti-smoking television commercial the government has produced since 1972, scheduled to begin within a few weeks.

The commercial opens with a close-up, head on

U.S. cigarette makers find a growing market overseas, as the van in Cologne, West Germany, attests. At Philip Morris's Richmond plant, cigarettes are prepared for foreign distribution.





shot of a burning cigarette. The narrator's distinctive voice belongs to actor James Earl Jones.

"Hallelujah! We Americans have seen the light and we're putting it out," Jones says as the cigarette is crushed out. "This country is kicking the habit. Most of us now don't smoke."

The television commercial sounds the major themes of next year's anti-smoking efforts.

Jones, in his most solemn voice, says that while fewer people are smoking, "We still got troubles. Kids are starting. Trouble. Women who take the pill and smoke. Trouble. Pregnant women who smoke. Trouble. In certain jobs smoking means real trouble."

Some HEW officials believe the battle has been about won.

"Essentially, the corner has been turned." says

"Essentially, the corner has been turned," says ohn Pinney, who heads the anti-smoking campaign. That doesn't mean we're home free, especially with

that doesn't mean we're home free, especially with kids ... But to a great extent we have turned the corner. In 20 years we'll be a nation where a very small percentage of the people smoke.
"I don't think there's anything the cigarette makers can do about it. They should face up to realities ... It is not compatible with the growing concern for good health, I think the future belongs to the nonsmoker."

But Congress will have something to say about HEW's efforts, and tobacco interests are showing one of their traditional strengths there: having the right

of their traditional strengths there: having the right person in the right spot.

Rep. William Natcher, D-Ky., has taken over the chairmanship of the appropriations subcommittee that will handle the \$47-million budget request for the anti-smoking campaign. Kentucky is the second largest producer of tobacco in the country and Natcher is expected to try to cut the request.

Tobacco farmers can also depend on Rep. Walter

Jones, a Democrat from Farmville in tobacco-rich Eastern North Carolina, to look out for their inter-ests. Jones is chairman of the House Agriculture Committee's tobacco subcommittee.

When he first arrived in Washington in 1966, Jones says, there was so little controversy about to-bacco "there wasn't a single meeting of the subcommittee. There wasn't anything to consider."

But recently Jones has felt compelled to take defension measurements but recently some statements.

But recently Jones has felt compelled to take defensive measures, concentrating his efforts on the price support program.

It's an easy program to defend, favored even by HEW Secretary Califano, on the grounds that the system helps hold down supply.

But it is also easy to defend because Jones and other lawmakers from tobacco states have consistently voted for everyone else's farm programs and the favor is usually returned.

"I would tend to yote for what the grain people

"I would tend to vote for what the grain people want," says Charles Whitley, a Mount Olive Democrat who sits on the tobacco subcommittee. "And they tend to vote for what we want."

Encouraging signs for industry

Tobacco interests were encouraged last August when President Carter said during a trip to Wilson that the price support system wouldn't end under his presidency. He also said he supported Califano's "forts to make tobacco even safer than it is today."

A good indication of how secure tobacco interests feel in Congress is their relatively low level of political giving. In last year's election, tobacco interests gave just over \$100,000 spread among more than 200 candidates. By modern standards, not a very hefty amount. If the threats were perceived as greater, the gifts would be greater.

The industry also has been waging its own cam-

paign to boost tobacco's image and hold the line on anti-smoking efforts. R.J. Reynolds launched its "Pride in Tobacco" campaign complete with bill-boards, bumper stickers and hats that carry the slogan. The industry contributed more than \$5.6 million to help defeat Proposition 5, which would have prohibited experience. hibited smoking in enclosed public places in Califor-

nia.
In addition, manufacturers have developed low-tar, low-nicotine brands designed to hold on to customers who may be shaken by medical conclusions on smoking and health. In 1978, low-tar cigarettes made up 30 percent of the domestic cigarette market, up from 25 percent the year before, according to the U-S. Department of Agriculture.

Companies won't talk much about their domestic marketing strategies — whether they involve developing new smokers or capturing an increasing percentages of existing ones.

oping new smokers or capturing an increasing percentages of existing ones.

But it's clear the potential for future growth is abroad where cigarette consumption increased an estimated 2.7 percent last year, compared to a three-tenths of 1 percent increase in the U.S. The market is greatest in developing nations where cigarette smoking is not under attack and is regarded as a symbol of success.

Last year, foreign sales of U.S.-produced cigarette smoking is not under attack and is regarded as a symbol of success.

of success.

Last year, foreign sales of U.S.-produced cigarettes hit more than 80 billion in 1978 — the highest ever, according to industry estimates.

And U.S. companies' international tobacco subsidiaries are doing well.

