How Tobacco Companies Gets & Keeps Your Patients Hooked: An Update

Disclosure Statement

•Research support received: National Cancer Institute, New York State Department of Health, the Robert Wood Johnson Foundation, the American Legacy Foundation, and the Flight Attendant Medical Research Foundation.

•Speaker's fees received: Georgetown University, Dartmouth University, John Hopkins University, Clearway Minnesota, the Substance Abuse Prevention Research Program, the Ontario Ministry of health, Novartis Corporation, and Pfizer Corporation. He has received payment for grant reviews for the National Cancer Institute, Flight Attendant Medical Research Institute, the Robert Wood Johnson Foundation, and the Canadian Partnership Against Cancer.

•Payment received: paid expert witness for plaintiffs in litigation against the tobacco industry.

Objectives

1. Recognize how tobacco industry marketing influences people to start and keep smoking; and

2. Describe how they (as health care clinicians) can incorporate knowledge of tobacco industry marketing practices into their cessation interventions.

What is the goal of product design?

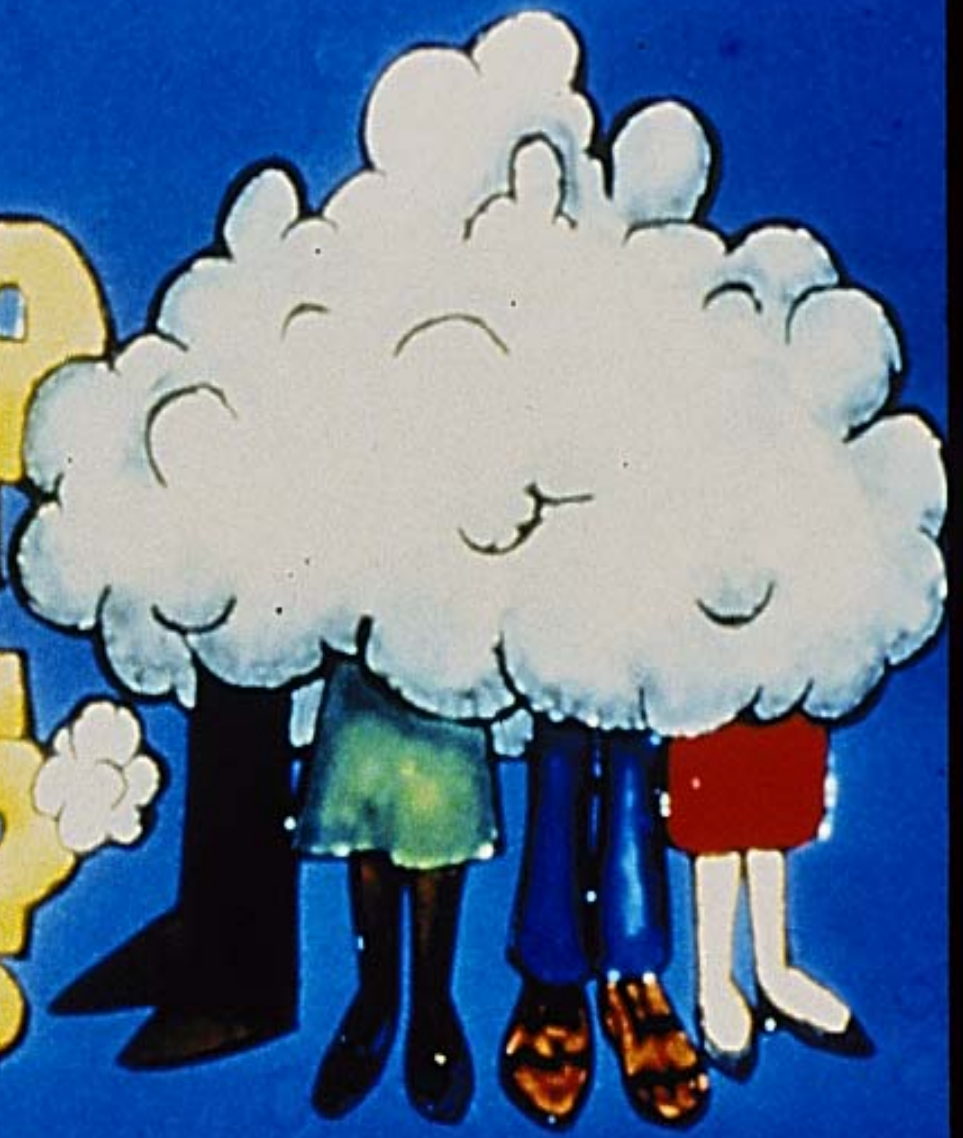
Money

Money

& more

Money

WHY DO PEOPLE SMOKE?



Doc Doctors Ought to Care

1953

FORWARDING MEMORANDUM

To Members of the Planning Committee:

Attempt has been made to organize this material in such a fashion that you can get the gist of it all in half an hour, by quick skimming; then you can go back to study what interests you most.

To reduce the longer enclosures to mere extracts might omit (through some blind spot in the mind that tried to edit the material for you) the very item where you yourself will find the important key to the problem.

This is, of course, the most challenging problem our organization

The attitude of the men we must directly deal with in the industry is at once interesting, and important for us to understand. That is why notes on the four interviews with "research directors" are given at some length. You'll get from them little real information about lung cancer, pro or con; but you'll find some mighty interesting opinions. One of the men said, "It's fortunate for us that cigarettes are a habit they can't break."

STRICTLY PRIVATE AND CONFIDENTIAL

July 17, 1963

IMPLICATIONS OF BATTELLE HIPPO I & II
AND
THE GRIFFITH FILTER

Moreover, nicotine is addictive.

We are, then, in the business of selling nicotine, an addictive drug effective in the release of stress mechanisms. But cigarettes - we will assume the Surgeon General's Committee to say - despite the beneficent effect of nicotine, have certain unattractive side effects:

1) They cause, or predispose to, lung cancer.

2) They contribute to certain cardiovascular disorders.

3) They may well be truly causative in emphysema, etc., etc.

PM 1969 – Why do people smoke?

First, we have to break the question into its two parts: 1) Why does one begin to smoke? and 2) Why does one continue to smoke?

There is general agreement on the answer to the first part. The 16 to 20-year old begins smoking for psychosocial reasons. The act of smoking is symbolic; it signifies adulthood, he smokes to enhance his image in the eyes of his peers. But the psychosocial motive is not enough to explain continued smoking. Some other motive force takes over to make smoking rewarding in its own right. Long after adolescent preoccupation with self-image has subsided, the cigaret will even preempt food in times of scarcity on the smoker's priority list.

We are of the conviction, in view of the foregoing, that the ultimate explanation for the perpetuated cigaret habit resides in the pharmacological effect of smoke upon the body of the smoker, the effect being most rewarding to the individual under stress.

Philip Morris (1972)

"No one has ever become a cigarette smoker by smoking cigarettes without nicotine"

The New York Times

opyright © 1994 The New York Times NEW YORK, FRIDAY, APRIL 15, 1994 · 75 cents beyond the greater New

Tobacco Chiefs Say Cigarettes Aren't Addictive

Stephen Crowley/The New York Times

Top executives from seven tobacco companies, at a hearing on smoking. They are identified on page A20.

Why they lied…

TI memo, 1980

September 9, 1980

MEMORANDUM

TO : Mr. Kloepfer

FROM: Mr. RK Knopick

Attached please find the technical review of the conference which led to Victor Cohn's "surprise" story of 8/30 that the National Insti-

I'm told, that the entire matter of addiction is the most potent weapon a prosecuting attorney can have in a lung cancer/cigarette case. We can't defend continued smoking as "free choice" if the person was "addicted."

the rise in marijuana use.

