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**"Light" or "Mild" Descriptors
and Product Image
- Final Quantitative Report -**



***Prepared for
HEALTH CANADA
Tobacco Control Programme
Healthy Environments and Consumer Safety***

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1. EXECUTIVE SUMMARY

BACKGROUND

- Because cigarette smoking is addictive, many smokers have great difficulty quitting, even though they know that smoking is harmful to their health. Some smokers try to get on the road to quitting by cutting back and switching to brands of cigarettes that are labelled "light" or "mild", sometimes postponing indefinitely further attempts to quit smoking.
- "Light" cigarettes were introduced in the 1960s in response to the numerous epidemiological studies in the 1950s that demonstrated a link between lung cancer and smoking.
- In recent decades, other industries have also begun to market product lines labelled "light"—for example, "light" foods and "light beer". The labels on these products follow regulated standards, and their meaning is well defined, which ensures consumers that a food labelled "light" generally represents a healthier choice. In this context, it has become natural for consumers to think that the extension of "light" labelling to tobacco products offers them the same guarantees, but unfortunately, it does not.
- Many surveys have shown that many smokers remain confused about the actual content of so-called "light" cigarettes: many smokers think that "light" or "mild" (L&M) cigarettes deliver less tar and nicotine, and that, in general, they are less harmful and help people to quit smoking.
- A quantitative experimental design study conducted for Health Canada by Créatec in February 2002¹ showed that the "Light" or "Mild" descriptors on cigarette packs significantly and substantially influenced a smoker's perceptions in terms of perceived strength of the product, brand personality and social image of the smoker.
- This present study explored the effectiveness of "Light" or "Mild" related Health Warning Messages (L/M HWMs) on cigarette packs.

PURPOSE OF THE STUDY

- The central hypothesis of this study was that "Light" or "Mild" related Health Warning Messages (L/M HWMs) could reduce consumer confusion with regard to the perceived properties of cigarettes using L&M descriptors on their packages.
 - The purpose of this study was to measure the effects of L/M HWMs concepts on the perceptions of cigarettes with and without the "light" descriptor and to compare these effects with those of current HWMs.

¹ Effect of "Light" and "Mild" Labels on Perceived Strength and Brand Image of Cigarettes. Créatec +.

SAMPLE

- In total, N = 645 interviews were completed with daily smokers of manufactured cigarettes, 18 years of age and over, from February 25 to March 7, 2004.
 - The sample was divided equally among six shopping malls in the main regions of Canada.
 - N = 217 interviews were completed with French respondents for testing the French version of the HWMs, and N = 428 were completed with English respondents for testing the English version of the HWMs.

EXPERIMENTAL DESIGN

- The interviews took, on average, 25 minutes to administer.
- This study differed from conventional public opinion research in the following ways:
 1. This study applied an experimental approach in which the respondents were exposed to differing stimuli to which their reactions were then measured according to a precise protocol. The study's findings were thus inferred by analysis of reactions to stimuli, and not by analysis of opinions expressed directly by the respondents.
 2. This study applied a set of perceptual scales and variables, several of which are those currently in use by the tobacco industry, on a common, standardized basis, to conduct product and positioning tests for "low yield" brands.
- Twenty-three product properties were used to measure perceptions and effectiveness of "Light" or "Mild" related Health Warning Messages (L/M HWM) concepts.
 - 5 product sensory attributes (ex. toxicity)
 - 12 product personality attributes (ex. risk-takers vs. very prudent)
 - 6 social image attributes (ex. biker man)
- Each respondent was exposed, in a specified order of rotation, to cigarette package mock-ups with and without the "light" descriptor.
- Each respondent was exposed to four HWMs, three test L/M HWMs and one control HWM. All respondents rated three test L/M HWMs and one control warning. The control warning was among three current HWMs selected for the purpose of this study and was rotated among respondents.
 - In total, each respondent rated eight mock-ups (4 HWMs, with and without descriptor).
- The mock-ups were flat in shape and printed on cardstock, measured 4 inches by 3 inches in size, identical to an actual size of a pack of 25 cigarettes, with the health warning message taking up the top 50% of the package surface area and the brand name (DuMaurier) on the bottom 50% package surface area.

ENGLISH**FRENCH****TEST L/M HWMs***

1. "mild" flavour, harsh reality	1. goût « léger », dure réalité
2. Taste can kill you	2. Un goût mortel
3. "light" is not less addictive	3. « légère » mais pas moins lourde de conséquence

CURRENT HWMs**

1. Tobacco smoke hurts babies	1. La fumée du tabac nuit aux bébés
2. Cigarettes cause mouth diseases	2. La cigarette cause des maladies de la bouche
3. Cigarettes cause lung cancer	3. La cigarette cause le cancer du poumon

* All evaluated by each respondent.

** Only one (selected at random) evaluated by each respondent.

STATISTICAL TESTS

- Two types of statistical tests were performed on the observed effects of the "light" descriptor and effects of the test and control warnings:
 - univariate T-test for paired observations;
 - multivariate MANOVA F-Tests. The particular MANOVA model used for this study was the "doubly multivariate repeated measures design".
- We used strict standards to decide whether to call a relationship or a difference "statistically significant". In order to earn this label, all tests must have had a probability of a type I error of less than 0.01, with a 95% confidence interval.

KEY CONCEPTS

- Simple main effect of the "light" descriptor was the difference between scores achieved by the packages with and without the descriptor.
- Simple main effect of the test "Light" or "Mild" related Health Warning Messages (L/M HWMs) was the difference between scores achieved by the packages with the test L/M HWMs and those with the control HWMs.
- Effect of descriptor and effect of HWMs could be correlated or independent. They were correlated when a two-way interaction effect (descriptor X HWMs) was significant. Interaction effects were differentials of simple main effects along the other factor. For example, the test L/M HWMs may have had an effect on product image different than control warnings, but were not different on the influence of the descriptor.

LIGHT DESCRIPTOR EFFECT

- Overall, findings confirmed previous experiments -- packages with the "light" descriptor triggered perceptions about the product contained within the packages which were significantly more favourable/appealing than packages without the descriptor.
- Univariate and multivariate statistical tests performed on the influence/effect of the "light" descriptor indicated that the "light" descriptor had:
 1. a very significant effect on almost all the sensory attributes of the product. Cigarettes contained in packages with the descriptor were perceived as "less strong" or "weaker":
 - Harder to draw;
 - Delivering lower initial satisfaction;
 - Having lower throat catch/hit; and
 - Being less toxic.
 - Influence of the descriptor was consistent across type of Health Warning Messages (HWMs) and language.
 - Perception of taste pleasantness, however, was not significantly influenced by the "light" descriptor.
 - These findings were consistent with what was observed in a recent experiment (February, 2002).
 2. a very significant effect on the social image of the smoker. Packages with the descriptor were significantly more/less associated with the following characters:
 - More with young women;
 - Less with farmer men;
 - Less with biker men;
 - Less with teenage boys.
 - Overall, the "light" descriptor made the smoker more desirable, less masculine, without making it effeminate.
 - These findings mirrored what was observed in a recent experiment (February, 2002).
 3. significant effects on a few product personality traits, but:
 - not consistent across types of HWMs;
 - not consistent across language version of warnings.
 - A previous experiment also observed that the effect of "Light" and "Mild" descriptors on personality traits varied a great deal from one brand to another.

- Packages with the "light" descriptor tended to influence perception of product personality in the following ways:
 - More disciplined;
 - Less risk-taking;
 - More health conscious;
 - More in control of his/her destiny.
- When respondents were asked to compare "light" and "mild" (L&M) cigarettes with "regular" cigarettes, the properties attributed to "light" and "mild" cigarettes were significantly different, especially in terms of levels of nicotine, amount of chemicals and additives, and amount of taste. The respondents' subjective perceptions indicated that they believed that L&M cigarettes were actually lighter than regular cigarettes.
 - Moreover, the respondents clearly stated that they believed what the light/mild labels suggested: only one respondent in five was not at all convinced that these cigarettes were lighter or milder than regular ones.
- The respondents ascribed a great deal of importance to the presence of the "light" descriptor.
 - In the respondents' eyes, these labels were so credible that half of them said they would be annoyed if these labels were withdrawn from the packages.
- Thus, both objectively (as measured by this experimental design) and subjectively (as measured by responses to direct questions), the "light" descriptor (that suggests a cigarette is light) was credible and effectively influenced smokers' perceptions.

INFLUENCE OF HWMS ON "LIGHT" DESCRIPTOR EFFECT

- Health Warning Messages (HWMs) had an influence on the descriptor effect if the descriptor effect was significantly different depending on the type of HWM it was associated with (interaction effect between HWMs and descriptor). HWMs had no influence on descriptor effect, if its effect was the same, whatever the type of HWMs it was associated with.
- Univariate and multivariate statistical tests performed on the interaction effect of "light" descriptor and HWMs indicated that:
 - the "light" descriptor effect was statistically the same for packages using the test warnings and those using the control warnings, for all attributes in the study.
 - Therefore, test "Light" or "Mild" related Health Warning Messages (L/M HWMs) had not significantly influenced or reduced consumers' confusion created by the "light" descriptor about "Light" vs. "Regular" cigarettes.

EFFECT OF TYPE OF WARNINGS

- Univariate and multivariate tests performed on the influence/effect of the type of warnings (test or control) indicated that:
 1. During univariate analysis, only one of the five sensory properties showed a significant difference caused by the type of warnings:
 - Packages with the test warnings scored lower on the throat catch scale, compared to packages with the control warnings.
 - However, multivariate analysis indicated that although differences were minimal, the test warnings had a consistent/significant influence on the entire sensory profile: test L/M HWMs tended to project a “weaker”, less damaging product image.
 2. Influence of the test warnings on the personality traits of the product was significant, when compared to control warnings, in the following ways:
 - a more prudent personality;
 - more concern for others;
 - more health conscious;
 - more image conscious;
 - more disciplined.
 - Multivariate analysis indicated that this influence was significant for the entire personality profile, taken as a whole.
 3. The test warnings had a significant influence on the social image of the smoker, when compared to control warnings, in the following ways:
 - More of the young woman;
 - More of the girl on bike;
 - Less of the farmer;
 - Less of the biker man.
 - Multivariate analysis indicated that this influence was significant for the entire social image profile, taken as a whole.

COMPARATIVE ASSESSMENT OF EACH TEST HWM

- Three types of analyses were performed, on ratings received by each of the three test L/M HWMs.
 1. Univariate testing of the influence of each test warning on the “light” descriptor effect;
 2. Univariate testing of the effect of each test warning on product image;
 3. Mapping of each test warning rating using correspondence analysis.

Influence on the descriptor effect

- As stated previously, the three test warnings, as a group (on average), had no influence on the "light" descriptor effect, when compared to control warnings.
- When the influence of each test warning was isolated, univariate tests indicated that none of the test warnings had a significant different influence on any of the 23 product properties measured in this study.
- Therefore, none of the three test warnings emerged as more efficient than the other (and the control warnings), in influencing consumers' confusion about L&M and Regular cigarettes.

Influence on product image

- As stated previously, the three test warnings, as a group (on average), had a significant influence on product image, when compared to control warnings (they tended to project a more appealing, desirable product image, in terms of sensory attributes, personality traits and social image attributes).
- When the effect of each of the three test warning concepts were isolated, univariate tests indicated that one concept "*light is not less addictive*" had two significant different effects:
 - Draw effort: easier with the test warning "*light is not less addictive*" -- overall
 - But not in its French version "*légère mais pas moins lourde de conséquences*"
 - Young woman: more of this character was projected by the test warning "*light is not less addictive*"
 - Significant for both language versions.
- Findings suggested that overall, the three test warnings had somewhat similar effects; in fact, they were more similar than different. However, the test concept "*light is not less addictive*", which used the word "*light*" and "*less*", gave a "*lighter*" halo to the product image, and tended to increase consumers' confusion instead of reducing it.

MAPPING OF THE TEST HWMS IMAGE EFFECTS

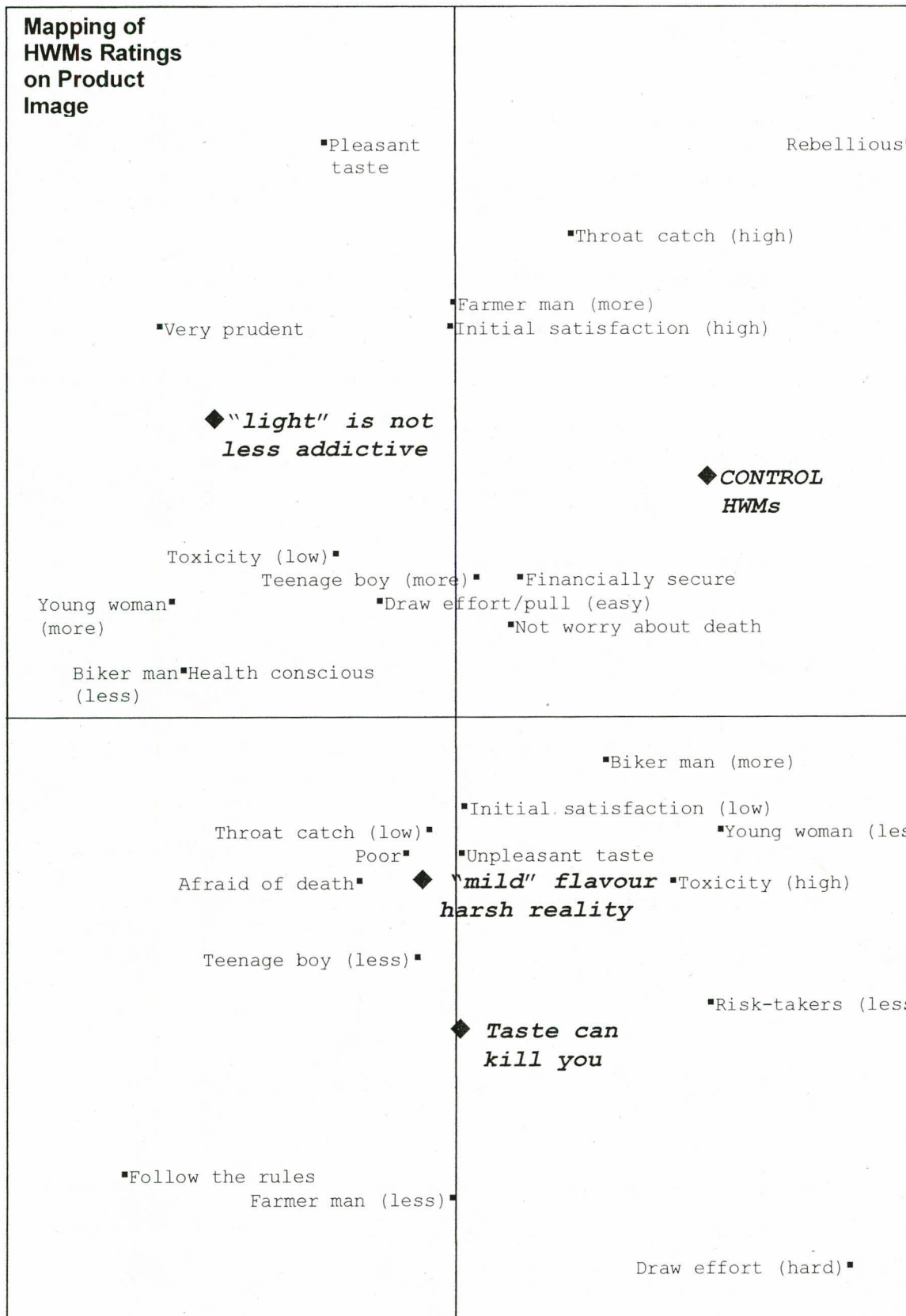
- To help visualize the possible product image effects of each of the test warnings and to see how similar or different these effects may be, we performed a correspondence analysis between the HWMs (the 3 test and the average control) and their raw ratings on the 23 product properties used in the study to measure effects on perceptions.
- Correspondence analysis indicated that 2 factor axes explained 92 percent of the entire variance created by the Health Warning Messages in the study:
 1. Personality appeal
 2. Sensory appeal

- Positions on the map indicated that:
 1. All three test warnings tended to project more positive product personality attributes than control warnings. The positions on the horizontal axis confirmed that test warnings may have had a reverse effect, "upgrading" rather than "downgrading" the overall image of cigarettes (Regular or Light).
 2. The test warning "*light is not less addictive*" emerged as the most different of the three test warnings used, when all properties were taken into account.
 - Note that both of the other test warnings directly addressed taste, so they positioned, unsurprisingly, closest to each other on the map.
 - The "*light is not less addictive*" warning projected more positive product properties both in terms of sensory and personality attributes, when compared to the other two test warnings. Note that this warning made the most explicit link to Light cigarettes, of the three test warnings used.
- Correspondence analysis confirmed, when all product properties were simultaneously taken into account, that "*light is not less addictive*" was the most risky of the three test concepts: it had not reduced consumers' confusion about L&M and Regular cigarettes, and was likely to present cigarettes in a more positive/less negative perspective than control warnings.
 - The two other test warnings had no decisive effects, when compared to control warnings:
 - They had not reduced consumer confusion.
 - They presented cigarettes in a less favourable perspective in terms of sensory appeal but in a more favourable perspective in terms of product personality, than control warnings.
- Mapping of HWMs and the 23 product properties is presented on the following page.

GENERAL CONCLUSION

- The "Light" or "Mild" related Health Warning Messages (L/M HWMs) concepts had no significant influence on the confusion about L&M vs. Regular cigarettes, generated by the "light" descriptor.
- The test L/M HWMs had significant effects on product image, making the product, at varying degrees, more appealing in terms of:
 - sensory profile;
 - product personality profile;
 - social image of the smoker.
 - Therefore, the test L/M warnings concepts were likely to have effects opposite to those intended.
 - The most risky test concept was "*light is not less addictive*".
- Findings suggest that L&M related warning messages on cigarette packs is a very challenging and high risk communication context that requires very careful testing.

Sensory Appeal -- F2 = 29%



2. BACKGROUND

- Because cigarette smoking is addictive, many smokers have great difficulty quitting, even though they know that smoking is harmful to their health. Some smokers try to get on the road to quitting by cutting back and switching to brands of cigarettes that are labelled "light" or "mild", sometimes postponing indefinitely further attempts to quit smoking.
- Some choose brands labelled as "light" or "mild" in the mistaken belief that the smoke from such cigarettes could be safer. These smokers may consciously or unconsciously adjust their way of smoking -- by inhaling deeper and longer or covering the filter ventilation holes, for instance -- to ensure that they inhale enough to achieve a satisfactory nicotine 'hit' (compensation). However, by increasing their intake of nicotine in this fashion, smokers also inhale more tar and other carcinogens.
- "Light" cigarettes were introduced in the 1960s in response to the numerous epidemiological studies in the 1950s that demonstrated a link between lung cancer and smoking.
- In recent decades, other industries have also begun to market product lines labelled "light"—for example, "light" foods and "light beer". The labels on these products follow regulated standards, and their meaning is well defined, which ensures consumers that a food labelled "light" generally represents a healthier choice. In this context, it has become natural for consumers to think that the extension of "light" labelling to tobacco products offers them the same guarantees, but unfortunately, it does not.
- As the tobacco industry itself admits, the "light" label is used for product positioning and does not necessarily have any objective connection to information on toxic substances printed on cigarette packages. Though it is well documented that the tar and nicotine content of a "light" cigarette, as measured by laboratory instruments, does not correspond to the content to which consumers are ultimately exposed. Many surveys have also shown that many smokers are not aware of this difference and remain confused about the actual content of so-called "light" cigarettes. Thus it has been found that many smokers think that "light" and "ultra-light" cigarettes deliver less tar and nicotine and that, in general, they are less harmful and help people to quit smoking.¹

¹ "Beliefs about 'Light' and 'Ultra Light' Cigarettes and Efforts to Change those Beliefs: An Overview of Early Efforts and Published Research", Lynn T. Kozlowski, Janine L. Pillitteri, Tobacco Control 2001; "Smokers' Beliefs about 'Light' and 'Ultra Light' Cigarettes", Paul Shiffman, Janine L. Pillitteri, Steven L. Burton, Jeffrey M. Rohay, Joe G. Gitchell, Tobacco Control 2001; "Do 'Light' Cigarettes Undermine Cessation?", John R. Hughes, Tobacco Control 2001.

- A quantitative experimental design study conducted for Health Canada by Créatec in February 2002¹ showed that the "Light" or "Mild" (L&M) descriptors on cigarette packs significantly and substantially influenced a smoker's perceptions in terms of perceived strength of the product, brand personality and social image of the smoker. The same study also indicated that many smokers shared the belief that cigarettes labelled as "light" are safer than "regular" cigarettes. Another study, a telephone survey conducted by Créatec in March, 2003,² indicated that although taste is the primary reason for smoking a L&M brand, perception of a safer cigarette is nonetheless the primary reason why many smokers switch from a regular to a L&M brand.
- A more recent study with quitters³ (Créatec – January, 2004) indicated that one in five recent quitters switched to a lighter / milder type of cigarette in their strategy to quit smoking.
- The purpose of this present study was to increase the understanding of the effectiveness of "Light" or "Mild" related Health Warning Messages on cigarette packs (L/M HWMs).

3. OBJECTIVE OF THE RESEARCH

- The central hypothesis of this study was that "Light" or "Mild" related Health Warning Messages (L/M HWMs) could reduce consumer confusion with regard to the perceived properties of cigarettes using L&M descriptors on their packages.
 - Consumer confusion, as measured in recent studies, could be reduced or eliminated if perceptions of L&M cigarettes and Regular cigarettes became closer or statistically identical.
 - The purpose of this study was to measure the effects of L/M HWMs concepts on the perceptions of cigarettes with and without the "light" descriptor and to compare these effects with those of current HWMs.
- More specifically, the criteria or product properties (23) used to measure perceptions and effectiveness of the L/M HWM concepts were:
 - **Product sensory profile – 5 attributes – 5-point scale**
 1. Draw effort
 2. Taste pleasantness
 3. Initial satisfaction
 4. Throat catch/hit
 5. Toxicity

¹ Effect of "Light" and "Mild" Labels on Perceived Strength and Brand Image of Cigarettes. Créatec +.

² Canadian Opinion on the Removal of L&M Labels from Cigarette Packages: A Survey of Smokers and Non-smokers. Créatec +.

³ Recent Quitters' Behaviour and Motivation – Quantitative Survey. Créatec +.

→ **Product personality profile – 12 attributes – 9-point scale**

1. Health conscious / health negligent
2. Image conscious (concerned about his/her image) / sloppy
3. Cool / straight
4. Leader / follower
5. Disciplined / disorganised
6. Rebellious / follow the rules
7. Higher education / lower education
8. In control of his (her) destiny / fatalist
9. Risk-taker / very prudent
10. Concern for others / selfish
11. Financially secure / poor
12. Afraid of death / does not worry about death

→ **Social image profile – 6 attributes – 9-point scale**

1. a teenage boy about 16 years old;
2. a dynamic, sporty, sexy woman, about 23 years old, on a motorcycle;
3. a heavy-set male biker, about 35 years old, with a beard and bare arms with a tattoo;
4. a businessman about 50 years old, in a suit;
5. an elegant, attractive woman, about 35 years old;
6. a male farmer or fisherman, about 60 years old, wearing overalls and a baseball cap.

- In addition, the survey included questions to measure consumer impressions of L&M cigarettes when compared to Regular cigarettes:
 - levels of nicotine;
 - amount of toxic chemicals;
 - health risks;
 - amount of taste;
 - physiological dependence.
- Finally, respondents were asked how important the "Light" or "Mild" descriptors were to them.

4. METHODOLOGY

4.1 TYPE OF STUDY

- This study differed from conventional public opinion research in the following ways:
 1. This study applied an experimental approach in which the respondents were exposed to differing stimuli to which their reactions were then measured according to a precise protocol. The study's findings were thus inferred by analysis of reactions to stimuli, and not by analysis of opinions expressed directly by the respondents.
 2. This study applied a set of perceptual scales and variables, several of which are those currently in use by the tobacco industry, on a common, standardized basis, to conduct product and positioning tests for "low yield" brands.
- Note that these attributes—mainly the product sensory ones, but also the ones related to product personality and social image—let us assess the effects of the descriptors on the perceived strength of the product. These product sensory attributes are among those currently in use by the tobacco industry in product testing, thus their usefulness has been proven and therefore appropriate for assessing so-called low- or ultra-low-yield cigarettes.

4.2 TARGET POPULATION

- This study targeted daily smokers of manufactured cigarettes, 18 years of age and over, English and French.
 - Incidence of target population is estimated at 18% (CTUMS¹ Wave 1, 2002).

4.3 INTERVIEW METHOD

- All data was collected during face-to-face interviews, averaging about 25 minutes in length. The questionnaire was administered according to a precise experimental plan designed to balance:
 - Number and type of Health Warning Messages (HWMs) in the test;
 - Presence or absence of the "Light" or "Mild" descriptors.
- All of the interviews were conducted during the period of February 25 to March 7, 2004.
- Each respondent received a \$5 incentive at the end of the interview.

¹ The Canadian Tobacco Use Monitoring Survey, an ongoing twice annual survey. www.gosokefree.ca/ctums.

4.4 EXPERIMENTAL DESIGN

- In order to achieve the objective stated previously, the materials tested included three (3) "light" or "mild" related Health Warning Messages (L/M HWMs) concept mock-ups developed by the Tobacco Control Programme (TCP), plus three (3) current HWMs (control). All HWMs were positioned on red DuMaurier packaging, with (DuMaurier Light) and without the "Light" descriptor (DuMaurier Regular - see Appendix 2).
 - For the purpose of this study, 50% of the cigarette package surface usually reserved for product branding purposes featured the same popular brand (DuMaurier).
 - Except for the HWMs and the "Light" descriptor, all mock-ups were strictly identical. The only change in sensory stimuli was the warning message and the absence/presence of the "Light" descriptor, nothing else.
- Each respondent was exposed, in a specified order of rotation, to 4 HWMs (3 test plus 1 current), with and without the "Light" descriptor associated with the brand (see table below) – for a total of 8 exposures.
 - The same warning message with and without the "Light" descriptor (in rotated order) was evaluated before the next mock-up was exposed.

TOTAL NUMBER OF EXPOSURES PER RESPONDENT

HWM (Rotated)	ENGLISH (E)			FRENCH (F)		
	With "Light" descriptor (A)	Without "Light" descriptor (B)	Total	With "Light" descriptor (A)	Without "Light" descriptor (B)	Total
L/M HWM #1	1EA	1EB	2	1FA	1FB	2
L/M HWM #2	2EA	2EB	2	2FA	2FB	2
L/M HWM #3	3EA	3EB	2	3FA	3FB	2
Control / current HWMs	CEA	CEB	2	CFA	CFB	2
TOTAL	4	4	8	4	4	8

N.B. Each respondent was exposed to the 3 test L/M HWMs and to only one of the 3 current HWMs.

- All respondents were exposed to the mock-ups using one of the two exposure sequences presented in the table below.
 - where T indicates one of the 3 test L/M HWMs;
 - where C indicates one of the 3 control (current) HWMs.

SEQUENCES OF EXPOSURE

	First	Second	Third	Fourth
Main sequence #1	T	C	T	T
Main sequence #2	C	T	T	T

N.B. The exposure sequence was rotated between respondents.

- Note that at the end of the exposure sequence, all respondents saw the 3 test L/M HWMs but only one of the 3 control HWMs (randomly selected). At the second stage of the exposure sequence, all respondents saw only one test L/M HWM and only one control HWM, with and without the "Light" descriptor.
- For the test L/M HWMs, these were randomly selected at each level of exposure.
- Presentation order of HWMs with and without the "Light" descriptor was systematically rotated between respondents.
- Analysis of the effects of the "light" descriptor with test L/M HWMs compared to its effects with the control HWMs used the measures recorded during the first and second stages of the exposure sequence.
 - For these analyses, each measure was the average produced by the HWMs randomly selected to represent the test L/M and the control HWMs.
- Analysis of the effects of each of the three test HWMs used the measures recorded during any stage where their evaluation took place (see section 4.7 for more details).

Rotations

- In total, there were 36 different versions of the questionnaire, to allow proper rotation of:
 - Test/control: first to appear (2 options);
 - Control messages (3 possible choices);
 - Test message ordering (3 options);
 - Descriptor – presence or absence first (2 options).
- Each of the 36 versions was used by 16-19 respondents.
 - One version was used by 16 respondents;
 - Three versions were used by 17 respondents;
 - Two versions were used by 19 respondents;
 - Thirty versions were used by 18 respondents.
- Rotation counts indicated that packages with and without the "Light" descriptor, test L/M and control HWMs had a statistically equal opportunity of exposure in the evaluations and therefore, there was no significant bias due to the evaluation procedure.

