

REGULATION OF TOBACCO PRODUCTS

THURSDAY, APRIL 14, 1994

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ENERGY AND COMMERCE,
SUBCOMMITTEE ON HEALTH AND THE ENVIRONMENT,
Washington DC.

The subcommittee met, pursuant to notice, at 9:05 a.m., 2123 Rayburn House Office Building, Hon. Henry A. Waxman (chairman) presiding.

Mr. WAXMAN. The meeting of the subcommittee will come to order. I'd like to ask our guests to please take your seats.

This is an historic hearing. For the first time ever, the chief executive officers of our Nation's tobacco companies are testifying together before the U.S. Congress. They are here because this subcommittee has legislative jurisdiction over those issues that affect our health. And no health issue is as important as cigarette smoking.

It is sometimes easier to invent fiction than to face the truth. The truth is that cigarettes are the single most dangerous consumer product ever sold. Nearly a half million Americans die every year as a result of tobacco. This is an astounding, almost incomprehensible statistic. Imagine our Nation's outrage if two fully loaded jumbo jets crashed each day, killing all aboard. Yet that is the same number of Americans that cigarettes kill every 24 hours.

Sadly, this deadly habit begins with our kids. Each day 3,000 children will begin smoking. In many cases they become hooked quickly and develop a life long addiction that is nearly impossible to break. For the past 30 years a series of surgeons general have issued comprehensive reports outlining the dangers these children will eventually face.

Lung cancer, heart disease, emphysema, bladder cancer, and stroke are only some of the diseases caused by tobacco causes. And now we know that kids will face a serious health threat even if they don't smoke. Environmental tobacco smoke is a Class A carcinogen, and it sickens more than 1 million kids every year.

In fact, five former surgeons general of the United States testified before this subcommittee this year, that the most important legislation in disease prevention that we could enact would be restrictions on smoking in public places. This subcommittee will soon act on that legislation, and it will consider other measures as well. This hearing will aid our efforts by presenting an important perspective. But these hearings are important for another reason as well.

For decades the tobacco companies have been exempt from the standards of responsibility and accountability that apply to all other American corporations. Companies that sell aspirin, cars, and soda are all held to strict standards when they cause harm.

We don't allow those companies to sell goods that recklessly endanger consumers. We don't allow them to suppress evidence of dangers when harm occurs. We don't allow them to ignore science and good sense. And we demand that when problems occur, corporations and their senior executives be accountable to Congress and the public.

This hearing marks the beginning of a new relationship between Congress and the tobacco companies. The old rules are out, the standards that apply to every other company are in. We look forward to hearing the testimony this morning, and to working with these companies to begin to reduce the extraordinary public health threat that tobacco poses.

An old proverb says that a journey of a thousand miles must begin with a single step. Today is the first step. Many more are to come as we deal with the most serious health problem facing our Nation.

Before calling on our witnesses, I want to recognize members of the subcommittee for opening statements, and to call on Mr. Bliley first.

Mr. BLILEY. Thank you, Mr. Chairman. Ladies and gentlemen, I certainly would like to know, who is the anti-smoking groups' P.R. agent because this person has done more for the name I.D. of this small town Virginia mayor over the past few weeks than all of my press secretaries combined for the past 14 years.

Seriously, ladies and gentlemen, over the past several weeks, we have witnessed an unprecedented assault on tobacco that has unfortunately been driven not by science but by press release. Now I've come to expect such behavior from the zealots in the anti-smoking community, but it seems that when it comes to tobacco that these tactics have acquired mainstream credibility. It is clear that tobacco is not politically correct.

I must say that I was saddened by what took place in this room a couple of weeks ago. I witnessed the Commissioner of the FDA, who is both a trained scientist and a lawyer, take threads of truth and weave them into whole cloth of rumor and innuendo. The members of this subcommittee were rude and hostile to any witness who dared to attempt to offer a different explanation. I hope today is different.

I welcome the leaders of the American tobacco manufacturers before our subcommittee to set the record straight. I pledge to you that I will do what I can to ensure that this proceeding is fair, and that your voice is heard. I am proud to represent thousands of honest, hard working men and women who earn their livelihood producing this legal product.

I am proud of all their positive contributions to my community, and I'll be damned if they are to be sacrificed on the alter of political correctness. This Congress must not turn its back on science and reason just because of the bubble of popularity. Though it may be only tobacco today, what lies next. Thank you, Mr. Chairman.

Mr. WAXMAN. Thank you Mr. Bliley. Mr. Synar?

Mr. SYNAR. Thank you, Mr. Chairman. Let me commend you and Mr. Wyden both for this very historic day on which we begin this journey.

Fifty million Americans are addicted to smoking. Four hundred and twenty thousand of our fellow citizens die each year because of tobacco and tobacco-related illnesses. Americans want to know why. Americans also want to know why American CEO's and executive continue to deny basic responsibility that they are not accountable for 1,000 deaths every day of the year in this country.

Americans want to know why corporate executives in America deny that their companies prey upon children as they spend \$4 billion advertising and promoting a product to the most vulnerable in our society. And Americans want to know, very simply, why corporate executives in this great country of ours continue to deny consumers basic information so that they can make informed decisions.

Today, at long last, we're going to get some of those answers. I look forward to today's hearing, and as the chairman said, this is the first step in a long journey.

[The prepared statement of Mr. Synar follows:]

OPENING STATEMENT OF HON. MIKE SYNAR

Ladies and Gentlemen, I am thrilled to be here, face to face, with the Chief Executive Officers and Chief Researchers from the seven largest cigarette and oral tobacco companies in the United States.

From their written testimony, I see that they are issuing the same blanket denials that they have clung to for the past 30 years.

These denials are simply no longer acceptable to this subcommittee or to the American people.

Fifty million Americans are addicted to smoking. They want to know why. They want to know all 700 ingredients, not just the 599 released yesterday in cigarettes and oral tobacco and how these ingredients affect their bodies. They want to make sure that tobacco companies are not preying on children.

Today, the tobacco industry, instead of continuing its attack on my bill, H.R. 2147 (which would give the FDA broad regulatory authority over tobacco while prohibiting the Agency from banning it) has instead tried to cast shadows on the credibility of two of the most respected health officials in our country: Dr. David Kessler, the Commissioner of the FDA, and Dr. Greg Connolly, a representative of the American Public Health Association.

Why is this necessary? Why not just provide this subcommittee with solid, honest answers?

This is a simple case of corporate responsibility. We require that Kraft cheese, owned by Philip Morris, list its ingredients on the back of the package. Marlboros, although exempted from every other regulation, cannot be allowed to cast its smoke screen over the health of Americans. Any other company that even attempted what the tobacco companies have done to the health of America's youth would have been sued out of existence years ago.

I hope that this hearing reveals some real answers about this deadly product, and gives some desperately needed information to the 50 million Americans addicted to cigarettes and oral tobacco.

Mr. WAXMAN. I thank you, Mr. Synar. Mr. McMillan?

Mr. MCMILLAN. I thank the chairman. And thank you for taking the time to investigate further this most important issue. Especially, I would like to thank you for giving the tobacco industry an opportunity to come in and directly explain some of the complexities of the issues which have been raised in recent weeks and years, confusing so many in this chamber.

It is extremely important that we pause long enough to listen and to get a clear understanding of what is at stake. I should point

out, unfortunately, that several Members of this Congress in the North Carolina delegation who's districts are impacted by this issue were not allowed to testify today.

These Representatives probably represent some 70,000 people who work directly in the tobacco industry either as growers or processors. And I think their interest and insight into this matter would be useful. And I hope that at a future date they can be included in the process and that their written testimony could be included in the record today.

I know that we will address a number of issues concerning tobacco processing and smoking in this hearing. I am particularly interested in hearing from the principal executives of the seven major tobacco companies about some of the issues previously raised before this subcommittee, particularly those that were raised, and possibly distorted, by Commissioner Kessler several weeks ago.

It is extremely important that we get factual information at this hearing. I believe that the gentlemen here today are in a position to provide that. Dr. Kessler spent a great deal of time explaining how he perceived the position and actions of the tobacco industry. Several of the issues discussed appeared to be in direct contradiction to my understanding as to how tobacco is processed, and certainly, I think, to the understanding of the gentlemen who are here today.

I expect that this hearing can shed considerable light on these for the benefit of the members of the committee and the American public who are watching. It is important that this subcommittee deal with factual information, as it should on matters of this import, and that it should take whatever actions are necessary, based on fact and not on public perception. However, I am extremely concerned that there are too many members here, and too many others outside, who are too eager to jump to conclusions before they look at the facts.

And I think we need to back up and, as the chairman said in his opening statement, apply equivalent standards to this product as we do to other products, applying the same rational thought to each. If we do this we will serve the American public well. I yield back the balance of my time.

Mr. WAXMAN. Thank you, Mr. McMillan. I do want to note that our colleagues from North Carolina were here to testify at our March 25th hearing. We'll have their statements in the record. Mr. Wyden?

Mr. WYDEN. Thank you very much, Mr. Chairman. I want to commend you for all of your years of leadership in this effort, and also our colleague, Mike Synar, who has done a tremendous job in advocating for the health rights of children who are so directly affected by tobacco products.

And I think I'd like to start by saying that I come to this hearing as a parent of a 4 year old and a 10 year old, and in a few years all of you, the executives who are sitting at the witness table, are going to be using advertising by Joe Camel to try to hook my kids and addict them to tobacco products.