In NL 188, we quoted Pollin's predecessor, Dr. Robert DuPont: "Cigarette smoking is more addictive than using heroin, hooking two-thirds of the people who ever smoke."

ϕ000135335

Isn't the question twofold?

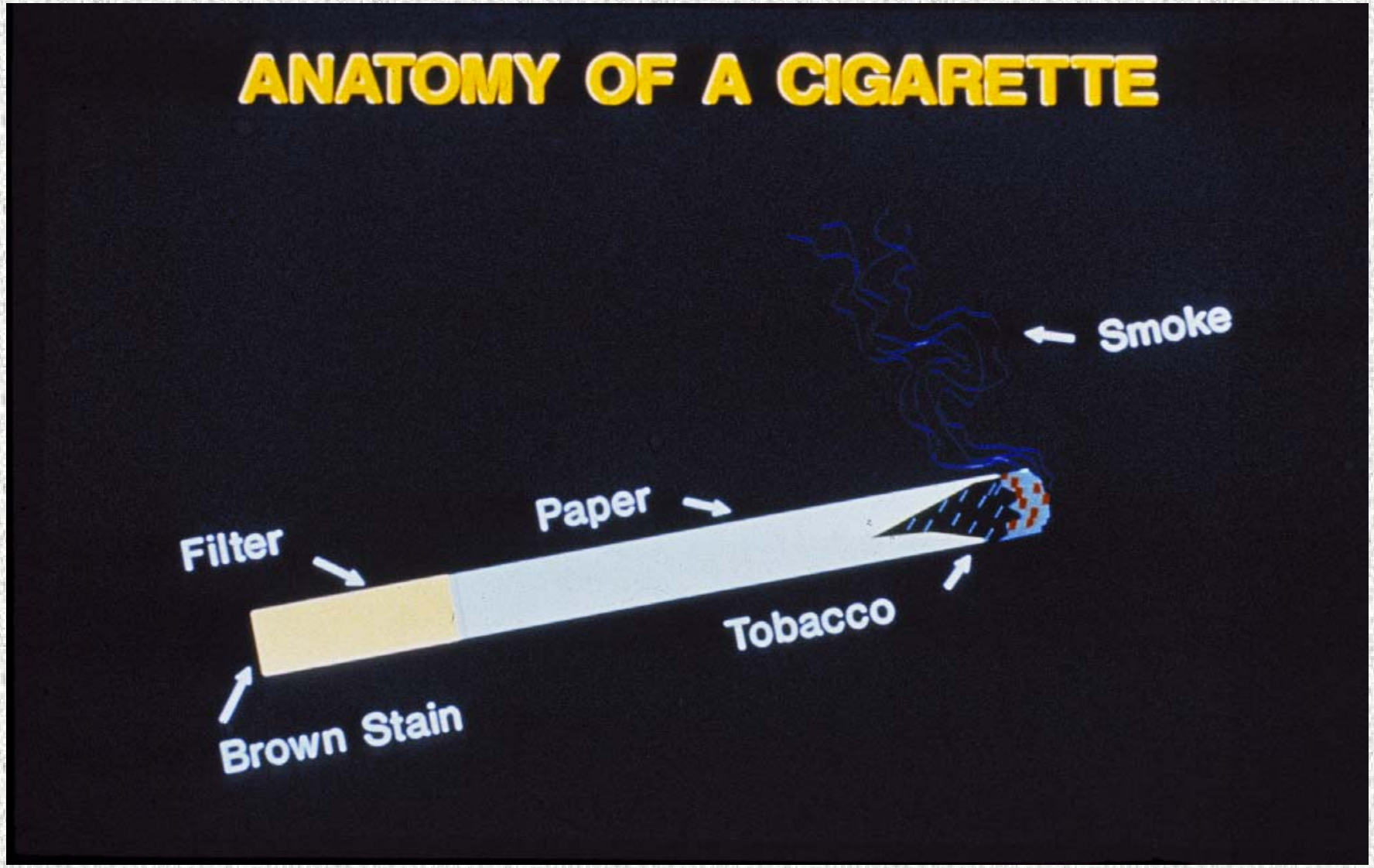
Did TI miss a chance to attend and present information at NIDA's 1979 meeting which developed the "addictive" language?

Did TI see ADAMHA's newsletter and was it therefore better prepared to respond when this matter became public?