Number of times (n) exposure sequence started

	Total	English	French
• With one test L/M HWM	324	215	109
• With one Control HWM	321	213	108
Total	645	428	217

Number of times (n) packages were evaluated at each stage of exposure, always starting with packages

	Total	English	French
• With "Light" descriptor	321	213	108
• Without "Light" descriptor	324	215	109
Total	645	428	217

Number of times (n) each of the 3 test L/M HWM were evaluated at each stage of exposure (with/without "Light" descriptor")

Stage of exposure	TOTAL SAMPLE			TOTAL
	Test L/M HWMS			
	1	2	3	
1	212	216	217	645
2	217	212	216	645
3	216	217	212	645
TOTAL	645	645	645	

Stage of exposure	ENGLISH			TOTAL
	Test L/M HWMs			
	1	2	3	
1	139	144	145	428
2	145	139	144	428
3	144	145	139	428
TOTAL	428	428	428	

Stage of exposure	FRENCH			TOTAL
	Test L/M HWMs			
	1	2	3	
1	73	72	72	217
2	72	73	72	217
3	72	72	73	217
TOTAL	217	217	217	

4.5 SAMPLE SIZE

- In total, N = 645 interviews were completed, distributed equally among six shopping malls (N = 103-108 each).
- It is important to note that the size of this experiment was equivalent to what the tobacco industry generally uses in its image and product tests, and was not made exaggeratedly high in order to make minimal differences significant. With samples of this size, the differences must be substantial to be significant.

4.6 TYPE OF SAMPLE

- A quota sample of the target population, with a 50% / 50% split between males and females, was selected in shopping malls in the following locations:

French speaking

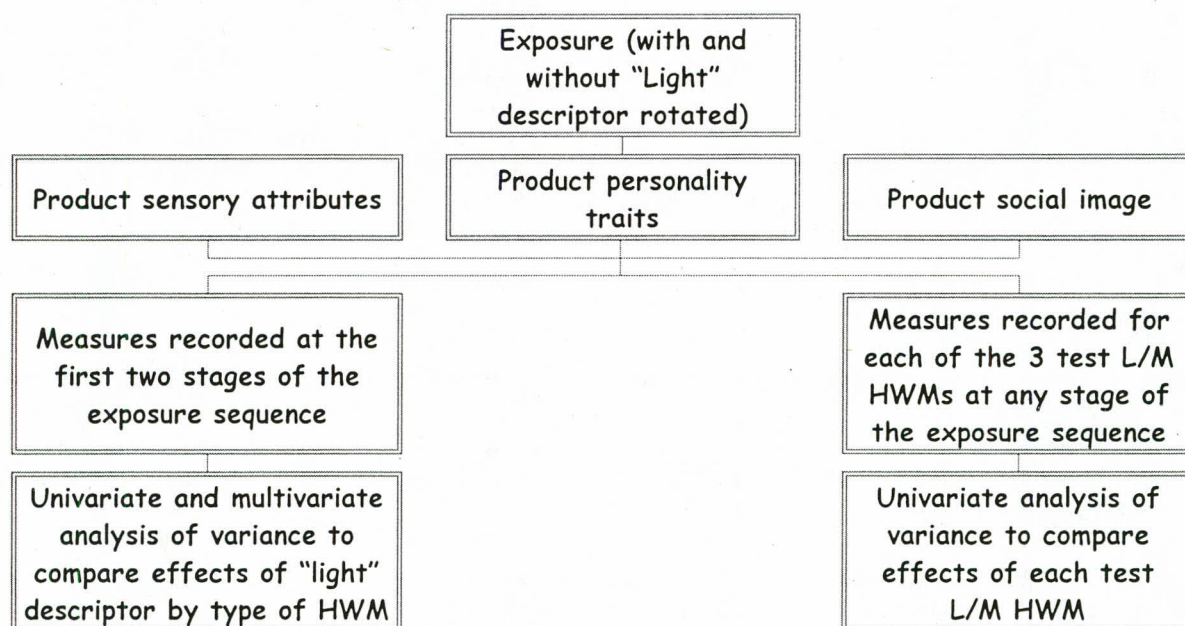
- Montreal
- Sherbrooke

English speaking

- Toronto
- Halifax
- Calgary
- Winnipeg

4.7 QUESTIONNAIRE

- The questionnaire was developed in French and English by Créatec. It took an average of 25 minutes to administer.
- To facilitate administration of the interviews according to a planned sequence of exposures, rotation of Health Warning Messages (HWMs), and rotation of the "Light" descriptor, 36 different versions of the questionnaire were prepared.
- In all cases, the respondents were asked for their impressions about the cigarettes' sensory attributes before being asked for their perceptions of the product personality and the people who smoke it.
- The questionnaire (see Appendix 1) was pre-tested with 10 Anglophones and 10 Francophones.
- The following diagram illustrates the process that was followed to gather and analyze the data to test the general hypothesis of this study.



4.8 INTERVIEW TOOLS

HWM Mock-ups

- The 6 English and 6 French mock-ups (3 test HWMs + 3 current HWMs) were flat in shape and printed on cardstock, measured 4 inches by 3 inches in size, identical to an actual size of a pack of 25 cigarettes, with the health warning message taking up the top 50% of the package surface area and the brand name on the bottom 50% package surface area.
- TCP supplied all mock-ups for testing.
- The HWMs used in this experiment were (see Appendix 2):

<u>ENGLISH</u>		<u>FRENCH</u>	
TEST L/M HWMs*			
1.	"mild" flavour, harsh reality	1.	goût « léger », dure réalité
2.	Taste can kill you	2.	Un goût mortel
3.	"light" is not less addictive	3.	« légère » mais pas moins lourde de conséquence

CURRENT HWMs**			
1.	Tobacco smoke hurts babies	1.	La fumée du tabac nuit aux bébés
2.	Cigarettes cause mouth diseases	2.	La cigarette cause des maladies de la bouche
3.	Cigarettes cause lung cancer	3.	La cigarette cause le cancer du poumon

* All evaluated by each respondent.

** Only one (selected at random) evaluated by each respondent.

Photos of characters representing social stereotypes

- To measure the social image of the product, we used the same photos of characters representing social stereotypes that were used in several previous Health Canada studies. These photos were supplied by Créatec.

4.9 FIELD PROCEDURES

- There were about twenty interviewers. All of them attended a briefing session and a simulated interview.
- The interviews were distributed across six shopping malls and spread out over a maximum continuous period of 10 days.
- A supervisor was always present at each interview site to oversee and check the accuracy (100%) of each interviewer's work.

- During the week following the completion of the field interviews, a follow-up validation was done on 10% of all the interviews, by telephone. In each telephone call, a few socio-demographic questions were verified.

4.10 CODING AND DATA-ENTRY PROCEDURES

- No special coding was required, because all questions were closed-ended.
- The data-entry procedure consisted of the following steps:
 - review the questionnaires quickly to detect any obvious inconsistencies;
 - program the questionnaires into a data-entry software module;
 - enter the data;
 - perform logical validation of all responses.

4.11 STATISTICAL ANALYSIS

- Weightings were applied for the distribution of men and women. The rotations in the exposure to the stimuli, the completed sample per shopping mall and age were not weighted.
- Once weighted, the data were used to produce banner tables.

Statistical tests

- Larger sample sizes have a tendency to inflate measures of statistical significance and may lead to false conclusions about effect and strength of association, as smaller confidence intervals do. Some statistical tests are particularly susceptible to this, such as the Chi Square measure of association and the T-Test measure of comparison.
- As mentioned previously, the sample size of this experiment was typical of what the tobacco industry generally uses and was not considered too large or too small.
- Therefore, strict standards were used to decide whether to call a relationship or a difference "statistically significant". In order to earn this label, all tests must have had a probability of a type I error of less than 0.01, with a 95% confidence interval.
- Two types of statistical tests were performed on the observed differences between presence / absence of the "light" descriptor and the test L/M HWMs and the control HWMs:
 - univariate T-test for paired observations.
 - multivariate MANOVA F-Tests.

MANOVA

- Multivariate analysis of variance (MANOVA) is a very flexible analytical method that can be applied to a variety of experimental designs, including the present one. The particular MANOVA model used for this study was the "doubly multivariate repeated measures design", where:

- the dependent variables (23) were the responses on the scales measuring:
 - perceived strength of the cigarette (5 attributes);
 - product personality traits (12 attributes);
 - social image of the product (6 attributes).
- there were two (2) within-subjects factors:
 - the presence or absence of the L/M descriptor;
 - the type of HWM (L/M related vs. control).
- because the within-subjects factors had two modalities, it was not necessary to specify a type of contrast;
- the language (2) was the between-subjects factor.
- The model was multivariate in two senses: first, because the same scale (for example, for a particular sensory attribute) was evaluated twice by the same respondent, on 4 occasions" (for the 3 test HWMs and 1 control HWM, with and without descriptor); and second, because each respondent evaluated several scales in the same set (for example, the 5 attributes in the sensory profile) on a single occasion (example: control HWM with descriptor).
- The MANOVA analyses required the data to be organized in the "*multivariate setup*", in other words, all scores for the same respondent had to reside within the same case and the order had to correspond to the matching levels of the within-subjects factors. Therefore, a separate data SPSS bank had to be produced for the MANOVA analyses.
- Three MANOVA analyses were performed in addition to the T-Test analysis:
 - one analysis for the combined effects for all test HWMs and all respondents, for each of the three sets of criteria (sensory, brand personality, social image).

4.12 CHARACTERISTICS OF THE WEIGHTED SAMPLE

- **Table 1** presents the demographic characteristics and smoking habits of respondents in the sample.
- In accordance with the quota set for the mall intercepts, the gender split of the sample was perfectly equal.
- Educational attainment and family income was lower than for the average Canadian population, which reflects what is known about current smokers.
- 38 percent of the total sample reported their usual brand of cigarettes to be a L&M, while 42 percent considered their usual brand to be a L&M.
- Half of the respondents had smoked for more than 10 years and the average number of cigarettes smoked per day was 16.1.

- French and English sub-samples had some significantly different characteristics. English respondents reported:
 - higher family income;
 - higher educational attainment;
 - more often working;
 - lower average number of cigarettes smoked per day;
 - higher incidence of L&M among usual brands;
 - lower incidence of a secondary brand of cigarettes.
- Both sub-samples were comparable in terms of:
 - age;
 - gender;
 - marital status.

TABLE 1

CHARACTERISTICS OF THE WEIGHTED SAMPLE

	Total (645) %	English (428) %	French (217) %
Gender			
• Male	50	50	50
• Female	50	50	50
Age			
• 18-24 years	37	36	39
• 25-44 years	40	41	38
• 45 years and over	23	23	22
Educational Attainment			
• High school or less	58	54	66
• College (some or completed)	28	28	27
• > College	14	18	6
Employment Status			
• Full-time	53	58	44
• Part-time	13	14	12
• Student	10	9	12
• Unemployed	23	19	31
• Don't know / no answer	1	0	1
Marital Status			
• Married / living as couple	40	39	41
• Single	48	47	49
• Other	11	13	10
• Dk/Na	1	1	0
Family Income			
• < \$40,000	52	45	68
• \$40,000 – \$79,999	28	32	20
• \$80,000 and over	11	14	5
• Dk/Na	9	10	7
Daily Number of Cigarettes			
• 10 or less	37	44	54
• 11-25	58	52	69
• More than 25	6	4	9
• Average number	16.1	15.1	18.1
Usual brand of cigarettes			
• DuMaurier Light*	12	16	5
• Total DuMaurier*	33	38	22
Label of usual brand is "Light" or "Mild"***	38	44	25
Consider usual brand to be "L&M"	42	48	28
Use a secondary brand of cigarettes	59	50	79
Secondary brand of cigarettes			
• DuMaurier Light*	5	7	2
• Total DuMaurier*	15	18	10
Label of secondary brand is "Light" or "Mild"***	17	18	14
Length of daily cigarette smoking			
• 5 years or less	29	33	22
• 6-10 years	21	21	23
• More than 10 years	50	46	56

* Note that the brand depicted in the test was DuMaurier.

** L&M = "Light" or "Mild", includes Ultra Light, Ultra Mild, Extra Light, Extra Mild.

"Light" or "Mild" Descriptors and Product Image

5. DETAILED RESULTS

5.1 ABOUT MEASURING EFFECTS AND PRESENTATION OF FINDINGS

This section provides the reader with some key definitions and concepts used throughout the report.

In addition, a concrete example to illustrate calculations and concepts is presented.

MEASURING EFFECTS

- Simple main effect of the "light" descriptor was the difference between scores achieved by the packages with and without the descriptor.
 - This effect could be examined overall and only for packages with the test "Light" or "Mild" related Health Warning Messages (L/M HWMs) or only for those with the control HWMs.
- Simple main effect of the test L/M HWMs was the difference between scores achieved by the packages with the test L/M HWMs and those with the control HWMs.
 - This effect could be examined overall and only for packages with or without the "light" descriptor.
- Effect of descriptor and effect of HWMs could be correlated or independent. They were correlated when a two-way interaction effect (descriptor X HWMs) was significant. Interaction effects were differentials of simple main effects along the other factor.
- To analyze and report findings, a model of variance analysis was designed to address the purpose of the study. As stated in section 3 – *objectives of the research*, the central hypothesis of this study was that "light" or "mild" related Health Warning Messages (L/M HWMs) could reduce consumer confusion with regard to the perceived properties of cigarettes using L&M descriptors on their packages. This hypothesis could be accepted if:
 - the "light" descriptor had a significant simple main effect;
 - and if this effect was significantly influenced by the type of HWMs (i.e. a significant interaction term – descriptor X type of HWMs showing that consumers' confusion was reduced with the test L/M HWMs).
- Therefore, we selected the following approach for illustrating and testing effects of the "light" descriptor and its interaction with the type of HWMs.

Univariate analysis

1. For each individual attribute, we first determined the simple main effect of the "light" descriptor for the packages using the test L/M HWMs and the control HWMs.

- This was the difference between scores for packages with and without the descriptor (simple main effect of descriptor).
 - Statistical significance of this difference was tested for each attribute and each type of HWMs (test and control).
2. For each individual attribute, we then compared the simple main effect of the "light" descriptor (measured as stated above) between packages using the test "Light" or "Mild" related Health Warning Messages (L/M HWMs) and those using the control HWMs.
- This was the differential effect of the "light" descriptor caused by the type of HWMs (interaction effect of descriptor and type of HWMs).
 - Statistical significance of this differential was tested for each attribute.

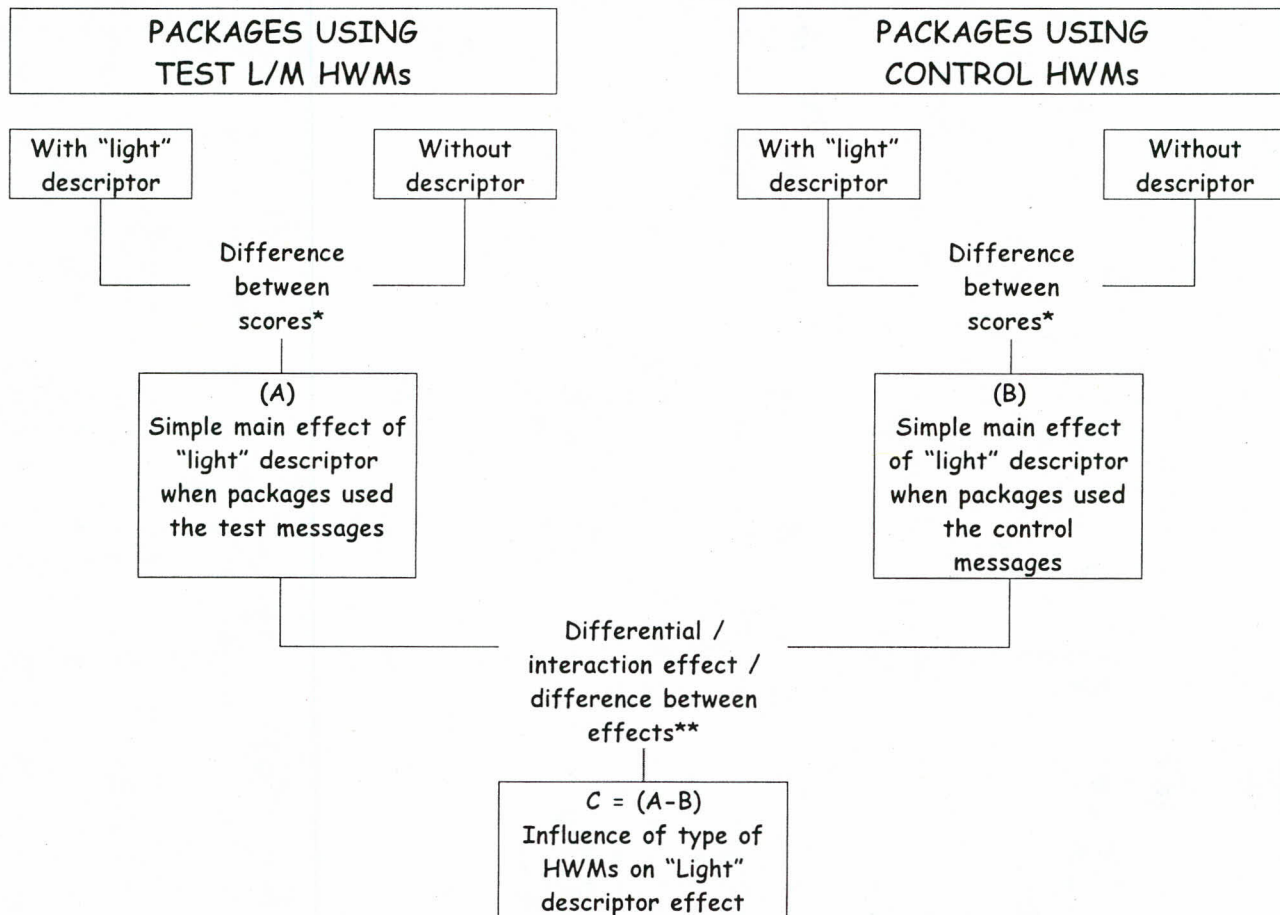
Multivariate analysis

- To verify if the "light" descriptor and its interaction with the type of HWMs had an influence on the entire set of attributes used (not on some individual attributes), we performed a multivariate analysis of variance (Manova – see section 4.11 for more details).
 - Simple main (multivariate) effects of "light" descriptor and type of HWMs were tested.
 - Interaction (multivariate) effects of descriptor and type of HWMs were also tested.

PRESENTING AND TESTING EFFECTS

- The following diagram illustrates the univariate approach followed to determine simple main effects of the "light" descriptor and their interaction with the type of HWMs, for each individual attribute.
- This diagram is followed by a lay-out of a typical table used to present findings on the observed effects (main and interaction), for each individual attribute.
- For the multivariate analysis of effects, findings presented are excerpts of the SPSS Manova program.

HOW EFFECTS WERE CALCULATED FOR EACH INDIVIDUAL ATTRIBUTE (univariate analysis)



* A positive difference between scores means that packages with the "light" descriptor have more of the attribute which is rated.

** A positive difference between effects means that the test L/M HWMs reduces the effect caused by the "light" descriptor.

- The following table presents the typical lay-out used to display the findings i.e. the "light" descriptor simple main effects (A and B) and the differential (interaction) effect of the "light" descriptor caused by the type of HWMs (C).

- A, B and C were tested for statistical significance (T-Test), for each attribute.
- The diagram presented previously shows how A, B and C were calculated.

HOW INDIVIDUAL EFFECTS ARE PRESENTED

Mean differences between scores with and without "Light" descriptor (N =645)	HWMs		Difference Test / Control
	Test	Control	
For each attribute of the profile	A*	B*	C*

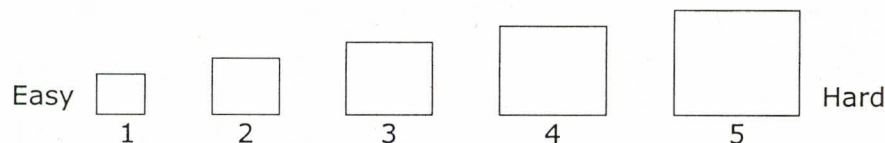
* See diagram on previous page.

EXAMPLE OF CALCULATIONS

First Attribute of the Sensory Profile

Q1.1 DRAW EFFORT / PULL (Easy – Hard)

The amount of effort necessary (drawing or sucking on this brand of cigarettes) to get a satisfactory puff of smoke into the mouth.



Detailed scores obtained using a 5-point scale
(Total sample – English and French combined)

	Packages using test L/M HWMs	Packages using control HWMs
➤ Average raw score for packages with "light" descriptor	2.84	2.91
➤ Average raw score for packages without descriptor	2.51	2.61
➤ Simple main effect of "light" descriptor on attribute	A 0.33	B 0.31
➤ Differential effect caused by HWM type (interaction effect)	C 0.02	

Mean differences between scores with and without "Light" descriptor (N =645)	HWMs		Difference Test / Control
	Test	Control	
Draw effort / pull	0.33*	0.31*	0.02

* *T-Test significant at $P < 0.01$*

Interpretation

- **A = 0.33** means that the cigarettes contained in packages with the "light" descriptor and using the test "Light" or "Mild" related Health Warning Messages (L/M HWMs) were perceived as harder to draw because this difference was statistically significant (T-Test).
- **B = 0.31** means that the cigarettes contained in packages with the "light" descriptor and using the control HWMs were perceived as harder to draw because this difference was statistically significant (T-Test).
- **C = 0.02** means that the effect of the "light" descriptor was the same between packages using the test C/D HWMs, or those using the current messages, because this differential (interaction effect) was not statistically significant (T-Test).

5.2 EFFECTS ON SENSORY PROFILE

Effects of "light" descriptor and HWM type on the product sensory profile were measured by five attributes selected from a list the tobacco industry uses to determine the sensory profile of products and brands in its product testing. These product properties were also used in a previous experiment on the effect of "light" and "mild" descriptors on perceived strength of cigarettes.¹

The same 5-point scale used in previous experiments and industry studies were also used in this experiment.

By comparing the sensory profile obtained for the packages with and without the "light" descriptor, we obtained an objective measurement of the influence of the "light" descriptor on the sensory perception of the product.

By comparing the "light" descriptor effect between test "Light" or "Mild" related Health Warning Messages (L/M HWMs) and control HWMs, we obtained an objective measurement of the effect of the test L/M HWMs on consumers' confusion about L&M vs. Regular cigarettes.

Comparisons were made using both univariate (T-Tests for each individual attribute) and multivariate (Manova F-Tests for the entire set of attributes) tests.

Tables 2-4 (at the end of this section) show the mean differences (univariate analysis) between scores for packages with and without "light" descriptor for the test and the control HWMs. For explanations on how these differences were calculated and what they mean can be found in the previous section 5.1.

- Table 2 presents the differences for the overall sample (N = 645)
- Table 3 presents the differences for the French HWMs (N = 217)
- Table 4 presents the differences for the English HWMs (N = 428)

Table 5 summarizes the results of the statistical significance of the effects (univariate T-Tests) observed in **Tables 2-4**.

Tables 6-8 show the simple main effects of test L/M HWMs.

Table 9 presents the detailed raw scores used to calculate effects and differences.

Interpretation of univariate analysis (**Tables 2-6**) is presented first, followed by MANOVA results.

¹ Effects of "Light" and "Mild" Labels on Perceived Strength and Brand Image of Cigarettes. Créatec +. February, 2002.

5.2.1 UNIVARIATE ANALYSIS

MAIN EFFECT OF "LIGHT" DESCRIPTOR

Total Sample

- For all sensory attributes, with the exception of one (*taste pleasantness*), findings indicated that the mere presence of the "light" descriptor influenced the perceived strength of the product, for both the test and the control HWMs.
 - Packages with the "light" descriptor, whether with the test L/M HWMs or with the control warnings, were perceived significantly differently than packages without the descriptor. Cigarettes contained in packages with the "light" descriptor were perceived as:
 - *harder to draw;*
 - *delivering lower initial satisfaction;*
 - *having lower throat catch/hit; and*
 - *being less toxic.*
 - The mere presence of the "light" descriptor was most likely to influence perception of *initial satisfaction* and *throat catch/hit* (almost half a point on the 5-point scale), whether with the test L/M HWMs or with the control warnings.
 - Presence of the "light" descriptor made no difference in terms of perceived taste pleasantness, whether with the test L/M HWMs or with the control warnings.
- The univariate tests for statistical significance of the observed differences caused by the "light" descriptor (T-Tests) were all significant at $P < 0.01$ for all sensory attributes (except *taste pleasantness*), and for both types of HWMs used.
- These findings confirmed results of a previous experiment¹ which demonstrated that the mere presence of a light/mild descriptor on a brand packaging made the cigarette it contains "weaker" in the eyes of smokers.
- This study revealed that this effect was still observed with packages using warnings directly related to L&M cigarettes and aimed at reducing consumer confusion about L&M vs. Regular cigarettes.

French vs. English Versions

- What was observed in the overall sample (combined results of French and English versions of the packages) was also verified within each of the language sub-samples.
 - Except for taste pleasantness, findings indicated that the mere presence of the "light" descriptor had a very significant influence on the perceived strength of the product, within each language version and for both test and control HWMs.

¹ Among 11 sensory attributes, only taste pleasantness and favourability towards the brand were not influenced by the "light" descriptor. Effects of "Light" and "Mild" Labels on Perceived Strength and Brand Image of Cigarettes. Créatec +. February, 2002.

- The univariate T-Tests of the observed differences caused by the "light" descriptor were all significant at $P < 0.01$ for all sensory attributes, except taste pleasantness. The strongest influence was observed on the same two sensory attributes, whatever the language version (initial satisfaction and throat catch/hit).
- The following table summarizes the results of the univariate statistical tests on the "light" descriptor simple main effect.

"LIGHT" DESCRIPTOR SIMPLE MAIN EFFECTS FOR TEST AND CONTROL HWMS
- SUMMARY OF STATISTICAL TESTING -

SENSORY ATTRIBUTES	TEST HWMS			CONTROL HWMS		
	Total	French	English	Total	French	English
1. Draw effort / pull	SIG	SIG	SIG	SIG	SIG	SIG
2. Taste pleasantness						
3. Initial satisfaction	SIG	SIG	SIG	SIG	SIG	SIG
4. Throat catch / hit	SIG	SIG	SIG	SIG	SIG	SIG
5. Toxicity	SIG	SIG	SIG	SIG	SIG	SIG

SIG = T-Test significant at $P < 0.01$

 Not significant

INTERACTION EFFECT OF "LIGHT" DESCRIPTOR WITH TYPE OF HWMS

Total Sample

- When the "light" descriptor main effect was compared between packages using the test "Light" or "Mild" related Health Warning Message (L/M HWM) concepts and those using current messages, no differential effect was statistically significant.
 - This means that the "light" descriptor had an identical simple main effect, whatever the type of HWMS used – the interaction effect was not significant – simple main effects of descriptor and type of HWMS on sensory attributes were independent.
 - The largest interaction term was observed for the *toxicity* attribute: the test HWM concepts slightly reduced the belief that Light cigarettes were less toxic than Regular cigarettes (slight reduction in consumer confusion) but this differential effect was not statistically significant.

French vs. English Versions

- For both language versions, no differential effect of the "light" descriptor by type of HWMs was statistically significant, except one: *throat catch/hit*.
 - French version of the warnings: the effect of the "light" descriptor on perceived throat catch was significantly smaller with the test warning concepts than with the current ones: with the test warnings, perceived throat catch of Light cigarettes was higher than with the control warnings.
 - English version of the warnings: the interaction effects of "light" descriptor and types of warning were all not significant, including on throat catch.
 - As seen previously, when the French and English results were combined (total sample), the differential effect of the "light" descriptor caused by the test warnings was not significant for any of the sensory attributes.
- The following table summarizes the results of the univariate statistical tests on the interaction effect between the "light" descriptor and the type of HWMs.

INTERACTION EFFECT OF "LIGHT" DESCRIPTOR WITH TYPE OF HWMS
- SUMMARY OF STATISTICAL TESTING-

SENSORY ATTRIBUTES	Total	French	English
1. Draw effort / pull			
2. Taste pleasantness			
3. Initial satisfaction			
4. Throat catch / hit		SIG	
5. Toxicity			

SIG = T-Test significant at $P < 0.01$

 Not significant

MAIN EFFECT OF TEST HWMS

- Tables 7-9** present the average raw scores achieved by the test and control HWMs, when scores for packages with and without descriptor were combined.
- Differences were minimal for each of the five attributes. The largest and only significant individual difference was for the attribute *throat catch/hit*: packages with the test warnings scored lower on the throat catch scale, compared to packages using control warnings.
- MANOVA analysis revealed (presented later) that the test L/M HWMs had a significant effect on the sensory profile taken as a whole and suggested that test HWMs had some distinct effect, when compared to control HWMs.

- This was because at least one individual difference was significant and all individual differences went in the same direction i.e. there was a consistent tendency (except for taste pleasantness).
- Packages using the test "Light" or "Mild" related Health Warning Messages (L/M HWMs) tended to be perceived as containing "weaker" cigarettes, less damaging than those with packages using the current HWMs (notably a lower throat catch).
 - This tendency was consistent across language versions.
- Therefore, we observed that the test L/M HWMs
 - had no significant influence on the confusion generated by the "light" descriptor about L&M vs. Regular cigarettes;
 - had a slight tendency to reinforce the perception that L&M cigarettes were "weaker/safer" cigarettes. Although this effect was small, it tended to be consistent.
- Detailed tables of the univariate results and statistical tests are presented on the following pages.