Now, some of you are parents and grandparents as well, and I think you'd agree with me that all our children are our most valuable possession. And I just can't understand how each of you is en-

gaged in an enterprise that is sure to kill some of our children. I hope today that you will tell us how you all can live with such a killing record on your conscience.

Now, this issue, in my view, is no longer a matter of free choice. It's clear that nicotine is addictive, and it's clear that people get hooked and they can't get off. The same is true of second-hand smoke. We have innocent bystanders that are hurt as the result of second-hand smoke, so this is no longer a matter of free choice. And I hope you will answer to us exactly how you all think that it is a matter of people just exercising an individual preference.

Finally, let me wrap up by saying that yesterday you all treated the American people to a chemical smorgasbord, and you put out a list of all these additives and, in effect, said that they are all safe. Well, I have a letter here from the Centers for Disease Control that disagrees with you. And let me read it to you.

"We cannot categorically state that any of the ingredients are either safe or hazardous without a reference to a specific dosage, and we are unable to determine hazardous risk for any of the substances."

You all didn't put out the quantities of chemicals that are used in cigarette products. You didn't put it out in terms of each brand of cigarettes. I'm going to make this letter from the Centers for Disease Control available to each of you, because it makes it very clear that until you put out that quantity of chemical that is used, it cannot be declared that these additives are safe.

Mr. Chairman, again, I commend you and our colleague, Mike Synar, for many years of work, and I look forward to our witnesses.

Mr. WAXMAN. I thank you, Mr. Wyden. Mr. Greenwood?

Mr. GREENWOOD. Mr. Chairman, in the interest of time, I'd like to forgo an opening statement. I look forward to hearing from the witnesses.

Mr. WAXMAN. Thank you. And Mr. Bryant?

Mr. BRYANT. Thank you, Mr. Chairman. I commend you for putting this together and I am glad that we have the executives here today. I would just like to say that while I do not think I have ever voted with your industry, I have not been an anti-smoking zealot by any definition.

I got into my teenager's car a couple of weeks ago and flipped open the glove compartment. There was a pack of Camel cigarettes which, ironically, is the same brand of cigarettes which my grandfather smoked, who died of lung cancer, after smoking your products for his entire life, when I was in the sixth grade.

I have always believed that the best way to raise kids is to let them have experience in life and make their own rational choices. But the problem with this is that I am not arguing with reason here, I am arguing with the fact that your product is addictive, depriving him and millions of other Americans of the ability to make a rational choice. And I think we are going to have to talk about that today.

In my view, the question raised by Mr. Wyden, about your moral responsibility to your fellow human beings is right at the center of this discussion. And I am one of millions of parents who is trying to figure out how to deal with this without forgoing the right of your child to have experiences and make reasonable decisions?

They cannot do that if they are going to be addicted to your product. And that is what your product does, it addicts people to something they cannot get rid of later in life. It deprives them of the reason that otherwise would come to bear on a decision to make a consumer choice.

So we are really not talking about consumer choices, a phrase which seems to weave itself through all of your written testimony. We are really talking about the inability of consumers to make a choice after they try your product for very long because they are hooked. I yield back my time.

Mr. WAXMAN. Thank you, Mr. Bryant. Mr. Kreidler?

Mr. KREIDLER. Thank you, Mr. Chairman. I want to thank you for holding these hearings so that we can hear from the tobacco industry. Tobacco kills the equivalent of the population of an entire congressional district every year. As a health care professional, I take a considerable interest in this heavy toll that we're taking right now that affects our public health, our medical system, and families.

We've seen enough of what has to be labeled as dodging, denial, and dissembling by the industry. And it's clear that it is time to learn the truth, to learn what toxins from cigarettes do to people, how much nicotine is in cigarettes, and what other chemicals do to people. It's time for full disclosure.

And, Mr. Chairman, I commend you for holding these hearings so that we can get to the bottom of this and find out what's really happening to the American people. Thank you, Mr. Chairman.

Mr. WAXMAN. Thank you very much, Mr. Kreidler.

[The prepared statement of Hon. Gary Franks follows:]

OPENING STATEMENT OF HON. GARY A. FRANKS

Thank you, Mr. Chairman. Today's hearings are an important part of moving the whole tobacco issue out in the public's eye for review. Tobacco use is an important subject, and when the public interest is concerned it should be reviewed.

We all know there is a great deal of interest on this topic. However, there is also a great deal of conflicting data available for public consumption. But charges and counter-charges will not get us to the facts, that is why these hearings play such an important role in the tobacco debate.

I believe the tobacco industry should be scrutinized for their actions, if they are not in the public's best interest. But by the same token, the arguments against the tobacco industry should be put to the same test. I would like to see all of the studies thoroughly reviewed and see if the conclusions all hold up to the same scrutinization.

As I understand it, the primary issues here are nicotine and its alleged manipulation and addiction, tobacco ingredients, tobacco's appeal to youth, and tobacco's impact on health.

Mr. Chairman, we need more facts on these issues before we start voting on any legislation regarding these issues.

Routinely, I request my staff to look into the various claims that cross my desk in the form of "Dear Colleague" letters. Many of these letters claim that tobacco use causes all sorts of problems. Many times, my staff learns that the information in these "Dear Colleague" letters lead you to conclusions that are exaggerations, or perhaps, distortions of the facts. Mr. Chairman, these distortions should only compel you to insure a fair and impartial hearing today.

A recent study from the Department of Health and Human Services confirms that the youth usage of smokeless tobacco products is currently declining and continues to go down. I would not of reached that conclusion from the information that has passed over my desk recently sent out by my colleagues here in the House of Representatives.

I understand that recent epidemiological studies that demonstrate statistical association are insufficient alone to propel a ban on consumer products or to move their classification as an addictive substance.

Certainly, before we start to criticize the industry's manufacturing process we should be very certain of the facts.

Let's leave the decision to use or not to use a tobacco product to the public after we provide them with complete and honest information about the product and it's production.

I am very concerned about the health of the American people, but my concern also extends to the millions of workers in one of the largest industries in America. We need to be sure of the facts of the tobacco issue before we denigrate an entire industry by loose interpretations of biased reports and slanderous remarks made by U.S. Government officials.

I look forward to hearing what these panels have to say. I have a healthy cynicism for all the claims made by the parties on both sides of this matter, and I look forward to getting to the honest facts about these issues.

I yield back the balance of my time.

Mr. WAXMAN. Gentlemen, we welcome you to our hearing today. There is a blue pamphlet at the witness table, that will inform you of the limits on the power of this subcommittee and the extent of your rights during your appearance today. You, I'm sure, are all aware that you are entitled to be represented by counsel, or advised by counsel during your appearance here today. Do you or those of who you have asked to accompany you object to appearing before this subcommittee under oath?

[No response.]

Mr. WAXMAN. If not, I'd like you to rise, and those who will be testifying, as well, with you to rise. Will you raise your right hands?

[Witnesses sworn.]

Mr. WAXMAN. Please consider yourself to be under oath. And we'd like to ask each of you to identify yourself, including those who are accompanying the witnesses, so that we can have that for the record.

Mr. CAMPBELL. William Campbell, President of Philip Morris U.S.A. I'm accompanied by Harold Burnley, our director of processing, and Dr. Kathy Ellis, our director of research.

Mr. JAMES JOHNSTON. I am Jim Johnston. I'm chairman and CEO of RJ Reynolds Tobacco Company. I am accompanied by Andy Schindler, our head of manufacturing and operations; Carl Lehman, our head of R and D; and Richard Cooper, our outside counsel and former general counsel of the FDA.

Mr. TADDEO. My name is Joe Taddeo. I am president of U.S. Tobacco. I'm accompanied by Robert Lawrence, he is our executive vice president of manufacturing and R and D.

Mr. TISCH. Mr. Chairman, I'm Andrew H. Tisch, chairman and chief executive officer of Lorillard Tobacco Company. With me is Dr. Alexander W. Spears, Lorillard's vice chairman and chief operating office. Dr. Spears has senior responsibility for Lorillard's research and production operations.

Mr. HERRIGAN. Mr. Chairman, I'm Ed Herrigan, chairman and chief executive officer of Liggett Group. Accompanying me this morning is Greg Sulin, our vice president of operations.

Mr. SANDEFUR. Mr. Chairman, I'm Tommy Sandefur, chairman and chief executive officer of Brown and Williamson Tobacco Company. I'm accompanied by Dr. John Jewell, who is in charge of our

manufacturing production operations, as well as Tilford Riehl, who is vice president of R and D.

Mr. DONALD JOHNSTON. Mr. Chairman, my name is Donald Johnston. I'm president and chief executive officer of the American Tobacco Company. And with me today is Robert F. Sprinkle, executive vice president of research and quality assurance.

Mr. WAXMAN. I thank you all very much. Without objection, your prepared statements will be a part of the record in full. We would ask that you summarize your prepared statement in approximately 10 minutes or less. I want to note, at the request of Mr. Bliley, we've agreed to allow Mr. Campbell of Philip Morris and Mr. Johnston of RJ Reynolds, an additional 5 minutes to complete their presentations.

I would also note before we begin that the subcommittee received a number of requests from Members of the House of Representatives who desire to present oral testimony. Although the hearing schedule precluded expanding the witness list today, without objection, the record will be held open to receive testimony from those of our colleagues who requested to testify.

[The prepared statements of Hon. Howard Coble, Hon. H. Martin Lancaster, and Hon. Karen Shepherd follow:]

STATEMENT OF THE HONORABLE HOWARD COBLE

Subcommittee on Health and the Environment

House Energy and Commerce Committee

April 14, 1994

Thank you, Mr. Chairman. I appreciate the opportunity to share my views with the members of the Subcommittee today.

