



# Admissions of the Tobacco Industry - Public vs Private Statements

## Nicotine and addiction

By the early 1960s, the British American Tobacco Company (BAT) and Brown and Williamson Tobacco Corporation (B&W) had developed a sophisticated understanding of nicotine pharmacology and knew that nicotine was pharmacologically addictive. Publicly, however, the tobacco industry has maintained and continues to maintain that nicotine is not addictive. The scientific community was much slower to appreciate nicotine addiction; the US Surgeon General did not conclude that nicotine was addictive until 1979.

### Surgeons General Reports

**1964:** *"The tobacco habit should be characterized as an habituation rather than an addiction"*<sup>1,2</sup>

**1979:** *"...it is no exaggeration to say that smoking is the prototypical substance-abuse dependency and that improved knowledge of this process holds great promise for prevention of risk"*<sup>3</sup>

**1988:** *"After carefully examining the available evidence, this Report concludes that:*

- *Cigarettes and other forms of tobacco are addicting*
- *Nicotine is the drug in tobacco that causes addiction*
- *The pharmacologic and behavioural processes that determine tobacco addiction are similar to those that determine addiction to drugs such as heroin and cocaine"*<sup>2</sup>

### B&W/BAT research results

*"There is increasing evidence that nicotine is the key factor in controlling, through the central nervous system, a number of beneficial effects of tobacco smoke, including its action in the presence of stress situations. In addition, the alkaloid (nicotine) appears to be intimately connected with the phenomena of tobacco habituation (tolerance) and/or addiction"*

Memorial Institute in Geneva, Switzerland, 1963 {1200.20}.

*"Chronic intake of nicotine appears to restore normal physiological functioning of the endocrine system, so that ever-increasing dose levels of nicotine are necessary to maintain the desired action. ...This unconscious desire explains the addiction of the individual to nicotine."*

From A Tentative Hypothesis on Nicotine Addiction, an essay written by scientists at Battelle and distributed to senior executives at BAT and B&W. 1963 {1200.01, p1}.

### B&W/BAT private statements

*"Moreover, nicotine is addictive. We are, then, in the business of selling nicotine, an addictive drug effective in the realm of stress mechanisms."*

Addison Yeaman, Vice President and general counsel, B&W, 1963 {1802.05, p.4}.

### Tobacco Industry public statements

*"I do not believe that nicotine is addictive...nicotine is a very important constituent in cigarette smoke for taste."*

Thomas Sandefur, Chairman and CEO, B&W, testifying before the Health and Environment Subcommittee, Energy and Commerce Committee, House of Representatives, June 23, 1994.

### Nicotine and Addiction: Low Tar/Low Nicotine cigarettes and the phenomenon of smoker compensation

Smokers compensate for the lack of nicotine in low tar/low nicotine cigarettes by puffing more frequently, by increasing the depth or duration of smoke inhalation, by smoking more cigarettes per day, and by smoking cigarettes to a shorter butt length. This means that smokers of low tar/low nicotine cigarettes are exposed to more tar and other harmful chemicals that would be indicated by an analysis of the cigarette smoke. This phenomenon, known as smoker compensation, was acknowledged internally in the tobacco industry by the early 1970s but was not appreciated in the scientific community until the 1980s.

**Surgeons General reports**

- 1966:** *"The preponderance of scientific evidence strongly suggests that the lower 'tar' and nicotine content of cigarette smoke, the less harmful would be the effect."*<sup>4</sup>
- 1979:** *"[The public] should be warned that, in shifting to a less hazardous cigarette, they may in fact increase their hazard as they begin smoking more cigarettes or inhaling more deeply"*<sup>3</sup>
- 1981:** *"Smokers may increase the number of cigarettes they smoke and inhale more deeply when they switch to lower yield cigarettes. Compensatory behavior may negate any advantage of the lower yield product or even increase the health risk."*<sup>4</sup>

**B&W/BAT research results**

*"...whatever the characteristics of cigarettes as determined by smoking machines, the smoker adjusts his pattern to deliver his own nicotine requirements."*

Minutes from BAT's Group Research and Development (R&D) conference held in Duck Key, Fla, 1974, taken by S.J.G. (S.J. Green of BAT R&D) {1125.01, p.2}.