TABLE 2 EFFECTS OF "LIGHT" DESCRIPTOR AND HWMS ON SENSORY PROFILE
– TOTAL SAMPLE –

Q1 I would like to have your impressions on what you think may happen when you smoke cigarettes contained in this package. Take the time to look at it. Then I would like you to fill out this part of the survey on your own. Here are the questions and a pencil. I will wait right here for you to finish this part, then we can go on with a few more interview questions. If you have any questions as you are going along, please ask me about them.

First, read the description of what may happen when you smoke cigarettes contained in the package shown on the picture. Then check the box that best represents your impression about what would happen. (Explain scale 1 to 5 / Leave the picture of the package in view / Self-complete)

Mean differences between scores with and without "Light" descriptor (N =645)	HWMS		Difference Test/Control
	Test	Control	
1. Draw effort / pull	.33*	.31*	.02
2. Taste pleasantness	-.03	-.05	.01
3. Initial satisfaction	-.43*	-.45*	.02
4. Throat catch / hit	-.44*	-.44*	-.01
5. Toxicity	-.20*	-.30*	.10

* T-Test significant at $P < 0.01$

N.B. Differences on 5-point scale used

All scores reported in the table were obtained during the first two (out of 4) exposure stages where respondents randomly evaluated one of the 3 control and one of the 3 test HWMS.

TABLE 3 **EFFECTS OF "LIGHT" DESCRIPTOR AND HWMS ON SENSORY PROFILE**
- FRENCH HWMS -

Q1 *I would like to have your **impressions** on what you think may happen when you smoke cigarettes contained in this package. Take the time to look at it. Then I would like you to fill out this part of the survey on your own. Here are the questions and a pencil. I will wait right here for you to finish this part, then we can go on with a few more interview questions. If you have any questions as you are going along, please ask me about them.*

First, read the description of what may happen when you smoke cigarettes contained in the package shown on the picture. Then check the box that best represents your impression about what would happen. (Explain scale 1 to 5 / Leave the picture of the package in view / Self-complete)

Mean differences between scores with and without "Light" descriptor (N = 217)	HWMS		Difference Test/Control
	Test	Control	
1. Draw effort / pull	.35*	.43*	-.08
2. Taste pleasantness	-.05	-.07	.02
3. Initial satisfaction	-.54*	-.68*	.13
4. Throat catch / hit	-.37*	-.66*	.28*
5. Toxicity	-.23*	-.31*	.09

* *T-Test significant at $P < 0.01$*

N.B. Differences on 5-point scale used

All scores reported in the table were obtained during the first two (out of 4) exposure stages where respondents randomly evaluated one of the 3 control and one of the 3 test HWMS.

TABLE 4 EFFECTS OF "LIGHT" DESCRIPTOR AND HWMS ON SENSORY PROFILE
- ENGLISH HWMS -

Q1 I would like to have your impressions on what you think may happen when you smoke cigarettes contained in this package. Take the time to look at it. Then I would like you to fill out this part of the survey on your own. Here are the questions and a pencil. I will wait right here for you to finish this part, then we can go on with a few more interview questions. If you have any questions as you are going along, please ask me about them.

First, read the description of what may happen when you smoke cigarettes contained in the package shown on the picture. Then check the box that best represents your impression about what would happen. (Explain scale 1 to 5 / Leave the picture of the package in view / Self-complete)

Mean differences between scores with and without "Light" descriptor (N = 428)	HWMS		Difference Test/Control
	Test	Control	
1. Draw effort / pull	.32*	.25*	.07
2. Taste pleasantness	-.02	-.04	.01
3. Initial satisfaction	-.38*	-.34*	-.05
4. Throat catch / hit	-.48*	-.32*	-.15
5. Toxicity	-.18*	-.30*	.11

* T-Test significant at $P < 0.01$

N.B. Differences on 5-point scale used

All scores reported in the table were obtained during the first two (out of 4) exposure stages where respondents randomly evaluated one of the 3 control and one of the 3 test HWMS.

TABLE 5

T-TESTS SUMMARY OF THE EFFECTS OF "LIGHT" DESCRIPTOR AND HWMs ON SENSORY PROFILE

Q1 I would like to have your impressions on what you think may happen when you smoke cigarettes contained in this package. Take the time to look at it. Then I would like you to fill out this part of the survey on your own. Here are the questions and a pencil. I will wait right here for you to finish this part, then we can go on with a few more interview questions. If you have any questions as you are going along, please ask me about them.

First, read the description of what may happen when you smoke cigarettes contained in the package shown on the picture. Then check the box that best represents your impression about what would happen. (Explain scale 1 to 5 / Leave the picture of the package in view / Self-complete)

SENSORY ATTRIBUTES (N = 645)	TEST HWMs			CONTROL HWMs			DIFFERENCE TEST / CONTROL		
	Total	French	English	Total	French	English	Total	French	English
1. Draw effort / pull	SIG	SIG	SIG	SIG	SIG	SIG			
2. Taste pleasantness									
3. Initial satisfaction	SIG	SIG	SIG	SIG	SIG	SIG			
4. Throat catch / hit	SIG	SIG	SIG	SIG	SIG	SIG		SIG	
5. Toxicity	SIG	SIG	SIG	SIG	SIG	SIG			

SIG = T-Test significant at $P < 0.01$

 Not significant

All tests reported in the table were on scores obtained during the first two (out of 4) exposure stages where respondents randomly evaluated one of the 3 control and one of the 3 test HWMs.

TABLE 6 **SIMPLE MAIN EFFECTS OF TEST HWMS ON SENSORY PROFILE**
- TOTAL SAMPLE -

Q1 I would like to have your impressions on what you think may happen when you smoke cigarettes contained in this package. Take the time to look at it. Then I would like you to fill out this part of the survey on your own. Here are the questions and a pencil. I will wait right here for you to finish this part, then we can go on with a few more interview questions. If you have any questions as you are going along, please ask me about them.

First, read the description of what may happen when you smoke cigarettes contained in the package shown on the picture. Then check the box that best represents your impression about what would happen. (Explain scale 1 to 5 / Leave the picture of the package in view / Self-complete)

SENSORY ATTRIBUTES (5-point scale)	HWMS*		Difference
	Test	Control	
1. Draw effort / pull	2.67	2.76	-.09
2. Taste pleasantness	3.03	3.03	.00
3. Initial satisfaction	3.07	3.11	-.04
4. Throat catch / hit	2.94	3.08	-.14**
5. Toxicity	3.69	3.75	-.06

* Raw scores obtained on a 5-point scale. One of the 3 test and one of the 3 control warnings were evaluated at random by each respondent.

** T-Test significant at $P < 0.01$

TABLE 7 **SIMPLE MAIN EFFECTS OF TEST HWMS ON SENSORY PROFILE**
- FRENCH HWMS -

Q1 I would like to have your impressions on what you think may happen when you smoke cigarettes contained in this package. Take the time to look at it. Then I would like you to fill out this part of the survey on your own. Here are the questions and a pencil. I will wait right here for you to finish this part, then we can go on with a few more interview questions. If you have any questions as you are going along, please ask me about them.

First, read the description of what may happen when you smoke cigarettes contained in the package shown on the picture. Then check the box that best represents your impression about what would happen. (Explain scale 1 to 5 / Leave the picture of the package in view / Self-complete)

SENSORY ATTRIBUTES (5-point scale)	HWMS*		Difference
	Test	Control	
1. Draw effort / pull	2.63	2.68	-.05
2. Taste pleasantness	2.96	2.96	.00
3. Initial satisfaction	3.02	2.99	.03
4. Throat catch / hit	2.89	3.09	-.20**
5. Toxicity	3.83	3.83	.00

* Raw scores obtained on a 5-point scale. One of the 3 test and one of the 3 control warnings were evaluated at random by each respondent.

** T-Test significant at $P < 0.01$

TABLE 8 **SIMPLE MAIN EFFECTS OF TEST HWMS ON SENSORY PROFILE**
- ENGLISH HWMS -

Q1 I would like to have your impressions on what you think may happen when you smoke cigarettes contained in this package. Take the time to look at it. Then I would like you to fill out this part of the survey on your own. Here are the questions and a pencil. I will wait right here for you to finish this part, then we can go on with a few more interview questions. If you have any questions as you are going along, please ask me about them.

First, read the description of what may happen when you smoke cigarettes contained in the package shown on the picture. Then check the box that best represents your impression about what would happen. (Explain scale 1 to 5 / Leave the picture of the package in view / Self-complete)

SENSORY ATTRIBUTES (5-point scale)	HWMS*		Difference
	Test	Control	
1. Draw effort / pull	2.69	2.80	-.11
2. Taste pleasantness	3.06	3.06	.00
3. Initial satisfaction	3.10	3.17	-.07
4. Throat catch / hit	2.96	3.08	-.12
5. Toxicity	3.62	3.72	-.10

* Raw scores obtained on a 5-point scale. One of the 3 test and one of the 3 control warnings were evaluated at random by each respondent.

** T-Test significant at $P < 0.01$

TABLE 9

RAW SCORES ON SENSORY PROFILE

Q1 I would like to have your impressions on what you think may happen when you smoke cigarettes contained in this package. Take the time to look at it. Then I would like you to fill out this part of the survey on your own. Here are the questions and a pencil. I will wait right here for you to finish this part, then we can go on with a few more interview questions. If you have any questions as you are going along, please ask me about them.

First, read the description of what may happen when you smoke cigarettes contained in the package shown on the picture. Then check the box that best represents your impression about what would happen. (Explain scale 1 to 5 / Leave the picture of the package in view / Self-complete)

SENSORY ATTRIBUTES (5-point scale)	HWMs	
	TEST	CONTROL
1. Draw effort / pull		
Total sample		
• With descriptor	2.84	2.91
• Without descriptor	2.51	2.61
• Difference	.33*	.31*
French HWMs		
• With descriptor	2.81	2.90
• Without descriptor	2.46	2.47
• Difference	.35*	.43*
English HWMs		
• With descriptor	2.85	2.92
• Without descriptor	2.53	2.68
• Difference	.32*	.25*
2. Taste pleasantness		
Total sample		
• With descriptor	3.01	3.00
• Without descriptor	3.04	3.05
• Difference	-.03	-.05
French HWMs		
• With descriptor	2.93	2.93
• Without descriptor	2.98	3.00
• Difference	-.05	-.07
English HWMs		
• With descriptor	3.06	3.04
• Without descriptor	3.08	3.08
• Difference	-.02	-.04

* T-Test significant at $P < 0.01$

Note: "Control" are scores obtained by one of the 3 existing HWMs evaluated at random by each respondent. "Test" are scores obtained by one of the 3 test concepts of L/M HWMs evaluated at random by each respondent (see Appendix 2).

Note: All results shown for "control" and "test" HWMs are raw scores obtained on a 5-point scale, where 1 means "low" and 5 means "high".

All scores reported in the table were obtained during the first two (out of 4) exposure stages where respondents randomly evaluated one of the 3 control and one of the 3 test HWMs.

SENSORY ATTRIBUTES (5-point scale)	HWMs	
	TEST	CONTROL
3. Initial satisfaction		
Total sample		
• With descriptor	2.86	2.88
• Without descriptor	3.29	3.33
• Difference	-.43*	-.45*
French HWMs		
• With descriptor	2.74	2.65
• Without descriptor	3.29	3.33
• Difference	-.54*	-.68*
English HWMs		
• With descriptor	2.91	3.00
• Without descriptor	3.29	3.34
• Difference	-.38*	-.34*
4. Throat catch / hit		
Total sample		
• With descriptor	2.72	2.87
• Without descriptor	3.16	3.30
• Difference	-.44*	-.44*
French HWMs		
• With descriptor	2.70	2.76
• Without descriptor	3.08	3.42
• Difference	-.37*	-.66*
English HWMs		
• With descriptor	2.72	2.92
• Without descriptor	3.20	3.24
• Difference	-.48*	-.32*
5. Toxicity		
Total sample		
• With descriptor	3.59	3.60
• Without descriptor	3.79	3.90
• Difference	-.20*	-.30*
French HWMs		
• With descriptor	3.71	3.68
• Without descriptor	3.94	3.99
• Difference	-.23*	-.31*
English HWMs		
• With descriptor	3.53	3.57
• Without descriptor	3.71	3.86
• Difference	-.18*	-.30*

* T-Test significant at $P < 0.01$

Note: "Control" are scores obtained by one of the 3 existing HWMs evaluated at random by each respondent. "Test" are scores obtained by one of the 3 test concepts of L/M HWMs evaluated at random by each respondent (see Appendix 2).

Note: All results shown for "control" and "test" HWMs are raw scores obtained on a 5-point scale, where 1 means "low" and 5 means "high".

All scores reported in the table were obtained during the first two (out of 4) exposure stages where respondents randomly evaluated one of the 3 control and one of the 3 test HWMs.

5.2.2 MULTIVARIATE ANALYSIS

- On the following pages the main MANOVA results (SPSS) are presented.
- Multivariate analysis of the differences (MANOVA) indicated that:
 1. the simple main effect of the "light" descriptor was significant.
 - This means that the mere presence of the descriptor had a significant effect on the entire sensory profile, whatever the type of HWMs.
 2. the simple main effect of the type of HWMs was significant.
 - This means that the influence of the test L/M HWMs on the entire sensory profile was significantly different than the influence of the control HWMs.
 3. the interaction effect of descriptor and type of HWMs was not significant.
 - This means that the test L/M HWM concepts had not influenced the simple main effect of the "light" descriptor – i.e. the effect of the descriptor on the entire sensory profile remained the same for both types of HWMs.
 4. the interaction effect of language with descriptor or type of HWMs was not significant.
 - This means that the main effect of the descriptor or the main effect of type of HWMs on the entire sensory profile remained the same, whatever the language version of the warnings.
- As can be seen by the following MANOVA results, all of the multivariate F-Tests for the simple main effects mentioned previously were significant ($P < 0.01$), but not the interaction effects. MANOVA univariate F-Tests are presented for comparison with the T-Tests presented earlier. Since the conditions of sphericity were not satisfied, this indicated that the T-Tests were more accurate when we examined the effects on each of the criteria. However, MANOVA univariate F-Tests and T-Tests pointed to the same conclusions.

*** * ANALYSIS OF VARIANCE -- DESIGN 1 * ***

SENSORY PROFILE

Tests involving 'DESCRIPTOR' Within-Subject Effect.

Mauchly sphericity test, W =	.51154
Chi-square approx. =	422.37908 with 14 D. F.
Significance =	.000
Greenhouse-Geisser Epsilon =	.76685
Huynh-Feldt Epsilon =	.77334
Lower-bound Epsilon =	.20000

AVERAGED Tests of Significance that follow multivariate tests are equivalent to univariate or split-plot or mixed-model approach to repeated measures.
Epsilons may be used to adjust d.f. for the AVERAGED results.

EFFECT .. LANGUAGE BY DESCRIPTOR
Multivariate Tests of Significance (S = 1, M = 1 1/2, N = 313)

Test Name	Value	Approx. F	Hypoth. DF	Error DF	Sig. of F
Pillais	.01135	1.44167	5.00	628.00	.207
Hotellings	.01148	1.44167	5.00	628.00	.207
Wilks	.98865	1.44167	5.00	628.00	.207
Roys	.01135				

Eigenvalues and Canonical Correlations

Root No.	Eigenvalue	Pct.	Cum. Pct.	Canon Cor.
1	.011	100.000	100.000	.107

EFFECT .. LANGUAGE BY DESCRIPTOR (CONT.)
Univariate F-tests with (1,632) D. F.

Variable	Hypoth. SS	Error SS	Hypoth. MS	Error MS	F	Sig. of F
T2	1.64960	971.64209	1.64960	1.53741	1.07298	.301
T6	.20891	693.17062	.20891	1.09679	.19047	.663
T10	8.40242	788.98477	8.40242	1.24839	6.73058	.010
T14	1.67124	707.75331	1.67124	1.11986	1.49236	.222
T18	.14682	507.24166	.14682	.80260	.18293	.669

EFFECT .. DESCRIPTOR
Multivariate Tests of Significance (S = 1, M = 1 1/2, N = 313)

Test Name	Value	Approx. F	Hypoth. DF	Error DF	Sig. of F
Pillais	.23076	37.67889	5.00	628.00	.000
Hotellings	.29999	37.67889	5.00	628.00	.000
Wilks	.76924	37.67889	5.00	628.00	.000
Roys	.23076				

Eigenvalues and Canonical Correlations

Root No.	Eigenvalue	Pct.	Cum. Pct.	Canon Cor.
1	.300	100.000	100.000	.480

EFFECT .. DESCRIPTOR (CONT.)
Univariate F-tests with (1,632) D. F.

Variable	Hypoth. SS	Error SS	Hypoth. MS	Error MS	F	Sig. of F
T2	64.00504	971.64209	64.00504	1.53741	41.63178	.000
T6	1.39456	693.17062	1.39456	1.09679	1.27149	.260
T10	128.76308	788.98477	128.76308	1.24839	103.14301	.000
T14	115.39716	707.75331	115.39716	1.11986	103.04580	.000
T18	37.30553	507.24166	37.30553	.80260	46.48099	.000

Tests involving 'TYPE OF HWMS' Within-Subject Effect.

Mauchly sphericity test, W = .63375
 Chi-square approx. = 287.39107 with 14 D. F.
 Significance = .000

Greenhouse-Geisser Epsilon = .84449
 Huynh-Feldt Epsilon = .85222
 Lower-bound Epsilon = .20000

AVERAGED Tests of Significance that follow multivariate tests are equivalent to univariate or split-plot or mixed-model approach to repeated measures.
 Epsilons may be used to adjust d.f. for the AVERAGED results.

EFFECT .. LANGUAGE BY TYPE OF HWMS

Multivariate Tests of Significance (S = 1, M = 1 1/2, N = 313)

Test Name	Value	Approx. F	Hypoth. DF	Error DF	Sig. of F
Pillais	.01160	1.47356	5.00	628.00	.196
Hotellings	.01173	1.47356	5.00	628.00	.196
Wilks	.98840	1.47356	5.00	628.00	.196
Roys	.01160				

 Eigenvalues and Canonical Correlations

Root No.	Eigenvalue	Pct.	Cum. Pct.	Canon Cor.
1	.012	100.000	100.000	.108

EFFECT .. LANGUAGE BY TYPE OF HWMS (CONT.)

Univariate F-tests with (1,632) D. F.

Variable	Hypoth. SS	Error SS	Hypoth. MS	Error MS	F	Sig. of F
T3	.67161	718.38079	.67161	1.13668	.59085	.442
T7	.00996	618.50879	.00996	.97865	.01018	.920
T11	1.48958	618.96100	1.48958	.97937	1.52096	.218
T15	1.13287	620.02030	1.13287	.98104	1.15476	.283
T19	.93658	525.32812	.93658	.83122	1.12676	.289

EFFECT .. TYPE OF HWMS

Multivariate Tests of Significance (S = 1, M = 1 1/2, N = 313)

Test Name	Value	Approx. F	Hypoth. DF	Error DF	Sig. of F
Pillais	.02504	3.22607	5.00	628.00	.007
Hotellings	.02569	3.22607	5.00	628.00	.007
Wilks	.97496	3.22607	5.00	628.00	.007
Roys	.02504				

 Eigenvalues and Canonical Correlations

Root No.	Eigenvalue	Pct.	Cum. Pct.	Canon Cor.
1	.026	100.000	100.000	.158

EFFECT .. TYPE OF HWMS (CONT.)

Univariate F-tests with (1,632) D. F.

Variable	Hypoth. SS	Error SS	Hypoth. MS	Error MS	F	Sig. of F
T3	3.01366	718.38079	3.01366	1.13668	2.65129	.104
T7	.00227	618.50879	.00227	.97865	.00232	.962
T11	.20853	618.96100	.20853	.97937	.21293	.645
T15	13.59863	620.02030	13.59863	.98104	13.86137	.000
T19	1.50209	525.32812	1.50209	.83122	1.80711	.179

Tests involving 'DESCRIPTOR BY TYPE OF HWMS' Within-Subject Effect.

Mauchly sphericity test, W = .76729
 Chi-square approx. = 166.90448 with 14 D. F.
 Significance = .000

Greenhouse-Geisser Epsilon = .90125
 Huynh-Feldt Epsilon = .90996
 Lower-bound Epsilon = .20000

AVERAGED Tests of Significance that follow multivariate tests are equivalent to univariate or split-plot or mixed-model approach to repeated measures.
 Epsilons may be used to adjust d.f. for the AVERAGED results.

EFFECT .. DESCRIPTOR BY TYPE OF HWMS
 Multivariate Tests of Significance (S = 1, M = 1 1/2, N = 313)

Test Name	Value	Approx. F	Hypoth. DF	Error DF	Sig. of F
Pillais	.00362	.45596	5.00	628.00	.809
Hotellings	.00363	.45596	5.00	628.00	.809
Wilks	.99638	.45596	5.00	628.00	.809
Roys	.00362				

 Eigenvalues and Canonical Correlations

Root No.	Eigenvalue	Pct.	Cum. Pct.	Canon Cor.
1	.004	100.000	100.000	.060

EFFECT .. DESCRIPTOR BY TYPE OF HWMS (CONT.)
 Univariate F-tests with (1,632) D. F.

Variable	Hypoth. SS	Error SS	Hypoth. MS	Error MS	F	Sig. of F
T4	.01122	459.59522	.01122	.72721	.01544	.901
T8	.03559	386.80779	.03559	.61204	.05815	.810
T12	.23591	391.74458	.23591	.61985	.38059	.538
T16	.38388	364.87572	.38388	.57734	.66493	.415
T20	1.33836	434.79148	1.33836	.68796	1.94540	.164

5.2.3 CONCLUSION

- Except for taste pleasantness, the mere presence of the "light" descriptor had a significant influence on the perceived strength of the product, on each sensory attribute taken individually or on the sensory profile taken as a whole:
 - whatever the language version of the warnings (French or English);
 - whatever the type of warning (test or control).
 - These findings confirmed previous experiments on the effects of "L&M" descriptors on the sensory properties of cigarettes and brands.
 - The effect of the "light" descriptor was statistically the same for packages using the test warnings and those using the control warnings. Therefore, the test warnings had not significantly reduced or influenced consumer confusion about the perceived sensory properties of "Light" vs. "Regular" cigarettes, for any individual sensory attribute or for the sensory profile taken as a whole.
- **The test "Light" or "Mild" related Health Warning Message (L/M HWM) concepts had no significant influence on the confusion about L&M vs. Regular cigarettes, generated by the presence of the "light" descriptor.**
- Compared to Regular cigarettes, cigarettes with the "light" descriptor were perceived as:
 - ***harder to draw;***
 - ***delivering lower initial satisfaction;***
 - ***having lower throat catch/hit; and***
 - ***being less toxic***

5.3 EFFECTS ON PRODUCT PERSONALITY PROFILE

Twelve attributes were used to determine the personality profile of the product. Some of these attributes were drawn from previous studies on brand personality and others from studies on the correlations between values and prevalence of smoking.

These attributes were measured on a 9-point semantic differential scale, with two contrasting labels (for example risk-takers vs. very prudent) at either end.

By comparing the personality profiles obtained for the packages with and without the "light" descriptor, we obtained an objective measurement of the influence of the "light" descriptor on the product personality.

By comparing the "light" descriptor effect between test L/M HWMs and control HWMs, we obtained an objective measurement of the effect of the test L/M HWMs on consumers' confusion about L&M vs. Regular cigarettes.

As we did for the effects on the sensory profile, the simple main effect of the "light" descriptor was compared between packages using the test warning concepts and those using the current ones.

Comparisons were made using both univariate (T-Tests for each individual attribute) and multivariate (Manova F-Tests for the entire set of attributes) tests.

Tables 10-12 (at the end of this section) show the mean differences (univariate analysis) between scores for packages with and without "light" descriptor for the test and the control HWMs.

- Table 10 presents the differences for the overall sample (N = 645)
- Table 11 presents the differences for the French HWMs (N = 217)
- Table 12 presents the differences for the English HWMs (N = 428)

Table 13 summarizes the results of the statistical significance of the effects (univariate T-Tests) observed in **Tables 10-12**.

Tables 14-16 show the simple main effects of test HWMs.

Table 17 presents the detailed raw scores used to calculate effects and differences.

Interpretation of univariate analysis (**Tables 10-14**) is presented first, followed by MANOVA results.

5.3.1 UNIVARIATE ANALYSIS

MAIN EFFECT OF "LIGHT" DESCRIPTOR

Total Sample

- When used with the test warnings, the "light" descriptor had a significant effect on only one personality attribute:
 - **Disciplined/disorganised:** packages with the "light" descriptor significantly projected a more disciplined/less disorganised personality than packages without the descriptor, when used with the test warnings.
 - Effect on this attribute was in the same direction for packages using the current warnings, but not large enough to be significant.
- When used with the current warnings, the "light" descriptor had a significant effect on three personality attributes:
 - **Risk-takers / very prudent:** with the "light" descriptor, personality was perceived as significantly more prudent / less risk-taking than without the descriptor, when used with the control warnings. Although in the same direction, this effect was not large enough with the test warnings to be significant.
 - **Health negligent / health conscious:** with the "light" descriptor, personality was perceived as significantly more health conscious / less negligent of health, when used with the control warnings. Although in the same direction, this effect was not large enough with the test warnings to be significant.
 - **In control of their destiny / fatalists:** with the "light" descriptor, personality was perceived as significantly more in control of their destiny / less fatalist, when used with the control warnings. This effect was only slightly in the same direction, and not large enough to be significant for the test warnings.
- One may think that because these significant effects of the "light" descriptor associated with the control HWMs disappeared with the test L/M HWMs, the test L/M HWMs were able to reduce consumers' confusion.
 - The evidence was not strong enough: the difference in effect was not large enough for the differential between test and control HWMs to be significant and attributable to the test HWMs (interaction effect of "light" descriptor and type of HWMs was not significant).
- Overall, these findings indicated that although the simple main effect of the "light" descriptor on product personality was different between types of HWMs, other findings (on interaction effect) suggested that this difference was not large enough and could not be attributable to the type of HWMs.
- Note that in previous experiments, it was observed that the effect of the descriptor on product personality was specific, not generic, and varied a great deal from brand to brand.

- Therefore, although the "light" descriptor may have had an effect on product personality, this effect may also vary a great deal depending on factors other than the type of warning. In this study, its effect was limited to a few attributes and was not consistent across language versions. In addition, testing of interaction effects revealed that it could not be attributable to the type of warning.

French vs. English Versions

- The few significant effects of the "light" descriptor observed for the total sample were not large enough or consistent enough to be also significant for each language version of the warnings.
- The following table summarizes the results of the T-Tests on the simple main effects of the "light" descriptor on each personality attribute.

"LIGHT" DESCRIPTOR EFFECTS FOR TEST AND CONTROL HWMS
- SUMMARY OF STATISTICAL TESTING -

PRODUCT PERSONALITY ATTRIBUTES	TEST HWMS			CONTROL HWMS		
	Total	French	English	Total	French	English
1. Risk-takers – Very prudent				SIG		SIG
2. Concern for others – Selfish						
3. Health negligent – Health conscious				SIG		
4. Financially secure – Poor						
5. Image conscious – Sloppy						
6. Straight – Cool						
7. Leader – Follower						
8. Higher education – Lower education						
9. In control of their destiny – Fatalists				SIG		
10. Afraid of death – Do not worry about death						
11. Disciplined – Disorganised	SIG		SIG			
12. Rebellious – Follow the rules						

SIG = T-Test significant at $P < 0.01$

 Not significant

INTERACTION EFFECT OF "LIGHT" DESCRIPTOR WITH TYPE OF HWMS

Total Sample

- For each personality attribute, the "light" descriptor simple main effect was compared between packages using the test warnings and those using the current messages.
 - No differential effect was statistically significant for the overall sample.
 - These findings indicated that the test "Light" or "Mild" related Health Warning Messages (L/M HWMs) had no statistically proven influence on the simple main effect of the "light" descriptor.

French vs. English Versions

- No differential effect was statistically significant in either language version of the warnings.

MAIN EFFECT OF TEST HWMS

- **Tables 15-17** present the raw scores (averages) obtained by the test and control HWMs, when scores for packages with and without descriptor were combined.
- Overall, several differences were significant. When compared to the perception associated with the control HWMs, the test HWMs tended significantly to project:
 - a more prudent personality;
 - more concern for others;
 - more health conscious;
 - more image conscious;
 - more disciplined.
- Therefore, we observed that the test L/M HWMs:
 - had no significant influence on the confusion about personality attributes of L&M vs. Regular cigarettes generated by the "light" descriptor;
 - had a clear and significant tendency to improve the product personality. As was the case for the sensory profile, findings indicated that the test L/M HWMs may have had a reverse effect, at the opposite of what was intended (telling smokers that Light cigarettes are not safer may reinforce the wrong belief that they are safer).
- Detailed tables of the univariate results and statistical tests are presented on the following pages.