My congressional district is one in which tobacco farming has been and still remains a vital part of the state and local economy. The Sixth District mirrors many regions in North Carolina in this regard, particularly those areas which are rural and less affluent.

I am somewhat surprised by the tone and content of this debate, as if the issue were novel. Cigarette companies have not suddenly altered their manufacturing processes or just started to use these ingredients. Similarly, there has been no change to federal food and drug law that would require the FDA to rethink its longstanding and well-reasoned position on cigarettes. In addition, nothing is new about the anti-smoking groups petitioning the FDA to regulate tobacco as a drug. These groups have done this for decades, and the FDA, with the approval of the courts, has denied these petitions for decades as well.

Dr. Kessler has suggested that he believes there may be a middle ground. As I understand his position, it might be possible for cigarettes containing low levels of nicotine or no nicotine at all to remain on the market while all other tobacco products are banned. This is the same tact the Anti-Saloon League used in the 1920's. First, it persuaded Congress to prohibit interstate shipments of liquor to "dry" states and territories. It then

Mr. WAXMAN. Mr. Campbell, we'd like to start with you. And I guess the best thing to do is to pass the microphone right in front of you.

TESTIMONY OF WILLIAM I. CAMPBELL, PRESIDENT, PHILIP MORRIS U.S.A., ACCOMPANIED BY KATHY ELLIS, DIRECTOR OF RESEARCH; JAMES W. JOHNSTON, CHAIRMAN, RJ REYNOLDS TOBACCO CO., ACCOMPANIED BY ANDY SCHINDLER, HEAD OF MANUFACTURING, AND RICHARD COOPER, COUNSEL; THOMAS E. SANDEFUR, JR., CHAIRMAN, BROWN & WILLIAMSON TOBACCO CORP., ACCOMPANIED BY TILFORD F. RIEHL, VICE PRESIDENT; ANDREW H. TISCH, CHAIRMAN, LORILLARD TOBACCO CO., ACCOMPANIED BY ALEXANDER SPEARS III, VICE CHAIRMAN; DONALD S. JOHNSTON, PRESIDENT, AMERICAN TOBACCO CO.; EDWARD A. HERRIGAN, JR., CHAIRMAN, LIGGETT GROUP, INC.; AND JOSEPH TADDEO, PRESIDENT, U.S. TOBACCO CO.

Mr. CAMPBELL. Thank you, Mr. Chairman, distinguished members of the subcommittee. In recent weeks a number of charges have been leveled against the tobacco industry generally, and Philip Morris specifically. I sincerely hope that you and other members of the subcommittee are today interested in separating the facts from the rhetoric regarding issues raised a few weeks ago in Commissioner Kessler's presentation.

Be that as it may, our consumers are being misled and when that happens Philip Morris has and will continue to speak out loudly and clearly. Our consumers deserve to know the truth, and I thank you for creating a forum that allows me the opportunity to set the record straight. I have a few charts to supplement my testimony. We have copies of them available here.

Philip Morris does not add nicotine to our cigarettes. Philip Morris does not manipulate nor independently control the level of nicotine in our products. There were a number of incorrect statements or assumptions in Commissioner Kessler's presentation. These issues are not new and many require a detailed rebuttal.

The claim that cigarette smoking is addictive has been made for many years. The fact that tar and nicotine levels vary among our many products has been publicized for over 20 years. The process by which cigarettes are manufactured, and which at our invitation FDA representatives saw first hand several weeks ago, has been publicly known for over 50 years. And the call for FDA to assert or be given jurisdiction over cigarettes has been made and rejected by the FDA and the courts on several occasions in the past.

To the extent possible in the time available today, my colleagues and I will try to answer the subcommittee's questions, and we will be happy to supplement the points we make in a detailed written submission.

Point one, Philip Morris does not add nicotine to our cigarettes. The claim that Philip Morris secretly adds nicotine during the manufacturing process to keep smokers addicted is false. The processes used to manufacture cigarettes have been a matter of public record for years in patent filings and in the published literature.

The result of that processing, cigarettes with varying levels of tar and nicotine reflecting a wide variety of consumer preferences, has

been closely monitored and reported by the Federal Trade Commission. The manufacturers have published the deliveries in every advertisement for the past 25 years.

The fact is that tar and nicotine levels have decreased dramatically over the past 40 years. Today the market is populated with a number of ultra low brands which deliver less than 5 percent of the tar and nicotine levels of popular brands just 20 years ago.

Philip Morris and other manufacturers have reduced nicotine deliveries in a number of ways. The most important is through the use of increasingly efficient filters which substantially reduced main smoke components, including both tar and nicotine. Filtration alone reduces nicotine delivery by 35 to 45 percent as compared to cigarettes made of simply tobacco and paper.

Through a process called ventilation, which allows fresh air to be drawn through the cigarette, nicotine levels are reduced by a further 10 to 50 percent. Through the use of expanded tobacco, a process developed by which Philip Morris puffs tobacco much like puffed rice cereal, tar and nicotine levels are reduced still further.

A fourth manufacturing technique, the reconstituted tobacco process, also reduces the nicotine in cigarettes. This process which has been thoroughly described in the literature for years does not increase nicotine levels in tobacco or in cigarettes. Through this process 20 to 25 percent of the nicotine in the tobacco used to make reconstituted leaf is lost and is not replaced.

These processes, when combined in cigarettes Philip Morris sells today, reduce nicotine deliveries, for example, by 50 percent in the case of Marlboro, and 90 percent in the case of Merit Ultima; again, compared to cigarettes made simply of tobacco and paper.

Ignoring these reductions, some critics have focused on the minute amounts of nicotine which are found in tobacco extracts and denatured alcohol. Even when used together, they have no measurable effect on the nicotine levels of our cigarettes. Philip Morris uses small amounts of denatured alcohol to apply flavors to the tobacco.

The alcohol is denatured, in fact, in order to make it drinkable—non-drinkable under a formula required by the Bureau of Alcohol, Tobacco, and Firearms, and found in the Federal Register. In other words, the outside vendors who supply us with the denatured alcohol use that tiny amount of nicotine solely to comply with the Federal law. All use by Philip Morris is reported annually to the B.A.T.F.

Philip Morris has spent hundreds of millions of dollars to reduce tar and nicotine levels to provide the products that the marketplace demands. Why, if we were supposedly intent on adding nicotine to cigarettes, why would Philip Morris have spent over \$300 million to develop a process to denicotinize tobacco and launch next a near zero nicotine brand?

I'll tell you why. Our public opinion research indicated smokers were interested in a no-nicotine cigarette. Our Maxwell House Coffee Company had pioneered processes for decaffeination of coffee, and we used that technology as a spring board for denicotinization of tobacco. The process worked, the resulting product did not.

We gambled \$300 million and lost. That's business. If Philip Morris does not strive constantly to meet consumer demand, we will fail in the American marketplace.

Point two. Philip Morris does not manipulate nor independently control the level of nicotine in our products. We voluntarily opened our manufacturing operations to the FDA in a good faith effort to resolve the allegation that we add nicotine or control its level in our cigarettes. As representatives of the FDA learned, nicotine levels in tobacco are measured at only two points in our manufacturing process, prior to the tobaccos being blended, and then 18 months later when those leaves have been manufactured into finished cigarettes.

Although Philip Morris maintains over 400 quality control checkpoints in the manufacturing process that measure things like moisture, weight, et cetera, none, not one, measure, report, or analyze nicotine levels in tobacco.

Commissioner Kessler indicated in his testimony that the nicotine to tar ratio increased as tar delivery decreased. The reason for the slight increase in the nicotine to tar ratio in lower tar and nicotine cigarettes is not the result of intentional manipulation but the result of the difference between filtering tar and filtering nicotine.

Simply put, filters are more efficient in removing tar than nicotine. As tar and nicotine levels fall, proportionally more tar is filtered out than nicotine. This does not mean that consumers of low tar cigarettes get more nicotine. Quite the contrary. On an absolute basis, far less nicotine is delivered per cigarette in lower tar and nicotine deliveries.

Commissioner Kessler suggested that during the period 1982 to 1991 tar delivery levels have remained flat while nicotine delivery levels have increased. The fact is, after substantial decreases since the 1950's, tar and nicotine levels both have remained relatively flat during the past decade.

Fact three. Philip Morris has not used patented processes to increase or maintain nicotine levels. Commissioner Kessler spent a great deal of his testimony attempting to support the proposition that Philip Morris may be using secret patented processes to increase or maintain nicotine delivery in our cigarettes. We have not. We are not.

Philip Morris, like every other corporation, applies for and obtains patents on virtually every innovation that we pioneer. That is critical to ongoing research efforts. Philip Morris currently holds over 600 patents, only about a quarter describe processes ever used. The processes described in the patents are no more secret than the regulations of the FDA. They are publicly disclosed upon issuance through the U.S. Patent Office.

In his testimony, Commissioner Kessler said he had no evidence that Philip Morris or any of the other companies ever actually used any of these patents to increase or maintain nicotine levels. As he correctly said, patents do not necessarily tell us what processes are currently being used in manufacturing cigarettes. To make myself perfectly clear, Philip Morris has never used any of the patents Commissioner Kessler cited except those to reduce nicotine levels.

Fact four—point four. Cigarette smoking is not addictive. During the March 25th hearing, Commissioner Kessler and members of

the subcommittee contended that nicotine is an addictive drug, and, therefore, smokers are drug addicts. I strenuously object to that premise. I strenuously object to that conclusion.