Philip Morris International, with 5.5 percent of the market abroad, sells more than 160 brands in more than 170 countries. It sells more cigarettes overseas (200 billion) than Philip Morris USA, does at home (168 billion). Its Marlboro brand is the world's top seller.

Russia's next on the list

R.J. Reynolds Tobacco International makes cigarettes in 20 countries, sells them in more than 140 and is negotiating to sell its cigarettes in Russia.

Chinese leaders, many of them chain-smokers like the late Mao Tse-tung, have already had at least one overture for sales there. The potential new owner of Liggett & Myers, Dolph Overton III of Smithfield, was a visitor to the new Chinese liaison office in Washington weeks before he offered to buy L&M this year for an estimated \$200 million.

Foreign manufacturers provide a strong market

Foreign manufacturers provide a strong market for North Carolina's raw tobacco. Last year, N.C. farmers produced 800 million pounds of flue-cured tobacco — two-thirds of the flue-cured tobacco grown in the United States. Nearly half the total was shipped abroad most to Eveneer to the strong when the stronger to the s

grown in the United States. Nearly half the total was shipped abroad, most to European nations where cigarette manufacturers compete with U.S. companies on foreign markets.

The competition is keen.

"More and more countries are growing more tobacco," said Dr. Hugh Kiger, who heads the Tobacco Leaf Exporters Association in Raleigh. And because of cheaper land and labor costs, "they are giving us fits on price."

Industry experts have been keeping particularly close watch on Brazil, a top competitor, where the government controls tobacco production and advanced research has produced a high-quality leaf.

But even in these markets, the unique flavor and aroma of North Carolina's flue-cured tobacco is a treasured ingredient in cigarettes.

treasured ingredient in cigarettes.

Cigarette makers don't look at it as moral dilemma

By NED CLINE

WINSTON-SALEM - William Hobbs, board chairman of R.J. Reynolds Tobacco Co.. sees no moral problem in making and sell-ing a product that the federal gov-ernment says can kill you ernment says can kill you.

"We're not killing people." says Hobbs. 63, who has never worked for any company except RJR, the world's biggest cigarette maker. "We're providing a great livelihood for many thousands of people in a 115 billion industry they over \$6.8 \$16-billion industry that pays \$6.8 billion in taxes every year."

Morgan Hunter, company president, adds: "We are a legal, legitimate industry involving thousands of people and billions of dollars... We don't have any hangdog approach for what we do. Our people are proud to work for RJR, and we are a very proud company."

Industry and most North Carolina officials share the view that producing tobacco and cigarettes poses no moral dilemma. That position is based on the idea there is no conclusive proof smoking is harmful — or at least that smoking is no more harmful than a lot of other things.

"I don't think that's any more of a moral issue than whether or not my father-in-law in Iowa ought to be producing beef, which is very good beef and has a lot of choles-terol in it and it might be danger-ous to health," Gov. Jim Hunt said. "Or whether or not in the state of Kentucky, they ought to be producing alcoholic beverages .

Hunt sees "moral dimensions to the questions of whether or not the poor, small farmer, so many of whom are involved in producing tobacco, are going to be able to make a living or be left without the one thing that literally feeds them (because of anti-smoking ef-

Hobbs and Hunter of R.J. Revnolds say if cigarette smoking is so dangerous, it stands to reason more people should die of lung cancer.

"Why don't 90 percent of smokers die of cancer?" Hobbs asked. "Smoking over a period of years may cause problems to your lungs, but if so I'm not aware of it. I've

but if so I'm not aware or it. I've never had any problem."
Hobbs, a native of Eden in Rockingham County, has smoked for more than 40 years. Hunter, 49, also Smokes. They say smoking is a pleasure and provides psychological

benefits that outweigh possible

medical hazards.

"I could stop smoking tomorrow, but I'd hate the thought of it," Hobbs said. Hunter said he isn't addicted to cigarettes, although, he said, he becomes irritable when he coen't, smoke for a while and doesn't smoke for a while and can't relax as well as when he

Hobbs and Hunter don't deny a statistical connection between smoking and health problems, but they say statistics aren't enough to convince them of a direct link.

"There is no clinical evidence that shows a direct causation of cancer." Hobbs said. "All studies done have been of a statistical nature. I don't know of any time that any component in tobacco smoke has been identified as the cause of any disease. Too much smoking might not be good for a person, but too much of a lot of things rould also be included." could also be included.

(Hobbs and Hunter aren't wrong as far as they go in comments about the statistics of smoking and cancer, but there's more to the medical studies than they conceded. Researchers say the kind of experiments that directly show smoking causes cancer in humans would be quire researchers to try to induce cancer in humans. But research has shown components of smoke cause cancer of the lung, mouth, and chest areas of rats, according to the Duke Cancer Information Serv-

Although they continue to defend smoking, cigarette company officials are starting to show concern over health questions.