**TABLE 10 EFFECTS OF "LIGHT" DESCRIPTOR AND HWMS ON PRODUCT PERSONALITY
- TOTAL SAMPLE -**

Q2 *I would like you to fill out the next part of the survey on your own. If you have any questions as you are going along, please ask me about them. Below is a statement about people like you who smoke cigarettes. Complete the sentence to describe your own **impressions** of people who would smoke the cigarettes contained in this package as their usual brand by circling a number between 1 and 9 on each of the scales listed after the statement. (Leave the picture of the package in view / self-complete)*

Mean differences between scores with and without "Light" descriptor (N = 645)	HWMS		Difference Test/Control
	Test	Control	
1. Risk-takers - Very prudent	.19	.33*	-.14
2. Concern for others - Selfish	-.13	-.19	.06
3. Health negligent - Health conscious	.10	.27*	-.18
4. Financially secure - Poor	.00	-.07	.07
5. Image conscious - Sloppy	-.02	-.05	.03
6. Straight - Cool	-.09	-.04	-.04
7. Leader - Follower	-.08	.03	-.08
8. Higher education - Lower education	-.06	-.11	.06
9. In control of their destiny - Fatalists	-.05	-.21*	.16
10. Afraid of death - Do not worry about death	-.12	-.17	.04
11. Disciplined - Disorganised	-.27*	-.12	-.14
12. Rebellious - Follow the rules	.15	.10	.04

* T-Test significant at $P < 0.01$

N.B. Differences on 9-point scale used

All scores reported in the table were obtained during the first two (out of 4) exposure stages where respondents randomly evaluated one of the 3 control and one of the 3 test HWMS.

**TABLE 11 EFFECTS OF "LIGHT" DESCRIPTOR AND HWMS ON PRODUCT PERSONALITY
- FRENCH HWMS -**

Q2 *I would like you to fill out the next part of the survey on your own. If you have any questions as you are going along, please ask me about them. Below is a statement about people like you who smoke cigarettes. Complete the sentence to describe your own impressions of people who would smoke the cigarettes contained in this package as their usual brand by circling a number between 1 and 9 on each of the scales listed after the statement. (Leave the picture of the package in view / self-complete)*

Mean differences between scores with and without "Light" descriptor (N = 217)	HWMS		Difference Test/Control
	Test	Control	
1. Risk-takers – Very prudent	.30	.34	-.05
2. Concern for others – Selfish	-.03	-.08	.06
3. Health negligent – Health conscious	.14	.29	-.21
4. Financially secure – Poor	.16	.00	.15
5. Image conscious – Sloppy	.07	-.02	.08
6. Straight – Cool	-.16	-.25	.10
7. Leader – Follower	-.08	.02	-.07
8. Higher education – Lower education	-.03	-.20	.16
9. In control of their destiny – Fatalists	-.02	-.30	.27
10. Afraid of death – Do not worry about death	-.35	-.28	-.09
11. Disciplined – Disorganised	-.17	-.11	-.05
12. Rebellious – Follow the rules	.26	.18	.06

* *T-Test significant at $P < 0.01$*

N.B. Differences on 9-point scale used

All scores reported in the table were obtained during the first two (out of 4) exposure stages where respondents randomly evaluated one of the 3 control and one of the 3 test HWMS.

**TABLE 12 EFFECTS OF "LIGHT" DESCRIPTOR AND HWMS ON PRODUCT PERSONALITY
- ENGLISH HWMS -**

Q2 *I would like you to fill out the next part of the survey on your own. If you have any questions as you are going along, please ask me about them. Below is a statement about people like you who smoke cigarettes. Complete the sentence to describe your own **impressions** of people who would smoke the cigarettes contained in this package as their usual brand by circling a number between 1 and 9 on each of the scales listed after the statement. (Leave the picture of the package in view / self-complete)*

Mean differences between scores with and without "Light" descriptor (N = 428)	HWMS		Difference Test/Control
	Test	Control	
1. Risk-takers - Very prudent	.14	.32*	-.19
2. Concern for others - Selfish	-.18	-.25	.06
3. Health negligent - Health conscious	.08	.25	-.16
4. Financially secure - Poor	-.08	-.11	.03
5. Image conscious - Sloppy	-.06	-.07	.00
6. Straight - Cool	-.05	.06	-.12
7. Leader - Follower	-.07	.03	-.09
8. Higher education - Lower education	-.07	-.06	.01
9. In control of their destiny - Fatalists	-.06	-.16	.10
10. Afraid of death - Do not worry about death	-.01	-.12	.10
11. Disciplined - Disorganised	-.32*	-.13	-.18
12. Rebellious - Follow the rules	.09	.07	.03

* T-Test significant at $P < 0.01$

N.B. Differences on 9-point scale used

All scores reported in the table were obtained during the first two (out of 4) exposure stages where respondents randomly evaluated one of the 3 control and one of the 3 test HWMS.

TABLE 13 T-TESTS SUMMARY OF THE EFFECTS OF "LIGHT" DESCRIPTOR AND HWMs ON PRODUCT PERSONALITY PROFILE

Q2 I would like you to fill out the next part of the survey on your own. If you have any questions as you are going along, please ask me about them. Below is a statement about people like you who smoke cigarettes. Complete the sentence to describe your own impressions of people who would smoke the cigarettes contained in this package as their usual brand by circling a number between 1 and 9 on each of the scales listed after the statement. (Leave the picture of the package in view / self-complete)

PRODUCT PERSONALITY ATTRIBUTES (N = 645)	TEST HWMs			CONTROL HWMs			DIFFERENCE TEST / CONTROL		
	Total	French	English	Total	French	English	Total	French	English
1. Risk-takers – Very prudent				SIG		SIG			
2. Concern for others – Selfish									
3. Health negligent – Health conscious				SIG					
4. Financially secure – Poor									
5. Image conscious – Sloppy									
6. Straight – Cool									
7. Leader – Follower									
8. Higher education – Lower education									
9. In control of their destiny – Fatalists				SIG					
10. Afraid of death – Do not worry about death									
11. Disciplined – Disorganised	SIG		SIG						
12. Rebellious – Follow the rules									

SIG = T-Test significant at $P < 0.01$

 Not significant

All tests reported in the table were on scores obtained during the first two (out of 4) exposure stages where respondents randomly evaluated one of the 3 control and one of the 3 test HWMs.

**TABLE 14 SIMPLE MAIN EFFECTS OF TEST HWMS ON PRODUCT PERSONALITY PROFILE
- TOTAL SAMPLE -**

Q2 *I would like you to fill out the next part of the survey on your own. If you have any questions as you are going along, please ask me about them. Below is a statement about people like you who smoke cigarettes. Complete the sentence to describe your own **impressions** of people who would smoke the cigarettes contained in this package as their usual brand by circling a number between 1 and 9 on each of the scales listed after the statement. (Leave the picture of the package in view / self-complete)*

PRODUCT PERSONALITY ATTRIBUTES (9-point scale)	HWMS*		Difference
	Test	Control	
1. Risk-takers – Very prudent	4.37	4.13	.24**
2. Concern for others – Selfish	5.24	5.47	-.23**
3. Health negligent – Health conscious	4.32	4.10	.22**
4. Financially secure – Poor	4.85	4.89	-.04
5. Image conscious – Sloppy	4.82	5.04	-.22**
6. Straight – Cool	4.96	4.84	.12
7. Leader – Follower	5.10	5.16	-.06
8. Higher education – Lower education	4.97	5.09	-.12
9. In control of their destiny – Fatalists	5.08	5.21	-.13
10. Afraid of death – Do not worry about death	5.80	5.94	-.14
11. Disciplined – Disorganised	5.09	5.23	-.14**
12. Rebellious – Follow the rules	4.87	4.79	.08

* Raw scores obtained on a 9-point scale. One of the 3 test and one of the 3 control warnings were evaluated at random by each respondent.

** T-Test significant at $P < 0.01$

**TABLE 15 SIMPLE MAIN EFFECTS OF TEST HWMS ON PRODUCT PERSONALITY PROFILE
- FRENCH HWMS -**

Q2 *I would like you to fill out the next part of the survey on your own. If you have any questions as you are going along, please ask me about them. Below is a statement about people like you who smoke cigarettes. Complete the sentence to describe your own **impressions** of people who would smoke the cigarettes contained in this package as their usual brand by circling a number between 1 and 9 on each of the scales listed after the statement. (Leave the picture of the package in view / self-complete)*

PRODUCT PERSONALITY ATTRIBUTES (9-point scale)	HWMS*		Difference
	Test	Control	
1. Risk-takers – Very prudent	4.23	4.15	.08
2. Concern for others – Selfish	5.23	5.20	.03
3. Health negligent – Health conscious	4.03	3.81	.22
4. Financially secure – Poor	4.68	4.53	.15
5. Image conscious – Sloppy	4.74	4.88	-.14
6. Straight – Cool	4.81	4.78	.03
7. Leader – Follower	5.02	5.10	-.08
8. Higher education – Lower education	4.83	5.03	-.20
9. In control of their destiny – Fatalists	4.98	4.99	-.01
10. Afraid of death – Do not worry about death	5.63	5.83	-.20
11. Disciplined – Disorganised	4.94	5.16	-.22
12. Rebellious – Follow the rules	4.86	4.95	-.09

* Raw scores obtained on a 9-point scale. One of the 3 test and one of the 3 control warnings were evaluated at random by each respondent.

** T-Test significant at $P < 0.01$

**TABLE 16 SIMPLE MAIN EFFECTS OF TEST HWMS ON PRODUCT PERSONALITY PROFILE
- ENGLISH HWMS -**

Q2 *I would like you to fill out the next part of the survey on your own. If you have any questions as you are going along, please ask me about them. Below is a statement about people like you who smoke cigarettes. Complete the sentence to describe your own **impressions** of people who would smoke the cigarettes contained in this package as their usual brand by circling a number between 1 and 9 on each of the scales listed after the statement. (Leave the picture of the package in view / self-complete)*

PRODUCT PERSONALITY ATTRIBUTES (9-point scale)	HWMS*		Difference
	Test	Control	
1. Risk-takers – Very prudent	4.44	4.12	.32**
2. Concern for others – Selfish	5.25	5.60	-.35**
3. Health negligent – Health conscious	4.46	4.24	.22
4. Financially secure – Poor	4.93	5.07	-.14
5. Image conscious – Sloppy	4.86	5.12	-.26**
6. Straight – Cool	5.03	4.88	.15
7. Leader – Follower	5.15	5.19	-.04
8. Higher education – Lower education	5.04	5.12	-.08
9. In control of their destiny – Fatalists	5.12	5.32	-.20**
10. Afraid of death – Do not worry about death	5.89	5.99	-.10
11. Disciplined – Disorganised	5.17	5.26	-.09
12. Rebellious – Follow the rules	4.88	4.71	.17

* Raw scores obtained on a 9-point scale. One of the 3 test and one of the 3 control warnings were evaluated at random by each respondent.

** T-Test significant at $P < 0.01$

TABLE 17

RAW SCORES ON PRODUCT PERSONALITY PROFILE

Q2 I would like you to fill out the next part of the survey on your own. If you have any questions as you are going along, please ask me about them. Below is a statement about people like you who smoke cigarettes. Complete the sentence to describe your own impressions of people who would smoke the cigarettes contained in this package as their usual brand by circling a number between 1 and 9 on each of the scales listed after the statement. (Leave the picture of the package in view / self-complete)

PRODUCT PERSONALITY ATTRIBUTES (9-point scale)	HWMs	
	TEST	CONTROL
1. Risk-takers – Very prudent		
Total sample		
• With descriptor	4.48	4.29
• Without descriptor	4.27	3.97
• Difference	.19	.33*
French HWMs		
• With descriptor	4.40	4.32
• Without descriptor	4.08	3.98
• Difference	.30	.34
English HWMs		
• With descriptor	4.51	4.28
• Without descriptor	4.37	3.96
• Difference	.14	.32*
2. Concern for others – Selfish		
Total sample		
• With descriptor	5.18	5.37
• Without descriptor	5.30	5.57
• Difference	-.13	-.19
French HWMs		
• With descriptor	5.22	5.15
• Without descriptor	5.24	5.24
• Difference	-.03	-.08
English HWMs		
• With descriptor	5.16	5.48
• Without descriptor	5.33	5.73
• Difference	-.18	-.25

* T-Test significant at $P < 0.01$

Note: "Control" are the 3 existing HWMs selected for this experiment.

"Test" are the 3 concepts of L/M HWMs selected for this experiment (see Appendix 2).

Note: All results shown for "control" and "test" HWMs are raw scores obtained on a 9-point scale, where 1 applies to the left side of the differential scale and 9 applies to the right side of the scale.

All scores reported in the table were obtained during the first two (out of 4) exposure stages where respondents randomly evaluated one of the 3 control and one of the 3 test HWMs.

PRODUCT PERSONALITY ATTRIBUTES (9-point scale)	HWMs	
	TEST	CONTROL
3. Health negligent – Health conscious		
Total sample		
• With descriptor	4.37	4.23
• Without descriptor	4.27	3.97
• Difference	.10	.27*
French HWMs		
• With descriptor	4.12	3.96
• Without descriptor	3.97	3.67
• Difference	.14	.29
English HWMs		
• With descriptor	4.49	4.37
• Without descriptor	4.42	4.12
• Difference	.08	.25
4. Financially secure – Poor		
Total sample		
• With descriptor	4.85	4.85
• Without descriptor	4.85	4.93
• Difference	.00	-.07
French HWMs		
• With descriptor	4.76	4.52
• Without descriptor	4.60	4.53
• Difference	.16	.00
English HWMs		
• With descriptor	4.90	5.02
• Without descriptor	4.97	5.13
• Difference	-.08	-.11
5. Image conscious – Sloppy		
Total sample		
• With descriptor	4.81	5.01
• Without descriptor	4.82	5.06
• Difference	-.02	-.05
French HWMs		
• With descriptor	4.78	4.85
• Without descriptor	4.71	4.88
• Difference	.07	-.02
English HWMs		
• With descriptor	4.83	5.09
• Without descriptor	4.88	5.16
• Difference	-.06	-.07

* T-Test significant at $P < 0.01$

Note: "Control" are the 3 existing HWMs selected for this experiment.

"Test" are the 3 concepts of L/M HWMs selected for this experiment (see Appendix 2).

Note: All results shown for "control" and "test" HWMs are raw scores obtained on a 9-point scale, where 1 applies to the left side of the differential scale and 9 applies to the right side of the scale.

All scores reported in the table were obtained during the first two (out of 4) exposure stages where respondents randomly evaluated one of the 3 control and one of the 3 test HWMs.

PRODUCT PERSONALITY ATTRIBUTES (9-point scale)	HWMs	
	TEST	CONTROL
6. Straight – Cool		
Total sample		
• With descriptor	4.91	4.83
• Without descriptor	5.00	4.86
• Difference	-.09	-.04
French HWMs		
• With descriptor	4.74	4.65
• Without descriptor	4.88	4.90
• Difference	-.16	-.25
English HWMs		
• With descriptor	5.00	4.92
• Without descriptor	5.05	4.84
• Difference	-.05	.06
7. Leader – Follower		
Total sample		
• With descriptor	5.07	5.17
• Without descriptor	5.13	5.14
• Difference	-.08	.03
French HWMs		
• With descriptor	4.98	5.12
• Without descriptor	5.06	5.09
• Difference	-.08	.02
English HWMs		
• With descriptor	5.12	5.20
• Without descriptor	5.16	5.17
• Difference	-.07	.03
8. Higher education – Lower education		
Total sample		
• With descriptor	4.95	5.04
• Without descriptor	4.99	5.15
• Difference	-.06	-.11
French HWMs		
• With descriptor	4.83	4.93
• Without descriptor	4.85	5.13
• Difference	-.03	-.20
English HWMs		
• With descriptor	5.01	5.09
• Without descriptor	5.07	5.16
• Difference	-.07	-.06

* T-Test significant at $P < 0.01$

Note: "Control" are the 3 existing HWMs selected for this experiment.

"Test" are the 3 concepts of L/M HWMs selected for this experiment (see Appendix 2).

Note: All results shown for "control" and "test" HWMs are raw scores obtained on a 9-point scale, where 1 applies to the left side of the differential scale and 9 applies to the right side of the scale.

All scores reported in the table were obtained during the first two (out of 4) exposure stages where respondents randomly evaluated one of the 3 control and one of the 3 test HWMs.

PRODUCT PERSONALITY ATTRIBUTES (9-point scale)	HWMs	
	TEST	CONTROL
9. In control of their destiny – Fatalists		
Total sample		
• With descriptor	5.06	5.11
• Without descriptor	5.09	5.31
• Difference	-.05	-.21*
French HWMs		
• With descriptor	4.97	4.84
• Without descriptor	5.00	5.12
• Difference	-.02	-.30
English HWMs		
• With descriptor	5.10	5.25
• Without descriptor	5.14	5.40
• Difference	-.06	-.16
10. Afraid of death – Do not worry about death		
Total sample		
• With descriptor	5.74	5.85
• Without descriptor	5.87	6.03
• Difference	-.12	-.17
French HWMs		
• With descriptor	5.44	5.69
• Without descriptor	5.82	5.97
• Difference	-.35	-.28
English HWMs		
• With descriptor	5.88	5.93
• Without descriptor	5.89	6.06
• Difference	-.01	-.12
11. Disciplined – Disorganised		
Total sample		
• With descriptor	4.95	5.17
• Without descriptor	5.22	5.29
• Difference	-.27*	-.12
French HWMs		
• With descriptor	4.85	5.11
• Without descriptor	5.02	5.22
• Difference	-.17	-.11
English HWMs		
• With descriptor	5.00	5.20
• Without descriptor	5.32	5.33
• Difference	-.32*	-.13

* T-Test significant at $P < 0.01$

Note: "Control" are the 3 existing HWMs selected for this experiment.

"Test" are the 3 concepts of L/M HWMs selected for this experiment (see Appendix 2).

Note: All results shown for "control" and "test" HWMs are raw scores obtained on a 9-point scale, where 1 applies to the left side of the differential scale and 9 applies to the right side of the scale.

All scores reported in the table were obtained during the first two (out of 4) exposure stages where respondents randomly evaluated one of the 3 control and one of the 3 test HWMs.

PRODUCT PERSONALITY ATTRIBUTES (9-point scale)	HWMs	
	TEST	CONTROL
12. Rebellious – Follow the rules		
Total sample		
• With descriptor	4.95	4.85
• Without descriptor	4.80	4.74
• Difference	.15	.10
French HWMs		
• With descriptor	4.99	5.04
• Without descriptor	4.77	4.84
• Difference	.26	.18
English HWMs		
• With descriptor	4.93	4.76
• Without descriptor	4.83	4.68
• Difference	.09	.07

* T-Test significant at $P < 0.01$

Note: "Control" are the 3 existing HWMs selected for this experiment.

"Test" are the 3 concepts of L/M HWMs selected for this experiment (see Appendix 2).

Note: All results shown for "control" and "test" HWMs are raw scores obtained on a 9-point scale, where 1 applies to the left side of the differential scale and 9 applies to the right side of the scale".

All scores reported in the table were obtained during the first two (out of 4) exposure stages where respondents randomly evaluated one of the 3 control and one of the 3 test HWMs.

5.3.2 MULTIVARIATE ANALYSIS

- On the following pages the main SPSS MANOVA results are presented.
- Multivariate analysis of the differences (MANOVA) indicated that:
 1. the "light" descriptor had a significant simple main effect on the entire personality profile.
 - This means that the mere presence of the descriptor had a significant influence on the perception of the entire personality profile, whatever the type of HWMs.
 - However, as seen in the univariate analysis, this effect was concentrated on a few attributes and not large enough to be significant whatever the language version and not consistent with both types of HWMs.
 2. the simple main effect of the type of HWMs was significant.
 - This means that the influence of the test warnings on the perception of the entire personality profile was significantly different than the influence of the control HWMs.
 3. the interaction effect of descriptor and type of HWMs was not significant.
 - This means that the test warnings had not influenced enough the effect of the "light" descriptor on the entire personality profile to be statistically significant.
 4. the interaction effect of language with descriptor or type of HWMs was not significant.
 - This means that the simple main effect of the descriptor or the main effect of type of HWMs on the entire personality profile remained the same, whatever the language version.
- As can be seen on the following MANOVA results, only the "light" descriptor and type of HWMs simple main effects were significant (as shown by the multivariate F-Tests – significant at $P < 0.01$). Main effects of descriptor were not significantly influenced by the type of HWMs or language version of the warnings.

**** ANALYSIS OF VARIANCE -- DESIGN 1 ****

PRODUCT PERSONALITY PROFILE

Tests involving 'DESCRIPTOR' Within-Subject Effect.

Mauchly sphericity test, W = .33970
 Chi-square approx. = 636.80943 with 77 D. F.
 Significance = .000

Greenhouse-Geisser Epsilon = .82187
 Huynh-Feldt Epsilon = .83827
 Lower-bound Epsilon = .08333

AVERAGED Tests of Significance that follow multivariate tests are equivalent to univariate or split-plot or mixed-model approach to repeated measures.
 Epsilons may be used to adjust d.f. for the AVERAGED results.

EFFECT .. LANGUAGE BY DESCRIPTOR

Multivariate Tests of Significance (S = 1, M = 5, N = 290 1/2)

Test Name	Value	Approx. F	Hypoth. DF	Error DF	Sig. of F
Pillais	.02339	1.16378	12.00	583.00	.306
Hotellings	.02395	1.16378	12.00	583.00	.306
Wilks	.97661	1.16378	12.00	583.00	.306
Roys	.02339				

Eigenvalues and Canonical Correlations

Root No.	Eigenvalue	Pct.	Cum. Pct.	Canon Cor.
1	.024	100.000	100.000	.153

EFFECT .. LANGUAGE BY DESCRIPTOR (CONT.)

Univariate F-tests with (1,594) D. F.

Variable	Hypoth. SS	Error SS	Hypoth. MS	Error MS	F	Sig. of F
T2	.31684	1353.89265	.31684	2.27928	.13901	.709
T6	1.36904	1247.22542	1.36904	2.09971	.65202	.420
T10	.02137	1568.51208	.02137	2.64059	.00809	.928
T14	3.28013	791.07160	3.28013	1.33177	2.46299	.117
T18	.16740	864.98157	.16740	1.45620	.11495	.735
T22	4.02265	742.26397	4.02265	1.24960	3.21914	.073
T26	.04697	984.64586	.04697	1.65765	.02833	.866
T30	1.09389	792.53588	1.09389	1.33424	.81987	.366
T34	.89782	869.15003	.89782	1.46322	.61359	.434
T38	10.44184	1249.57656	10.44184	2.10366	4.96364	.026
T42	.17871	927.24591	.17871	1.56102	.11448	.735
T46	2.49266	1074.84881	2.49266	1.80951	1.37754	.241

EFFECT .. DESCRIPTOR

Multivariate Tests of Significance (S = 1, M = 5, N = 290 1/2)

Test Name	Value	Approx. F	Hypoth. DF	Error DF	Sig. of F
Pillais	.07202	3.77065	12.00	583.00	.000
Hotellings	.07761	3.77065	12.00	583.00	.000
Wilks	.92798	3.77065	12.00	583.00	.000
Roys	.07202				

Eigenvalues and Canonical Correlations

Root No.	Eigenvalue	Pct.	Cum. Pct.	Canon Cor.
1	.078	100.000	100.000	.268

EFFECT .. DESCRIPTOR (CONT.)

Univariate F-tests with (1,594) D. F.

Variable	Hypoth. SS	Error SS	Hypoth. MS	Error MS	F	Sig. of F
T2	42.02242	1353.89265	42.02242	2.27928	18.43670	.000
T6	12.49962	1247.22542	12.49962	2.09971	5.95303	.015
T10	20.17037	1568.51208	20.17037	2.64059	7.63858	.006
T14	.00202	791.07160	.00202	1.33177	.00152	.969
T18	.57312	864.98157	.57312	1.45620	.39357	.531
T22	2.61410	742.26397	2.61410	1.24960	2.09194	.149
T26	.00721	984.64586	.00721	1.65765	.00435	.947
T30	5.22352	792.53588	5.22352	1.33424	3.91499	.048
T34	9.56765	869.15003	9.56765	1.46322	6.53878	.011
T38	25.34472	1249.57656	25.34472	2.10366	12.04789	.001
T42	21.02834	927.24591	21.02834	1.56102	13.47090	.000
T46	13.85483	1074.84881	13.85483	1.80951	7.65668	.006

Tests involving 'TYPE OF HWMS' Within-Subject Effect.

Mauchly sphericity test, W = .17483
 Chi-square approx. = 1028.59425 with 77 D. F.
 Significance = .000

Greenhouse-Geisser Epsilon = .72676
 Huynh-Feldt Epsilon = .73979
 Lower-bound Epsilon = .08333

AVERAGED Tests of Significance that follow multivariate tests are equivalent to univariate or split-plot or mixed-model approach to repeated measures.
 Epsilons may be used to adjust d.f. for the AVERAGED results.

EFFECT .. LANGUAGE BY TYPE OF HWMS
Multivariate Tests of Significance (S = 1, M = 5 , N = 290 1/2)

Test Name	Value	Approx. F	Hypoth. DF	Error DF	Sig. of F
Pillais	.04470	2.27329	12.00	583.00	.008
Hotellings	.04679	2.27329	12.00	583.00	.008
Wilks	.95530	2.27329	12.00	583.00	.008
Roys	.04470				

Eigenvalues and Canonical Correlations

Root No.	Eigenvalue	Pct.	Cum. Pct.	Canon Cor.
1	.047	100.000	100.000	.211

EFFECT .. LANGUAGE BY TYPE OF HWMS (CONT.)
Univariate F-tests with (1,594) D. F.

Variable	Hypoth. SS	Error SS	Hypoth. MS	Error MS	F	Sig. of F
T3	5.62654	1748.04081	5.62654	2.94283	1.91195	.167
T7	20.89575	1779.17875	20.89575	2.99525	6.97629	.008
T11	.06648	1970.09636	.06648	3.31666	.02004	.887
T15	10.82128	1195.87841	10.82128	2.01326	5.37500	.021
T19	2.34338	1632.92247	2.34338	2.74903	.85244	.356
T23	1.28349	984.63406	1.28349	1.65763	.77429	.379
T27	.40388	1035.17595	.40388	1.74272	.23175	.630
T31	1.12204	826.55667	1.12204	1.39151	.80635	.370
T35	4.66515	1211.76196	4.66515	2.04000	2.28684	.131
T39	1.21030	1551.44745	1.21030	2.61186	.46339	.496
T43	3.08477	1059.61246	3.08477	1.78386	1.72927	.189
T47	13.10938	1416.37743	13.10938	2.38447	5.49781	.019

EFFECT .. TYPE OF HWMS
Multivariate Tests of Significance (S = 1, M = 5 , N = 290 1/2)

Test Name	Value	Approx. F	Hypoth. DF	Error DF	Sig. of F
Pillais	.05253	2.69373	12.00	583.00	.002
Hotellings	.05545	2.69373	12.00	583.00	.002
Wilks	.94747	2.69373	12.00	583.00	.002
Roys	.05253				

Eigenvalues and Canonical Correlations

Root No.	Eigenvalue	Pct.	Cum. Pct.	Canon Cor.
1	.055	100.000	100.000	.229

EFFECT .. TYPE OF HWMS (CONT.)
Univariate F-tests with (1,594) D. F.

Variable	Hypoth. SS	Error SS	Hypoth. MS	Error MS	F	Sig. of F
T3	22.52472	1748.04081	22.52472	2.94283	7.65410	.006
T7	17.20844	1779.17875	17.20844	2.99525	5.74524	.017
T11	24.44082	1970.09636	24.44082	3.31666	7.36910	.007
T15	.10900	1195.87841	.10900	2.01326	.05414	.816
T19	28.20855	1632.92247	28.20855	2.74903	10.26128	.001
T23	4.67705	984.63406	4.67705	1.65763	2.82152	.094
T27	2.03053	1035.17595	2.03053	1.74272	1.16515	.281
T31	10.29364	826.55667	10.29364	1.39151	7.39746	.007

T35	8.68966	1211.76196	8.68966	2.04000	4.25963	.039
T39	7.61682	1551.44745	7.61682	2.61186	2.91624	.088
T43	20.30734	1059.61246	20.30734	1.78386	11.38394	.001
T47	.69182	1416.37743	.69182	2.38447	.29013	.590

Tests involving 'DESCRIPTOR BY TYPE OF HWMs' Within-Subject Effect.

Mauchly sphericity test, W = .43287
Chi-square approx. = 493.85740 with 77 D. F.
Significance = .000

Greenhouse-Geisser Epsilon = .87366
Huynh-Feldt Epsilon = .89207
Lower-bound Epsilon = .08333

AVERAGED Tests of Significance that follow multivariate tests are equivalent to univariate or split-plot or mixed-model approach to repeated measures.
Epsilons may be used to adjust d.f. for the AVERAGED results.