Cigarettes contain nicotine because it occurs naturally in tobacco. Nicotine contributes to the taste of cigarettes and the pleasures of smoking. The presence of nicotine, however, does not make cigarettes a drug or smoking an addiction.

Coffee, Mr. Chairman, contains caffeine, and few people seem to enjoy coffee that does not. Does that make coffee a drug? Are coffee drinkers drug addicts? I think not.

People can and do quit smoking. According to the 1988 Surgeon General's Report, there are more than 40 million former smokers in the United States, and 90 percent of those who quit did so on their own, without any outside help. Smoking is not intoxicating, no one gets drunk from cigarettes, and no one has said that smokers do not function normally. Smoking does not impair judgment. In short, no one is likely to be arrested for driving under the influence of cigarettes.

Our consumers smoke for many reasons. Smokers are not drug users or drug addicts, and we do not appreciate or accept being characterized as such because, yes, Mr. Chairman, I am one of the 50 million smokers in this country.

Point five. Philip Morris research does not establish that smoking is addictive. At the March 25th hearing, Commissioner Kessler made the statement, supported by Dr. Heningfield, that in 1983 a company, later identified as Philip Morris, suppressed research by one of its own scientists who, allegedly, concluded that nicotine was an addictive substance.

That is false. In fact, that scientist published two full papers and five abstracts related to the work in question, including one published in 1982, a year prior to the creation of the manuscript in question. The manuscript subsequently provided to the committee by Commissioner Kessler, presented some evidence that rats will self-administer nicotine, and that nicotine, therefore, is a weak reinforcing agent.

The researcher later concluded that nicotine is a reinforcer in the class of non-addictive chemical compounds such as saccharin and water. In addition, and Commissioner Kessler failed to note this, the manuscript itself states, and I quote, "Termination of prolonged access to nicotine under conditions in which it functions as a positive reinforcer does not result in physiological dependence."

Thus the manuscript did not conclude that nicotine is addictive. And both Dr. Kessler and Dr. Heningfield know that. More importantly, the committee should know that by the time the Philip Morris researcher was ready to publish his study in 1983, the positive reinforcing nature of nicotine had already been reported in other published literature.

Indeed, the 1988 Surgeon General's Report, to which Dr. Heningfield was a contributor, stated that such nicotine reinforcement was shown conclusively, as early as 1981, based on Government-supported research. Last month Dr. Heningfield testified before this committee that because the manuscript was unpublished, he could not cite it in his literature reviews. In fact, Dr.

Heningfield did cite the manuscript in a 1984 literature review he wrote.

Finally, in that same review, Dr. Heningfield acknowledged that another abstract by the same researcher actually showed that even, and I quote, "At high levels of tobacco smoke or nicotine intake, maintained for extended periods, abrupt abstinence is not followed by the onset of withdrawal syndrome." I'm sure Dr. Heningfield simply forgot that publication.

Point six. Consumers are not misled by the published nicotine deliveries as measured by the FTC method. Contrary to the impression given by Commissioner Kessler that the FTC has somehow adopted a test procedure that can mislead the public as to the true levels of tar and nicotine they are inhaling.

The routine analytical smoking methods derived from the FTC method are nearly identical to those used throughout the world to measure tar and nicotine levels and accurately compare brand deliveries. All of the tests are conducted on cigarettes obtained from the marketplace. They are therefore the same cigarettes smoked by consumers.

Commissioner Kessler suggested that the FTC figures were misleading because smokers might compensate for a lower tar and lower nicotine brand by smoking those cigarettes differently. If Commissioner Kessler is also claiming that lower yield cigarette smokers smoke more cigarettes, he is simply wrong. The data show smokers of low yield brands smoke fewer cigarettes than smokers of high yield brands.

Mr. Chairman, we at Philip Morris appreciate the opportunity to respond to some of the claims made against us. We will be pleased to answer any questions you may have about these matters, and to provide a more detailed written submission, should that be appropriate.

Further, I extend to you and the other members of your subcommittee an invitation to come see our manufacturing process first hand, as the FDA has already done. We're proud of our company, our products, and the people at Philip Morris. Thank you, Sir.

[Testimony resumes on p. 558.]

[The prepared testimony of Mr. Campbell follows:]

Statement of William I. Campbell
President and Chief Executive Officer
of Philip Morris U.S.A.

before the

Subcommittee on Health and the Environment
House Energy and Commerce Committee

April 14, 1994

Mr. Chairman and distinguished Members of the Subcommittee. I am here today at your request, and I would like to take this opportunity to set the record straight on charges that have recently been made against the industry and Philip Morris. First, Philip Morris does not add nicotine to our cigarettes. Second, Philip Morris does not "manipulate" or independently "control" the level of nicotine in our products. Third, Philip Morris has not used patented processes to increase or maintain nicotine levels. Fourth, cigarette smoking is not addictive. Fifth, Philip Morris has not hidden research which says that it is. And, finally, consumers are not misled by the published nicotine deliveries as measured by the FTC method.

Mr. Chairman, I trust that you and the other Members of the Subcommittee are sincerely interested in learning the facts about the various issues raised a few weeks ago in Commissioner Kessler's presentation -- issues which, I might add, are not new. The claim that

Mr. WAXMAN. Thank you very much, Mr. Campbell. We do have questions, but we're going to hear from all of the witnesses before members on the panel ask their questions. Mr. James Johnston? Please pull the microphone in front of you?

TESTIMONY OF JAMES W. JOHNSTON

Mr. JAMES JOHNSTON. Good morning, Mr. Chairman, members of the subcommittee. Again, I am Jim Johnston, chairman and chief executive officer of RJ Reynolds Tobacco Company. I appreciate this opportunity to discuss a number of important issues concerning the tobacco industry.

I am proud to be here today to speak for the 45 million adults who choose to smoke, and the growers, retailers, and the other 2.3 million Americans who are part of the tobacco industry. I am proud to represent the more than 10,000 people at Reynolds Tobacco, who are dedicated to making the best cigarettes that we can make.

My company and I take very seriously the allegations that have leveled against us. And I would like the record to clearly show that Reynolds Tobacco does not spike its products with nicotine. In fact, our process results in the loss of nicotine. We do not add, or otherwise manipulate nicotine to addict smokers. Finally, there is no justification for the FDA to regulate cigarettes as a drug.

I also want to talk to you about the real issue before the American people and this subcommittee. The real issue is, should cigarettes be outlawed? Let's make no mistake about it, the goal of the anti-smoking industry is to bring back prohibition. This morning I intend to show you how they hope to achieve that goal.

But, first, I want to address the charge that Reynolds Tobacco manipulates the level of nicotine in its products, the implication is that we are somehow doing something sinister to addict smokers or to keep them addicted. We do not.

We do reduce the amount of nicotine in our products. We do monitor and measure tar and nicotine yields because we are required to publish those figures in our advertising. And we do maintain the consistent taste and quality of our brands which our customers expect. But we do not do anything to hook smokers or to keep them hooked.

Let me repeat, we do not manipulate nicotine to addict smokers. We no more manipulate nicotine in cigarette than coffee manufacturers manipulate caffeine in their products. There is nothing sinister about it.

I think the subcommittee should also be aware that Dr. Kessler's definition of addiction would classify most coffee, cola, and tea drinkers as addicts, caffeine addicts. Many people experience a strong urge for a cup of coffee each morning, and there is a well-documented physical withdrawal syndrome associated with the consumption of coffee and caffeinated soft drinks.

Nonetheless, I seriously doubt that the American public would say that these characteristics put caffeine in the same class as addictive drugs such as cocaine and heroin. And I don't think anyone would seriously suggest that the FDA consider regulating coffee, tea, or soda as drugs, even though soft drink manufacturers routinely add caffeine to their products.

In the same vein, the manufacturers of alcoholic beverages constantly monitor the alcohol content of their products through the fermentation process to precisely control the level of alcohol. In addition, some wines are fortified with added alcohol. Nonetheless, Reynolds Tobacco is not aware of any efforts to regulate wine, beer, or spirits as a drug. And we certainly don't believe that efforts of that type are necessary or desirable.

Much of the recent controversy surrounding our products is focused on our use of various techniques that help us reduce the tar and nicotine yields of our products. Let me be clear. We could stop using those techniques. We could chop up the tobacco and roll it in paper, but the consequence of doing that would be a return to the 1940's, when the average cigarette yielded 40 milligrams, 2.8 milligrams of nicotine. That would increase the tar and nicotine in our cigarettes by 300 to 400 percent. I trust this committee would not endorse such an effort as a matter of public policy, regardless of your personal views about smoking.

At the last hearing on this subject, some people asked why we don't simply eliminate from our products. Nicotine plays an essential role in the overall smoking experience. It enhances the taste of the smoke and the way it feels on the smoker's palate, and it contributes to the overall smoking enjoyment. During the past several years there have been a wide variety of attempts to convince the American public that cigarettes are addictive, and some public officials have even gone so far as to put cigarettes in the same class as cocaine and heroin.

You don't need to be a trained scientist to see this isn't true. All you need to do is ask and honestly answer two simple questions. First, would you rather board a plane with a pilot who just smoked a cigarette, one with a pilot who just had a couple of beers, or snorted cocaine, or shot heroin, or popped some pills?

Second, if cigarettes were addictive, could almost 43 million Americans have quit smoking, almost all of them on their own without any outside help? The answers are obvious, and that is precisely my point. Cigarettes are clearly not in the same class as addictive, mind-altering like heroin and cocaine.