Constrained Choice

Product design is all about the …

Nicotine

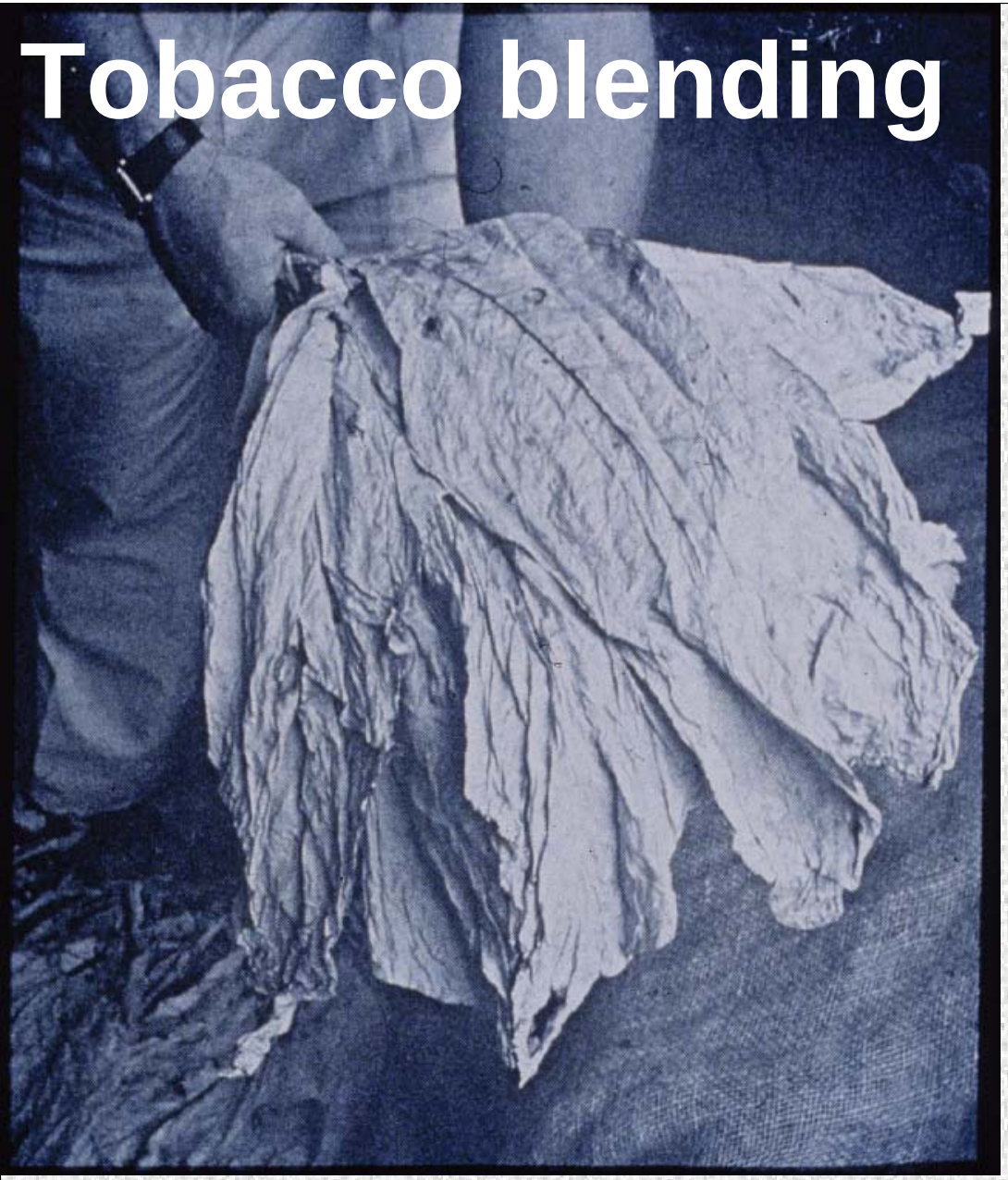


Controlling nicotine delivery

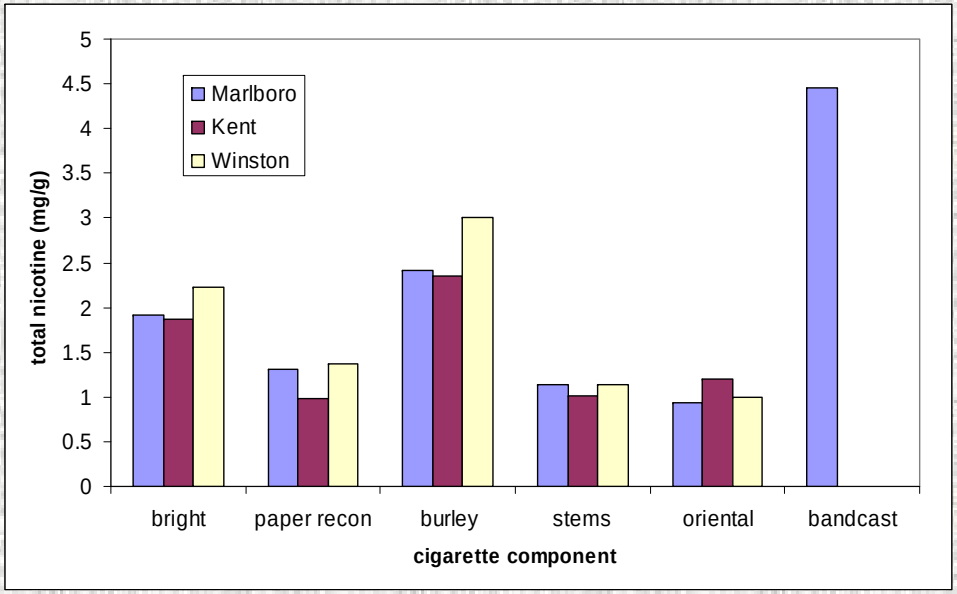
Three critical elements to nicotine delivery

1. Blending
2. Additives
3. Engineering

Tobacco blending



Different strains of tobacco have different amounts of nicotine

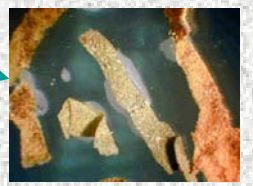


What's in a Cigarette? Tobacco Composition

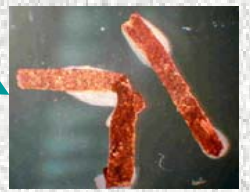
Bright
(30-40%)

Burley
(20-30%)

Stems
(2-10%)



Oriental
(10-15%)



Recon
(5-30%)

Tobacco can also be EXPANDED, or puffed like breakfast cereal.

HER, Dept.S&T, PMNE July 29th,1987

Ablage

NEW TAR QUALITY

PYROLYSATES TO DISTILLATES

Any future reduction of tar levels will come into conflict with a twofold limit, as (1) a minimum amount of nicotine is needed for the smoker's satisfaction (ca. 0,8 mg/cig) and (2) there exists a maximum concentration of nicotine in smoke to let the taste of the latter unaffected (less than 10%). Therefore, the possible limit of tar reduction will be

INBIFO Institut für biologische Forschung GmbH

INBIFO Vertragsforschung

Von Dr. W. Reininghaus
An Dr. W. Fink

Köln 2.Sep.87
WRE/FMU

Vielen Dank für die überlassenen Unterlagen.

- ○ Rücksprache
- ○ Erledigung
- ○ Stellungnahme
- ○ Kenntnisnahme
- ○ Prüfung
- ⊗ Verbleib
- ○ Weiterleitung an

202 3186690

Fuggerstraße 3, D-5000 Köln 90
Telefon: Porz (0 22 03) 30 31, Telefax: (0 22 03) 303 362, Telex: 08 874 875 inbi d

chemical change by
like oxidation,
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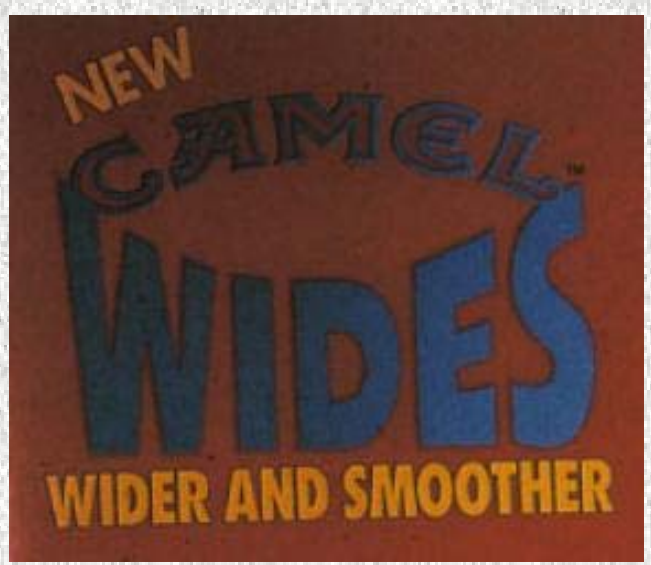
Product Engineering



Say this 5 times fast

Filter Fiber *Fall-out*

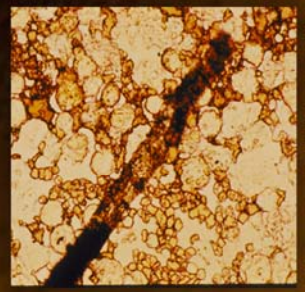
Filter Fiber *Fall-out*

Filter Fiber *Fall-out*

Filter Fiber *Fall-out*

Filter Fiber *Fall-out*

With each puff you inhale tar-coated plastic fibers from your filter



Filter fiber embedded in a lung

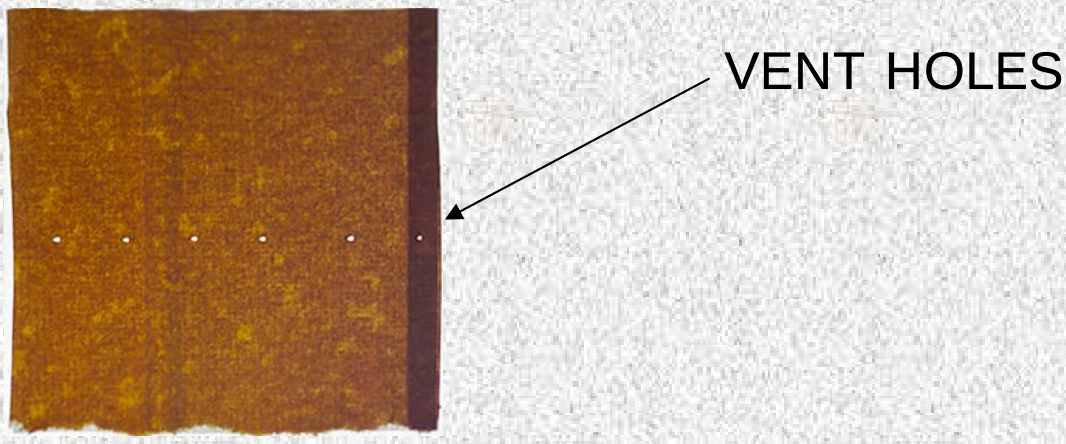
doingyoudamage.com

Call the Quitline 1-866-NY-QUITS (1-866-697-8487)

See if you are eligible for a FREE starter kit of nicotine patches to help you quit

Filter ventilation

- Probably the most influential design feature of the modern cigarette
- **THE** major way standard tar, nicotine, and carbon monoxide yields are reduced



People don’t smoke like machines

Air dilution through filter vent holes reduces machine smoked mainstream deliveries.

