Physicians for a Smoke-Free Canada

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The History of The Canadian Safer Cigarette Program

INSIDE

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Reducing Harm Or Increasing Profits?

Reduced carcinogens. Reduced nitrosamines. In the year 2002, Imperial Tobacco Canada (ITL), Philip Morris, and Vector have all either released or stated that release was imminent for new cigarette brands with a claim of lowered toxicity. But can these claims be trusted? What is the larger context behind the development of these products?

Safer cigarettes?

In the tobacco company documents in the Minnesota and Guildford collections, there is documentation of the development of a research program into "safer" cigarettes. The Canadian company had been conducting research at a large scale on tobacco, including a number of projects developed to produce a "safer" cigarette including Janus, Rio, EMN, and Day.

A closer look at these projects demonstrate that the driving force behind the safer cigarette program has been the pursuit of increasing sales of cigarettes. Public perception that cigarettes are dangerous has seriously affected the revenue of the tobacco companies: changing that perception from the reality promises to bring a whole new generation into the tobacco market.

The projects described here follow the changes within ITL and British American Tobacco (BAT) from the discovery of how dangerous their products really were, to the hope of counteracting that harm, and finally to the realization that making people believe cigarettes are safe is much more achievable than actually making the cigarette safer.

The Imperial Tobacco research program became a program concerned with providing an impression of safety to restore the social acceptability of smoking, combating the social pressure to quit because of health reasons. The development of a "safer" cigarette in Canada was research into improving the social acceptability of smoking, capitalizing on real health concerns with insubstantial benefits.

We should be cautious of any cigarette product that claims safety , "reduced carcinogenicity" or some other variation on the theme. The documents suggest that the only benefit will be to the coffers of the tobacco companies themselves.

"Most of the modifications tested had relatively small effects on specific carcinogenic activity"

In The Beginning...

In the beginning of "safer" cigarette research program, there was tremendous hope for a safe cigarette and the resultant advantages from being the only tobacco company with a product that did not kill its customers. In the 1950's and 1960's, research focused on identifying known toxic and carcinogenic substances and reducing them through filtering.

Chemicals were isolated from the smoke: Benzopyrene, arsenic, tobacco-associated nitrosamines, coumarin, and a host of other known dangerous substances.

Research continued steadily, painstakingly identifying and measuring the thousands of chemicals in tobacco smoke.

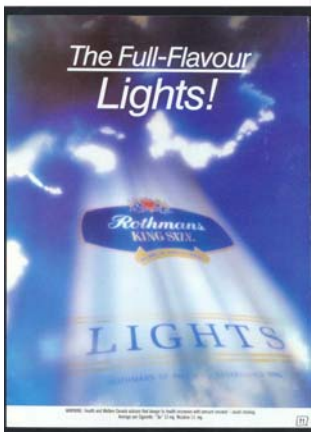
However, it quickly became clear that filters were not a solution. Any filter that was effective enough would also block the nicotine along with the rest of the smoke.

Sufficient gross reductions in tar and nicotine level for the tobacco companies was not a possibility. However, if the most dangerous chemicals could be reduced without changing the properties of the cigarette, the preferred solution would be at hand.

Project Janus: Identifying Carcinogens

In a 1968 document, the goal of the safer cigarette program was the production of a "Health-oriented cigarette which has minimal biological activity; for example, one which would yield a near zero reading in a mouse skin painting test."

Biological activity, the industry codename for "cancer" was tested for, by scientists both within and outside of the tobacco companies by taking the condensate from the cigarette and applying it, "painting", to the shaved backs of mice. If tumours developed, then the substance was shown to have caused cancer.



Health and purity sell

In 1965, Janus began as a long-term research program to determine the carcinogenic components of tobacco smoke. The cigarettes used in Project Janus were specially produced to test various design features of cigarettes.

Some research focused on biological testing of certain tobacco extraction and reconstitution processes, and at the biological activity of chemically treated tobacco sheets. Most of the modifications tested had relatively small effects on specific carcinogenic activity.

For instance, although BATflake, a reconstituted tobacco product, was found to be more tumorgenic than the control cigarettes, as was PCL, the reconstituted sheet developed by Imperial Tobacco, both the tested cigarette and the control produced cancerous tumours. All of the tests demonstrated that the modified cigarettes could cause cancer, albeit possibly to a greater or lesser degree than unmanipulated tobacco.

Project Janus demonstrated that BAT and ITL knew that cigarettes were dangerous, that specific component of cigarettes were dangerous, and that modifying the tobacco was not, at least as of yet, a solution.

PROJECT RIO: MANIPULATING MUTAGENS

Project Rio marks the pessimistic shift in attitude towards biological research. It was not intended to create a safer cigarette, or to determine the danger of the product, but to compete in the marketplace.

Rio was a huge international project that tested every major cigarette brands with the Ames test, a quick test for mutagenicity developed in California in the 1970's. BAT scientists were initial uninterested in Ames testing as it was useful for screening, but potentially misleading if used for other purposes. More importantly, BAT already had the Project Janus results for carcinogenicity.