I agree that for some people cigarette smoking is habit forming in the same way that other pleasurable activities such as watching TV, eating your favorite foods, sometimes overeating your favorite foods, and drinking coffee can be habit forming. And, yes, some smokers find it difficult to quit.

But there is nothing about cigarette smoking that prevents a person from clearly thinking and making reasoned decisions, including the decision to quit. The allegation that smoking cigarettes is addictive is part of a growing and disturbing trend that has destroyed the meaning of the term by characterizing virtually any enjoyable activity whether it is eating sweets, drinking coffee, playing video games, or watching TV. This defies common sense.

Now, let's go to the real issue, prohibition. The anti-smoking industry is committed to achieving what essentially amounts to prohibition. When confronted, they will tell you they don't want prohibition, but their actions belie those claims. Regardless of what we in the tobacco industry do, our opponents in the anti-smoking industry cry "Foul." We produce high tar cigarettes and they say,

"Reduce tar and nicotine." We lower those levels and they say, "It doesn't matter, regulate those products as drugs."

Let me cite just two examples. When Philip Morris introduced a cigarette that was essentially nicotine-free, the Coalition on Smoking OR Health called it, quote, "The most dangerous product put on the market in the last 10 years." And they petitioned the FDA to ban it.

Several years ago our company test marketed a cigarette that had virtually no tar and less nicotine than 97 percent of the cigarettes on the market. It virtually eliminated second-hand smoke, and was essentially fire safe. The response? The product and our company were viciously attacked, and petitions were filed with the FDA to ban the product. The bottom line is, in the eyes of the anti-smoking industry, we can do nothing right short of firing our employees and going out of business.

A good example is the recent use of scare tactics concerning the ingredients used by the tobacco industry. Ingredients are added to our product to enhance the flavor and aroma of our products. And despite all the claims that have been made about our ingredients, the fact is more than 99.99 percent of this Winston cigarette, and all the cigarettes we make, 99.99 percent is tobacco and ingredients that can be lawfully used in foods. The other 1/100th of 1 percent are ingredients that have been approved by other governments for use in tobacco products.

In addition, all the ingredients used by the industry have been thoroughly reviewed by a blue ribbon panel of experts, scientific experts, toxicologists, who have concluded that those ingredients are, and I quote, "Not hazardous under the conditions of use." So let's be clear about the fact that the anti-smoking industry's call for a smoke-free society by the year 2000 is little more than a thinly veiled attempt to achieve back door prohibition.

If you don't believe that is the case, just look at how extreme some of these efforts are, like trying to prohibit people from smoking outdoors, in public parks, in their cars, or even their own homes. And consider this, alcohol prohibition started with the anti-alcohol movement, claiming that their goal was simply temperance.

The American public overwhelmingly opposes prohibition whether it comes in through the front door or sneaks in through the back door. So let's be clear about the fact that back door prohibition is prohibition nonetheless. Raising taxes to force smokers to quit is back door prohibition. Banning smoking in all public places, indoors and outdoors, including parks, work places, and outdoor stadiums to further stigmatize smokers is back door prohibition.

Banning advertising so that new or better products can't be effectively communicated and introduces is censorship and it is back door prohibition. Forcing manufacturers to produce products that smokers find unsatisfying or unacceptable is back door prohibition. Attacking every attempt by the industry to respond to public and smoker concerns is back door prohibition.

And advocating that the FDA regulates cigarettes as a drug, which would effectively ban cigarettes from the market, is clearly back door prohibition.

If any member of this subcommittee truly believed that cigarettes are too dangerous to be sold, then stand up, vote for prohibi-

tion and be prepared for the consequences. But no one should try to use the back door and force prohibition by saying cigarettes are a drug because they contain tobacco which contains nicotine. My company and I must speak up for smokers and for the 85 percent of all Americans who oppose prohibition.

So I submit the real question before the American public and this subcommittee is this, should cigarettes be outlawed? Will adults be allowed to choose to smoke, to afford to smoke, to smoke outside their homes, or is it time to say, "No, the Government knows better." Thank you.

[Testimony resumes on p. 590.]

[The prepared statement of James W. Johnston follows:]

Mr. WAXMAN. Thank you, Mr. Johnston. At the request, I gather, of the witnesses, we're going to call on our next speaker, Thomas E. Sandefur, chairman and CEO of Brown and Williamson Tobacco Company, rather than go down the list. Mr. Sandefur?

TESTIMONY OF THOMAS E. SANDEFUR, JR.

Mr. SANDEFUR. Mr. Chairman, I have a short statement to make. It's been given to the subcommittee and to save time, I'll be more than happy to forgo reading that. It's your pleasure. If you want me to read my statement to you, I'll be happy to.

Mr. WAXMAN. If you want. It's going to be in the record, so—

Mr. SANDEFUR. It's in the record.

Mr. WAXMAN [continuing]. So if you want to say something orally, do so. If you don't we'll move on to the next witness. We've got a lot scheduled.

Mr. SANDEFUR. Fine. Thank you.

[The prepared statement of Mr. Sandefur follows:]

STATEMENT OF THOMAS E. SANDEFUR, JR., CHAIRMAN AND CHIEF EXECUTIVE OFFICER, BROWN & WILLIAMSON TOBACCO CORPORATION

Mr. Chairman and members of the subcommittee, I appear today on behalf of Brown & Williamson Tobacco Corporation in response to the chairman's letter of March 31, 1994, to address questions concerning nicotine in cigarettes that have been raised in recent weeks by FDA Commissioner David A. Kessler and others. This statement supplements the statement submitted by Brown & Williamson in connection with the subcommittee's hearing on March 25, which is part of the record of that hearing.

The premise of the questions raised by Commissioner Kessler is that nicotine is "addictive." The term "addiction" has been used to describe everything from an enslavement to hard drugs to an inability to lose weight or watch less television, and Surgeon General Koop himself proclaimed in 1982 that children were "addicted" to video games. In view of the radical differences between tobacco and hard drugs in their effects on behavior and the symptoms associated with quitting, and in view of the fact that more than half of all Americans alive who have ever smoked have quit—over 90 percent without professional help—equating cigarettes and hard drugs is nothing more than rhetoric.

Initially, in his letter of February 25, 1994, Dr. Kessler suggested that cigarette manufacturers "commonly add nicotine to cigarettes to deliver specific amounts of nicotine." Brown & Williamson has never done that, as we demonstrated in our submission to this subcommittee in connection with its March 25 hearing. Dr. Kessler mentioned a number of patents in his testimony on March 25, including some that have been secured by Brown & Williamson. I can state categorically that Brown & Williamson does not utilize, and has never utilized, any of these patents to control the amount of nicotine in cigarettes. As Brown & Williamson explained, moreover, "the nicotine content of B&W cigarettes is lower than the nicotine content of the tobacco used to produce them." According to the New England Journal of Medicine, the average nicotine delivery dropped from 2 milligrams to 0.9 milligrams between 1955 and 1987.

After the submissions by Brown & Williamson and the other manufacturers, Dr. Kessler, in his testimony on March 25, retreated to the suggestion that the cigarette manufacturers' failure to use the technology supposedly at their disposal to eliminate nicotine from cigarettes suggests that they may intend it to satisfy an addiction. This, too, is incorrect.

Without nicotine, you don't have tobacco. Without nicotine, cigarettes simply would not taste like cigarettes. The experience of another manufacturer indicates that consumers will not accept a cigarette without nicotine. Calls for legislation to eliminate nicotine amount to a call to ban cigarettes—not because the substance that allegedly satisfies an "addiction" would be removed, but because the resulting product would taste nothing like a cigarette. We offer a range of products with a range of nicotine deliveries and the consumer makes the choice.

We also vigorously dispute the suggestion of Dr. Kessler and Dr. Slade that the "tar" and nicotine ratings produced using the FTC test method are meaningless or misleading. The cigarette manufacturers have never suggested that these ratings re-

flect the precise amount of "tar" and nicotine that each individual smoker actually receives. But we do believe that smokers can expect to receive lower amounts of those constituents from lower-rated brands than from higher-rated brands, and that the FTC test method therefore reliably ranks cigarettes in terms of "tar" and nicotine deliveries. EPA's mileage figures may not reflect the actual experience of individual drivers, but EPA is correct that a Cadillac delivers fewer miles per gallon than a Honda.

Hopefully our testimony today will help to clear up some of the misconceptions that currently exist about nicotine in cigarettes.

On April 5, Dr. Kessler wrote me a letter asking to arrange a meeting between FDA representatives and members of our research, scientific, technical, and production staffs to review relevant information. I have responded to Dr. Kessler's request and anticipate that such a meeting will take place shortly.

Mr. WAXMAN. Next we'll hear from Andrew Tisch, chairman and CEO of Lorillard Tobacco Company.

OK. Thank you.

TESTIMONY OF ANDREW H. TISCH

Mr. TISCH. Thank you, Mr. Chairman. At the committee's request, I have submitted for the record at this hearing a written statement in response to each of the questions set forth in your invitation letter. In normal circumstances I would be happy to summarize that statement orally and then respond to any questions you or the members of the committee might have.

But these are not normal circumstances, Mr. Chairman, you have made a number of very serious claims and assertions during the press conference that you called yesterday. Claims and assertions that question the integrity of our company and of Dr. Alexander Spears, who is with me today and testified before this committee on March 25th.