Finger or lip blockage increases mainstream smoke deliveries(1).

Air dilution may result in larger or more frequent puffs(2) increasing delivery(3).

1. Kozlowski LT, Rickert WS, Pope MA, Robinson JC, Frecker RC (1982) British Journal of Addiction 77, 159-165.
2. Kozlowski LT, O’Connor RJ (2002), Tobacco Control, 11, i40-i50.
3. Kozlowski LT, Sweeney CT, Pillitteri, JL (1996) Experimental and Clinical Psychoparmacology, 4, 404-408.

Tip Ventilation

The vivid discussion about condensate and nicotine in cigarette smoke and the increasing attention paid to substances in the gas phase have caused us to intensify our development work and to enlarge our production capacity for perforated cigarette tipping material.

Visible

Invisible

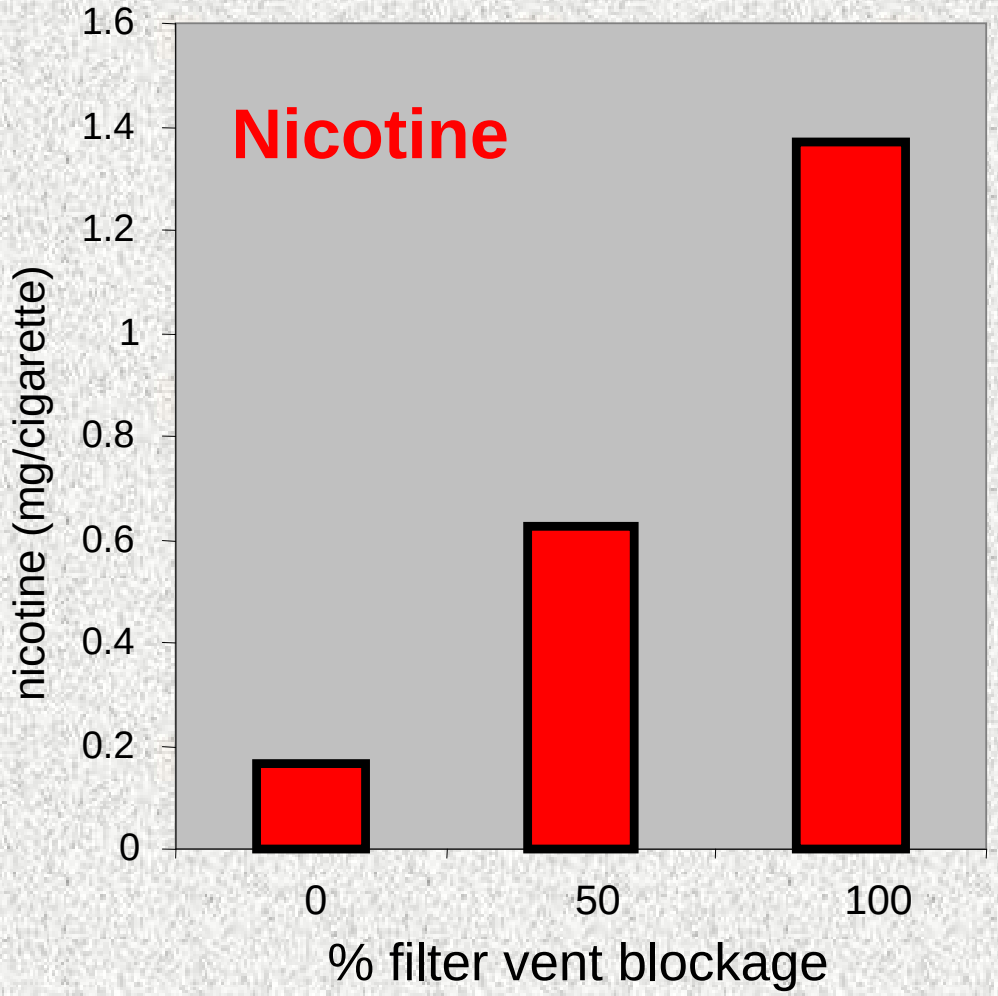
The illusion of Light

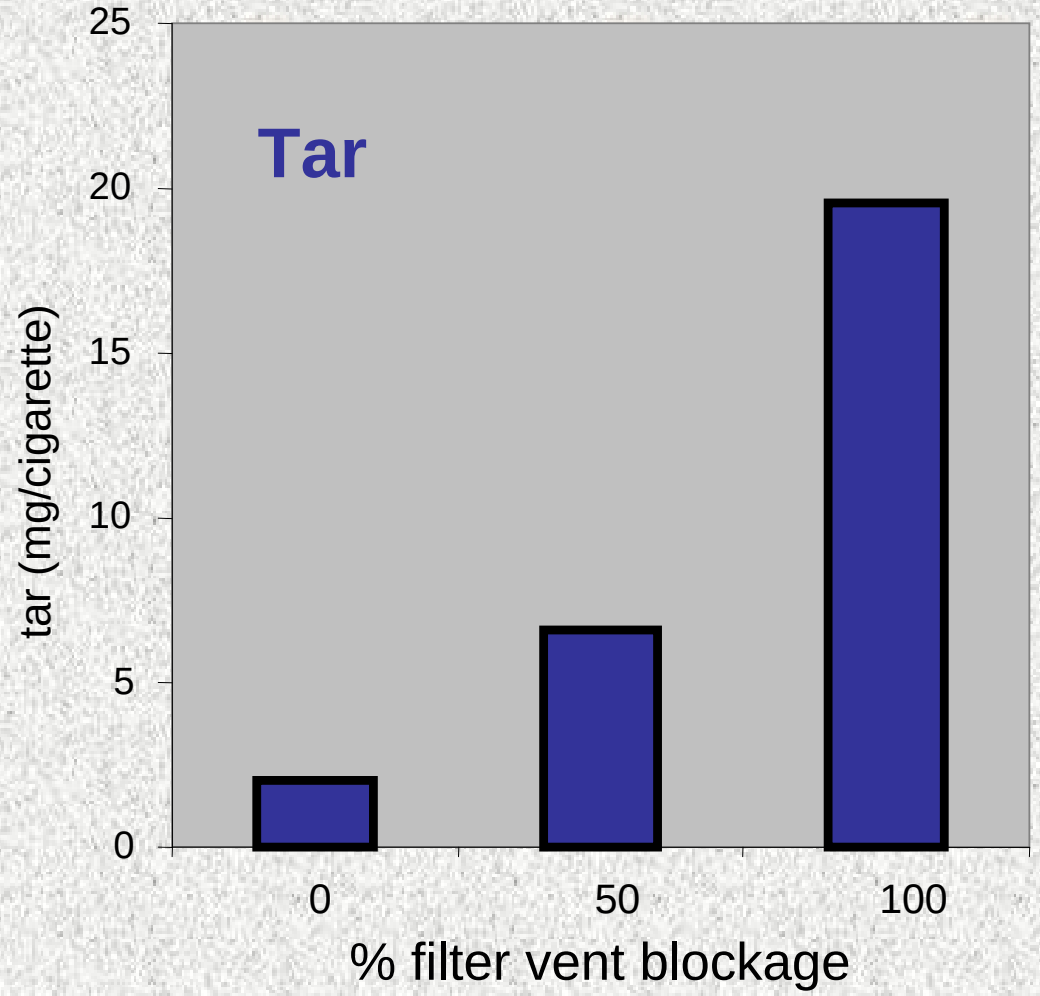
What butt-holes? seeing is believing

Nearly invisible vent holes can be found on every cigarette butt...here's how to find them.