*"Compensation study conducted by Imperial Tobacco Co., a BATCo affiliate, [shows that a smoker] adjusts his smoking habits when smoking cigarettes with low nicotine and TPM [total particulate matter] to duplicate his normal cigarette nicotine intake."*

From document titled "Chronology of Brown & Williamson Smoking & Health Research," regarding research conducted in 1975. Chronology dated 1988 {1006.01, p. 27}

**B&W/BAT internal statements**

*"In most cases, however, the smoker of a filter cigarette was getting as much or more nicotine and tar as he would have gotten from a regular cigarette."*

Ernest Pepples, Vice President and general counsel, B&W, 1976 {2205.01, p.2}

**Tobacco industry public statements**

*"All the fuss about smoking got me to thinking I'd either quit or smoke True."*

*I smoke True."* Advertisement for Lorillard's True cigarettes in Ms. Magazine, October 1975

*"I like to smoke, and what I like is a cigarette that isn't timid on taste. But I'm not living in some ivory tower. I hear the things being said against high-tar smoking as well as the next guy. And so I started looking. For a low-tar smoke that had some honest-to-goodness taste..."* Advertisement for Vantage cigarettes in Time magazine, November 9, 1977, pp.86-87

*"The tobacco industry cannot find definitive evidence that tar above a certain level is harmful, and below it is not."*

*At the same time, they are responding to what we might call the 'scare market.'"*

William Kloeppfer, Jr, Tobacco Institute spokesman, in a New York Times articles, October 30, 1976<sup>5</sup>.

## Role of Tobacco Industry Research Committee/Council for Tobacco Research

The Tobacco Industry Research Committee (TIRC), later renamed the Council for Tobacco Research-USA Inc (CTR), was created by US tobacco companies in 1954. The tobacco industry has publicly claimed that TIRC/CTR is an independent organization that funds unbiased research into the health effects of smoking. Internally, however, tobacco industry representatives have stated that TIRC/CTR was created for public relations purposes and that it later fulfilled political and legal roles.

**B&W/BAT private statements**

*"Originally, CTR was organized as a public relations effort... The research of CTR also discharged a legal responsibility... Finally the industry research effort has included special projects designed to find scientists and medical doctors who might serve as industry witnesses in lawsuits or in a legislative forum."*

Ernest Pepples, Vice President and general counsel, B&W, 1976 {2010.02, p.2}

**Tobacco industry public statements**

*"From the outset, the Tobacco Industry Research Committee has made clear that the object of its research program is to encourage scientific study for facts about tobacco use and health. Its position is that research will help provide the knowledge about lung cancer and heart disease for a full evaluation of all factors being studied in connection with these diseases."* Public relations document, circa 1963 {1903.03, p.1}

*"The Council for Tobacco Research-USA Inc. is the sponsoring agency of a program of research into questions of tobacco use and health... The Council awards research grants to independent scientists who are assured complete scientific freedom in conducting their studies. Grantees alone are responsible for reporting or publishing their findings in the accepted scientific manner - through medical and scientific journals and societies."*<sup>6</sup>

## Smoking & Disease, 1960's

By the early 1960s, the scientific community had determined that smoking is causally related to lung cancer and probably related to heart disease. Results from tobacco industry laboratories supported these conclusions, but the tobacco industry publicly denied that the links had been proven.

### Surgeons General reports

**1964:** *"Cigarette smoking is causally related to lung cancer in men; the magnitude of cigarette smoking far outweighs all other factors. The data for women, though less extensive, point in the same direction."*

*"Cigarette smoking is the most important of the causes of chronic bronchitis in the United States, and increases the risk of dying from chronic bronchitis."*

*"Male cigarette smokers have a higher death rate from coronary artery disease than non-smoking males, but it is not clear that the association has causal significance".*

*"Cigarette smoking is a significant factor in the causation of cancer of the larynx [and] an association exists between cigarette smoking and cancer of the urinary bladder in men."*<sup>1</sup>

### B&W/BAT research results

*"Scientists with whom I talked [at BATs laboratories in Great Britain] were unanimous in their opinion that smoke is weakly carcinogenic under certain conditions and that efforts should be made to reduce this activity."*

Dr R. B. Griffin, head of R&D, B&W, 1965 {1105.01, p.2}

### B&W/BAT private statements

*"At the best, the probabilities are that some combination of constituents of smoke will be found conducive to the onset of cancer or to create an environment in which cancer is more likely to occur."*

Addison Yeaman, Vice President and general counsel, B&W, 1963 {1802.05, p.1}.