When a representative of our company called your staff yesterday following a press conference to ask that Dr. Spears be given a separate opportunity to respond to the claims and assertions from your press conference that related to him, we were told that this would not be possible.

More specifically, we were told that Dr. Spears opportunity to respond would be limited to any time that might be left from the time that has been allotted to my testimony or to the question and answer period that is to follow.

Mr. Chairman, I frankly cannot understand the attitude conveyed by your staff. Indeed, I am left with no choice but to cede the balance of my time to Dr. Spears to ensure that he will have the adequate opportunity to correct the very serious misstatements and misconceptions that were conveyed in yesterday's press conference.

Mr. Chairman, with your permission, I'd like to ask if Dr. Spears may respond during the rest of my time period?

Mr. WAXMAN. Mr. Tisch, we're going to have plenty of opportunity for Dr. Spears to respond. I do have a number of questions to ask of him, he will have his chance. But this is our chance to hear to from you. And we want to hear from you at this point.

Mr. TISCH. OK, fine. I must respectfully disagree with that, but you are the boss.

On behalf of the more than 3,700 employees at Lorillard Tobacco Company, I am pleased to have this opportunity to address you about the issues you identified in your letter to Lorillard of March

31st, 1994, announcing this hearing. You will recall that Dr. Spears testified before this subcommittee on March 25, 1994, with respect to the same subjects proposed for discussion here today.

In as much as Dr. Spears and Lorillard's position on the questions raised has not changed in the past 2 weeks, for the sake of brevity, I have attached to my statement a copy of Dr. Spears' written submission of March 25th, and ask your permission that it and his March 25th oral testimony also be entered into the record.

Mr. WAXMAN. Without objection. [See p. 377.]

Mr. TISCH. At the outset, I want to reaffirm and emphasize what Dr. Spears said during his appearance on March 25th, and to make absolutely clear to the Congress and to the public that the level of nicotine in the products manufactured and sold by Lorillard is solely determined by the tobacco that we buy and the blending of the different tobaccos used in our manufacturing.

The tar and nicotine yields of our products are determined by a combination of the tobacco blends and the physical characteristics which constitute the construction of the cigarette, namely, length, circumference, paper porosity, filter, tip ventilation, and tobacco density. Nicotine levels follow tar levels and are not raised or reduced for particular brands.

Dr. Spears previously advised you that in the course of manufacturing we use denatured alcohol which the Bureau of Alcohol, Tobacco, and Firearms requires be made unpotable by the manufacturer of the alcohol to the addition of a miniscule amount of nicotine. We also use a number of flavors which incorporate a tobacco extract that contains some nicotine. But it is important to understand that the combined amount of nicotine from these sources is too small to be measured in the final products.

The manufacture of our brands of cigarettes also involves the use of reconstituted tobacco, or tobacco sheet. One of the processes Lorillard uses in the production of reconstituted tobacco involves a temporary separation and subsequent reapplication of water soluble components of tobacco, including nicotine. However—and I invite your specific attention to this important fact—this process and all others, all of which are well known in published literature, results in a reduction of nicotine in the finished product.

Dr. Kessler's March 25th testimony referred to a 1980 Lorillard patent dealing with nicotine and reconstituted tobacco. I am advised that an earlier laboratory observation indicated a possible use for this process. Following our usual business practice, and that of virtually every other company in American, we applied for and obtained the patent.

However, so there is no misunderstanding, the record should reflect that Lorillard has never practiced the patented process in any commercial manner. Moreover, even if it was to be used, the process would not result in any increase or decrease in the nicotine level.

In your March 31st letter, we are asked to address any studies of the physiological or psychological effects of nicotine and related compounds which have been undertaken by Lorillard. I can respond succinctly. Lorillard has not undertaken any such research.

As regards cigarette ingredients, please note the following. The cigarette manufacturers have provided to the Department of

Health and Human Services, each year since 1984, a comprehensive listing of cigarette ingredients. HHS has never indicated to Lorillard at any time, in response to those submissions, that it had a problem with respect to any individual ingredient or groups of ingredients.

Indeed, when HHS asked the manufacturers for the quantity of each ingredient being used, the manufacturers promptly provided that information to HHS on a confidential basis. To my knowledge, HHS has no outstanding requests to this manufacturer or any others for additional information.

The manufacturers, including Lorillard, have assured HHS repeatedly that we would be happy to meet with HHS officials, and/or HHS scientific consultants to answer any questions about ingredients which the HHS or its consultants might have. I reaffirm that commitment now.

Finally, Mr. Chairman, allow me to sum up and to state Lorillard's position on the principal issues raised in the statement released by you when you scheduled today's hearings. In doing so, it is also my purpose to respond to Dr. Kessler's erroneous assertions first made on February 25th, and then expanded upon at your March 25th hearing.

Lorillard does not take any steps to assure a minimum level of nicotine in our products. Lorillard does not add nicotine to cigarette tobacco for the purpose of manipulating or spiking the amount of nicotine received by the smoker. Lorillard makes no effort to keep secret any information about the nicotine content of our products.

And, as you know, since 1971, every cigarette advertisement has carried a complete disclosure of the tar and nicotine content. Mr. Chairman, I respectfully suggest to you that Lorillard has acted and will continue to act in a completely responsible manner in this as well all our business practices.

Furthermore, I state unequivocally that our manufacturing processes neither violate the Federal Food, Drug, and Cosmetic Act, nor do they justify placing the manufacture of cigarettes under the jurisdiction of the FDA.

I thank you for your attention and for this opportunity to state Lorillard's position. At the appropriate time, Dr. Spears and I will take any questions you or your colleagues might have. Thank you.

Mr. WAXMAN. Thank you, Mr. Tisch.

Donald Johnston, president of American Tobacco Company.

TESTIMONY OF DONALD S. JOHNSTON

Mr. DONALD JOHNSTON. Thank you, Mr. Chairman. What I have to say is repetitive from the statements already read, but I believe these points do bear repetition as they focus on the facts concerning the issues you raised in your letter inviting us to this hearing.

Aside from tobacco itself, and federally authorized use of alcohol denatured with minute amounts of nicotine, the American Tobacco Company does not use nicotine in the manufacture of its cigarettes. Contrary to the implications that have aired before this subcommittee and elsewhere, the American Tobacco Company does not spike its cigarettes with nicotine, or it does not use any of the patents that have been placed before this subcommittee on any other like processes or devices.

The only source of nicotine, other than that naturally occurring in tobacco is introduced from Specially Denatured Alcohol Number 4, which is used as a solvent for flavorings. SDA No. 4 is authorized for tobacco use in accordance with the 27 Code of the Federal Regulations of Alcohol, Tobacco Products, and Firearms which were revised as of April 1, 1993. I believe it is section 21.118 and 21.38. And it is denatured by the alcohol manufacturer in accordance with the prescribed formula outlined in the regulations.

Now, the quantity of nicotine indirectly added to tobacco from the use of SDA No. 4 is on the order of 3 parts per million to 5 parts per million, or 3 ten thousands of a percent to 5 ten thousands of a percent by weight, which is infinitesimal in comparison to the naturally occurring nicotine of tobacco blends that generally contain 2 to 2.5 percent by weight.

Further, the American Tobacco Company does manufacture reconstituted tobacco by the Fourdrinier papermaking process that involves separation of water soluble components from tobacco, formation of the tobacco cellulosic sheet, and reapplication of the water soluble components to the sheet that's in a continuous process. American does add nicotine to this process.

The end product is tobacco material that contains only the quantity of water soluble components, including nicotine originally removed from the tobacco. In practice, as I believe has already been mentioned, the nicotine content of the reconstituted tobacco material is approximately 4 percent less, which is owing to the processing losses, than the nicotine content of the tobacco utilized in the reconstitution process.

The American Tobacco Company uses various types of natural tobaccos, including reconstituted tobacco in the manufacture of its cigarettes. The percentages of natural tobacco types and reconstituted tobacco vary by brand. However, after processing of tobacco for cigarette manufacture, the nicotine content is on the order of 5 percent less than that of the various tobaccos entering into the process.

On the matter of patents, the American Tobacco Company has been issued two patents, U.S. Patent Number 3428049, and Number 4505282 which reference the addition of materials which could include tobacco extract and/or nicotine to cigarettes and an innerliner wrap for a tobacco smoking article. As with any patent, the language is purposely broad in scope with an objective of covering a wide variety of conceptual applications which may or may not be reduced to practice.

While the American Tobacco Company has been issued such patents, addition of tobacco extract or nicotine to cigarette filters and wrapper have never been employed in a commercial cigarette product by American Tobacco.

In summary, nicotine involved in the federally regulated and authorized use of SDA No. 4 denatured alcohol is negligible. Nothing is done in the tobacco processing or manufacture of cigarettes or filters by the American Tobacco Company to increase nicotine beyond that which is naturally occurring in the tobacco.

I would now like to address questions that have also been raised with respect to the intent of the design of our cigarettes in relation to nicotine. In 1966, the Federal Trade Commission amended its

cigarette advertising guides to encourage cigarette manufacturers to publish the tar and nicotine content expressed in milligrams of the mainstream smoke from a cigarette, declaring that to be information concerning cigarettes which may be material and desired by the consuming public. Time has proven the FTC to have been right and that consumers have shown an interest in and differing preferences for different levels of tar and nicotine.

Moreover, since 1971, American has been governed by and has adhered to an FTC Consent Order requiring American to publish in its advertisements for low tar cigarettes tar and nicotine data as determined by the testing method employed by the FTC in the testing of the smoke of its domestic cigarettes.