1. Break a cigarette at the filter.
2. Cut the paper away from the filter
3. Separate the filter and paper
4. Place the filter paper on a flash-light for a clear view of the vents

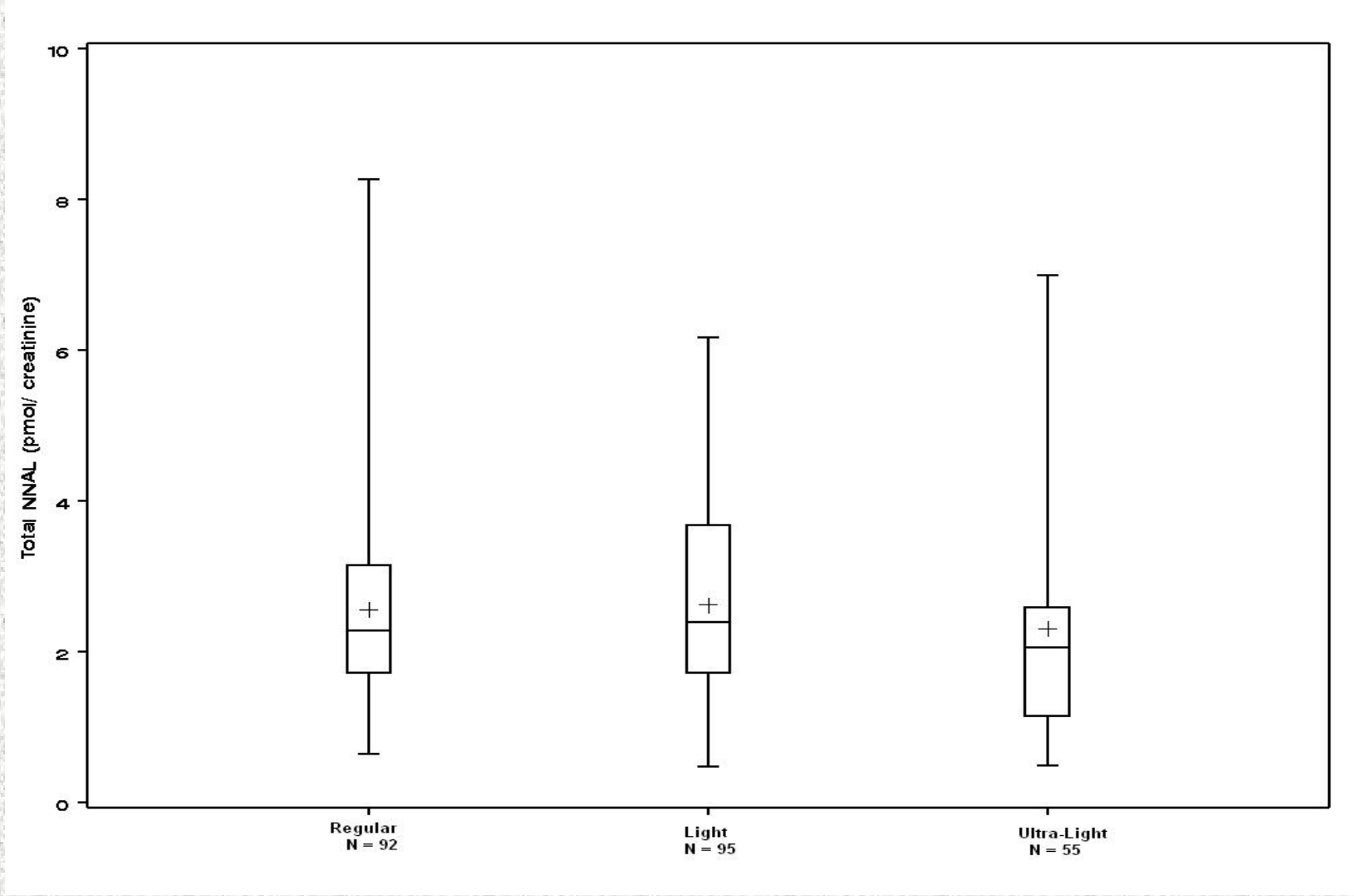
Effect of vent blockage on machine smoked deliveries
of an ultralight cigarette (80% filter ventilation)





Nicotine and tar levels increase ~10x as filter vent holes are blocked.

Urinary NNAL in Smokers of Regular, Light, and Ultra-light Cigarettes



Source: Hatsukami, Hecht TTURC – University of Minnesota

Additives

Tobacco

Casings

Humectants

Flavoring Agents

pH Controllers

Paper

Burn Rate Controllers

Inks

Filter

Flavoring Agents

Plasticizers

PhilipMorrisUSA
an Altria Company

www.philipmorrisusa.com/en/cms/Home/default.aspx

Our Tobacco Ingredients by Brand list identifies principal and flavor ingredients that are either commonly known or added to tobacco at levels of 0.1% or more of the weight of the tobacco rod (the column of tobacco in each cigarette) for our cigarettes sold in the U.S.

The ingredients in the Tobacco Ingredients by Brand list are identified in descending order by weight.

Marlboro Box

- Tobacco
- Water – *moisturizer, processing aid*
- Sugars (Sucrose and/or Invert Sugar and/or High Fructose Corn Syrup) – *flavor, humectant*
- Propylene Glycol - *humectant*
- Glycerol - *humectant*
- Licorice Extract - *flavor*
- Diammonium Phosphate – *flavor, processing aid*
- Ammonium Hydroxide - *flavor, processing aid*
- Cocoa and Cocoa Products - *flavor*
- Carob Bean and Extract - *flavor*
- Natural and Artificial Flavors

Flavored tobacco

Cigarette Trends: Flavoured Cigarettes

Menthol penetration	% total cigarettes
Singapore	38%
Philippines	23%
Hong Kong	31%
USA	28%
Finland	21%
Malaysia	20%
Japan	17%
Thailand	16%
Mexico	17%
Colombia	14%
Poland	12%
New Zealand	12%

Source: Euromonitor from trade sources/ national statistics/estimates

- **Flavoured cigarettes** are traditionally popular in Asia Pacific and increasingly popular in the **US.**
- **Popular flavours** include **menthol, chocolate, strawberry, raspberry, cherry, clove, lime-lemon, vanilla, coffee, licorice**
- Asia-Pac leads world in **menthol flavour cigarettes**, where it is equally popular amongst male smokers.
- Contentious area in mature markets like US, given the argument over **juvenile marketing.**