Nevertheless some Ames testing was done just in case. The results were discouraging, not because it provided BAT and ITL with new information, but because it could affect marketing: "From the results of cigarettes evaluated to date it is clear that cigarette brands can be readily distinguished. This is in contrast with the earlier mouse-skin-painting results. An unfortunate side effect is that the sensitivity increases the 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 than those from the opposition."

The goal of Rio was to be able to "determine those parameters which affect mutagenicity of smoke condensate, and, by monitoring market brands for condensate mutagenicity on a periodic basis, to help ensure that ITL brands rank favorably." A cigarette was even designed to produce a low score in the event of regulation.

It became more important to have products that satisfy the health concerns of smokers rather than a product that was legitimately safe. It was more important to have a cigarette that could be marketed as safer, using a league table for instance, than a cigarette that would do less damage. Maintaining the social acceptability of cigarettes was a project that was much more conceivable than producing cigarettes that did not kill.

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PROJECT EMN: MODIFIED FOR SAFETY?

Project EMN (Eliminate, Modify, Neutralize) was proposed by scientists at ITL in 1985.

EMN would remove toxics selectively from the cigarettes as they were identified by organizations such as the Royal College of Physicians or the Surgeon General. This would, they supposed, reduce the specific toxicity of cigarette smoke.

The outcome of Project EMN would be a cigarette modified to respond to pressures from health agencies, which would allow the cigarette to be approved as safe by independent agencies. This was important because the companies of BAT had agreed not to overtly promote cigarettes as safer or healthier as that would be an admission of danger. An outside agency, through its regular testing procedure, could notice the lack of hazardous chemicals and would then publicize the "safety" of the cigarette. BAT would not have to be involved in the decision of either danger or safety. The role of the industry would simply be modification.

The CEO of BAT, Patrick Sheehy commissioned a report on EMN. The report cast doubts on ITL's

Project EMN (continued)

assumption that authorities would be able to underwrite the product as safe as there was no acceptable threshold limits for many of the carcinogenic chemicals in smoke. The general consensus of industry scientists was that it was impossible to produce a genuinely safe cigarette.

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Sheehy shut down EMN. Sheehy didn't care whether a safe cigarette was possible or not. The real issue was making smokingmore socially accepted: "The BAT objective is and should be to make the whole subject of smoking acceptable to the authorities and to the public at large since this is the real challenge facing the Industry." Not safety, Sheehy said, acceptability. It was more important to seem safe, than be safe.

Project Day—It's the Marketing, Stupid

At around the same time as Project EMN was being rejected by BAT, the marketing department of ITL was conducting a large survey that examined why people quit and why or why not they stayed quitters. It turned out that the main reasons for quitting were that people though that smoking was dirty and dangerous. The marketing department reasoned that if smoking was more acceptable the size of the market would increase dramatically.

The marketing department determined if people thought that cigarettes were safer, people would find them more acceptable, and smoke more whether they were actually safer or not.

Marketing safer cigarettes takes many forms.

Project Day was to develop a cigarette in which the toxic chemicals were removed from tobacco and the nicotine replaced—the concept that people most accepted as a safe cigarette. The idea of a modified cigarette proposed by Day is surprisingly similar to the modified cigarette proposed by project EMN. However, Day, unlike EMN was concerned with cigarettes that people thought were safer, rather than were actually safer. It was about marketing, not science.

Day became the most important Canadian project, with the equivalent of four scientists at Imperial working full time on the project, not including assistants and administration.

It is likely that Project Day is still a functional program. In testimony given at court in November of 2000, Don Brown suggested that research was continuing into "a safer cigarette," research that is likely Day. ITL has also announced that it is planning to release a reduced nitrosamine cigarette, a product which is very likely an outcome of the work of Project Day.

Questions About Safer Cigarettes

Q: Is the safer cigarette program part of the 'new' tobacco company?

A: No, ITL and BAT have been working on developing a safer cigarette since at least the 1960's. That they admit to such a program now has more to do with the changes in tobacco control within the last decade than any newfound moral responsibility.

Q: What could be wrong with a safer cigarette ?

A. There is no proof that a safer cigarette actually causes less harm to smokers. These documents suggest that any labelling such as "reduced carcinogens" should especially not be regarded as being "safer." ITL and BAT demonstrate that their research program is more concerned with changing the perception that cigarette are dangerous than the actual harm done by the tobacco. There is no evidence to suggest that other companies think differently. "Reduced Harm" cigarettes should be regarded as a marketing ploy and an attempt to convince more people to smoke.

Q: But wouldn't it be better to have less carcinogens or toxins in cigarettes no matter what?

A. Potentially, reducing the carcinogens or other substances could make cigarettes slightly less harmful than regular cigarettes for an individual; however, the cigarettes would still be dangerous and would still be addictive. If more people were attracted to smoke, or less tempted to quit , then **more** people would be harmed by cigarettes. Clearly, this situation brings no public health benefit. The only safe cigarette is one that isn't

Don't Quit, Switch. is the real message with safer cigarettes

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