Through tobacco blends, filtration, ventilation, American Tobacco has, on a sales-weighted average, reduced tar and, consequently, nicotine levels as determined by the FTC method. The tar and nicotine data for each of American's products are published. American carefully monitors its finished cigarettes, and the published data to assure that the tar and nicotine figures are accurate.

Thus American Tobacco manufactures and sells cigarettes with tar and nicotine content in response to the consumer demand for different types of cigarettes, and provides correct information to consumers about those amounts. American has no desire or intent to manipulate nicotine.

At no time has the American Tobacco Company attempted to market a cigarette based upon nicotine content. Or more generally, has it ever designed or marketed a cigarette with the purpose or intent of selling nicotine. Rather, American has always considered that it sells cigarettes and that nicotine is one of the several intrinsic properties characteristic of the tobacco itself.

Thank you for your attention, Mr. Chairman.

Mr. WAXMAN. Thank you very much, Mr. Johnston.

Next I want to hear from Mr. Horrigan.

TESTIMONY OF EDWARD A. HORRIGAN, JR.

Mr. HERRIGAN. Thank you Mr. Chairman and fellow members of the committee. My name is Ed Horrigan, Jr., and I am chairman and chief executive officer of the Liggett Group. Although I've only somewhat recently joined the Liggett, I have had the pleasure of addressing this subcommittee on a prior occasion.

After having served in the military and then in companies in other industries in this country for over 20 years, I joined the tobacco industry 16 years ago. And then in 1989 I retired as chairman and CEO of Reynolds Tobacco, as well as vice-chair of RJR Nabisco. I came out of retirement to rejoin the tobacco industry mindful of the challenges presented to it at this time.

And also with the knowledge, born of my experience, that the tobacco industry is one of the respectable American industries that make up American commerce. It acts responsibly in its business practices, and it produces a product recognized world-wide for its quality.

And, therefore, I am pleased to have this opportunity to address the subcommittee on behalf of Liggett on the matters that were discussed during your meeting earlier on March 25th.

While my remarks will be somewhat redundant, repetitive from the other companies, I will highlight them to show the uniform sense of responsibility and accountability that exists in this industry, and to add our sense to the absurdity of the allegations that people continue to place against this industry.

At the outset, I would like to make it clear that Liggett does not increase the nicotine level of our cigarettes beyond the level of nicotine found naturally in the unprocessed tobacco that we use to make our cigarettes. Second, Liggett does not manipulate the level of nicotine in our cigarettes to hook or addict smokers. Third, Liggett does not use any of the patented technology that was referred to by Dr. Kessler in his testimony before this committee last month.

And, finally, I want to emphasize that we at Liggett are proud of the quality of the cigarettes that we produce, we're proud of the people who grow our tobacco that goes into our product, we're proud of the people who manufacture them for us, as well as those people who distribute and sell our product legitimately around this country.

Now, with regard to the manufacture of cigarettes, I would like to emphasize that the manufacturing process results in a reduction in the amount of nicotine in cigarettes when compared to the nicotine in the unprocessed tobacco.

Second, the essential components of cigarette manufacturing, and specifically, the use of reconstituted tobacco has been publicly documented for decades, so none of this is new. Reconstituted tobacco is used to reduce waste and to achieve the most efficient use of the natural tobacco that we purchase for our product.

Tobacco is the most expensive component of the cigarette and, therefore, any loss of that tobacco would make the production of cigarettes more costly. In brief, the reconstitution process involves the addition of water to the tobacco to separate water soluble substances, including some nicotine, from the tobacco.

The remaining tobacco cellulose can then be formed into sheets. Water soluble substances originally removed from the tobacco are then once again returned to that tobacco sheet. No nicotine not found naturally in the tobacco is added in the production of the reconstituted tobacco. In fact, the reconstituted tobacco contains less nicotine than raw tobacco, from which it was made, because a certain amount of the natural nicotine is inevitably lost in that process.

Denatured alcohol and tobacco flavorants are the only other sources of nicotine in our cigarettes. Nicotine occurs naturally in the water soluble extracts of tobacco used in miniscule amounts as flavorants. The use of tobacco flavorants has been a matter of public record, again, for decades.

The Specially Denatured Alcohol No. 4, which is used as a carrier for flavors, is the only denatured alcohol that is approved by B.A.T.F. for the manufacturing process in cigarettes. The B.A.T.F. requires that that alcohol be denatured by the addition of a miniscule amount of nicotine to make it undrinkable. And it is denatured in accordance with the prescribed formulas outlined by B.A.T.F.

The amount of nicotine contributed to tobacco smoke by way of tobacco flavorants and denatured alcohol, is so miniscule that it cannot be measured in tobacco smoke, using the FTC's standard methods. Moreover, as I noted, the nicotine content of cigarettes, manufactured by Liggett, is lower than the nicotine in the unprocessed tobacco that we use to make our product.

Therefore, Liggett, like the rest of us, does not manipulate or spike the amount of nicotine during the manufacture of its cigarettes to achieve an alleged addicting level of nicotine. Specifically, Liggett does not and has not used any of the patented processes described in those patents referred to in Dr. Kessler's earlier testimony.

Liggett does not believe that there is any such thing as an addicting level of nicotine in cigarettes, or that cigarettes are addictive like heroine or cocaine, as has been alleged. In fact, to equate cigarette smoking with actual hard drug addiction ignores the significant differences between them. It also blinks at reality.

As has been mentioned, there have been over 40 million Americans who have chosen to quit smoking. And more than half of all adult smokers have quit, 90 percent of them quitting without the aid of the Betty Ford Clinic, or the Hazelton Clinic, or any other such clinic. It's thus apparent that irrespective of the nicotine in cigarettes, consumers can and do choose to quit.

Consumers also express their personal preference by choosing from a wide variety of cigarette brands and styles on the market that have different "tar" and nicotine yields. To meet the demands of the marketplace, Liggett produces a variety of cigarette brands with a variety of "tar" and nicotine yields. For more than 20 years, cigarette advertising has carried the nicotine yield of each cigarette brand and style as measured in accordance with FTC standard test methods. Over the years, consumers have expressed a growing preference for cigarettes with lower "tar" and nicotine yields. This has resulted, on an industry-wide basis, in more than a 50 percent reduction in average nicotine yields over the past 40 years.

In conclusion, let me say that nicotine is a naturally occurring substance in tobacco, which is obviously an intrinsic characteristic of our product. Liggett does not design or manufacture its cigarettes with the intent to spike the amount of nicotine in cigarettes. There is no secret about the yields of Liggett's cigarettes, which I reiterate has been publicly disclosed for years.

In closing, I'd like to add a personal observation. Some anti-tobacco zealots would have the American people believe that in our manufacturing process there is a gentleman at the end of each line with a pot of nicotine making sure that we sprinkle the product as it goes out the door to be sure that there is enough nicotine to hook or addict smokers. We don't do that, and I've never heard of it being done.

In all of my years in this business world-wide, I have never known of a product-designed objective or goal that included even the notion of spiking the amount of nicotine in a cigarette to achieve a level that would hook or addict smokers.

I am pleased to be back before your committee, Mr. Chairman. We look forward to answering your questions.

Mr. WAXMAN. Thank you very much, Mr. Horrigan.

And, last, is it Mr. Taddeo?

TESTIMONY OF JOSEPH TADDEO

Mr. TADDEO. Taddeo. Thank you, Mr. Chairman. U.S. Tobacco is a leading manufacturer and producer of smokeless tobacco products, including moist snuff. U.S. Tobacco does not manufacture cigarettes. U.S. Tobacco's smokeless tobacco brands include Copenhagen, which is one of America's oldest registered brand names. It was introduced in 1822. Skol, our second largest selling brand was introduced in 1934.

Clearly, smokeless tobacco is not a new product. The use of smokeless tobacco has been a tradition in the United States since the 18th Century, predating branded cigarettes by over 100 years. In fact, smokeless tobacco products dominated the American tobacco market until the early 20th Century when cigarettes began to win wide public acceptance.

While today smokeless tobacco products are consumed throughout the United States, per capita consumption of smokeless tobacco in the 1990's is less than 25 percent of what it was at the turn of the century. As for U.S. Tobacco's products specifically, the makeup and manufacturing process for its smokeless tobacco brands is very similar to what it was at the turn of the century, regardless of the flavor, cut of the tobacco, form, or packaging.

I welcome, Mr. Chairman, this opportunity to set the record straight, with regard to the baseless claims made before this subcommittee on March 25th, concerning U.S. Tobacco's marketing practices.

Before turning to those matters, however, I will comment on allegations of manipulation or control of nicotine in tobacco products. U.S. Tobacco does not in any way manipulate the nicotine level in its tobacco products, nor does U.S. Tobacco take any action to control the nicotine content of its tobacco products before, during, or after the manufacturing process. In fact, an incidental effect of our manufacturing process is that the nicotine content of our smokeless tobacco products is less than that which occurs naturally in the tobacco.

Other than tobacco itself, the only material used in the manufacture of U.S. Tobacco's smokeless tobacco products which contains nicotine is denatured alcohol, which is purchased from a supplier as a carrying agent for the application of certain flavorings that do not dissolve in water.

The denatured alcohol that is used by U.S. Tobacco has been denatured by its manufacturer with small amounts of nicotine. The use of nicotine as a denaturant for alcohol which is to be used in the processing and manufacturing of tobacco products is specifically approved by the Bureau of Alcohol, Tobacco, and Firearms.