### Tobacco industry public statements

*"The smoking of tobacco continues to be one of the subjects requiring study in the lung cancer problem as do many other agents and influences in modern living. Science does not yet know enough about any suspected factors to judge whether they may operate alone, whether they may operate in conjunction with others, or whether they may affect or be affected by factors of whose existence science is not yet aware."*

Public relations document, circa 1963 {1903.03, p.3}

## Smoking and Disease, 1970's

Throughout the 1970s, B&W and BAT (and probably other tobacco companies as well) privately engaged in a massive research campaign to identify and remove any toxic compounds identified in tobacco smoke. Privately, B&W and BAT scientists concluded there was no scientific controversy about smoking being dangerous. Their goal was to create a 'safe' cigarette. However, their research showed that there were so many different toxic compounds in tobacco smoke that it would be very difficult to remove them all. Publicly the industry continued to deny that smoking had been proven harmful to health.

### Surgeons General reports

**1972** *"Tobacco use is associated with increased risk of coronary heart disease; cerebrovascular disease (stroke); aortic aneurysm, peripheral vascular disease; chronic obstructive bronchopulmonary disease (COPD); cancers of the lung, lip, larynx, oral cavity, esophagus, urinary bladder, and pancreas; and gastrointestinal disorders such as peptic ulcer disease. In addition, maternal smoking during pregnancy retards fetal growth."*<sup>7</sup>

**1979** *"The longer a smoker smokes, the higher the risk of dying prematurely. Death rates are higher for smokers who start smoking at younger ages and for smokers who inhale. Life expectancy at any given age is significantly shortened by cigarette smoking. Cigar and pipe smoking also increase the risk of premature death. Although death rates are particularly high among cigarette smokers for such diseases as lung cancer, chronic obstructive lung disease, and cancer of the larynx, coronary heart disease is the chief contributor to the excess mortality among cigarette smokers."*<sup>3</sup>

#### **B&W/BAT research results**

*"Carbon monoxide [CO] will become increasingly regarded as a health hazard for smokers. The methods of control available are ventilation, diffusion and the choice of smoking materials. But the inverse relationship of polycyclic aromatics and carbon monoxide is still observed, e.g. lithium hydroxide reduced CO substantially but is coupled with an increase in tumorigenic activity."*

Minutes from the Group Research & Development Conference held in Duck Key Fla, 1974, taken by S. J. Green of BAT R&D {1174.01, p.1}

#### **B&W/BAT private statements**

*"There has been no change in the scientific basis for the case against smoking. Additional evidence of smoke dose related incidence of some diseases associated with smoking has been published. But generally this has long ceased to be an area for scientific controversy."*

Minutes from BATs Group Research & Development Conference held in Sydney, Australia, 1978, taken by S.J. Green of BAT R&D {1174.01, p.1}

#### **Tobacco industry public statements**

*"Taking all the above into consideration, we believe there is sound evidence to conclude that the statement 'cigarettes cause cancer' is not a statement of fact but merely a hypothesis." [emphasis in original] B&W public relations document, 1971 {21106.06, p.10}*

*"As for the lack of research on the "harmful" effects of smoking, the fact is there is good reason to doubt the culpability of cigarette smoking in coronary heart disease."*

Ross R. Millhiser, President, Philip Morris Inc, in *New York Times* opinion editorial, January 12, 1978<sup>8</sup>

*"There is still no basic answer to why people who smoke fall victim to some diseases in greater numbers than people who don't smoke."*<sup>9</sup>

Walker Merryman, Tobacco Institute spokesman, in *New York Times* article, September 22, 1979<sup>9</sup>

## **Smoking and Disease, 1980's**

B&W and BAT continued their efforts to develop a 'safer' cigarette during the 1980s. The focus of their research was minimizing the 'biological activity', or carcinogenic potential of their products. Unfortunately, this proved more difficult than expected. In addition, as the scientific community noted, even if less carcinogenic cigarettes could be designed, these cigarettes would still cause some cancer, as well as heart disease and other non-cancer diseases.