EFFECT .. DESCRIPTOR BY TYPE OF HWMs
Multivariate Tests of Significance (S = 1, M = 5 , N = 290 1/2)

Test Name	Value	Approx. F	Hypoth. DF	Error DF	Sig. of F
Pillais	.02305	1.14616	12.00	583.00	.320
Hotellings	.02359	1.14616	12.00	583.00	.320
Wilks	.97695	1.14616	12.00	583.00	.320
Roys	.02305				

Eigenvalues and Canonical Correlations

Root No.	Eigenvalue	Pct.	Cum. Pct.	Canon Cor.
1	.024	100.000	100.000	.152

EFFECT .. DESCRIPTOR BY TYPE OF HWMs (CONT.)
Univariate F-tests with (1,594) D. F.

Variable	Hypoth. SS	Error SS	Hypoth. MS	Error MS	F	Sig. of F
T4	3.09458	986.89949	3.09458	1.66145	1.86258	.173
T8	1.13979	1049.91241	1.13979	1.76753	.64485	.422
T12	3.22663	1415.35440	3.22663	2.38275	1.35416	.245
T16	1.23333	801.12765	1.23333	1.34870	.91446	.339
T20	.52967	860.93478	.52967	1.44939	.36544	.546
T24	.44750	558.40018	.44750	.94007	.47603	.490
T28	1.37930	898.03091	1.37930	1.51184	.91233	.340
T32	1.09086	565.85760	1.09086	.95262	1.14511	.285
T36	4.08083	838.18503	4.08083	1.41109	2.89198	.090
T40	.01747	996.22949	.01747	1.67715	.01042	.919
T44	3.15864	707.71755	3.15864	1.19144	2.65110	.104
T48	.76657	862.48576	.76657	1.45200	.52794	.468

5.3.3 CONCLUSION

- The mere presence of the "light" descriptor had significant effects on a few personality attributes.
 - These few effects were significant for the total sample. They were not large enough to be significant for both language versions of the warnings.
 - These few effects were not significant for both types of warnings: one personality attribute was significantly influenced when used with the test warnings and three other attributes, only when used with the current warnings.
 - However, these differences in the "light" descriptor effect between types of HWMs could not be attributable to the test L/M HWMs (interaction/differential effects were not significant).
 - Overall, these findings reflected what was observed in previous experiments: effects of the "light" descriptor on product personality may vary greatly, depending on elements of the packaging other than warnings.
- **The test L/M HWM concepts had no significant influence on the confusion about L&M vs. Regular cigarettes, generated by the presence of the "light" descriptor.**

5.4 EFFECTS ON SOCIAL IMAGE PROFILE

Six photos, each depicting a character representing a social stereotype, were shown to the respondents in rotated order, with the cigarette packages (the photos are reproduced in Appendix 3). For each of these photos, the respondents were asked to indicate, on a 9-point scale, the extent to which they thought the package they were being shown could be the type of cigarettes favoured most by the character in the photo (1 = not at all, 9 = very much).

By comparing the scores for the packages with and without the "light" descriptor, we obtained an objective measurement of the influence of the "light" descriptor on the product social image.

By comparing the "light" descriptor effect between test L/M HWMs and control HWMs, we obtained an objective measurement of the effect of the test L/M HWMs on consumers' confusion about L&M vs. Regular cigarettes.

As we did for the effects on sensory and personality profiles, the simple main effects of the "light" descriptor were compared between packages using the test warning concepts and those using the current ones.

Comparisons were made using both univariate (T-Tests for each individual attribute) and multivariate (Manova F-Tests for the entire set of attributes) tests.

Tables 18-20 (at the end of this section) show the mean differences (univariate analysis) between scores for packages with and without "light" descriptor for the test and the control HWMs.

- Table 18 presents the differences for the overall sample (N = 645)
- Table 19 presents the differences for the French HWMs (N = 217)
- Table 20 presents the differences for the English HWMs (N = 428)

Table 21 summarizes the results of the statistical significance of the effects (univariate T-Tests) observed in **Tables 18-20**.

Tables 22-24 show the simple main effects of test HWMs.

Table 25 presents the detailed raw scores used to calculate effects and differences.

Results of univariate analysis are presented first, followed by MANOVA results.

5.4.1 UNIVARIATE ANALYSIS

MAIN EFFECT OF "LIGHT" DESCRIPTOR

Total Sample

- For four of the 6 characters, the "light" descriptor had a significant effect on the total sample and within each type of HWMs. And for three characters, the effect was significant for each language version and each type of HWMs.
 1. **Biker man**
 - Presence of the "light" descriptor significantly and substantially decreased the likelihood that the package could be this character's favourite cigarettes.
 2. **Young woman**
 - Presence of the "light" descriptor significantly and substantially increased the likelihood that the package could be this character's favourite cigarettes.
 3. **Farmer man**
 - Presence of the "light" descriptor significantly and substantially decreased the likelihood that the package could be this character's favourite cigarettes.
 4. **Teenage boy**
 - Presence of the "light" descriptor decreased the likelihood that the packages could be this character's favourite cigarettes.
- These findings confirmed observations obtained from previous experiments, where the "light" descriptor had significant and consistent effect on the social image of the smoker.

French vs. English Versions

- Three of the four significant effects of the "light" descriptor observed in the total sample, for both types of warnings, were also significant for each language version of the warnings:
 1. Biker man
 2. Young woman
 3. Farmer man
- The following table summarizes the results of the T-Tests on the simple main effects of the "light" descriptor on each social image attribute.

"LIGHT" DESCRIPTOR EFFECTS FOR TEST AND CONTROL HWMS
- SUMMARY OF STATISTICAL TESTING -

SOCIAL IMAGE ATTRIBUTES	TEST HWMS			CONTROL HWMS		
	Total	French	English	Total	French	English
1. Business man (not at all - very much)				SIG	SIG	
2. Teenage boy (not at all - very much)	SIG	SIG	SIG	SIG	SIG	SIG
3. Girl on bike (not at all - very much)			SIG			SIG
4. Biker man (not at all - very much)	SIG	SIG	SIG	SIG	SIG	SIG
5. Young woman (not at all - very much)	SIG	SIG	SIG	SIG	SIG	SIG
6. Farmer man (not at all - very much)	SIG	SIG	SIG	SIG	SIG	SIG

SIG = T-Test significant at $P < 0.01$

 Not significant

INTERACTION EFFECT OF "LIGHT" DESCRIPTOR WITH TYPE OF HWMS

Total Sample

- For each social image attribute, the "light" descriptor simple main effect was compared between packages using the test "Light" or "Mild" related Health Warning Messages (L/M HWMS) and those using the current messages.
 - No differential effect was statistically significant.
 - These findings indicated that the test L/M HWMS had no statistically proven influence on the effect of the "light" descriptor.

French vs. English Versions

- No differential effect was statistically significant in either version of the warnings.

MAIN EFFECT OF TEST HWMS

- Tables 23-25** present the raw scores achieved by the test and control HWMS, when scores for packages with and without descriptor were combined.
- Several differences were significant: for four of the 6 characters, the test warnings projected a significantly different image.

- Compared to the control warnings, the test HWMs projected a less masculine image,
 - more of the young woman;
 - more of the girl on bike;
 - less of the farmer;
 - less of the biker man.
- These findings were consistent with the differences in effects observed on sensory and product personality profiles: the test "Light" or "Mild" related Health Warning Messages (L/M HWMs) may have had reverse effects. Products associated with these warnings had more L&M stereotyped connotations on the three sets of criteria used and had not reduced or influenced consumers' confusion about L&M vs. Regular cigarettes.

TABLE 18 EFFECTS OF "LIGHT" DESCRIPTOR AND HWMs ON SOCIAL IMAGE PROFILE
– TOTAL SAMPLE –

Q3 *Now I would like to show you pictures of people who smoke and the package of cigarettes you just saw. Please take a careful look at them. For each picture I show you, I will ask you to what extent do you think these could be their favourite cigarettes. We will use a scale from 1 to 9, 1 meaning "not at all" and 9 "very much". (Write in number 1-9 / Leave the picture of the package in view. Rotate pictures as checked)*

Mean differences between scores with and without "Light" descriptor (N =645)	HWMs		Difference Test/Control
	Test	Control	
1. Business man (not at all – very much)	-.14	-.24	.10
2. Teenage boy (not at all – very much)	-.39*	-.49*	.11
3. Girl on bike (not at all – very much)	.16	.14	.00
4. Biker man (not at all – very much)	-1.03*	-1.18*	.17
5. Young woman (not at all – very much)	.56*	.50*	.05
6. Farmer man (not at all – very much)	-.62*	-.76*	.13

* *T-Test significant at $P < 0.01$*

N.B. *Differences on 9-point scale used*

All scores reported in the table were obtained during the first two (out of 4) exposure stages where respondents randomly evaluated one of the 3 control and one of the 3 test HWMs.

TABLE 19 EFFECTS OF "LIGHT" DESCRIPTOR AND HWMS ON SOCIAL IMAGE PROFILE
– FRENCH HWMS –

Q3 Now I would like to show you pictures of people who smoke and the package of cigarettes you just saw. Please take a careful look at them. For each picture I show you, I will ask you to what extent do you think these could be their favourite cigarettes. We will use a scale from 1 to 9, 1 meaning "not at all" and 9 "very much". (Write in number 1-9 / Leave the picture of the package in view. Rotate pictures as checked)

Mean differences between scores with and without "Light" descriptor (N = 217)	HWMS		Difference Test/Control
	Test	Control	
1. Business man (not at all – very much)	-.31	-.55*	.25
2. Teenage boy (not at all – very much)	-.63*	-.91*	.28
3. Girl on bike (not at all – very much)	-.03	-.22	.19
4. Biker man (not at all – very much)	-1.31*	-1.42*	.11
5. Young woman (not at all – very much)	.87*	.53*	.33
6. Farmer man (not at all – very much)	-.82*	-.80*	-.02

* T-Test significant at $P < 0.01$

N.B. Differences on 9-point scale used

All scores reported in the table were obtained during the first two (out of 4) exposure stages where respondents randomly evaluated one of the 3 control and one of the 3 test HWMS.

TABLE 20 EFFECTS OF "LIGHT" DESCRIPTOR AND HWMS ON SOCIAL IMAGE PROFILE
– ENGLISH HWMS –

Q3 Now I would like to show you pictures of people who smoke and the package of cigarettes you just saw. Please take a careful look at them. For each picture I show you, I will ask you to what extent do you think these could be their favourite cigarettes. We will use a scale from 1 to 9, 1 meaning "not at all" and 9 "very much". (Write in number 1-9 / Leave the picture of the package in view. Rotate pictures as checked)

Mean differences between scores with and without "Light" descriptor (N = 428)	HWMS		Difference Test/Control
	Test	Control	
1. Business man (not at all – very much)	-.05	-.08	.03
2. Teenage boy (not at all – very much)	-.27	-.27	.03
3. Girl on bike (not at all – very much)	.26	.32*	-.10
4. Biker man (not at all – very much)	-.88*	-1.05*	.20
5. Young woman (not at all – very much)	.41*	.48*	-.10
6. Farmer man (not at all – very much)	-.51*	-.74*	.21

* T-Test significant at $P < 0.01$

N.B. Differences on 9-point scale used

All scores reported in the table were obtained during the first two (out of 4) exposure stages where respondents randomly evaluated one of the 3 control and one of the 3 test HWMS.

TABLE 21 T-TESTS SUMMARY OF THE EFFECTS OF "LIGHT" DESCRIPTOR AND HWMs ON SOCIAL IMAGE PROFILE

Q3 Now I would like to show you pictures of people who smoke and the package of cigarettes you just saw. Please take a careful look at them. For each picture I show you, I will ask you to what extent do you think these could be their favourite cigarettes. We will use a scale from 1 to 9, 1 meaning "not at all" and 9 "very much". (Write in number 1-9 / Leave the picture of the package in view. Rotate pictures as checked)

SOCIAL IMAGE ATTRIBUTES (N = 645)	TEST HWMs			CONTROL HWMs			DIFFERENCE TEST / CONTROL		
	Total	French	English	Total	French	English	Total	French	English
1. Business man (not at all – very much)					SIG				
2. Teenage boy (not at all – very much)	SIG	SIG		SIG	SIG				
3. Girl on bike (not at all – very much)						SIG			
4. Biker man (not at all – very much)	SIG	SIG	SIG	SIG	SIG	SIG			
5. Young woman (not at all – very much)	SIG	SIG	SIG	SIG	SIG	SIG			
6. Farmer man (not at all – very much)	SIG	SIG	SIG	SIG	SIG	SIG			

SIG = T-Test significant at $P < 0.01$

 Not significant

All tests reported in the table were on scores obtained during the first two (out of 4) exposure stages where respondents randomly evaluated one of the 3 control and one of the 3 test HWMs.

TABLE 22 **SIMPLE MAIN EFFECTS OF TEST HWMS ON SOCIAL IMAGE PROFILE**
- TOTAL SAMPLE -

Q3 *Now I would like to show you pictures of people who smoke and the package of cigarettes you just saw. Please take a careful look at them. For each picture I show you, I will ask you to what extent do you think these could be their favourite cigarettes. We will use a scale from 1 to 9, 1 meaning "not at all" and 9 "very much". (Write in number 1-9 / Leave the picture of the package in view. Rotate pictures as checked)*

SOCIAL IMAGE ATTRIBUTES (9-point scale)	HWMS*		Difference
	Test	Control	
1. Business man (not at all – very much)	5.13	5.02	.11
2. Teenage boy (not at all – very much)	5.14	5.19	-.05
3. Girl on bike (not at all – very much)	4.96	4.70	.26**
4. Biker man (not at all – very much)	5.53	5.86	-.33**
5. Young woman (not at all – very much)	5.06	4.62	.44**
6. Farmer man (not at all – very much)	4.97	5.27	-.30**

* *Raw scores obtained on a 9-point scale. One of the 3 test and one of the 3 control warnings were evaluated at random by each respondent.*

** *T-Test significant at $P < 0.01$*

TABLE 23 **SIMPLE MAIN EFFECTS OF TEST HWMS ON SOCIAL IMAGE PROFILE**
- FRENCH HWMS -

Q3 *Now I would like to show you pictures of people who smoke and the package of cigarettes you just saw. Please take a careful look at them. For each picture I show you, I will ask you to what extent do you think these could be their favourite cigarettes. We will use a scale from 1 to 9, 1 meaning "not at all" and 9 "very much". (Write in number 1-9 / Leave the picture of the package in view. Rotate pictures as checked)*

SOCIAL IMAGE ATTRIBUTES (9-point scale)	HWMS*		Difference
	Test	Control	
1. Business man (not at all – very much)	4.53	4.61	-.08
2. Teenage boy (not at all – very much)	4.24	4.15	.09
3. Girl on bike (not at all – very much)	4.83	4.56	.27
4. Biker man (not at all – very much)	4.95	5.35	-.40**
5. Young woman (not at all – very much)	4.94	4.59	.35
6. Farmer man (not at all – very much)	4.29	4.67	-.38**

* *Raw scores obtained on a 9-point scale. One of the 3 test and one of the 3 control warnings were evaluated at random by each respondent.*

** *T-Test significant at $P < 0.01$*

**TABLE 24 SIMPLE MAIN EFFECTS OF TEST HWMS ON SOCIAL IMAGE PROFILE
- ENGLISH HWMS -**

Q3 Now I would like to show you pictures of people who smoke and the package of cigarettes you just saw. Please take a careful look at them. For each picture I show you, I will ask you to what extent do you think these could be their favourite cigarettes. We will use a scale from 1 to 9, 1 meaning "not at all" and 9 "very much". (Write in number 1-9 / Leave the picture of the package in view. Rotate pictures as checked)

SOCIAL IMAGE ATTRIBUTES (9-point scale)	HWMS*		Difference
	Test	Control	
1. Business man (not at all – very much)	5.43	5.23	.20
2. Teenage boy (not at all – very much)	5.60	5.72	-.12
3. Girl on bike (not at all – very much)	5.03	4.77	.26
4. Biker man (not at all – very much)	5.82	6.11	-.29
5. Young woman (not at all – very much)	5.12	4.64	.48**
6. Farmer man (not at all – very much)	5.32	5.57	-.25**

* Raw scores obtained on a 9-point scale. One of the 3 test and one of the 3 control warnings were evaluated at random by each respondent.

** T-Test significant at $P < 0.01$

TABLE 25

RAW SCORES ON SOCIAL IMAGE PROFILE

Q3 Now I would like to show you pictures of people who smoke and the package of cigarettes you just saw. Please take a careful look at them. For each picture I show you, I will ask you to what extent do you think these could be their favourite cigarettes. We will use a scale from 1 to 9, 1 meaning "not at all" and 9 "very much". (Write in number 1-9 / Leave the picture of the package in view. Rotate pictures as checked)

SOCIAL IMAGE ATTRIBUTES (9-point scale)	HWMs	
	TEST	CONTROL
1. Business man (not at all – very much)		
Total sample		
• With descriptor	5.07	4.90
• Without descriptor	5.20	5.14
• Difference	-.14	-.24
French HWMs		
• With descriptor	4.38	4.33
• Without descriptor	4.68	4.88
• Difference	-.31	-.55*
English HWMs		
• With descriptor	5.41	5.19
• Without descriptor	5.45	5.27
• Difference	-.05	-.08
2. Teenage boy (not at all – very much)		
Total sample		
• With descriptor	4.95	4.95
• Without descriptor	5.33	5.43
• Difference	-.39*	-.48*
French HWMs		
• With descriptor	3.92	3.70
• Without descriptor	4.55	4.60
• Difference	-.63*	-.91*
English HWMs		
• With descriptor	5.46	5.58
• Without descriptor	5.73	5.85
• Difference	-.27	-.27

* T-Test significant at $P < 0.01$

Note: "Control" are the 3 existing HWMs selected for this experiment.

"Test" are the 3 concepts of L/M HWMs selected for this experiment (see Appendix 2).

Note: All results shown for "control" and "test" HWMs are raw scores obtained on a 9-point scale, where 1 means "not at all" and 9 means "very much".

All scores reported in the table were obtained during the first two (out of 4) exposure stages where respondents randomly evaluated one of the 3 control and one of the 3 test HWMs.

SOCIAL IMAGE ATTRIBUTES (9-point scale)	HWMs	
	TEST	CONTROL
3. Girl on bike (not at all – very much)		
Total sample		
• With descriptor	5.04	4.77
• Without descriptor	4.88	4.63
• Difference	.16	.14
French HWMs		
• With descriptor	4.81	4.45
• Without descriptor	4.84	4.67
• Difference	-.03	-.22
English HWMs		
• With descriptor	5.15	4.92
• Without descriptor	4.90	4.61
• Difference	.26	.32*
4. Biker man (not at all – very much)		
Total sample		
• With descriptor	5.02	5.27
• Without descriptor	6.04	6.43
• Difference	-1.03*	-1.18*
French HWMs		
• With descriptor	4.30	4.64
• Without descriptor	5.61	6.07
• Difference	-1.31*	-1.42*
English HWMs		
• With descriptor	5.38	5.59
• Without descriptor	6.26	6.62
• Difference	-.88*	-1.05*
5. Young woman (not at all – very much)		
Total sample		
• With descriptor	5.34	4.87
• Without descriptor	4.78	4.37
• Difference	.56*	.50*
French HWMs		
• With descriptor	5.37	4.86
• Without descriptor	4.51	4.33
• Difference	.87*	.53*
English HWMs		
• With descriptor	5.32	4.88
• Without descriptor	4.92	4.38
• Difference	.41*	.48*

* T-Test significant at $P < 0.01$

Note: "Control" are the 3 existing HWMs selected for this experiment.

"Test" are the 3 concepts of L/M HWMs selected for this experiment (see Appendix 2).

Note: All results shown for "control" and "test" HWMs are raw scores obtained on a 9-point scale, where 1 means "not at all" and 9 means "very much".

All scores reported in the table were obtained during the first two (out of 4) exposure stages where respondents randomly evaluated one of the 3 control and one of the 3 test HWMs.

SOCIAL IMAGE ATTRIBUTES (9-point scale)	HWMs	
	TEST	CONTROL
6. Farmer man (not at all – very much)		
Total sample		
• With descriptor	4.66	4.89
• Without descriptor	5.28	5.65
• Difference	-.62*	-.76*
French HWMs		
• With descriptor	3.88	4.27
• Without descriptor	4.70	5.07
• Difference	-.82*	-.80*
English HWMs		
• With descriptor	5.06	5.21
• Without descriptor	5.58	5.94
• Difference	-.51*	-.74*

* T-Test significant at $P < 0.01$

Note: "Control" are the 3 existing HWMs selected for this experiment.

"Test" are the 3 concepts of L/M HWMs selected for this experiment (see Appendix 2).

Note: All results shown for "control" and "test" HWMs are raw scores obtained on a 9-point scale, where 1 means "not at all" and 9 means "very much".

All scores reported in the table were obtained during the first two (out of 4) exposure stages where respondents randomly evaluated one of the 3 control and one of the 3 test HWMs.

5.4.2 MULTIVARIATE ANALYSIS

- On the following pages the main SPSS MANOVA results are presented.
- Multivariate analysis of the differences (MANOVA) indicated that:
 1. the "light" descriptor had a significant simple main effect on the entire social image profile.
 - This means that the mere presence of the descriptor had a significant influence on the perception of the entire social image profile, whatever the type of HWMs.
 2. the simple main effect of the type of HWMs was significant.
 - This means that the test warnings effect on the perception of the entire social image profile was significantly different than the effect of the control HWMs.
 3. the interaction effect of descriptor and type of HWMs was not significant.
 - This means that the test warnings had not influenced the effect of the "light" descriptor on the entire social image profile.

4. the interaction effect of language and type of HWMs was not significant.
5. the interaction effect of descriptor and language version of warnings was significant.

- This means that the language version of the warnings influenced the main effect of the descriptor on the entire social image profile.
- Univariate analysis determined that there was no significant interaction effect of descriptor and language, on any attribute taken individually. Multivariate analysis indicated that although this interaction effect was not large enough on an individual basis, it was consistent enough across the entire profile to emerge as significant. Therefore, the effect of the "light" descriptor on social image was influenced by language.

- As can be seen, the "light" descriptor and type of HWMs simple main effects, interaction of descriptor and language were significant (as shown by the multivariate F-Tests – significant at $P < 0.01$). Main effects of descriptor were not significantly influenced by the type of HWMs but were significantly influenced by the language version of the warnings.

**** ANALYSIS OF VARIANCE -- DESIGN 1 ****

SOCIAL IMAGE PROFILE

Tests involving 'DESCRIPTOR' Within-Subject Effect.

Mauchly sphericity test, $W = .49044$
 Chi-square approx. = 443.69689 with 20 D. F.
 Significance = .000

Greenhouse-Geisser Epsilon = .78159
 Huynh-Feldt Epsilon = .78948
 Lower-bound Epsilon = .16667

AVERAGED Tests of Significance that follow multivariate tests are equivalent to univariate or split-plot or mixed-model approach to repeated measures. Epsilons may be used to adjust d.f. for the AVERAGED results.

EFFECT .. LANGUAGE BY DESCRIPTOR

Multivariate Tests of Significance ($S = 1, M = 2, N = 309$)

Test Name	Value	Approx. F	Hypoth. DF	Error DF	Sig. of F
Pillais	.03348	3.57932	6.00	620.00	.002
Hotellings	.03464	3.57932	6.00	620.00	.002
Wilks	.96652	3.57932	6.00	620.00	.002
Roys	.03348				

 Eigenvalues and Canonical Correlations

Root No.	Eigenvalue	Pct.	Cum. Pct.	Canon Cor.
1	.035	100.000	100.000	.183

EFFECT .. LANGUAGE BY DESCRIPTOR (CONT.)
Univariate F-tests with (1,625) D. F.

Variable	Hypoth. SS	Error SS	Hypoth. MS	Error MS	F	Sig. of F
T2	19.13800	2468.16610	19.13800	3.94907	4.84621	.028
T6	36.39440	2585.63817	36.39440	4.13702	8.79725	.003
T10	23.66969	2016.75397	23.66969	3.22681	7.33533	.007
T14	22.95752	3537.68981	22.95752	5.66030	4.05588	.044
T18	10.43565	2358.08295	10.43565	3.77293	2.76592	.097
T22	5.94556	2606.01390	5.94556	4.16962	1.42592	.233

EFFECT .. DESCRIPTOR
Multivariate Tests of Significance (S = 1, M = 2 , N = 309)

Test Name	Value	Approx. F	Hypoth. DF	Error DF	Sig. of F
Pillais	.21281	27.93497	6.00	620.00	.000
Hotellings	.27034	27.93497	6.00	620.00	.000
Wilks	.78719	27.93497	6.00	620.00	.000
Roys	.21281				

Eigenvalues and Canonical Correlations

Root No.	Eigenvalue	Pct.	Cum. Pct.	Canon Cor.
1	.270	100.000	100.000	.461

EFFECT .. DESCRIPTOR (CONT.)
Univariate F-tests with (1,625) D. F.

Variable	Hypoth. SS	Error SS	Hypoth. MS	Error MS	F	Sig. of F
T2	37.07680	2468.16610	37.07680	3.94907	9.38875	.002
T6	152.32217	2585.63817	152.32217	4.13702	36.81929	.000
T10	3.36134	2016.75397	3.36134	3.22681	1.04169	.308
T14	773.37694	3537.68981	773.37694	5.66030	136.63170	.000
T18	183.97776	2358.08295	183.97776	3.77293	48.76254	.000
T22	289.65711	2606.01390	289.65711	4.16962	69.46843	.000

Tests involving 'TYPE OF HWMS' Within-Subject Effect.

Mauchly sphericity test, W = .58271
Chi-square approx. = 336.34078 with 20 D. F.
Significance = .000

Greenhouse-Geisser Epsilon = .84060
Huynh-Feldt Epsilon = .84961
Lower-bound Epsilon = .16667

AVERAGED Tests of Significance that follow multivariate tests are equivalent to univariate or split-plot or mixed-model approach to repeated measures.
Epsilons may be used to adjust d.f. for the AVERAGED results.

EFFECT .. LANGUAGE BY TYPE OF HWMs
Multivariate Tests of Significance (S = 1, M = 2, N = 309)

Test Name	Value	Approx. F	Hypoth. DF	Error DF	Sig. of F
Pillais	.00973	1.01562	6.00	620.00	.414
Hotellings	.00983	1.01562	6.00	620.00	.414
Wilks	.99027	1.01562	6.00	620.00	.414
Roys	.00973				

Eigenvalues and Canonical Correlations

Root No.	Eigenvalue	Pct.	Cum. Pct.	Canon Cor.
1	.010	100.000	100.000	.099

EFFECT .. LANGUAGE BY TYPE OF HWMs (CONT.)
Univariate F-tests with (1,625) D. F.

Variable	Hypoth. SS	Error SS	Hypoth. MS	Error MS	F	Sig. of F
T3	12.18330	2837.08858	12.18330	4.53934	2.68394	.102
T7	5.91010	2606.89584	5.91010	4.17103	1.41694	.234
T11	.04731	2819.10166	.04731	4.51056	.01049	.918
T15	1.94032	3120.30394	1.94032	4.99249	.38865	.533
T19	2.48009	2621.18962	2.48009	4.19390	.59136	.442
T23	2.55154	2863.12016	2.55154	4.58099	.55698	.456

EFFECT .. TYPE OF HWMs
Multivariate Tests of Significance (S = 1, M = 2, N = 309)

Test Name	Value	Approx. F	Hypoth. DF	Error DF	Sig. of F
Pillais	.05464	5.97215	6.00	620.00	.000
Hotellings	.05780	5.97215	6.00	620.00	.000
Wilks	.94536	5.97215	6.00	620.00	.000
Roys	.05464				

Eigenvalues and Canonical Correlations

Root No.	Eigenvalue	Pct.	Cum. Pct.	Canon Cor.
1	.058	100.000	100.000	.234

EFFECT .. TYPE OF HWMs (CONT.)
Univariate F-tests with (1,625) D. F.

Variable	Hypoth. SS	Error SS	Hypoth. MS	Error MS	F	Sig. of F
T3	3.51643	2837.08858	3.51643	4.53934	.77466	.379
T7	.01930	2606.89584	.01930	4.17103	.00463	.946
T11	41.07966	2819.10166	41.07966	4.51056	9.10744	.003
T15	67.21329	3120.30394	67.21329	4.99249	13.46289	.000
T19	96.42432	2621.18962	96.42432	4.19390	22.99154	.000
T23	60.15931	2863.12016	60.15931	4.58099	13.13238	.000

Tests involving 'DESCRIPTOR BY TYPE OF HWMS' Within-Subject Effect.

Mauchly sphericity test, W = .81967
 Chi-square approx. = 123.83832 with 20 D. F.
 Significance = .000

Greenhouse-Geisser Epsilon = .93731
 Huynh-Feldt Epsilon = .94831
 Lower-bound Epsilon = .16667

AVERAGED Tests of Significance that follow multivariate tests are equivalent to univariate or split-plot or mixed-model approach to repeated measures.
 Epsilons may be used to adjust d.f. for the AVERAGED results.