Enhanced Consumer Understanding and Innovation

Marlboro Red Line

WARNING TO BE PLACED HERE

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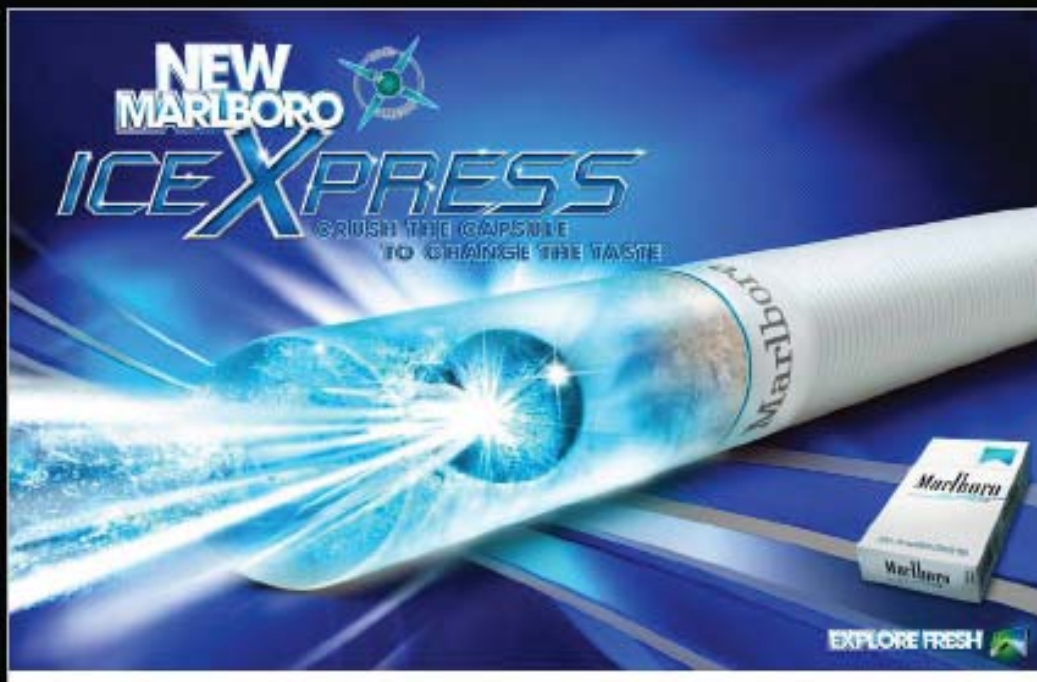
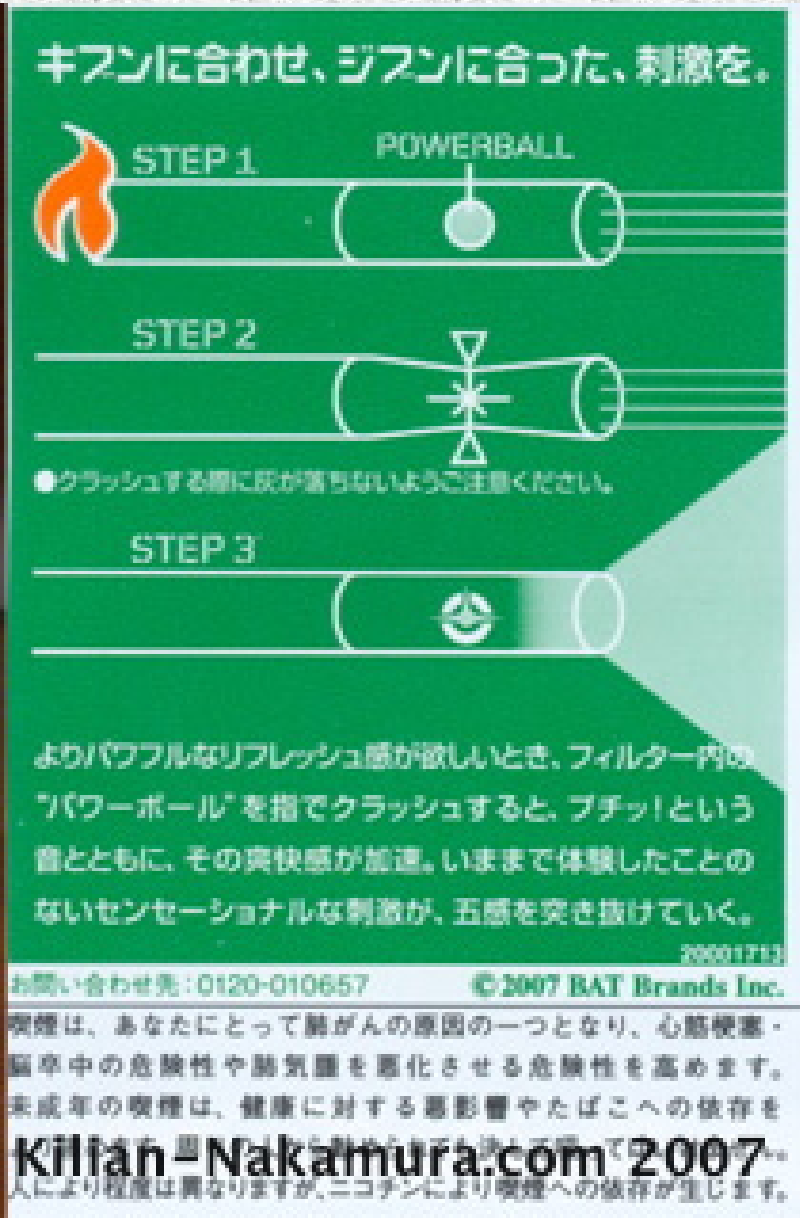


WARNING TO BE PLACED HERE

KOOL/CAMEL CRUSH

CAMEL CRUSH

CAMEL CRUSH



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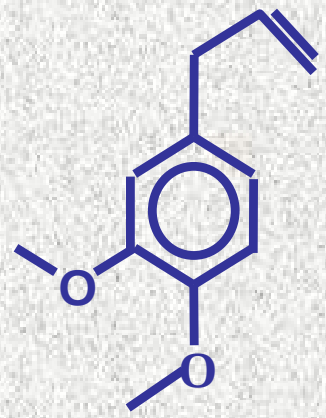
Tobacco Flavor Additives added as the Natural Extract "Generally Regarded as Safe"

Methyleugenol



Basil, Bay, Cloves, Nutmeg, Lemongrass, Cinnamon bark, Allspice

Tumorigen, Mutagen, Sedative, Primary Irritant

The National Toxicology Program recently found that methyleugenol is highly carcinogenic

C63-01306

RPORATED
ESPONDENCE
NIA

To: For the File

Date: July 22, 1963

From: H. Wakeham

Subject: HAZLETON LABORATORIES

I met with Dr. Lloyd W. Hazleton, President of Hazleton Laboratories at the Hazlet
meeting was
defining what
industry if it
might be the

Dr. Hazleton

1. Our b
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2. The e
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on numer
predicted
the cigar

3. The G
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4. There exist specialists in food and drug law. We can contact these through the Food Law Institute or through the New York University School of Law which gives specialized courses in this area.

Dr. Hazleton promised to consider these matters, and to discuss the general problem with me again in two or three weeks time.

HWake

HW/jst.

3. The GRAS list is subdivided by uses. The recognition of safety is, therefore, directly related to the conditions of use. Application of the GRAS list for foods cannot be made to some other use, for example, cosmetics. without specific tests. Strictly speaking, only published studies could be used to establish a GRAS list for things which are inhaled. Relatively few such studies have been made. This concept would provide a rather formidable barrier in the case of cigarettes.

Ammonia and/or phosphate provide much of what is commonly referred to as the PM character. These compounds alter blend and smoke chemistry in order to:

- Reduce irritation (smoke ammonia/carbonyl reactions).
- Enhance nicotine availability (free nicotine).
- Impart unique base flavor notes (reaction products).
- Enhance flavor compounds (reaction products).

These are essential elements of ammonia technology and its beneficial impact on smoke sensory.

It has long been known that PM uses phosphates, ammonia, and/or diammonium phosphate (DAP) to alter blend chemistry. The role of these compounds in influencing many aspects of the blend and smoke chemistry has been well documented. And these compounds (and their impact on tobacco and smoke chemistry) contribute significantly to Marlboro's sensory character.

What do you tell your patients?