"We recognize that a company in the tobacco business confronts a special challenge," Philip Morris make a product that carries health warning, that cannot be vertised on television and radio the U.S. and many other countries, and that some people would like to legislate out of existence by reviving a form of prohibition.

"As a corporation and as individuals, we share a serious concern about major public health prob-lems, and we commit resources to lems, and we commit resources to help find the causes of diseases that have been statistically associ-ated with cigarette smoking. We have no trouble accepting a world in which there are different points of view, but we do have trouble with zealots who tolerate no opin-



Photo By BILL BILLINGS

All-American scene at Timmonsville, S.C., auction

ions except their own."

The amount of money that to-bacco companies spend on health research is a constant theme.

research is a constant theme.

Hobbs says Reynolds alone has spent between \$20 million and \$25 million for medical research during the last two decades to determine if the government's research is valid — not to debunk the studies. "Our philosophy on research is that all the negative studies by the

overnment haven't been very pro government haven't been very productive and we're not getting anywhere with statistics," Hobbs said.
"Our purpose is to find the cause of cancer, if it's related to cigarettes.... We just want to find

rettes ... We just want to find the answers."
Said Hunter: "There's always some industry under attack from somebody. But you can't let this bother you or you'll become paranold about it."

There are choices if you don't want to grow tobacco

By HOWARD COVINGTON

CLINTON — When Lundy Packing Co. opened here in the mid-1950s, the firm was buying about 100 hogs a week from Sampson County farmers, whose main focus was tobacco.

Last year, Sampson County farmers earned almost as much from raising hogs as they did from growing tobbaco as Lundy's 800 workers butchered 5,000 hogs a week and took home nearly \$8 million in paychecks.

In adjoining Duplin County, Jimmy Stroud and his brother, Earl, once grew more than 30 acres of tobacco. Now they produce only half that and have switched to turkey and beef

"We can make more money off turkeys with a whole lot less investment," says Jimmy Stroud

Alternatives

Tobacco is still North Carolina's top money crop. But that might be changing in the next few years. Chickens, turkeys and eggs — North Carolina's \$700-million poultry industry — could soon pass tobacco as the state's leading agricultural products.

That's an important point to those who wonder if North Carolina could switch to a nontobac-co-dependent economy if it

"Yes, there are alternatives to "Yes, there are alternatives to tobacco," N.C. State Agriculture School Dean J.E. Legates said in a recent speech. "A new generation of North Carolina farmers have become competitive with other farmers in the U.S. in producing (other) crops and livestock."

In some ways, North Carolina's tobacco industry is already undergoing key changes. Ciga-rette-making companies have di-versified into businesses ranging from beer to real estate, and mechanization is replacing the tobacco field worker.

even though more than 133,300 North Carolina farm owners still hold tobacco allotments fewer and fewer are actuy in the tobacco-growing busi-ss. Instead, large-scale farmers e-leasing the right to grow to-cco assigned to other farmers

by the federal government and combining them into large tracts on which using harvesting machinery is profitable.

New businesses

The concentration of tobacco growers has meant that many farmers are developing other crops and starting new business-

es.
Today, North Carolina ranks
first in the number of swine producers who sell more than 5,000
hogs a year; and first in receipts
from farm forestry, growing
sweet potatoes and cucumbers
for pickles, as well as tobacco.

"When I was growing up we had about 4,300 farms in Wilson County," Gov. Jim Hunt said recently. "Now we've got about 1,000 farms. (The farmers) have gone into swine, they've gone into sweet potatoes, that sort of thing. And, of course, a lot of them have gone into the Firestone plant, the Dinner Bell plant, which is a swine-packing house. They are working for Central Soya, Kerr Glass and all these new industries they have these new industries they have brought in."

But even with the changes, tobacco remains crucial, particular-ly to North Carolina's small farmers. It is the only crop that can be grown successfully on many farms with limited acerage.
"No other crop for which we

have a stable market can provide the per-acre return that is real-ized from tobacco," Legates says.

Profitable crop

Researchers at N.C. State Uniresearchers at N.C. State University have experimented with sunflowers, grapes, Christmas trees, trellis tomatoes and strawberries, which will produce as many dollars per acre as tobacco

"But we know you can't just grow them," says Legates, "We also must have a continuing substantial market for them."

Even sunflowers and Christmas trees won't help the small-scale farmers who have stopped growing tobacco to start new endeavors. Without the money from renting their federal tobacco allotments to others, the farmers say, they would have trouble surviving economically in the other businesses.