#### **Surgeons General reports**

**1981** *"Smoking cigarettes with lower yields of 'tar' and nicotine reduces the risk of lung cancer and, to some extent, improves the smoker's chance for longer life, provided there is no compensatory increase in the amount smoked. However, the benefits are minimal in comparison with giving up cigarettes entirely."*<sup>4</sup>

**1989** *"Smoking is responsible for more than one of every six deaths in the United States. Smoking remains the single most important preventable cause of death in our society."*<sup>10</sup>

#### **B&W/BAT research results**

*"Cigarette brands can be readily distinguished [in terms of mutagenicity as judged by an Ames test]. This is in contrast with the earlier mouse skin painting results. An unfortunate side-effect is that the sensitivity increase in probability of an Ames League Table appearing. A further unfortunate examination is that, to date, it is not uncommon for BAT brands to have a higher result [i.e. greater mutagenicity] than those from the opposition."*

Minutes from BAT biological Conference held in Southampton, England, 1984, author unknown {1181.06, p.1}

**B&W/BAT private statements**

*"Despite intense research over the past 25 years, the biological activity of smoke remains a major challenge. In particular, it is not known in quantitative terms whether the smoke from modern low and ultra-low products has a lower specific biological activity than that from previous high delivery products. Nor is it clearly established...what are the main factors that influence biological [carcinogenic] activity."*

Minutes from BAT Research Conference held in Montebelloe, Quebec, 1982 prepared by L.C.F. Blackman of BAT R&D {1179.01, p.4}

**Tobacco industry public statements**

*"Cigarette smoking has not been scientifically established to be a cause of chronic diseases, such as cancer, cardiovascular disease, or emphysema. Nor has it been shown to affect pregnancy outcome adversely."*

Sheldon Sommers, MD, scientific director of the CTR in congressional testimony, March 1983

**Mouse skin painting experiments**

Both the tobacco industry and the general scientific community have relied on mouse skin painting experiments to evaluate the carcinogenicity of elements in tobacco smoke. Publicly, however, the tobacco industry has criticized the validity of these tests.

**Surgeons General reports**

**1964** *"Induction of cancer by a compound of one species does not prove that the test compound would be carcinogenic in another species under similar circumstances. Therefore, the tests for carcinogenicity in animals can provide only supporting evidence for the carcinogenicity of a given compound or material in man. Nevertheless, any agent that can produce cancer in an animal is suspected of being carcinogenic in man also."<sup>1</sup>*

*"Almost every species that has been adequately tested has proved to be susceptible to the effect of certain polycyclic aromatic hydrocarbons identified in cigarette smoke and designated as carcinogenic on the basis of tests in rodents. Therefore, one can reasonably postulate that the same polycyclic hydrocarbons may also be carcinogenic in one or more tissues of man with which they come in contact."<sup>1</sup>*

**B&W/BAT research results**

*"Studies in instant [fresh] condensate are showing a biological activity towards mouse-skin of the same order as that of stale condensate, suggesting that the biological activity is not time-dependent. The clear possibility of producing cigarettes with reduced mouse-skin biological activity therefore becomes of greater importance and a research solution to the whole problem is more likely."*

Minutes from BAT Research Conference held in Hilton Head Island, SC, 1968, prepared by S.J. Green of BAT R&D {1112.01, p.1}

*"The meeting agreed that it would be worthwhile to make a cigarette with lower biological activity on mouse skin painting, provided this did not adversely affect the position with respect to irritation and other factors. It was recognized that this implied certain assumptions about the relevance of mouse skin painting."*

Minutes from BAT R&D Conference held in Montreal, Quebec, 1967, author unknown {1165.02, p3}

**B&W/BAT private statements**

*"Historically, bioassay experiments were undertaken by the industry with the object of clarifying the role of smoke constituents in pulmonary carcinogenesis. The most widely used of these methods [was] mouse-skin painting...(a) in the foreseeable future, say five years, mouse-skin painting would remain as the ultimate court of appeal on carcinogenic effects."*