EFFECT .. DESCRIPTOR BY TYPE OF HWMS
 Multivariate Tests of Significance (S = 1, M = 2 , N = 309)

Test Name	Value	Approx. F	Hypoth. DF	Error DF	Sig. of F
Pillais	.00579	.60169	6.00	620.00	.729
Hotellings	.00582	.60169	6.00	620.00	.729
Wilks	.99421	.60169	6.00	620.00	.729
Roys	.00579				

 Eigenvalues and Canonical Correlations

Root No.	Eigenvalue	Pct.	Cum. Pct.	Canon Cor.
1	.006	100.000	100.000	.076

EFFECT .. DESCRIPTOR BY TYPE OF HWMS (CONT.)
 Univariate F-tests with (1,625) D. F.

Variable	Hypoth. SS	Error SS	Hypoth. MS	Error MS	F	Sig. of F
T4	2.11280	1601.17393	2.11280	2.56188	.82471	.364
T8	2.84434	1599.90535	2.84434	2.55985	1.11114	.292
T12	.21875	1486.66481	.21875	2.37866	.09196	.762
T16	3.89053	1746.30180	3.89053	2.79408	1.39242	.238
T20	1.63156	1639.79387	1.63156	2.62367	.62186	.431
T24	1.68456	1878.68292	1.68456	3.00589	.56042	.454

5.4.3 CONCLUSION

- The mere presence of the "light" descriptor had significant effects on several of the characters used in the study.
 - Several of these effects were significant for the overall sample, for each language version of the warnings, and for either type of warning used on the packages.
 - Overall, these findings reflected what was observed in previous experiments: the "light" descriptor had a strong and significant effect on social image, it made the product less masculine (without making it effeminate) and, overall, more desirable.
 - Overall, findings indicated that the differential effect of the "light" descriptor caused by the test warning was not significant for any of the characters used in the study. Language of warning influenced the effect of the descriptor, not the type of warning.
- **The test "Light" or "Mild" related Health Warning Message (L/M HWM) concepts had no significant influence on the confusion about L&M vs. Regular cigarettes, generated by the "light" descriptor.**

5.5 COMPARATIVE ASSESSMENT OF EACH TEST HWMS

In this section, we compare the scores obtained by each of the three test L/M HWMs.

- *Each test "Light" or "Mild" related Health Warning Message (L/M HWM) was evaluated by all respondents, with and without the "light" descriptor.*
- *As seen previously, on average, the test HWMs had not significantly influenced consumers' confusion about L&M vs. Regular cigarettes generated by the "light" descriptor.*
- *However, compared to control HWMs, we observed that instead of "downgrading" perceptions about L&M cigarettes, these test HWMs may have had a reverse effect resulting in "upgrading" perceptions of L&M cigarettes, both on sensory and personality attributes.*

We also compare the three test HWMs in terms of their influence on the descriptor effect and on perceptions towards the product.

Tables 26-34 present the descriptor effect and the raw scores (average with and without the descriptor combined) for each of the test warnings and for each of the three sets of criteria.

The following section presents the results of a correspondence analysis: a perceptual mapping of the test warnings based on their raw scores.

INFLUENCE OF EACH TEST WARNING ON THE EFFECT OF THE "LIGHT" DESCRIPTOR

- We performed a univariate variance analysis (ANOVA) on the descriptor effect to determine how much influence each of the three test warnings had on the descriptor effect.
- None of the 23 univariate ANOVA tests were significant.
- As mentioned previously, on average, the influence of the test warnings on the descriptor effect (consumers' confusion generated by the descriptor) was not significant on any set of properties (sensory, product personality, social image).
 - This closer examination indicated that the conclusion based on averaged measures also applied individually, to each of the three test warnings and each of the attributes.
 - Therefore, not one of the test warnings emerged as more efficient in reducing consumers' confusion about L&M and Regular cigarettes.

INFLUENCE OF EACH TEST WARNINGS ON PRODUCT IMAGE

- **Tables 26-34** present the raw scores that each test warning achieved on each product property. These raw scores were the combined ratings given by respondents to packages with and without the descriptor.
- We performed a univariate variance analysis (ANOVA) on these raw ratings to compare the influence of each of the three test warnings.
- Only two of the 23 univariate ANOVA tests were significant (one sensory attribute, one social image attribute, no product personality attributes):
 - Draw effort: easier with the test warning "*light is not less addictive*"
 - But not in its French version "*légère mais pas moins lourde de conséquences*".
 - Young woman: more of this character was projected by the test warning "*light is not less addictive*".
 - Significant for both language versions.
- These findings suggested that, overall, the three test warnings had somewhat similar effects; in fact, they were more similar than different. However, the test concept "*light is not less addictive*", which used the word "*light*" and "*less*", gave a "*lighter*" halo to the product image, and tended to increase consumers' confusion instead of reducing it.
- The next section, which takes into account all raw ratings simultaneously, will confirm this observation.

TABLE 26

**COMPARATIVE EFFECTS OF THE TEST HWM CONCEPTS
ON SENSORY PROFILE
- TOTAL SAMPLE -**

Mean differences between scores with and without "Light" descriptor	"mild" flavour, harsh reality (645) %	Taste can kill you (645) %	"light" is not less addictive (645) %	ANOVA Test	Control HWMs (Average) (645) %
1. Draw effort / pull	.33*	.25*	.27*		.31*
2. Taste pleasantness	-.06	-.10	-.05		-.05
3. Initial satisfaction	-.42*	-.42*	-.32*		-.45*
4. Throat catch / hit	-.43*	-.45*	-.35*		-.44*
5. Toxicity	-.23*	-.17*	-.15*		-.30*
Mean of absolute differences	.29	.28	.23	N/A	.31
Raw scores (with and without descriptor combined)					
1. Draw effort / pull	2.85	2.76	2.65	SIG	2.76
2. Taste pleasantness	2.97	2.96	3.07		3.03
3. Initial satisfaction	3.04	3.06	3.09		3.11
4. Throat catch / hit	3.04	3.01	3.05		3.08
5. Toxicity	3.73	3.72	3.63		3.75

* T-Test significant at $P < 0.01$

SIG ANOVA Test significant at $P < 0.01$

 Not significant

N.B. Ratings and differences on 5-point scale used

"Light" or "Mild" Descriptors and Product Image

TABLE 27

**COMPARATIVE EFFECTS OF THE TEST HWM CONCEPTS
ON SENSORY PROFILE
– ENGLISH TEST HWMS –**

Mean differences between scores with and without "Light" descriptor	"mild" flavour, harsh reality (428) %	Taste can kill you (428) %	"light" is not less addictive (428) %	ANOVA Test	Control HWMS (Average) (428) %
1. Draw effort / pull	.32*	.21*	.27*		.25*
2. Taste pleasantness	-.09	-.04	-.02		-.04
3. Initial satisfaction	-.32*	-.33*	-.27*		-.34*
4. Throat catch / hit	-.36*	-.48*	-.35*		-.32*
5. Toxicity	-.18*	-.13	-.15*		-.30*
Mean of absolute differences	.25	.24	.21	N/A	.25
Raw scores (with and without descriptor combined)					
1. Draw effort / pull	2.87	2.80	2.65	SIG	2.80
2. Taste pleasantness	2.98	2.95	3.12		3.06
3. Initial satisfaction	3.06	3.07	3.12		3.17
4. Throat catch / hit	2.98	2.97	3.08		3.08
5. Toxicity	3.63	3.65	3.55		3.72

* T-Test significant at $P < 0.01$

SIG ANOVA Test significant at $P < 0.01$

 Not significant

N.B. Ratings and differences on 5-point scale used

"Light" or "Mild" Descriptors and Product Image

TABLE 28

**COMPARATIVE EFFECTS OF THE TEST HWM CONCEPTS
ON SENSORY PROFILE
– FRENCH TEST HWMS –**

Mean differences between scores with and without "Light" descriptor	goût « léger » dure réalité (217) %	Un goût mortel (217) %	« légère » mais pas moins lourde de conséquences (217) %	ANOVA Test	Control HWMs (Average) (217) %
1. Draw effort / pull	.35*	.33*	.25*		.43*
2. Taste pleasantness	.00	-.22	-.12		-0.07
3. Initial satisfaction	-.61*	-.60*	-.41*		-.68*
4. Throat catch / hit	-.59*	-.40*	-.33*		-.66*
5. Toxicity	-.32*	-.25*	-.15		-.31*
Mean of absolute differences	.37	.36	.25	N/A	.43
Raw scores (with and without descriptor combined)					
1. Draw effort / pull	2.82	2.69	2.65		2.68
2. Taste pleasantness	2.96	2.97	2.98		2.96
3. Initial satisfaction	3.00	3.03	3.02		2.99
4. Throat catch / hit	3.18	3.11	2.99		3.09
5. Toxicity	3.92	3.88	3.78		3.83

* T-Test significant at $P < 0.01$

SIG ANOVA Test significant at $P < 0.01$

 Not significant

N.B. Ratings and differences on 5-point scale used

TABLE 29

**COMPARATIVE EFFECTS OF THE TEST HWM CONCEPTS
ON PRODUCT PERSONALITY PROFILE
- TOTAL SAMPLE -**

Mean differences between scores for test HWMs with and without "Light" descriptor	"mild" flavour, harsh reality (645) %	Taste can kill you (645) %	"light" is not less addictive (645) %	ANOVA Test	Control HWMs (Average) (645) %
1. Risk-takers - Very prudent	.25*	.32*	.17		.33*
2. Concern for others - Selfish	-.13	-.19*	-.08		-.19
3. Health negligent - Health conscious	.20*	.18	.21*		.27*
4. Financially secure - Poor	.02	-.02	-.13		-.07
5. Image conscious - Sloppy	-.11	-.09	-.14		-.05
6. Straight - Cool	-.09	-.16*	-.14		-.04
7. Leader - Follower	-.09	-.07	.00		.03
8. Higher education - Lower education	-.09	-.04	-.14*		-.11
9. In control of their destiny - Fatalists	-.02	-.05	-.05		-.21*
10. Afraid of death - Do not worry about death	-.25*	-.24*	-.14		-.17
11. Disciplined - Disorganised	-.13	-.25*	-.19*		-.12
12. Rebellious - Follow the rules	.14	.15	.15		.10
Mean of absolute differences	.13	.15	.13	N/A	.14
Raw scores (with and without descriptor combined)					
1. Risk-takers - Very prudent	4.15	4.18	4.41		4.13
2. Concern for others - Selfish	5.37	5.31	5.21		5.47
3. Health negligent - Health conscious	4.21	4.20	4.46		4.10
4. Financially secure - Poor	4.89	4.82	4.84		4.89
5. Image conscious - Sloppy	4.91	4.91	4.84		5.04
6. Straight - Cool	4.86	4.88	4.97		4.84
7. Leader - Follower	5.13	5.00	5.06		5.16
8. Higher education - Lower education	5.10	4.98	4.93		5.09
9. In control of their destiny - Fatalists	5.24	5.12	5.09		5.21
10. Afraid of death - Do not worry about death	5.75	5.86	5.66		5.94
11. Disciplined - Disorganised	5.16	5.15	5.04		5.23
12. Rebellious - Follow the rules	4.81	4.86	4.91		4.79

* T-Test significant at $P < 0.01$ SIG ANOVA Test significant at $P < 0.01$

Not significant

N.B. Ratings and differences on 9-point scale used

TABLE 30

**COMPARATIVE EFFECTS OF THE TEST HWM CONCEPTS
ON PRODUCT PERSONALITY PROFILE
– ENGLISH TEST HWMS –**

Mean differences between scores for test HWMs with and without "Light" descriptor	"mild" flavour, harsh reality (428) %	Taste can kill you (428) %	"light" is not less addictive (428) %	ANOVA Test	Control HWMs (Average) (428) %
1. Risk-takers – Very prudent	.18	.27*	-.20		.32*
2. Concern for others – Selfish	-.04	-.21	-.10		-.25
3. Health negligent – Health conscious	.10	.13	.22		.25
4. Financially secure – Poor	.00	-.04	-.13		-.11
5. Image conscious – Sloppy	-.16	-.10	-.15		-.07
6. Straight – Cool	-.09	-.13	-.15		.06
7. Leader – Follower	-.13	-.08	.08		.03
8. Higher education – Lower education	-.11	-.04	-.19*		-.06
9. In control of their destiny – Fatalists	-.01	.05	-.02		-.16
10. Afraid of death – Do not worry about death	-.14	-.20	-.04		-.12
11. Disciplined – Disorganised	-.11	-.30*	-.20*		-.13
12. Rebellious – Follow the rules	.12	.17	.04		.07
Mean of absolute differences	.10	.14	.13	N/A	.14
Raw scores (with and without descriptor combined)					
1. Risk-takers – Very prudent	4.22	4.22	4.40		4.12
2. Concern for others – Selfish	5.42	5.37	5.24		5.60
3. Health negligent – Health conscious	4.33	4.30	4.63		4.24
4. Financially secure – Poor	5.03	4.90	4.90		5.07
5. Image conscious – Sloppy	4.99	4.97	4.92		5.12
6. Straight – Cool	4.91	4.92	5.04		4.88
7. Leader – Follower	5.16	5.05	5.12		5.19
8. Higher education – Lower education	5.13	5.00	5.00		5.12
9. In control of their destiny – Fatalists	5.33	5.15	5.10		5.32
10. Afraid of death – Do not worry about death	5.82	5.92	5.69		5.99
11. Disciplined – Disorganised	5.23	5.21	5.11		5.26
12. Rebellious – Follow the rules	4.82	4.87	4.92		4.72

* T-Test significant at $P < 0.01$

SIG ANOVA Test significant at $P < 0.01$

 Not significant

N.B. Ratings and differences on 9-point scale used

"Light" or "Mild" Descriptors and Product Image

TABLE 31

**COMPARATIVE EFFECTS OF THE TEST HWM CONCEPTS
ON PRODUCT PERSONALITY PROFILE
– FRENCH TEST HWMs –**

Mean differences between scores for test HWMs with and without "Light" descriptor	goût « léger » dure réalité (217) %	Un goût mortel (217) %	« légère » mais pas moins lourde de conséquences (217) %	ANOVA Test	Control HWMs (Average) (217) %
1. Risk-takers – Very prudent	.41*	.41*	.12		.34
2. Concern for others – Selfish	-.30	-.17	-.06		-.08
3. Health negligent – Health conscious	.39*	.30	.19		.29
4. Financially secure – Poor	.06	.01	-.13		.00
5. Image conscious – Sloppy	.00	-.06	-.11		-.02
6. Straight – Cool	-.10	-.22	-.10		-.25
7. Leader – Follower	-.01	-.04	-.15		.02
8. Higher education – Lower education	-.03	-.04	-.05		-.20
9. In control of their destiny – Fatalists	-.05	-.26	-.11		-.30
10. Afraid of death – Do not worry about death	-.47*	-.33	-.35*		-.28
11. Disciplined – Disorganised	-.17	-.14	-.18		-.11
12. Rebellious – Follow the rules	.17	.10	.35*		.18
Mean of absolute differences	.18	.17	.16	N/A	.17
Raw scores (with and without descriptor combined)					
1. Risk-takers – Very prudent	4.00	4.10	4.44		4.15
2. Concern for others – Selfish	5.27	5.18	5.15		5.20
3. Health negligent – Health conscious	3.98	4.01	4.12		3.81
4. Financially secure – Poor	4.60	4.66	4.71		4.53
5. Image conscious – Sloppy	4.75	4.81	4.70		4.88
6. Straight – Cool	4.75	4.79	4.82		4.78
7. Leader – Follower	5.06	4.92	4.94		5.10
8. Higher education – Lower education	5.02	4.95	4.78		5.03
9. In control of their destiny – Fatalists	5.07	5.05	5.06		4.99
10. Afraid of death – Do not worry about death	5.61	5.74	5.58		5.83
11. Disciplined – Disorganised	5.01	5.03	4.92		5.16
12. Rebellious – Follow the rules	4.79	4.82	4.88		4.95

* T-Test significant at $P < 0.01$

SIG ANOVA Test significant at $P < 0.01$

 Not significant

N.B. Ratings and differences on 9-point scale used

"Light" or "Mild" Descriptors and Product Image

TABLE 32

**COMPARATIVE EFFECTS OF THE TEST HWM CONCEPTS
ON SOCIAL IMAGE PROFILE
- TOTAL SAMPLE -**

Mean differences between scores for test HWMs with and without "Light" descriptor	"mild" flavour, harsh reality (645) %	Taste can kill you (645) %	"light" is not less addictive (645) %	ANOVA Test	Control HWMs (Average) (645) %
1. Business man (not at all - very much)	-.27*	-.20	-.19		.24
2. Teenage boy (not at all - very much)	-.46*	-.53*	-.43*		-.49*
3. Girl on bike (not at all - very much)	.22	.01	.19		.14
4. Biker man (not at all - very much)	-1.21*	-1.04*	-.77*		-1.18*
5. Young woman (not at all - very much)	.72*	.43	.47*		.50*
6. Farmer man (not at all - very much)	-.65*	-.60*	-.68*		-.76*
Mean of absolute differences	.59	.47	.46	N/A	.55
Raw scores (with and without descriptor combined)					
1. Business man (not at all - very much)	4.99	4.94	5.14		5.02
2. Teenage boy (not at all - very much)	5.14	5.16	5.10		5.19
3. Girl on bike (not at all - very much)	4.79	4.83	4.97		4.70
4. Biker man (not at all - very much)	5.61	5.84	5.42		5.86
5. Young woman (not at all - very much)	4.80	4.77	5.23	SIG	4.62
6. Farmer man (not at all - very much)	5.08	4.91	5.13		5.27

* T-Test significant at $P < 0.01$

SIG ANOVA Test significant at $P < 0.01$

 Not significant

N.B. Ratings and differences on 9-point scale used

"Light" or "Mild" Descriptors and Product Image

TABLE 33

**COMPARATIVE EFFECTS OF THE TEST HWM CONCEPTS
ON SOCIAL IMAGE PROFILE
– ENGLISH TEST HWMS –**

Mean differences between scores for test HWMs with and without "Light" descriptor	"mild" flavour, harsh reality (428) %	Taste can kill you (428) %	"light" is not less addictive (428) %	ANOVA Test	Control HWMs (Average) (428) %
1. Business man (not at all – very much)	-.10	-.14	-.12		-.08
2. Teenage boy (not at all – very much)	-.27	-.45*	-.44*		-.27
3. Girl on bike (not at all – very much)	.27*	.01	.27		.32*
4. Biker man (not at all – very much)	-.95*	-1.00*	-.62*		-1.05*
5. Young woman (not at all – very much)	.56*	.40*	.31		.48*
6. Farmer man (not at all – very much)	-.55*	-.58*	-.65*		-.74*
Mean of absolute differences	.45	.43	.40	N/A	.49
Raw scores (with and without descriptor combined)					
1. Business man (not at all – very much)	5.33	5.12	5.50		5.23
2. Teenage boy (not at all – very much)	5.58	5.65	5.62		5.72
3. Girl on bike (not at all – very much)	4.90	4.94	5.20		4.77
4. Biker man (not at all – very much)	5.86	6.08	5.76		6.11
5. Young woman (not at all – very much)	4.82	4.87	5.25	SIG	4.64
6. Farmer man (not at all – very much)	5.42	5.30	5.54		5.57

* T-Test significant at $P < 0.01$

SIG ANOVA Test significant at $P < 0.01$

 Not significant

N.B. Ratings and differences on 9-point scale used

"Light" or "Mild" Descriptors and Product Image

TABLE 34

**COMPARATIVE EFFECTS OF THE TEST HWM CONCEPTS
ON SOCIAL IMAGE PROFILE
– FRENCH TEST HWMS –**

Mean differences between scores for test HWMs with and without "Light" descriptor	goût « léger » dure réalité (217) %	Un goût mortel (217) %	« légère » mais pas moins lourde de conséquences (217) %	ANOVA Test	Control HWMs (Average) (217) %
1. Business man (not at all – very much)	-.60*	-.31	-.33		-.55*
2. Teenage boy (not at all – very much)	-.83*	-.68*	-.40*		-.91*
3. Girl on bike (not at all – very much)	.13	.03	.03		-.22
4. Biker man (not at all – very much)	-1.71*	-1.10*	-1.09*		-1.42*
5. Young woman (not at all – very much)	1.01*	.48*	.77*		.53*
6. Farmer man (not at all – very much)	-.86*	-.64*	-.73*		-.80*
Mean of absolute differences	.86	.54	.56	N/A	.74
Raw scores (with and without descriptor combined)					
1. Business man (not at all – very much)	4.33	4.59	4.44		4.61
2. Teenage boy (not at all – very much)	4.28	4.20	4.10		4.15
3. Girl on bike (not at all – very much)	4.57	4.59	4.52		4.56
4. Biker man (not at all – very much)	5.13	5.36	4.74		5.35
5. Young woman (not at all – very much)	4.77	4.57	5.18	SIG	4.59
6. Farmer man (not at all – very much)	4.42	4.16	4.32		4.67

* T-Test significant at $P < 0.01$

SIG ANOVA Test significant at $P < 0.01$

 Not significant

N.B. Ratings and differences on 9-point scale used

"Light" or "Mild" Descriptors and Product Image

5.6 MAPPING OF THE TEST HWMS IMAGE EFFECTS

- To help visualize the possible product image effects of the test warnings and see how similar or different these effects may be, we performed a correspondence analysis between the HWMs (the 3 test and the average control) and the 23 product properties used in the study to measure effects on perceptions.

INTRODUCTION

- Correspondence analysis was the statistical method used specifically for the multivariate analysis of the rectangular table (e.g., HWMs and product properties). This method was used because the numerical values obtained were so large they prevented rapid assimilation of the information contained in the data set.
- The program also permitted mapping on the same factor axes of the HWMs and the product properties.
- The basic principles for interpretation of the perceptual map as presented in this study are:
 - a) Some degree of proximity between two HWMs means that the characteristics of the two HWMs are correlated to some degree, especially as the HWM points become more distant from the point of origin.

The position of a point on the factor axis is the correlation coefficient of this HWM with the corresponding factor; thus, points located in the centre frame at the origin have no significant correlation with the factors.
 - b) Proximity between two product properties means that these two properties are correlated.
 - c) Finally, proximity between a HWM and a product property signifies, on average, that this property is distinctive to this HWM.

DATA ANALYZED

- The data matrix subjected to the correspondence analysis included:

Columns (4 objects)

- Each of the 3 test HWMs
- The average control HWM

Rows (23 attributes)

- 5 sensory attributes
- 12 product personality attributes
- 6 social image attributes

- Note that for each of the 23 properties, 2 measures were used – top and bottom box ratings (percentages) of the scales. Therefore, the analysis used 46 measures for the product properties (ex. percent hard to draw and percent easy to draw).
- The measures used were the raw scores (for packages with and without the descriptor combined) for the total sample (both language versions combined).
- Correspondence analysis used the following features: all objects and attributes were active. This means that all properties were used to determine the configuration of the perceptual map and position the HWMs.
 - To facilitate reading of the map, properties closest to the center have not been displayed because they applied equally to the HWMs and had no relevance with regard to interpretation.
 - Distances between HWMs, on the one hand, and between properties, on the other, could be compared among themselves and distances between HWMs and properties could also be compared (because of the normalization method, which distributed the total variance symmetrically among the rows and columns of the data table).

INTERPRETATION OF THE MAP

- The results indicated that 2 factor axes explained 92 percent of the entire variance present in the map (**see map at the end of this section**):
 - Factor axis 1: 63 percent
 - Factor axis 2: 29 percent

Horizontal axis

- This factor was by far the most important and alone accounted for 63 percent of the entire variance.
- At a glance, it was clear that this factor separated, as on a continuum:
 - Personality attributes which were more desirable (left) than less desirable (right);
 - The "*light is not less addictive*" test warning (left) from the average of the control warnings (right);
 - The 2 other test warnings positioned in the middle of this axis.
- The product properties most correlated with this factor were:

On the right – Appealing Product Personality Attributes

- Very prudent;
- Health conscious;
- Young woman;
- Not biker man;

- Follow the rules.

On the left – Less Desirable Product Personality Attributes

- Not girl on bike;
- Risk-taker;
- Biker man;
- Rebellious.

- This factor was named **Personality Appeal**.

Vertical Axis

- This axis (the second most important) summarized 29 percent of the entire variance, which was high for a second factor. This factor was therefore important with regard to interpretation.

At the top, the most correlated product properties were:

- Taste pleasantness;
- High throat catch/hit;
- Farmer man;
- High initial satisfaction.

At the bottom

- Not farmer man;
- Hard to draw;
- Unpleasant taste.

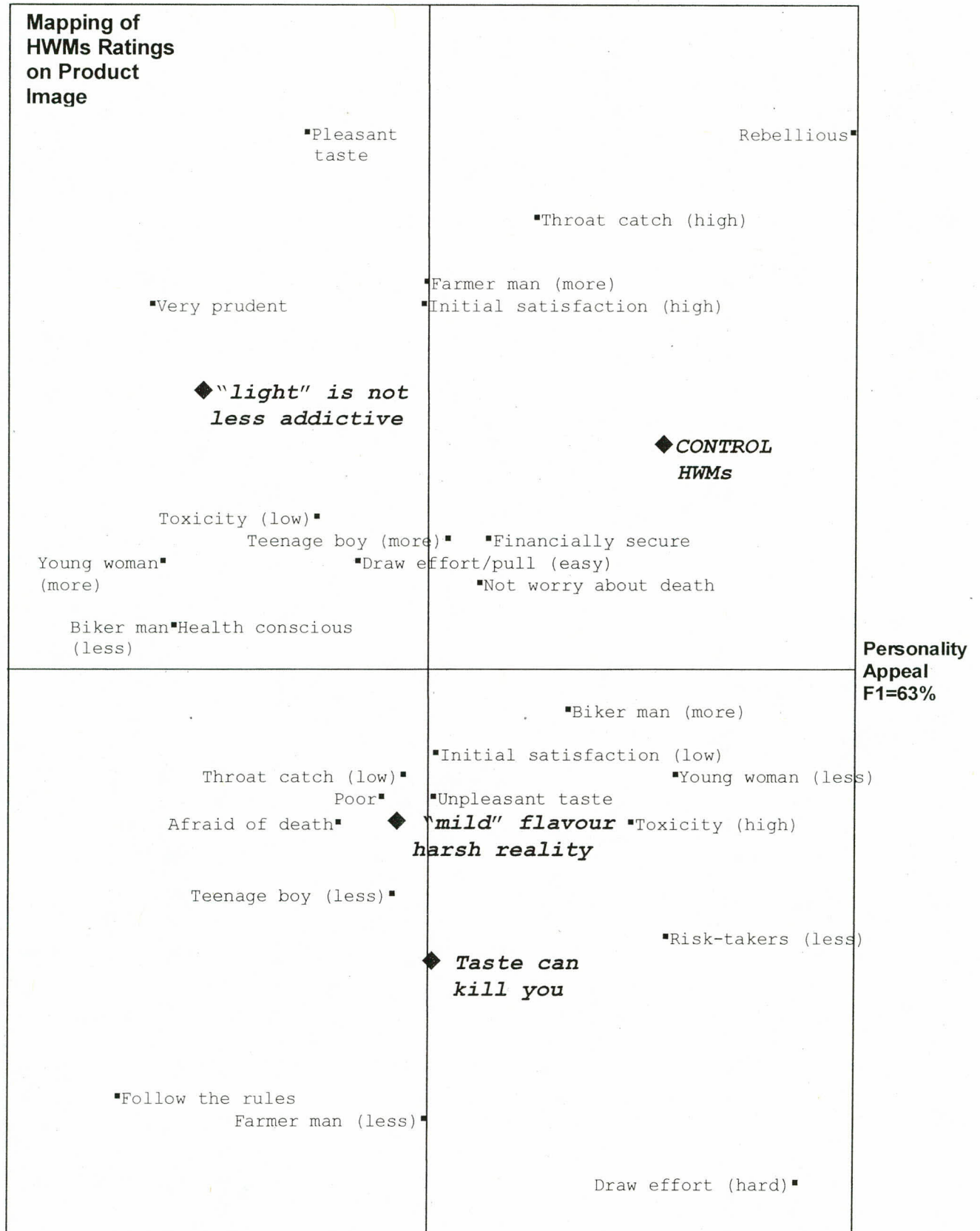
- This factor separated product properties on the intense vs. weak continuum.
 - It also contrasted a group of two test HWMs with taste connotations ("*mild flavour, harsh reality*" and "*Taste can kill you*") from the third test warning ("*light is not less addictive*") and the control warnings.
- We named this factor **Sensory Appeal**.
- Positions on the map indicated that:
 1. All three test warnings tended to project more positive product personality attributes than control warnings. The positions on the horizontal axis confirmed that test warnings may have had the reverse effect – that is, "upgrading" rather than "downgrading" the overall image of cigarettes (Regular or Light).
 2. The test warning "*light is not less addictive*" emerged as the most different or unique among the three test warnings used, when all properties were taken into account.
 - Note that both the other test warnings directly addressed taste, so they positioned, unsurprisingly, closest to each other on the map.

- The "*light is not less addictive*" warning projected more positive product properties both in terms of sensory and personality attributes, when compared to the two other test warnings. Note that this warning made the most explicit reference to Light cigarettes, of the three test warnings used.