4000 chemicals

Pee in every puff

THE BUFFALO NEWS

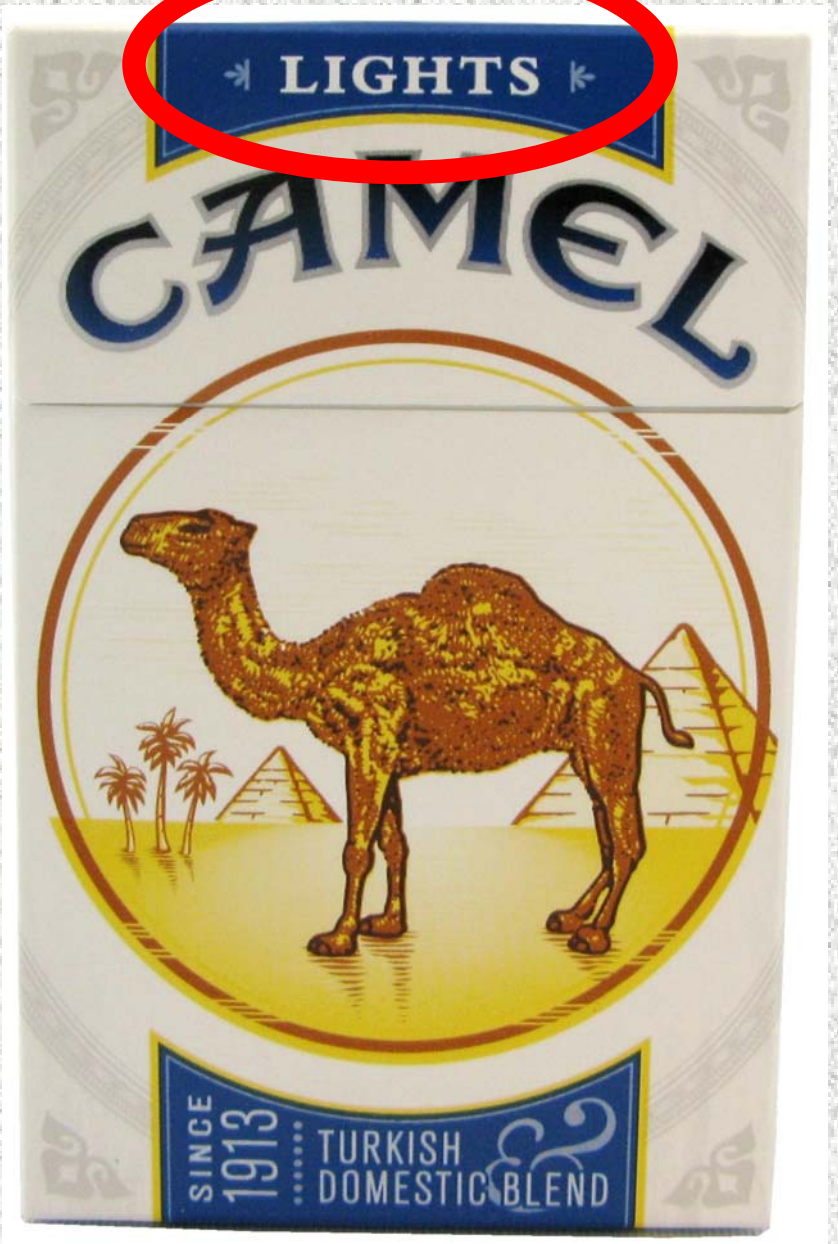
Smokers report belief that 'light' meant safer

"It's not as harsh as a regular cigarette. They're all bad for you."
Jennifer Smith, 34, of Hamburg

"It said 'light' and I figured it would be better for me."
Leonard Pleasant

"They made it seem like it was less harmful. I would say I was deceived."
Lori Riker, 48, of North Tonawanda

- “Light,” “Mild” and “Low tar” prohibited in more than 40 countries.



Deceptive Labeling and Pack Design

"…as one moves down the delivery sector, then the closer to white a pack tends to become. This is because white is generally held to convey a clean healthy association."

Source: Philip Morris, 1990

New Yorker Magazine, 2008

"These new regulations will fundamentally change the way we get around them."

Replacement” descriptors

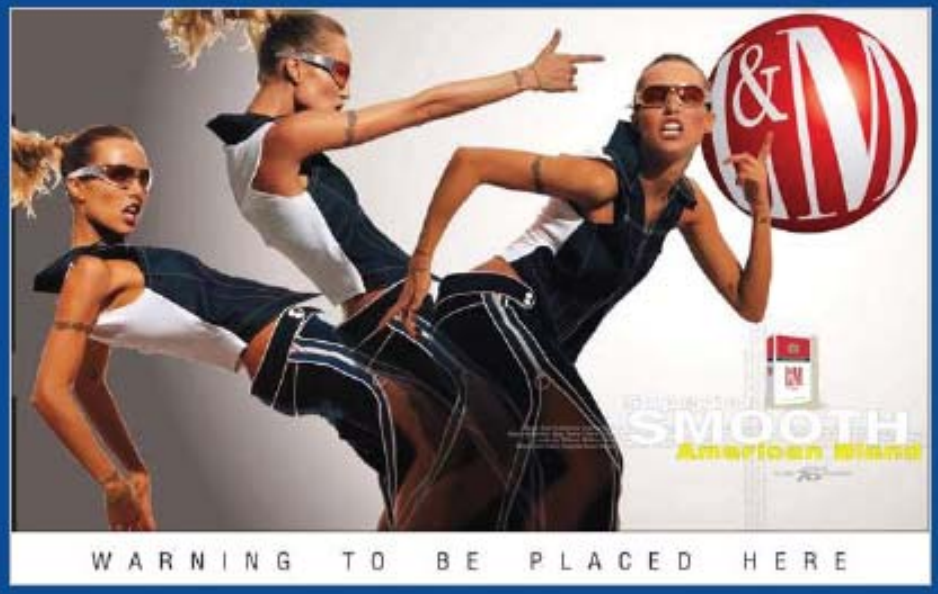
PHILIP MORRIS INTERNATIONAL

Changing up the labeling

L&M

Old Line-up

New Line-up



Descriptor 2: Full flavor vs. Smooth

(All respondents)

			Neither
Most tar	91%	5%	5%
Smoothest taste	5%	94%	1%
Which one would you buy?	37%	62%	2%
Which one would you buy if you were trying to reduce the risks to your health?	9%	88%	4%

Descriptor 3: Full flavor vs. Silver

(All respondents)

			Neither
Most tar	81%	14%	5%
Smoothest taste	25%	72%	2%
Which one would you buy?	46%	52%	1%
Which one would you buy if you were trying to reduce the risks to your health?	18%	78%	4%

Descriptor 4: Number

(All respondents)

			Neither
Most tar	88%	8%	5%
Smoothest taste	22%	71%	7%
Which one would you buy?	42%	56%	2%
Which one would you buy if you were trying to reduce the risks to your health?	8%	89%	3%

Descriptor 5: Shading

(All respondents)

			Neither
Most tar	87%	5%	8%
Smoothest taste	20%	76%	5%
Which one would you buy?	37%	61%	2%
Which one would you buy if you were trying to reduce the risks to your health?	8%	87%	5%

Plain Packaging

			Neither
Deliver most tar	54%	37%	9%
Smoothest taste	69%	25%	6%
Which one would you buy?	81%	18%	1%
Which one would you buy if you were trying to reduce the risks to your health?	46%	48%	6%
More attractive	97%	3%	1%
Appeal to youth under 18 years old	91%	9%	0%
Contains cigarettes of better quality	92%	6%	2%

New products everyday
www.tobaccoproducts.org

L&M Link (super-slims)

Palenie poważnie szkodzi Tobie i osobom w Twoim otoczeniu

Big Tobacco Now in Smokeless Game

Reynolds marketing 'Camel Snus'
May 1, 2006

Test markets in Austin and Portland

Philip Morris tests Smokeless, Spitless Tobacco, July 18, 2006

Marlboro Snus test market in Dallas, August 2007

WHY SO MANY NEW PRODUCTS??

especially smokeless…

RJR 1982 – Nordine Study

However, we cannot ever be comfortable selling a product which most of our customers would stop using if they could. That is to say, if the exit gate from our market should suddenly open, we could be out of business almost overnight.