Minutes from BAT Research Conference held in Kronberg, Germany, 1969, prepared by S.J. Green of BAT R&D {1169.01, pp. 2-4}

## Tobacco industry public statements

*"Much of the experimental work involved mouse-painting or animal smoke inhalation experiments... [t]hese condensates are artificially produced under laboratory conditions and, as such, have little, if any, relation to cigarette smoke as it reaches the smoker. Further, the results obtained on the skin of mice should not be extrapolated to the lung tissue of the mouse or any other species. Certainly such skin results should not be extrapolated to the human lung."*

B&W public relations document, 1971 [emphasis in original] {2110.06, pp 6-7}

## Environmental Tobacco Smoke

During the 1970s and 1980s, scientific evidence began to suggest that exposure to environmental tobacco smoke (ETS) could cause adverse health effects, such as lung cancer and cardiovascular disease, in nonsmokers. B&W and BAT responded by privately attempting to create a product that produced less hazardous sidestream smoke. Publicly, however, the industry has denied that passive smoking has been proven to be harmful to health.

## Surgeon general's reports

**1972** *"1. An atmosphere contaminated with tobacco smoke can contribute to the discomfort of many individuals."*

*2. The level of carbon monoxide attained in experiments using rooms filled with tobacco smoke had been shown to be equal, and at times to exceed, the legal limits for maximum air pollution permitted for ambient air quality...*

*3. Other components of tobacco smoke, such as particulate matter and the oxides of nitrogen, have been shown in various concentrations to affect adversely animal pulmonary and cardiac structure and function. The extent of the contribution of these substances to illness in humans exposed to the concentrations present in an atmosphere contaminated with tobacco smoke is not presently known."<sup>1</sup>*

**1982** Epidemiological studies in ETS and lung cancer *"raise the concern that involuntary smoking may pose a carcinogenic risk to the nonsmoker."<sup>2</sup>*

**1986** *"This review leads to three major conclusions:*

*1. Involuntary smoking is a cause of disease, including lung cancer, in healthy nonsmokers.*

*2. The children of parents who smoke compared with the children of nonsmoking parents have an increased frequency of respiratory infections, increased respiratory symptoms, and slightly smaller rates of increase in lung function as the lung matures.*

*3. The simple separation of smokers and nonsmokers within the same air space may reduce, but does not eliminate, the exposure of nonsmokers to environmental tobacco smoke."<sup>3</sup>*

## B&W/BAT research results

*"SIDESTREAM RESEARCH AND DEVELOPMENT*

*Strategic objectives remain as follows:*

*Develop cigarettes with reduced sidestream yields and/or reduced odour and irritation*

*Conduct research to anticipate and refute claims about the health effects of passive smoking."* Summary of BATs Group Research and Development Centre Activities, 1984 {1181.12, p.1}

## B&W/BAT private statements

*"We must get hard data both to help counter anti-smoking attacks, and to support the design of future products... we should keep within BAT: animal results on sidestream activity thoughts on the biological activity [carcinogenicity] of sidestream [smoke] research findings on the consumer annoyance aspects of environmental [tobacco] smoke - since these have potential commercial value."*

Minutes from BAT Research Conference held in Montebello, Quebec, 1982, prepared by L.F.C. Blackman of BAT R&D {1179.01, p.7}

## Tobacco industry public statements

*"Evidence relating ETS to health effects is scanty, contradictory and often fundamentally flawed... More and better research needs to be done."<sup>26</sup>(p1) Exposure to environmental tobacco smoke has not been shown to cause lung cancer in nonsmokers... Such exposure has not been shown to impair the respiratory or cardiovascular health of nonsmoking adults or children, or to exacerbate pre-existing disease in these groups, or to cause 'allergic' symptoms on a physiological basis."*

The material included in this fact sheet is extracted from Glantz, S.A., Barnes, D.E., Bero, L., Hanauer, P., Slade, J., (1995) " *Looking through a Keyhole at the Tobacco Industry; The Brown & Williamson Documents*" JAMA, vol 274, No. 3, July 19

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