The amount of nicotine that might be contributed to our smokeless tobacco products through the use of this denatured alcohol in the manufacturing process is so miniscule as to be unmeasurable by standard laboratory methodologies.

Mr. Chairman, there were three serious allegations, made before this subcommittee on March 25th, regarding U.S. Tobacco's marketing practices. First, the allegation that U.S. Tobacco markets its smokeless tobacco products to persons under the age of 18.

The second allegations was that U.S. Tobacco has conducted scientific research for the purpose of, quote, "Creating and maintaining dependence among smokeless tobacco consumers." And, third, the allegation that U.S. Tobacco products are developed in the basis of some sort of graduating levels of nicotine.

As to the allegation that U.S. Tobacco markets these products to persons under the age of 18, that allegation is absolutely false. We strongly believe at U.S. Tobacco that those who enjoy our products should be adults. That is why U.S. Tobacco and other smokeless tobacco manufacturers have devoted substantial efforts and resources to discourage the sale of their products to minors.

Those efforts include support of State laws mandating 18 as a minimum purchase age for smokeless tobacco products. Programs to remind parents, retailers, and other adults that smokeless tobacco is an adult custom not intended for youth, a national campaign in publications such as U.S.A. Today, U.S. News and World Report to communicate our adults only policy.

I, too, am concerned reports indicating that some individuals have tried tobacco products including smokeless tobacco before they are adults. Research, conducted by others, indicates that advertising plays little, if any, role in the decision to begin using smokeless tobacco. That research indicates that a variety of factors, including family and friends appear to influence the decision to begin using various products, including smokeless tobacco.

It's noteworthy that according to a recent Department of Health and Human Services Report, use of smokeless tobacco by males under 18 years of age is low, decreasing, and very close to HHS's target or goal for the year 2000.

In 1992, Healthy People Review states that the reported use of smokeless tobacco, which is defined as use on at least one occasion in the last 30 days by 12 to 17 year old males decreased by 20 percent from 6.6 percent in 1988 to 5.3 percent in 1991.

Moreover, a survey published in October 1993, by the Substance Abuse and Mental Health Services Administration, reported that the use of smokeless tobacco by 12 to 17 year old males had further declined in 1992 to 4.8 percent, which is very close to the 4 percent target for the year 2000 in Healthy People 2000 Review.

Even though these trends are encouraging, they're not good enough. We're not going to rest until that figure is zero. U.S. Tobacco will continue its efforts, with other members of the industry, to discourage the sale of smokeless tobacco products to minors.

As for the allegation that U.S. Tobacco has conducted scientific research for the purpose of, and I quote, "Creating and maintaining dependence among consumers," that allegation is also false. The research in question was funded by U.S. Tobacco and other tobacco manufacturers.

However, it was neither intended or used by U.S. Tobacco to develop or manufacture smokeless tobacco products. The research was conducted 15 years ago by a group of independent researchers in the Department of Pharmacology at Pennsylvania State University College of Medicine.

For a number of years, the Pennsylvania State researchers had been interested in measuring extremely low levels of blood nicotine in tobacco consumers. And later they became interested in studying

the absorption by humans of nicotine from snuff and chewing tobacco. The Pennsylvania State researchers submitted a proposal for a 3 year study to pursue this matter.

Several tobacco companies, including U.S. Tobacco, funded this research during the period 1978 to 1981. The document relied upon to support this allegation and testimony relates to the research conducted at Pennsylvania State and was prepared by those researchers. The results of that research are reflected in a 1983 publication by the Pennsylvania State researchers in the journal *Pharmacology*, therefore, available in the public domain.

And this project, the funding of this research, was part of the smokeless tobacco industry's ongoing funding of research by independent investigators into questions relating to smokeless tobacco and health. Over the years, such funding has totalled more than \$25 million and has been acknowledged in nearly 800 scholarly articles and abstracts in a wide spectrum of scientific publications.

As to the allegation that U.S. Tobacco products are developed based on a graduating levels of nicotine, that allegation is false. As indicated in my written statement, the assertion that U.S. Tobacco manipulates its consumers and dictates which of its smokeless tobacco products those consumers ultimately choose to use are totally false.

The key to our product development process is developing products which appeal to the taste preferences of our consumers. The taste characteristics of our smokeless tobacco products, as with all tobacco products, are inherently complex. A number of factors interacting with each other affect the ultimate taste, including leaf blend, cut of tobacco, moisture, PH, flavors, and undoubtedly nicotine in the tobacco leaf.

U.S. Tobacco's success is based upon its unique ability to develop a wide selection of flavored products incorporating blends of tobacco that have been developed over hundreds of years ago.

What would I tell someone who said, you are using the graduation strategy to entice consumers to begin using low nicotine starters products, either through advertising or through nicotine dependence to graduate down to products of higher levels of nicotine? I'd tell them that our consumers do not conform to any so-called graduation theory.

The oral tobacco market does not work that way. There is no set pattern of brand switching among smokeless tobacco consumers. Smokeless tobacco consumers remain loyal to a single brand, or switch among a variety of brands according to their taste preferences, cut of tobacco, form, and packaging.

U.S. Tobacco's line of smokeless tobacco is based on the appreciation that we can not make any part of the public like and use any one of our products, if it does not appeal to their taste preferences.

Finally, Mr. Chairman let me address the general concerns which have been raised about the ingredients added to tobacco products. The identity of the ingredients in U.S. Tobacco's smokeless tobacco products is proprietary information. I can assure you, however, that U.S. Tobacco has a procedure in place for the evaluation of all available scientific information regarding the ingredients added to the tobacco in the manufacture of our products.

As a result of these evaluations, U.S. Tobacco believes that no ingredient, which it adds to tobacco in the manufacture of its products, would result in adverse health consequences to a consumer of our products.

Without revealing proprietary information, I can tell you that every ingredient which U.S. Tobacco adds to tobacco in the manufacture of our products is a common food item, or approved for use in food, with the one single exception of denatured alcohol which you've heard a lot about today, which is the only substance approved by the B.A.T.F. for use in the manufacture of tobacco products.

[Testimony resumes on p. 619.]

[The prepared statement of Mr. Taddeo follows:]

Moreover, there is no set pattern of brand switching among smokeless tobacco consumers. In short, smokeless tobacco consumers remain loyal to a single brand or switch among a variety of brands according to their preference for flavor, cut of tobacco, form and packaging. They do not conform to any so-called "graduation strategy".

U.S. Tobacco offers smokeless tobacco products suited to the tastes of those consumers who choose to make tobacco a part of their lifestyle. The variety of different U.S. Tobacco products reflects the wide range of consumer preferences in flavor, cut of the tobacco, form and packaging.

Conclusion

U.S. Tobacco does not in any way manipulate the nicotine levels in its smokeless tobacco products, nor does it control the nicotine content of its tobacco products before, during or after the manufacturing process.

Furthermore, U.S. Tobacco does not employ any marketing strategy based upon a theory that consumers can be enticed to begin using low-nicotine "starter" smokeless tobacco products, and subsequently caused to "graduate" to products with higher levels of nicotine.

Mr. WAXMAN. Thank you very much, Mr. Taddeo.

Mr. TADDEO. Thank you, Mr. Chairman.

Mr. WAXMAN. I and all my colleagues on the subcommittee appreciate your being here. Your participation in the subcommittee's ongoing investigation into tobacco is essential. This is, however, not going to be an easy day. We have a lot of substantive issues that we want to go into.

When we hear about scientific disputes, we have to listen to one expert versus another. But let me tell you there are some things that we know about from our own personal experience. I was a smoker and I know how addicted I was to smoking. I know how hard it was to quit. Each and every time I did try to quit, I had to do it a number of times before I was successful. So from my own personal experience, and from people I've known and talked to, your universal comment that cigarette smoking is not addictive just doesn't ring true.

Now, Mr. Johnston, I want to start with your testimony. You and your colleagues seem to have almost a fanatical insistence your products are the same as all these other products. This morning, in your written statement and in your oral statement, you have compared cigarettes to coffee, tea, sweets, sugar, warm milk, cheese, chocolate, and Twinkies. That's quite a list.

I'm struck by what I think is a calculated attempt to trivialize the devastating health impacts of your product. You and I both know that Twinkies don't kill a single American a year. They may not add to a healthy diet, but they don't kill. The difference between cigarettes and Twinkies, and the other products you mentioned is death. I'm sure you are aware that the Surgeon General and the American Medical Association estimate that cigarettes kill over 400,000 smokers every year. Putting aside your assertion that people accept this risk willingly, do you agree with this estimate?

Mr. JAMES JOHNSTON. Do I agree with the estimate of why the 35,000 people? I've heard from this subcommittee this morning three or four different numbers. My understanding of how that number is—

Mr. WAXMAN. If you don't agree with that number, then give us your number. How many smokers die each year from smoking cigarettes?

Mr. JAMES JOHNSTON. I will explain.

Mr. WAXMAN. No. I want you to answer. We have limited time.

Mr. JAMES JOHNSTON. I do not know how many.

Mr. WAXMAN. Do you disagree with the Surgeon General's estimate?

Mr. JAMES JOHNSTON. It is a computer generated number that makes—

Mr. WAXMAN. Mr. Johnston, I'm going to have to ask you to respond to my questions. Do you or do you not agree with the Surgeon General's estimate that over 400,000 smokers die—

Mr. JAMES JOHNSTON. I do not agree.

Mr. WAXMAN. OK. Do you know how many smokers die each year?

Mr. JAMES JOHNSTON. I do not know.