CONCLUSION

- Correspondence analysis confirmed, when all product properties were simultaneously taken into account, that the "*light is not less addictive*" test warning was the most risky of the three test concepts: it had not reduced consumer confusion about L&M and Regular cigarettes, and was likely to present cigarettes in a more positive/less negative perspective than control warnings.
 - The two other test warnings had no decisive effects, when compared to control warnings:
 - They had not reduced consumer confusion.
 - They presented cigarettes in a less favourable perspective in terms of sensory appeal but in a more favourable perspective in terms of product personality, than control warnings.

Sensory Appeal -- F2 = 29%



5.7 PERCEIVED DIFFERENCES BETWEEN REGULAR AND LIGHT CIGARETTES

Respondents were asked to compare Regular and Light cigarettes to determine their beliefs with respect to five product properties.

- Overall, findings were very consistent with those obtained in a previous experiment (although the composition of the target group was not exactly the same).¹
 - For two of the five properties, a very high contrast was observed between Regular and Light cigarettes. Roughly, half of the sample believed that Light cigarettes (see **Table 35**):
 1. contained less nicotine (43 percent compared to 15 percent who believed they contained more);
 2. had less taste or flavour (56 percent compared with 15 percent who believed they had more).
 - Although not so pronounced, Light cigarettes were favoured on one other property: 30 percent believed they had less chemicals and additives, compared with 18 percent who thought they had more.
 - On two properties, Light and Regular cigarettes were not differentiated:
 - Physiological dependence
 - Harm to health
 - These findings reflected paradoxical views on the differences between Regular and Light Cigarettes and indicated that some confusion still exists.
 - On one hand, Light cigarettes were perceived as containing less nicotine, less chemicals and additives;
 - On the other hand, Light cigarettes were believed to be as addictive and as harmful as Regular cigarettes.
 - Because of these paradoxical views, results of public opinion surveys on beliefs about L&M cigarettes should be interpreted very carefully. Smokers may not always respond in a consistent and logical way.

¹ *Effects of "Light" and "Mild" labels on perceived strength and brand image of cigarettes. February 2002, Créatec +. In this 2002 study, most smokers surveyed were using L&M brands.*

TABLE 35

**PERCEIVED DIFFERENCES BETWEEN
REGULAR AND LIGHT CIGARETTES**

L.1 Think about the possible differences between cigarettes labelled on packages as light and cigarettes labelled as regular. First, with regard to (READ AND ROTATE) do you think that light cigarettes compared to regular cigarettes are (have)...? (Read and rotate starting with item checked)

	Total sample (645) %	French HWMs (217) %	English HWMs (428) %
Levels of nicotine			
• Higher	15	11	16
• Lower	43	50	40
• Difference	-28	-39	-24
• Don't know / no answer	2	0	2
Amounts of chemicals and additives			
• Higher	18	19	17
• Lower	30	34	28
• Difference	-12	-15	-11
• Don't know / no answer	2	1	2
Physiological dependence caused by smoking			
• Higher	13	9	14
• Lower	11	5	14
• Difference	2	4	0
• Don't know / no answer	2	0	3
Harm to health caused by smoking			
• Higher	12	9	14
• Lower	17	14	19
• Difference	-5	-5	-5
• Don't know / no answer	2	0	3
Amount of taste or flavour of the cigarette			
• Higher	15	12	16
• Lower	56	71	48
• Difference	-41	-59	-32
• Don't know / no answer	2	1	3

"Light" or "Mild" Descriptors and Product Image

5.8 IMPORTANCE ASCRIBED TO PRESENCE OF "LIGHT" DESCRIPTOR ON PACKAGES

*Respondents were asked how important the "light" descriptor was for them and if they would be annoyed should the descriptor be withdrawn from all current packages (see **Table 36**).*

- Results indicated that the "light" descriptor was important to respondents and that withdrawing labels saying "light" or "mild" would annoy many of them.
 - A majority (57 percent) of respondents said it was important the descriptor be written close to the brand name.
 - A similar proportion was found in a February 2002 study (63 percent), using the same question, among smokers of Regular cigarettes.
 - Half (49 percent) of the respondents would be annoyed if the descriptor was completely withdrawn from the packages, which suggested that the descriptor had "real" value for consumers (only 30 percent would not be annoyed at all).
 - A similar proportion was found in a February 2002 study (53 percent), using the same question, among smokers of Regular cigarettes.
 - Half of the respondents (49 percent) were convinced (very or somewhat) that cigarettes labelled as "light" or "mild" were actually "lighter" or "milder" than Regular cigarettes (only 20 percent were not convinced at all).
 - A similar proportion (54 percent) was found in a February 2002 study, using the same question, among smokers of Regular cigarettes.
- Overall, these findings confirmed that the "light" descriptor had real meaning for respondents who also believed Light cigarettes were really different than Regular cigarettes and suggested that consumers were still confused about L&M cigarettes compared to Regular cigarettes.

TABLE 36 IMPORTANCE ASCRIBED TO PRESENCE OF "LIGHT" DESCRIPTOR
ON CIGARETTE PACKAGES

	Total sample (645) %	French HWMs (217) %	English HWMs (428) %
L.2 In the choice of cigarette brands that meet your needs, how important it is to you that the label Light, Mild, Extra Mild, Extra Light, Ultra Light or Regular be written close to the brand name? Would you say...? (Read)			
• Very important	29	25	31
• Somewhat important	28	28	28
L.3 To what extent are you convinced that cigarettes labelled as Light or Extra Light are "lighter" or "milder" than regular cigarettes? Would you say...? (Read)			
• Very convinced	17	15	18
• Somewhat convinced	32	28	34
• Not very convinced	30	35	27
• Not convinced at all	20	22	18
• Don't know / no answer	2	0	3
L.4 To what extent would you be annoyed if any label saying "Light", "Mild", "Extra Mild" "Extra Light", "Ultra Light" or "Regular" was withdrawn from all current packages labelled that way? Would you say...? (Read)			
• Very annoyed	26	19	30
• Somewhat annoyed	23	17	26
• Not very annoyed	19	19	19
• Not annoyed at all	30	45	23
• Don't know / no answer	2	0	3

APPENDIX 1

QUESTIONNAIRE

SCREENER

February, 2004
Draft.1

INTERVIEW	RESPONDENT (for verification)
Date: _____	Tel.: (____) _____
Start: _____ [] a.m. [] p.m.	Name: _____
Finish: _____ [] a.m. [] p.m.	INTERVIEWER: _____

Hi, we are doing a study on cigarette smoking on behalf of the Government of Canada. This survey involves people aged **18 or more, smokers**. If you smoke cigarettes, we would like you to participate. While your participation is voluntary, your answers will be kept confidential. If you are smoker and if you complete the interview, we would offer you \$5 in cash as a way of thanking you for your help.

If respondent accepts, proceed with screening. If refuses, record as refusal before screening and proceed your recruiting.

S.1 At the present time, do you smoke cigarettes manufactured (not rolled) everyday, occasionally (less than everyday) or not at all?

- | | |
|----------------------|----------------------------|
| • EVERYDAY | () DAILY SMOKER, CONTINUE |
| • OCCASIONALLY | () |
| • NOT AT ALL | () THANK AND TERMINATE |
| • Dk/Na | () |

S.2 Do you (or does anyone in your household) work for an advertising or market research firm, or a tobacco company?

- | | | | |
|------------------|---------------------|------------------|----------|
| • Yes..... () 1 | THANK AND TERMINATE | • No () 2 | CONTINUE |
|------------------|---------------------|------------------|----------|

S.3 What is your age? (If respondent is reluctant to give exact age, say: Instead of giving your exact age, I will read a range of ages for you to choose from. Please stop me when I read the range in which your age falls.)

- | | |
|------------------------------|--|
| • 18-19 years old..... () 1 | • 45-54 years old () 5 |
| • 20-24 years old..... () 2 | • 55-64 years old () 6 |
| • 25-34 years old..... () 3 | • 65-74 years old () 7 |
| • 35-44 years old..... () 4 | • 75 years old or over () 8 |
| | • Less than 18 years old..... () 9 CONCLUDE |

S.4 INTERVIEWER: Record gender of respondent

- | | |
|--------------------|----------------------|
| • Male () 1 | • Female () 2 |
|--------------------|----------------------|

S.5 **PROCEED WITH INTERVIEW.** We would like to interview you as part of our study – this involves an interview right here in the mall – the interview could take about 25 minutes. We will be interviewing a large number of people across Canada and will be only reporting about what you say as part of a larger group. We would offer you \$5 as a way of thanking you for your help. Will you participate in our study?

- | | |
|------------------|------------------------|
| • Yes..... () 1 | PROCEED WITH INTERVIEW |
| • No () 2 | THANK, RECORD REFUSAL |

INTERVIEWER:

If respondent is not alone: We would like frank answers and opinions. Therefore we need to interview him/her without another person assisting, since different person may have different views.

QUESTIONNAIRE

A	1	2	3	C
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SMOKING HABITS

We are now ready to begin the actual interview. We'd first like to talk with you about your smoking habits.

H.1 On average, how many cigarettes do you smoke per day? (Probe for precise number. If respondent says one pack a day, probe for number of cigarettes in a pack)

_____ cigarettes per day

H.2 How long have you been a cigarette smoker? Has it been...? (Read)

- Less than 1 year ()1
- 1-5 years ()2
- 6-10 years ()3
- More than 10 years ()4
- Dk/Na ()9

H.3 What brand of cigarettes do you usually smoke? (Do not read. Code one brand only. Probe for whether respondent smokes regular type of cigarettes, light, medium, mild, extra mild, extra light, ultra light, special mild, special, etc. within their brand. Do not probe if king size or regular size)

- Belvedere (Regular) ()01
- Belvedere Extra Mild ()02
- Benson & Hedges (Regular) ()03
- Benson & Hedges Deluxe Ultra Light ()04
- Benson & Hedges Deluxe Ultra Light Menthol ()05
- Craven "A" (Regular) ()06
- Craven "A" Light ()07
- Craven "A" Menthol ()08
- DuMaurier (Regular) ()09
- DuMaurier Light ()10
- DuMaurier Extra Light ()11
- DuMaurier Ultra Light ()12
- DuMaurier Special ()13
- DuMaurier Special 100 ()14
- Export "A" (Regular) ()15
- Export "A" Medium ()16
- Export "A" Mild ()17
- Export "A" Light ()18
- Export "A" Ultra Light ()19
- Matinee (Regular) ()20
- Matinee Extra Mild ()21
- Matinee Slims ()22
- Player's (Regular / Filter) ()23
- Player's Light ()24
- Player's Extra Light ()25
- Rothmans (Regular) ()26
- Rothmans Special Mild ()27
- Other (specify) _____ ()90
- No regular brand ()98
- Dk/Na ()99

H.4 Do you consider your main cigarette brand (SEE H.3) to be a...? (Read)

- Regular ()1
- Light ()2
- Mild ()3
- Ultra Light ()4
- Extra Light..... ()5
- Ultra Mild..... ()6
- Extra Mild ()7
- Other (do not read)..... ()8
- Dk/Na ()9

H.5 Is there another brand of cigarette you usually smoke when you can't get your usual brand (H.3)?

- Yes ()1
 - No ()2
 - Dk/Na ()9
- SKIP TO NEXT SECTION

H.6 What is your second preferred cigarette brand that you smoke when you can't get your usual regular brand? (Do not read. Code one brand only. Probe for whether respondent smokes regular type of cigarettes, light, mild, extra light, etc. within their brand. Do not probe if king size or regular size)

- Belvedere (Regular)..... ()01
- Belvedere Extra Mild..... ()02
- Benson & Hedges (Regular)..... ()03
- Benson & Hedges Deluxe Ultra Light..... ()04
- Benson & Hedges Deluxe Ultra Light Menthol ()05
- Craven "A" (Regular) ()06
- Craven "A" Light..... ()07
- Craven "A" Menthol..... ()08
- DuMaurier (Regular)..... ()09
- DuMaurier Light ()10
- DuMaurier Extra Light..... ()11
- DuMaurier Ultra Light..... ()12
- DuMaurier Special ()13
- DuMaurier Special 100 ()14
- Export "A" (Regular)..... ()15
- Export "A" Medium..... ()16
- Export "A" Mild ()17
- Export "A" Light..... ()18
- Export "A" Ultra Light ()19
- Matinee (Regular)..... ()20
- Matinee Extra Mild ()21
- Matinee Slims ()22
- Player's (Regular / Filter)..... ()23
- Player's Light ()24
- Player's Extra Light..... ()25
- Rothmans (Regular) ()26
- Rothmans Special Mild ()27
- Other (specify) _____ ()90
- No second brand ()98
- Dk/Na ()99

1	A
---	---



1	A
---	---

I will show you the picture of the package of a cigarette brand you may already know. (Interviewer: show test package / make sure package matches picture above) Take the time to look.

Interviewer: Let the respondent free to examine the picture. Wait 30 seconds before proceeding with the interview.

Q1. I would like to have your impressions on what you think may happen when you smoke cigarettes contained in this package. Take the time to look at it. Then I would like you to fill out this part of the survey on your own. Here are the questions and a pencil. I will wait right here for you to finish this part, then we can go on with a few more interview questions. If you have any questions as you are going along, please ask me about them.

First, read the description of what may happen when you smoke cigarettes contained in the package shown on the picture. Then check the box that best represents your impression about what would happen. (Explain scale 1 to 5 / Leave the picture of the package in view / Self-complete)

Q1.1 DRAW EFFORT / PULL (Easy – Hard)

The amount of effort necessary (drawing or sucking on this brand of cigarettes) to get a satisfactory puff of smoke into the mouth.

Easy ☐ ☐ ☐ ☐ ☐ Hard

Q1.2 TASTE PLEASANTNESS (Unpleasant – Pleasant)

The degree of pleasantness or unpleasantness of the flavour that is present during smoking.

Unpleasant ☐ ☐ ☐ ☐ ☐ Pleasant

Q1.3 INITIAL SATISFACTION (Low – High)

The extent to which this brand of cigarettes is capable of delivering satisfactory puffs of smoke, even in the starting puff or two.

Low ☐ ☐ ☐ ☐ ☐ High

Q1.4 THROAT CATCH / HIT (Low – High)

The short, sharp momentary “kick” or “hit” sensation felt in the lower throat / upper chest region specifically as the smoke goes down. It is noticed immediately as the smoke contacts the throat and last a second or less.

Low ☐ ☐ ☐ ☐ ☐ High

Q1.5 TOXICITY (Low – High)

How much does smoking this brand of cigarettes regularly cause harmful health effects.

Low ☐ ☐ ☐ ☐ ☐ High

RESPONDENT: RETURN QUESTIONNAIRE TO INTERVIEWER.

INTERVIEWER: CHECK FOR COMPLETENESS

- Q2.** I would like you to fill out the next part of the survey on your own. If you have any questions as you are going along, please ask me about them. Below is a statement about people like you who smoke cigarettes. Complete the sentence to describe your own **impressions** of people who would smoke the cigarettes contained in this package as their usual brand by circling a number between 1 and 9 on each of the scales listed after the statement. **(Leave the picture of the package in view / self-complete)**

In general, people who would smoke this brand of cigarettes...

Q2.1	Risk-takers	1	2	3	4	5	6	7	8	9	Very prudent
Q2.2	Concern for others	1	2	3	4	5	6	7	8	9	Selfish
Q2.3	Health negligent	1	2	3	4	5	6	7	8	9	Health conscious
Q2.4	Financially secure	1	2	3	4	5	6	7	8	9	Poor
Q2.5	Image conscious	1	2	3	4	5	6	7	8	9	Sloppy
Q2.6	Straight	1	2	3	4	5	6	7	8	9	Cool
Q2.7	Leader	1	2	3	4	5	6	7	8	9	Follower
Q2.8	Higher education	1	2	3	4	5	6	7	8	9	Lower education
Q2.9	In control of their destiny	1	2	3	4	5	6	7	8	9	Fatalists
Q2.10	Afraid of death	1	2	3	4	5	6	7	8	9	Do not worry about death
Q2.11	Disciplined	1	2	3	4	5	6	7	8	9	Disorganised
Q2.12	Rebellious	1	2	3	4	5	6	7	8	9	Follow the rules

RESPONDENT: RETURN QUESTIONNAIRE TO INTERVIEWER

- Q3.** Now I would like to show you pictures of people who smoke and the package of cigarettes you just saw. Please take a careful look at them. For each picture I show you, I will ask you to what extent do you think these can be their favourite cigarettes. We will use a scale from 1 to 9, 1 meaning "not at all" and 9 "very much". **(Write in number 1-9 / Leave the picture of the package in view. Rotate pictures as checked)**

☐ 1. Business man	☐ 2. Teenage boy	☐ 3. Girl on bike	☐ 4. Biker man	☐ 5. Young woman	☐ 6. Farmer man

1	B
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1	B
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I will show you the picture of the package of a cigarette brand you may already know. (Interviewer: show test package / make sure package matches picture above) Take the time to look.

**Interviewer: Let the respondent free to examine the picture.
Wait 30 seconds before proceeding with the interview.**

Q1. I would like to have your impressions on what you think may happen when you smoke cigarettes contained in this package. Take the time to look at it. Then I would like you to fill out this part of the survey on your own. Here are the questions and a pencil. I will wait right here for you to finish this part, then we can go on with a few more interview questions. If you have any questions as you are going along, please ask me about them.

First, read the description of what may happen when you smoke cigarettes contained in the package shown on the picture. Then check the box that best represents your impression about what would happen. (Explain scale 1 to 5 / Leave the picture of the package in view / Self-complete)

Q1.1 DRAW EFFORT / PULL (Easy – Hard)

The amount of effort necessary (drawing or sucking on this brand of cigarettes) to get a satisfactory puff of smoke into the mouth.

Easy ☐ ☐ ☐ ☐ ☐ Hard

Q1.2 TASTE PLEASANTNESS (Unpleasant – Pleasant)

The degree of pleasantness or unpleasantness of the flavour that is present during smoking.

Unpleasant ☐ ☐ ☐ ☐ ☐ Pleasant

Q1.3 INITIAL SATISFACTION (Low – High)

The extent to which this brand of cigarettes is capable of delivering satisfactory puffs of smoke, even in the starting puff or two.

Low ☐ ☐ ☐ ☐ ☐ High

Q1.4 THROAT CATCH / HIT (Low – High)

The short, sharp momentary “kick” or “hit” sensation felt in the lower throat / upper chest region specifically as the smoke goes down. It is noticed immediately as the smoke contacts the throat and last a second or less.

Low ☐ ☐ ☐ ☐ ☐ High

Q1.5 TOXICITY (Low – High)

How much does smoking this brand of cigarettes regularly cause harmful health effects.

Low ☐ ☐ ☐ ☐ ☐ High

RESPONDENT: RETURN QUESTIONNAIRE TO INTERVIEWER.

INTERVIEWER: CHECK FOR COMPLETENESS

- Q2.** I would like you to fill out the next part of the survey on your own. If you have any questions as you are going along, please ask me about them. Below is a statement about people like you who smoke cigarettes. Complete the sentence to describe your own **impressions** of people who would smoke the cigarettes contained in this package as their usual brand by circling a number between 1 and 9 on each of the scales listed after the statement. (**Leave the picture of the package in view / self-complete**)

In general, people who would smoke this brand of cigarettes...

Q2.1	Risk-takers	1	2	3	4	5	6	7	8	9	Very prudent
Q2.2	Concern for others	1	2	3	4	5	6	7	8	9	Selfish
Q2.3	Health negligent	1	2	3	4	5	6	7	8	9	Health conscious
Q2.4	Financially secure	1	2	3	4	5	6	7	8	9	Poor
Q2.5	Image conscious	1	2	3	4	5	6	7	8	9	Sloppy
Q2.6	Straight	1	2	3	4	5	6	7	8	9	Cool
Q2.7	Leader	1	2	3	4	5	6	7	8	9	Follower
Q2.8	Higher education	1	2	3	4	5	6	7	8	9	Lower education
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Q2.10	Afraid of death	1	2	3	4	5	6	7	8	9	Do not worry about death
Q2.11	Disciplined	1	2	3	4	5	6	7	8	9	Disorganised
Q2.12	Rebellious	1	2	3	4	5	6	7	8	9	Follow the rules

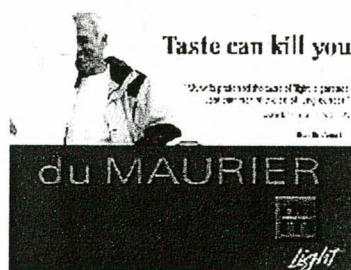
RESPONDENT: RETURN QUESTIONNAIRE TO INTERVIEWER

- Q3.** Now I would like to show you pictures of people who smoke and the package of cigarettes you just saw. Please take a careful look at them. For each picture I show you, I will ask you to what extent do you think these can be their favourite cigarettes. We will use a scale from 1 to 9, 1 meaning "not at all" and 9 "very much". (**Write in number 1-9 / Leave the picture of the package in view. Rotate pictures as checked**)

☐ 1. Business man	☐ 2. Teenage boy	☐ 3. Girl on bike	☐ 4. Biker man	☐ 5. Young woman	☐ 6. Farmer man

2

A



2

A

I will show you the picture of the package of a cigarette brand you may already know. (Interviewer: show test package / make sure package matches picture above) Take the time to look.

**Interviewer: Let the respondent free to examine the picture.
Wait 30 seconds before proceeding with the interview.**

Q1. I would like to have your impressions on what you think may happen when you smoke cigarettes contained in this package. Take the time to look at it. Then I would like you to fill out this part of the survey on your own. Here are the questions and a pencil. I will wait right here for you to finish this part, then we can go on with a few more interview questions. If you have any questions as you are going along, please ask me about them.

First, read the description of what may happen when you smoke cigarettes contained in the package shown on the picture. Then check the box that best represents your impression about what would happen. (Explain scale 1 to 5 / Leave the picture of the package in view / Self-complete)

Q1.1 DRAW EFFORT / PULL (Easy – Hard)

The amount of effort necessary (drawing or sucking on this brand of cigarettes) to get a satisfactory puff of smoke into the mouth.

Easy ☐ ☐ ☐ ☐ ☐ Hard

Q1.2 TASTE PLEASANTNESS (Unpleasant – Pleasant)

The degree of pleasantness or unpleasantness of the flavour that is present during smoking.

Unpleasant ☐ ☐ ☐ ☐ ☐ Pleasant

Q1.3 INITIAL SATISFACTION (Low – High)

The extent to which this brand of cigarettes is capable of delivering satisfactory puffs of smoke, even in the starting puff or two.

Low ☐ ☐ ☐ ☐ ☐ High

Q1.4 THROAT CATCH / HIT (Low – High)

The short, sharp momentary “kick” or “hit” sensation felt in the lower throat / upper chest region specifically as the smoke goes down. It is noticed immediately as the smoke contacts the throat and last a second or less.

Low ☐ ☐ ☐ ☐ ☐ High

Q1.5 TOXICITY (Low – High)

How much does smoking this brand of cigarettes regularly cause harmful health effects.

Low ☐ ☐ ☐ ☐ ☐ High

RESPONDENT: RETURN QUESTIONNAIRE TO INTERVIEWER.

INTERVIEWER: CHECK FOR COMPLETENESS

- Q2.** I would like you to fill out the next part of the survey on your own. If you have any questions as you are going along, please ask me about them. Below is a statement about people like you who smoke cigarettes. Complete the sentence to describe your own **impressions** of people who would smoke the cigarettes contained in this package as their usual brand by circling a number between 1 and 9 on each of the scales listed after the statement. (Leave the picture of the package in view / self-complete)

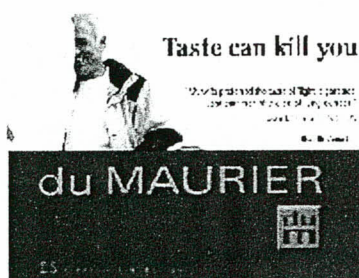
In general, people who would smoke this brand of cigarettes...

Q2.1	Risk-takers	1	2	3	4	5	6	7	8	9	Very prudent
Q2.2	Concern for others	1	2	3	4	5	6	7	8	9	Selfish
Q2.3	Health negligent	1	2	3	4	5	6	7	8	9	Health conscious
Q2.4	Financially secure	1	2	3	4	5	6	7	8	9	Poor
Q2.5	Image conscious	1	2	3	4	5	6	7	8	9	Sloppy
Q2.6	Straight	1	2	3	4	5	6	7	8	9	Cool
Q2.7	Leader	1	2	3	4	5	6	7	8	9	Follower
Q2.8	Higher education	1	2	3	4	5	6	7	8	9	Lower education
Q2.9	In control of their destiny	1	2	3	4	5	6	7	8	9	Fatalists
Q2.10	Afraid of death	1	2	3	4	5	6	7	8	9	Do not worry about death
Q2.11	Disciplined	1	2	3	4	5	6	7	8	9	Disorganised
Q2.12	Rebellious	1	2	3	4	5	6	7	8	9	Follow the rules

RESPONDENT: RETURN QUESTIONNAIRE TO INTERVIEWER

- Q3.** Now I would like to show you pictures of people who smoke and the package of cigarettes you just saw. Please take a careful look at them. For each picture I show you, I will ask you to what extent do you think these can be their favourite cigarettes. We will use a scale from 1 to 9, 1 meaning "not at all" and 9 "very much". (Write in number 1-9 / Leave the picture of the package in view. Rotate pictures as checked)

☐ 1. Business man	☐ 2. Teenage boy	☐ 3. Girl on bike	☐ 4. Biker man	☐ 5. Young woman	☐ 6. Farmer man



I will show you the picture of the package of a cigarette brand you may already know. (**Interviewer: show test package / make sure package matches picture above**) Take the time to look.

Interviewer: Let the respondent free to examine the picture. Wait 30 seconds before proceeding with the interview.

Q1. I would like to have your **impressions** on what you think may happen when you smoke cigarettes contained in this package. Take the time to look at it. Then I would like you to fill out this part of the survey on your own. Here are the questions and a pencil. I will wait right here for you to finish this part, then we can go on with a few more interview questions. If you have any questions as you are going along, please ask me about them.

First, read the description of what may happen when you smoke cigarettes contained in the package shown on the picture. Then check the box that best represents your impression about what would happen. (**Explain scale 1 to 5 / Leave the picture of the package in view / Self-complete**)

Q1.1 DRAW EFFORT / PULL (Easy – Hard)

The amount of effort necessary (drawing or sucking on this brand of cigarettes) to get a satisfactory puff of smoke into the mouth.

Easy ☐ ☐ ☐ ☐ ☐ Hard

Q1.2 TASTE PLEASANTNESS (Unpleasant – Pleasant)

The degree of pleasantness or unpleasantness of the flavour that is present during smoking.

Unpleasant ☐ ☐ ☐ ☐ ☐ Pleasant

Q1.3 INITIAL SATISFACTION (Low – High)

The extent to which this brand of cigarettes is capable of delivering satisfactory puffs of smoke, even in the starting puff or two.

Low ☐ ☐ ☐ ☐ ☐ High

Q1.4 THROAT CATCH / HIT (Low – High)

The short, sharp momentary “kick” or “hit” sensation felt in the lower throat / upper chest region specifically as the smoke goes down. It is noticed immediately as the smoke contacts the throat and last a second or less.

Low ☐ ☐ ☐ ☐ ☐ High

Q1.5 TOXICITY (Low – High)

How much does smoking this brand of cigarettes regularly cause harmful health effects.

Low ☐ ☐ ☐ ☐ ☐ High

RESPONDENT: RETURN QUESTIONNAIRE TO INTERVIEWER.

INTERVIEWER: CHECK FOR COMPLETENESS

- Q2.** I would like you to fill out the next part of the survey on your own. If you have any questions as you are going along, please ask me about them. Below is a statement about people like you who smoke cigarettes. Complete the sentence to describe your own **impressions** of people who would smoke the cigarettes contained in this package as their usual brand by circling a number between 1 and 9 on each of the scales listed after the statement. (**Leave the picture of the package in view / self-complete**)

In general, people who would smoke this brand of cigarettes...

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Q2.2	Concern for others	1	2	3	4	5	6	7	8	9	Selfish
Q2.3	Health negligent	1	2	3	4	5	6	7	8	9	Health conscious
Q2.4	Financially secure	1	2	3	4	5	6	7	8	9	Poor
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Q2.8	Higher education	1	2	3	4	5	6	7	8	9	Lower education
Q2.9	In control of their destiny	1	2	3	4	5	6	7	8	9	Fatalists
Q2.10	Afraid of death	1	2	3	4	5	6	7	8	9	Do not worry about death
Q2.11	Disciplined	1	2	3	4	5	6	7	8	9	Disorganised
Q2.12	Rebellious	1	2	3	4	5	6	7	8	9	Follow the rules

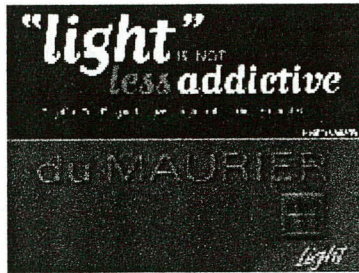
RESPONDENT: RETURN QUESTIONNAIRE TO INTERVIEWER

- Q3.** Now I would like to show you pictures of people who smoke and the package of cigarettes you just saw. Please take a careful look at them. For each picture I show you, I will ask you to what extent do you think these can be their favourite cigarettes. We will use a scale from 1 to 9, 1 meaning "not at all" and 9 "very much". (**Write in number 1-9 / Leave the picture of the package in view. Rotate pictures as checked**)

☐ 1. Business man	☐ 2. Teenage boy	☐ 3. Girl on bike	☐ 4. Biker man	☐ 5. Young woman	☐ 6. Farmer man

3

A



3

A

I will show you the picture of the package of a cigarette brand you may already know. (Interviewer: show test package / make sure package matches picture above) Take the time to look.