- Some slow but steady "progress" is being made in developing techniques for stopping smoking; but no universal, easy method is yet in sight.

- The probability of such a method appearing in the near term is small.

- The probability of such a method appearing over the long term approaches 100%.

- If/when that occurs, our options include:

  (1) Go out of business.

  (2) Find a way to eliminate the desire of smokers to stop smoking.

  (3) Provide other products, away from conventional cigarettes, which meet the same needs cigarettes now meet, but without the associated negatives.

- If, of the above alternatives, (1) is unacceptable, and (2) is not likely to be achievable, then we need to seriously consider (3).

    - o We need to define the gratifications (social, psychological, physiological, oral, manipulative, visual, etc.) derived/expected from smoking of conventional cigarettes.

    - o Simplistically, we then need to develop and market other products which would deliver these same gratifications, without the negatives presently associated with smoking of conventional cigarettes.

    - o This will take much time and resources to implement.

    - o This is where our long term opportunity/survival lies.

    - o We need to get started.

WHY SMOKELESS

- DESOCIALIZATION OF SMOKING IN PUBLIC VENUES
- THE SCIENTIFIC LINK BETWEEN ETS AND DISEASES IN THE INNOCENT
- NEED TO MAINTAIN ADDICTION AND MARKET IN A CHANGING ENVIRONMENT
- "GATEWAY" to CIGARETTES

  "*HOOK 'EM YOUNG, HOOK 'EM FOR LIFE*"
- EASE OF USE/HIDE
- DETER CESSATION
- NOVEL DELIVERY SYSTEM TO KEEP/START ADDICTION
- GROWTH MARKET
- PRICE ADVANTAGE
- ABLE TO USE AS A BRAND EXTENSION
- TOUT HEALTH ADVANTAGE-NO TAR AND REDUCED TSNA
- TOUT IMAGE CHANGE BUT NOT BEHAVIOR
- DISSOLVABLES-ELIMINATE THE NEED TO "SPIT"
- "TOBACCO ANYWHERE"
- FLAVORED

LOTS OF DIFFERENT PRODUCTS

Wide range of smokeless products

NEW!

a fresh new way to Camel.

WARNING:

THIS PRODUCT MAY CAUSE MOUTH CANCER

©2008RJRTC

WHAT IS SNUS?

FRESH, REFRIGERATED SPITFREE POUCHES.

HOW TO SNUS:

1. POP it under your upper lip
2. wait a few minutes to feel a TINGLE
3. ENJOY the taste for up to 30 minutes

ENJOY SNUS:

ANYTIME, ANYWHERE!

It's LIMITLESS!

PTD IN USA 705999 TAKE ONE

CAN'T SMOKE?

Pop a Pouch
snus
The NEW
Tobacco
WARNING:
THIS PRODUCT
IS NOT A SAFE
ALTERNATIVE
TO CIGARETTES

Get Listerine PocketPaks® In 4 Great Refreshing Flavors:

Cool Mint®, FreshBurst®, Cinnamon, and Fresh Citrus.

Coming Soon!

WARNING:

THIS PRODUCT IS NOT A SAFE ALTERNATIVE TO CIGARETTES

cameldissolvables.com*

*WEBSITE RESTRICTED TO LEGAL AGE TOBACCO CONSUMERS.

PTD IN USA 707182 DISSOLVABLE TOBACCO GIVE ONE

dissolvable TOBACCO

3 Unique Ways to Enjoy Tobacco

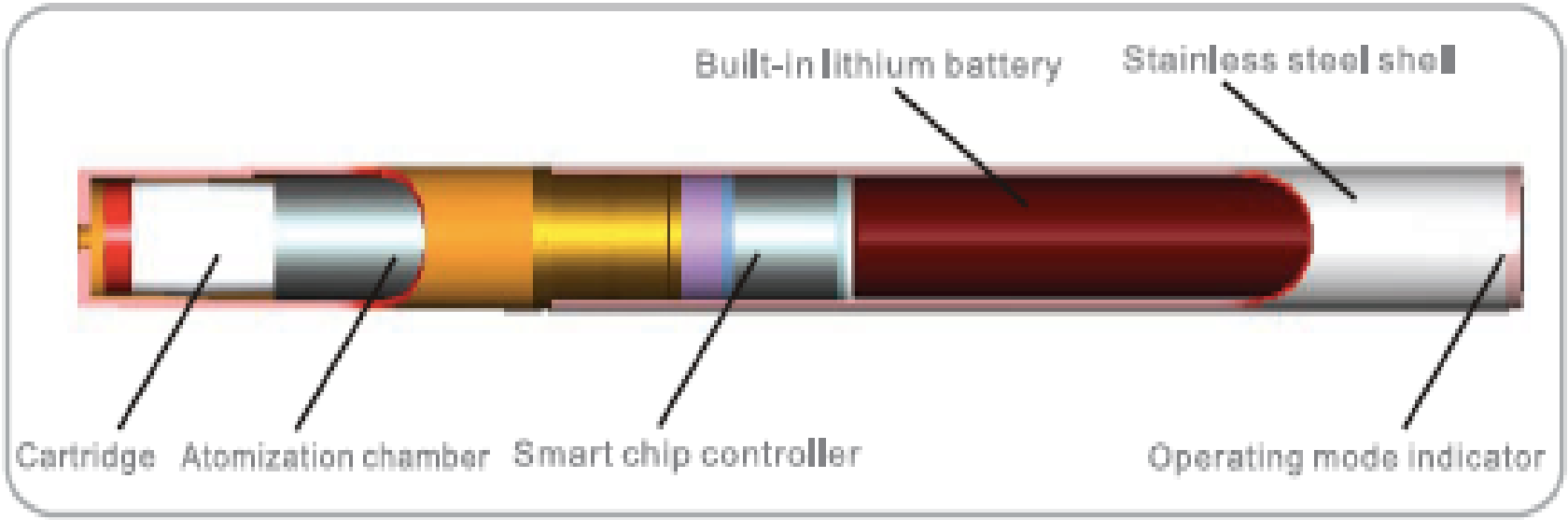
©2008 R.J. REYNOLDS TOBACCO CO. (3T)

E-cigarette

06 Structure of an "Electronic Cigarette"

Cigarette body

The cigarette body is an integrated structure consisting of stainless steel shell, lithium ion battery assembly, smart chip and program controlled circuits, atomization chamber and cartridge and so on. In the front of it, there exists an operating mode indicator.



Talking to your patients

15 conversation starters

1. What brand do you smoke?
2. Have you ever asked yourself why you smoke that brand?
3. Why are there 20 cigarettes in a pack; why not 15 or 44?
4. How much are you spending on cigarettes every day?
5. Where do you buy your cigarettes?
6. How much does it cost to make a single cigarette?
7. When do you typically smoke your first cigarette of day?
8. Do you smoke every day or just some days during the week?
9. Do you think you are addicted to cigarettes?
10. Have you tried to quit before?
11. What did you do to try to quit?
12. Have you ever thought about using nicotine patches or some other drug to help you quit?
13. How confident are you that you'll be able quit for good?
14. How important is willpower to staying off cigarettes?
15. When do you plan to stop smoking?

Educational Materials

"Light" cigarettes are not safer

Light cigarettes have more (nearly) invisible vents punched in them. Filter vent holes make you smoke differently—you inhale harder. There is nothing light about light cigarettes.

Natural and organic cigarettes are no safer than other types of cigarettes.

CALL THE QUITLINE

1-866-NY-QUITS (1-866-697-8487)

WWW.NYSMOKEFREE.COM

Website Resources

www.tobaccoproducts.org

Questions