**Interviewer: Let the respondent free to examine the picture.
Wait 30 seconds before proceeding with the interview.**

- Q1.** I would like to have your impressions on what you think may happen when you smoke cigarettes contained in this package. Take the time to look at it. Then I would like you to fill out this part of the survey on your own. Here are the questions and a pencil. I will wait right here for you to finish this part, then we can go on with a few more interview questions. If you have any questions as you are going along, please ask me about them.

First, read the description of what may happen when you smoke cigarettes contained in the package shown on the picture. Then check the box that best represents your impression about what would happen. (Explain scale 1 to 5 / Leave the picture of the package in view / Self-complete)

Q1.1 DRAW EFFORT / PULL (Easy – Hard)

The amount of effort necessary (drawing or sucking on this brand of cigarettes) to get a satisfactory puff of smoke into the mouth.

Easy ☐ ☐ ☐ ☐ ☐ Hard

Q1.2 TASTE PLEASANTNESS (Unpleasant – Pleasant)

The degree of pleasantness or unpleasantness of the flavour that is present during smoking.

Unpleasant ☐ ☐ ☐ ☐ ☐ Pleasant

Q1.3 INITIAL SATISFACTION (Low – High)

The extent to which this brand of cigarettes is capable of delivering satisfactory puffs of smoke, even in the starting puff or two.

Low ☐ ☐ ☐ ☐ ☐ High

Q1.4 THROAT CATCH / HIT (Low – High)

The short, sharp momentary “kick” or “hit” sensation felt in the lower throat / upper chest region specifically as the smoke goes down. It is noticed immediately as the smoke contacts the throat and last a second or less.

Low ☐ ☐ ☐ ☐ ☐ High

Q1.5 TOXICITY (Low – High)

How much does smoking this brand of cigarettes regularly cause harmful health effects.

Low ☐ ☐ ☐ ☐ ☐ High

RESPONDENT: RETURN QUESTIONNAIRE TO INTERVIEWER.

INTERVIEWER: CHECK FOR COMPLETENESS

- Q2.** I would like you to fill out the next part of the survey on your own. If you have any questions as you are going along, please ask me about them. Below is a statement about people like you who smoke cigarettes. Complete the sentence to describe your own **impressions** of people who would smoke the cigarettes contained in this package as their usual brand by circling a number between 1 and 9 on each of the scales listed after the statement. (**Leave the picture of the package in view / self-complete**)

In general, people who would smoke this brand of cigarettes...

Q2.1	Risk-takers	1	2	3	4	5	6	7	8	9	Very prudent
Q2.2	Concern for others	1	2	3	4	5	6	7	8	9	Selfish
Q2.3	Health negligent	1	2	3	4	5	6	7	8	9	Health conscious
Q2.4	Financially secure	1	2	3	4	5	6	7	8	9	Poor
Q2.5	Image conscious	1	2	3	4	5	6	7	8	9	Sloppy
Q2.6	Straight	1	2	3	4	5	6	7	8	9	Cool
Q2.7	Leader	1	2	3	4	5	6	7	8	9	Follower
Q2.8	Higher education	1	2	3	4	5	6	7	8	9	Lower education
Q2.9	In control of their destiny	1	2	3	4	5	6	7	8	9	Fatalists
Q2.10	Afraid of death	1	2	3	4	5	6	7	8	9	Do not worry about death
Q2.11	Disciplined	1	2	3	4	5	6	7	8	9	Disorganised
Q2.12	Rebellious	1	2	3	4	5	6	7	8	9	Follow the rules

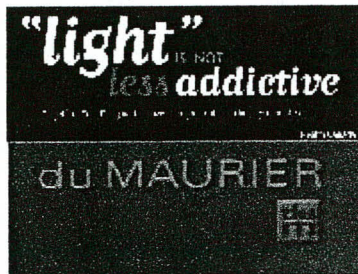
RESPONDENT: RETURN QUESTIONNAIRE TO INTERVIEWER

- Q3.** Now I would like to show you pictures of people who smoke and the package of cigarettes you just saw. Please take a careful look at them. For each picture I show you, I will ask you to what extent do you think these can be their favourite cigarettes. We will use a scale from 1 to 9, 1 meaning "not at all" and 9 "very much". (**Write in number 1-9 / Leave the picture of the package in view. Rotate pictures as checked**)

☐ 1. Business man	☐ 2. Teenage boy	☐ 3. Girl on bike	☐ 4. Biker man	☐ 5. Young woman	☐ 6. Farmer man

3

B



3

B

I will show you the picture of the package of a cigarette brand you may already know. (Interviewer: show test package / make sure package matches picture above) Take the time to look.

Interviewer: Let the respondent free to examine the picture. Wait 30 seconds before proceeding with the interview.

- Q1. I would like to have your impressions on what you think may happen when you smoke cigarettes contained in this package. Take the time to look at it. Then I would like you to fill out this part of the survey on your own. Here are the questions and a pencil. I will wait right here for you to finish this part, then we can go on with a few more interview questions. If you have any questions as you are going along, please ask me about them.

First, read the description of what may happen when you smoke cigarettes contained in the package shown on the picture. Then check the box that best represents your impression about what would happen. (Explain scale 1 to 5 / Leave the picture of the package in view / Self-complete)

Q1.1 DRAW EFFORT / PULL (Easy – Hard)

The amount of effort necessary (drawing or sucking on this brand of cigarettes) to get a satisfactory puff of smoke into the mouth.

Easy ☐ ☐ ☐ ☐ ☐ Hard

Q1.2 TASTE PLEASANTNESS (Unpleasant – Pleasant)

The degree of pleasantness or unpleasantness of the flavour that is present during smoking.

Unpleasant ☐ ☐ ☐ ☐ ☐ Pleasant

Q1.3 INITIAL SATISFACTION (Low – High)

The extent to which this brand of cigarettes is capable of delivering satisfactory puffs of smoke, even in the starting puff or two.

Low ☐ ☐ ☐ ☐ ☐ High

Q1.4 THROAT CATCH / HIT (Low – High)

The short, sharp momentary “kick” or “hit” sensation felt in the lower throat / upper chest region specifically as the smoke goes down. It is noticed immediately as the smoke contacts the throat and last a second or less.

Low ☐ ☐ ☐ ☐ ☐ High

Q1.5 TOXICITY (Low – High)

How much does smoking this brand of cigarettes regularly cause harmful health effects.

Low ☐ ☐ ☐ ☐ ☐ High

RESPONDENT: RETURN QUESTIONNAIRE TO INTERVIEWER.

INTERVIEWER: CHECK FOR COMPLETENESS

- Q2.** I would like you to fill out the next part of the survey on your own. If you have any questions as you are going along, please ask me about them. Below is a statement about people like you who smoke cigarettes. Complete the sentence to describe your own **impressions** of people who would smoke the cigarettes contained in this package as their usual brand by circling a number between 1 and 9 on each of the scales listed after the statement. (**Leave the picture of the package in view / self-complete**)

In general, people who would smoke this brand of cigarettes...

Q2.1	Risk-takers	1	2	3	4	5	6	7	8	9	Very prudent
Q2.2	Concern for others	1	2	3	4	5	6	7	8	9	Selfish
Q2.3	Health negligent	1	2	3	4	5	6	7	8	9	Health conscious
Q2.4	Financially secure	1	2	3	4	5	6	7	8	9	Poor
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Q2.6	Straight	1	2	3	4	5	6	7	8	9	Cool
Q2.7	Leader	1	2	3	4	5	6	7	8	9	Follower
Q2.8	Higher education	1	2	3	4	5	6	7	8	9	Lower education
Q2.9	In control of their destiny	1	2	3	4	5	6	7	8	9	Fatalists
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Q2.12	Rebellious	1	2	3	4	5	6	7	8	9	Follow the rules

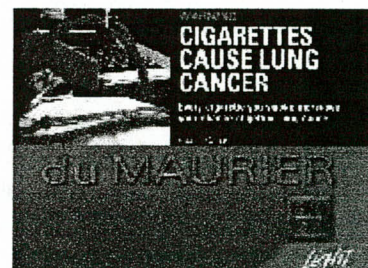
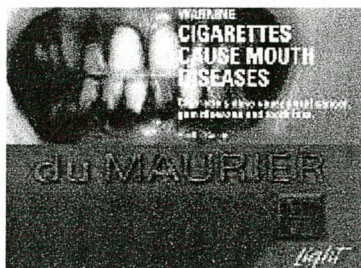
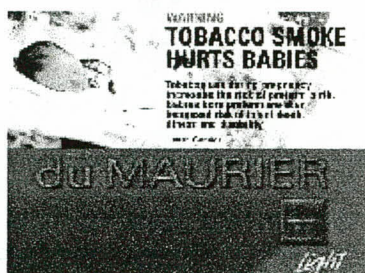
RESPONDENT: RETURN QUESTIONNAIRE TO INTERVIEWER

- Q3.** Now I would like to show you pictures of people who smoke and the package of cigarettes you just saw. Please take a careful look at them. For each picture I show you, I will ask you to what extent do you think these can be their favourite cigarettes. We will use a scale from 1 to 9, 1 meaning "not at all" and 9 "very much". (**Write in number 1-9 / Leave the picture of the package in view. Rotate pictures as checked**)

☐ 1. Business man	☐ 2. Teenage boy	☐ 3. Girl on bike	☐ 4. Biker man	☐ 5. Young woman	☐ 6. Farmer man

C	A
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C	A
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C1A

or

C2A

or

C3A

I will show you the picture of the package of a cigarette brand you may already know. (Interviewer: show test package / make sure package matches picture above) Take the time to look.

**Interviewer: Let the respondent free to examine the picture.
Wait 30 seconds before proceeding with the interview.**

Q1. I would like to have your impressions on what you think may happen when you smoke cigarettes contained in this package. Take the time to look at it. Then I would like you to fill out this part of the survey on your own. Here are the questions and a pencil. I will wait right here for you to finish this part, then we can go on with a few more interview questions. If you have any questions as you are going along, please ask me about them.

First, read the description of what may happen when you smoke cigarettes contained in the package shown on the picture. Then check the box that best represents your impression about what would happen. (Explain scale 1 to 5 / Leave the picture of the package in view / Self-complete)

Q1.1 DRAW EFFORT / PULL (Easy – Hard)

The amount of effort necessary (drawing or sucking on this brand of cigarettes) to get a satisfactory puff of smoke into the mouth.

Easy ☐ ☐ ☐ ☐ ☐ Hard

Q1.2 TASTE PLEASANTNESS (Unpleasant – Pleasant)

The degree of pleasantness or unpleasantness of the flavour that is present during smoking.

Unpleasant ☐ ☐ ☐ ☐ ☐ Pleasant

Q1.3 INITIAL SATISFACTION (Low – High)

The extent to which this brand of cigarettes is capable of delivering satisfactory puffs of smoke, even in the starting puff or two.

Low ☐ ☐ ☐ ☐ ☐ High

Q1.4 THROAT CATCH / HIT (Low – High)

The short, sharp momentary “kick” or “hit” sensation felt in the lower throat / upper chest region specifically as the smoke goes down. It is noticed immediately as the smoke contacts the throat and last a second or less.

Low ☐ ☐ ☐ ☐ ☐ High

Q1.5 TOXICITY (Low – High)

How much does smoking this brand of cigarettes regularly cause harmful health effects.

Low ☐ ☐ ☐ ☐ ☐ High

RESPONDENT: RETURN QUESTIONNAIRE TO INTERVIEWER.

INTERVIEWER: CHECK FOR COMPLETENESS

- Q2.** I would like you to fill out the next part of the survey on your own. If you have any questions as you are going along, please ask me about them. Below is a statement about people like you who smoke cigarettes. Complete the sentence to describe your own **impressions** of people who would smoke the cigarettes contained in this package as their usual brand by circling a number between 1 and 9 on each of the scales listed after the statement. **(Leave the picture of the package in view / self-complete)**

In general, people who would smoke this brand of cigarettes...

Q2.1	Risk-takers	1	2	3	4	5	6	7	8	9	Very prudent
Q2.2	Concern for others	1	2	3	4	5	6	7	8	9	Selfish
Q2.3	Health negligent	1	2	3	4	5	6	7	8	9	Health conscious
Q2.4	Financially secure	1	2	3	4	5	6	7	8	9	Poor
Q2.5	Image conscious	1	2	3	4	5	6	7	8	9	Sloppy
Q2.6	Straight	1	2	3	4	5	6	7	8	9	Cool
Q2.7	Leader	1	2	3	4	5	6	7	8	9	Follower
Q2.8	Higher education	1	2	3	4	5	6	7	8	9	Lower education
Q2.9	In control of their destiny	1	2	3	4	5	6	7	8	9	Fatalists
Q2.10	Afraid of death	1	2	3	4	5	6	7	8	9	Do not worry about death
Q2.11	Disciplined	1	2	3	4	5	6	7	8	9	Disorganised
Q2.12	Rebellious	1	2	3	4	5	6	7	8	9	Follow the rules

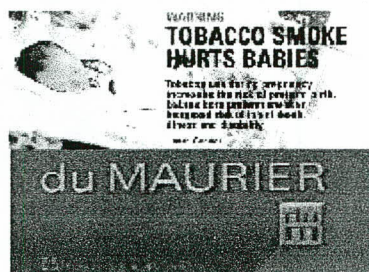
RESPONDENT: RETURN QUESTIONNAIRE TO INTERVIEWER

- Q3.** Now I would like to show you pictures of people who smoke and the package of cigarettes you just saw. Please take a careful look at them. For each picture I show you, I will ask you to what extent do you think these can be their favourite cigarettes. We will use a scale from 1 to 9, 1 meaning "not at all" and 9 "very much". **(Write in number 1-9 / Leave the picture of the package in view. Rotate pictures as checked)**

☐ 1. Business man	☐ 2. Teenage boy	☐ 3. Girl on bike	☐ 4. Biker man	☐ 5. Young woman	☐ 6. Farmer man

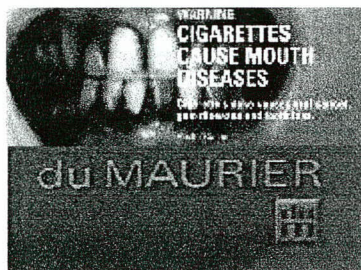
C	B
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C	B
---	---



C1B

or



C2B

or



C3B

I will show you the picture of the package of a cigarette brand you may already know. (Interviewer: show test package / make sure package matches picture above) Take the time to look.

Interviewer: Let the respondent free to examine the picture. Wait 30 seconds before proceeding with the interview.

Q1. I would like to have your impressions on what you think may happen when you smoke cigarettes contained in this package. Take the time to look at it. Then I would like you to fill out this part of the survey on your own. Here are the questions and a pencil. I will wait right here for you to finish this part, then we can go on with a few more interview questions. If you have any questions as you are going along, please ask me about them.

First, read the description of what may happen when you smoke cigarettes contained in the package shown on the picture. Then check the box that best represents your impression about what would happen. (Explain scale 1 to 5 / Leave the picture of the package in view / Self-complete)

Q1.1 DRAW EFFORT / PULL (Easy – Hard)

The amount of effort necessary (drawing or sucking on this brand of cigarettes) to get a satisfactory puff of smoke into the mouth.

Easy ☐ ☐ ☐ ☐ ☐ Hard

Q1.2 TASTE PLEASANTNESS (Unpleasant – Pleasant)

The degree of pleasantness or unpleasantness of the flavour that is present during smoking.

Unpleasant ☐ ☐ ☐ ☐ ☐ Pleasant

Q1.3 INITIAL SATISFACTION (Low – High)

The extent to which this brand of cigarettes is capable of delivering satisfactory puffs of smoke, even in the starting puff or two.

Low ☐ ☐ ☐ ☐ ☐ High

Q1.4 THROAT CATCH / HIT (Low – High)

The short, sharp momentary “kick” or “hit” sensation felt in the lower throat / upper chest region specifically as the smoke goes down. It is noticed immediately as the smoke contacts the throat and last a second or less.

Low ☐ ☐ ☐ ☐ ☐ High

Q1.5 TOXICITY (Low – High)

How much does smoking this brand of cigarettes regularly cause harmful health effects.

Low ☐ ☐ ☐ ☐ ☐ High

RESPONDENT: RETURN QUESTIONNAIRE TO INTERVIEWER.

INTERVIEWER: CHECK FOR COMPLETENESS

- Q2.** I would like you to fill out the next part of the survey on your own. If you have any questions as you are going along, please ask me about them. Below is a statement about people like you who smoke cigarettes. Complete the sentence to describe your own **impressions** of people who would smoke the cigarettes contained in this package as their usual brand by circling a number between 1 and 9 on each of the scales listed after the statement. (**Leave the picture of the package in view / self-complete**)

In general, people who would smoke this brand of cigarettes...

Q2.1	Risk-takers	1	2	3	4	5	6	7	8	9	Very prudent
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Q2.4	Financially secure	1	2	3	4	5	6	7	8	9	Poor
Q2.5	Image conscious	1	2	3	4	5	6	7	8	9	Sloppy
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Q2.7	Leader	1	2	3	4	5	6	7	8	9	Follower
Q2.8	Higher education	1	2	3	4	5	6	7	8	9	Lower education
Q2.9	In control of their destiny	1	2	3	4	5	6	7	8	9	Fatalists
Q2.10	Afraid of death	1	2	3	4	5	6	7	8	9	Do not worry about death
Q2.11	Disciplined	1	2	3	4	5	6	7	8	9	Disorganised
Q2.12	Rebellious	1	2	3	4	5	6	7	8	9	Follow the rules

RESPONDENT: RETURN QUESTIONNAIRE TO INTERVIEWER

- Q3.** Now I would like to show you pictures of people who smoke and the package of cigarettes you just saw. Please take a careful look at them. For each picture I show you, I will ask you to what extent do you think these can be their favourite cigarettes. We will use a scale from 1 to 9, 1 meaning "not at all" and 9 "very much". (**Write in number 1-9 / Leave the picture of the package in view. Rotate pictures as checked**)

☐ 1. Business man	☐ 2. Teenage boy	☐ 3. Girl on bike	☐ 4. Biker man	☐ 5. Young woman	☐ 6. Farmer man

L&M LABEL

L.1 Think about the possible differences between cigarettes labelled on packages as light and cigarettes labelled as regular. First, with regard to **(READ AND ROTATE)** do you think that light cigarettes compared to regular cigarettes are (have)...? **(Read and rotate starting with item checked)**

[]A **Levels of nicotine...**

- Much higher (light) ()1
- Somewhat higher ()2
- The same ()3
- Somewhat lower or ()4
- Much lower levels of nicotine? ()5
- Dk/Na ()9

[]B **Amounts of chemicals and additives...**

- Much higher (light) ()1
- Somewhat higher ()2
- The same ()3
- Somewhat lower or ()4
- Much lower amounts of chemicals and additives? ()5
- Dk/Na ()9

[]C **Physiological dependence caused by smoking...**

- Much less addictive (light) ()1
- Somewhat less addictive ()2
- Just as addictive ()3
- Somewhat more addictive or ()4
- Much more addictive? ()5
- Dk/Na ()9

[]D **Harm to health caused by smoking...**

- Much more (light) ()1
- Somewhat more ()2
- The same ()3
- Somewhat less or ()4
- Much less? ()5
- Dk/Na ()9

[]E **Amount of taste or flavour of the cigarette...**

- Much more (light) ()1
- Somewhat more ()2
- The same ()3
- Somewhat less or ()4
- Much less flavour or taste? ()5
- Dk/Na ()9

L.2 In the choice of cigarette brands that meet your needs, how important it is to you that the label Light, Mild, Extra Mild, Extra Light, Ultra Light or Regular be written close to the brand name? Would you say...? **(Read)**

- Very important ()1
- Somewhat important..... ()2
- Not very important ()3
- Not important at all..... ()4
- Dk/Na..... ()9

L.3 To what extent are you convinced that cigarettes labelled as Light or Extra Light are "lighter" or "milder" than regular cigarettes? Would you say...? **(Read)**

- Very convinced ()1
- Somewhat convinced..... ()2
- Not very convinced ()3
- Not convinced at all ()4
- Dk/Na..... ()9

L.4 To what extent would you be annoyed if any label saying "Light", "Mild", "Extra Mild" "Extra Light", "Ultra Light" or "Regular" was withdrawn from all current packages labelled that way? Would you say...? **(Read)**

- Very annoyed..... ()1
- Somewhat annoyed..... ()2
- Not very annoyed..... ()3
- Not annoyed at all..... ()4
- Dk/Na..... ()9

CLASSIFICATION

We now have just a few more questions to ask, which will help us classify your responses for statistical purposes only.

C.1 What is the highest level of education you have reached? **(DO NOT READ)**

- Elementary school or less (no schooling to grade 7)..... ()1
- Some high school (grades 8 - 11)..... ()2
- Completed high school (grades 12 or 13 or OAC)..... ()3
- Some community college, vocational or trade school (or some CEGEP) ()4
- Completed community college, vocational or trade school (or complete CEGEP). ()5
- Some university (no degree)..... ()6
- Completed university (Bachelor's degree)..... ()7
- Post graduate university (Master's, Ph.D., completed or not) ()8
- DK/NA ()9

C.2 Which of the following best describes your employment status? Are you... **(READ)**

- Employed full-time (30 hours/week or more) ()1
- Employed part-time ()2
- Unemployed or looking for a job ()3
- Staying at home full-time (home-maker, social assistance) ()4
- Student ()5
- Retired ()6
- OTHER ()8
- DK/NA ()9

C.3 Are you... **(READ)**

- Married or living as a couple ()1
- Single ()2
- Widowed ()3
- Separated ()4
- Divorced ()5
- DK/NA ()9

C.4 Into which of the following categories would you put the total annual income, before taxes and deductions, for 2003, of all members of your household, including yourself? Is it... **(READ)**

- Less than \$10,000 ()1
- \$10,000 to \$19,999 ()2
- \$20,000 to \$39,999 ()3
- \$40,000 to \$59,999 ()4
- \$60,000 to \$79,999 ()5
- \$80,000 to \$99,999 ()6
- \$100,000 to \$119,999 ()7
- \$120,000 and over ()8
- Refuse/DK/NA ()9

**THANK YOU VERY MUCH FOR YOUR PARTICIPATION.
THAT COMPLETES THE INTERVIEW.**

SÉLECTION

Février 2004
Draft.1

ENTREVUE	RÉPONDANT (pour vérification)
Date : _____	Tel. : (____) _____
Début : _____ [] a.m. [] p.m.	Nom : _____
Fin : _____ [] a.m. [] p.m.	INTERVIEWEUR :

Bonjour / Bonsoir. Nous effectuons une étude sur la cigarette pour le compte du gouvernement du Canada. L'étude vise les **fumeurs âgés de 18 ans ou plus**. Nous aimerions que vous y participiez – la participation est volontaire mais toutes vos réponses resteront entièrement confidentielles. Si vous êtes fumeur et que vous complétez l'entrevue, vous recevrez 5 \$ en argent, en guise de remerciement.

Si le répondant accepte, continuez avec la sélection. Si refuse, inscrire comme refus avant la sélection et passez à un(e) autre candidat(e).

S.1 À l'heure actuelle, est-ce que vous fumez la cigarette toute faite (pas roulée) tous les jours, à l'occasion ou jamais?

- | | |
|--|--------------------------------|
| • TOUS LES JOURS..... | () FUMEUR RÉGULIER, CONTINUER |
| • À L'OCCASION (PAS TOUS LES JOURS)..... | () |
| • JAMAIS..... | () REMERCIER ET TERMINER |
| • Nsp/Nrp..... | () |

S.2 Est-ce que vous (ou un membre de votre foyer) travaillez pour une firme de publicité ou d'études de marché, ou un fabricant de tabac?

- | | |
|--|----------------------------|
| • Oui..... () 1 REMERCIER ET TERMINER | • Non..... () 2 CONTINUER |
|--|----------------------------|

S.3 Quel est votre âge? (Si le répondant hésite à donner son âge précis, dites : Au lieu de me donner votre âge exact, je vais vous lire des groupes d'âges et lorsque le vôtre tombera dans une catégorie, vous m'arrêterez.)

- | | |
|------------------------|---------------------------------------|
| • 18-19 ans..... () 1 | • 45-54 ans..... () 5 |
| • 20-24 ans..... () 2 | • 55-64 ans..... () 6 |
| • 25-34 ans..... () 3 | • 65-74 ans..... () 7 |
| • 35-44 ans..... () 4 | • 75 ans ou plus..... () 8 |
| | • Moins de 18 ans..... () 9 TERMINER |

S.4 INTERVIEWEUR : Enregistrer le sexe du répondant

- | | |
|-----------------------|----------------------|
| • Masculin..... () 1 | • Féminin..... () 2 |
|-----------------------|----------------------|

S.5 INITIER L'ENTREVUE. Nous aimerions vous interviewer dans le cadre de notre sondage – ici même – dans le centre commercial. L'entrevue durera environ 25 minutes. Nous interrogerons un grand nombre de personnes à travers le Canada et les réponses seront toutes regroupées ensemble. Nous vous offrons 5 \$ en argent comptant en guise de remerciement. Acceptez-vous de participer à notre sondage?

- | | |
|---------------------------|---|
| • Oui..... () 1 ENTREVUE | • Non..... () 2 MERCI. INSCRIVEZ REFUS |
|---------------------------|---|

INTERVIEWEUR :

Si le répondant est accompagné : nous aimerions que les réponses à cette étude soient franches. C'est pourquoi l'entrevue se déroulera sans que personne n'écoute, car les opinions peuvent être différentes.

QUESTIONNAIRE

A	1	2	3	C
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HABITUDES DE CONSOMMATION

Nous sommes maintenant prêts à commencer l'entrevue proprement dite. J'aimerais tout d'abord aborder vos habitudes liées à la cigarette.

H.1 En moyenne, combien de cigarettes fumez-vous chaque jour? (Sonder pour obtenir un nombre précis. Si le répondant répond un paquet par jour, sonder pour savoir combien il y a de cigarettes dans le paquet.)

_____ cigarettes par jour

H.2 Depuis combien de temps fumez-vous? Est-ce depuis...? (Lire)

- Moins d'un an ()1
- 1-5 ans ()2
- 6-10 ans ()3
- Plus de 10 ans ()4
- Nsp/Nrp ()9

H.3 Quelle marque de cigarettes fumez-vous habituellement? (Ne pas lire. Cochez une seule marque. Sonder si la marque que le répondant fume est une sorte de cigarettes régulière, légère, medium, douce, extra douce, extra légère, ultra légère, spéciale douce, spéciale, etc. Ne pas demander si King size ou format régulier.)

- Belvedere (Régulier) ()01
- Belvedere Extra Douce ()02
- Benson & Hedges (Régulier) ()03
- Benson & Hedges Deluxe Ultra Légère ()04
- Benson & Hedges Deluxe Ultra Légère Menthol ()05
- Craven "A" (Régulier) ()06
- Craven "A" Légère ()07
- Craven "A" Menthol ()08
- DuMaurier (Régulier) ()09
- DuMaurier Légère ()10
- DuMaurier Extra Légère ()11
- DuMaurier Ultra Légère ()12
- DuMaurier Spécial ()13
- DuMaurier Spécial 100 ()14
- Export "A" (Régulier) ()15
- Export "A" Medium ()16
- Export "A" Douce ()17
- Export "A" Légère ()18
- Export "A" Ultra Légère ()19
- Matinée (Régulier) ()20
- Matinée Extra Douce ()21
- Matinée Slims ()22
- Player's (Régulier / Filtre) ()23
- Player's Légère ()24
- Player's Extra Légère ()25
- Rothmans (Régulier) ()26
- Rothmans Spécial Douce ()27
- Autre (Préciser) ()90
- Pas de marque régulière ()98
- Nsp/Nrp ()99

H.4 Considérez-vous que votre principale marque de cigarettes (**VOIR H.3**) est une cigarette de type...? (**Lire**)

- Régulière ()1
- Légère..... ()2
- Douce..... ()3
- Ultra Légère ()4
- Extra Légère ()5
- Ultra Douce..... ()6
- Extra Douce ()7
- Autre (**ne pas lire**) ()8
- Nsp/Nrp..... ()9

H.5 Y a-t-il une autre marque de cigarettes que vous fumez habituellement lorsque vous ne pouvez vous procurer votre marque préférée (**H.3**)?

- Oui ()1
- Non ()2
- Nsp/Nrp..... ()9

SAUTER À LA PROCHAINE SECTION

H.6 Quelle est votre seconde marque de cigarettes préférée que vous fumez lorsque vous ne pouvez vous procurer votre marque habituelle régulière? (**Ne pas lire. Cochez une seule marque. Sonder si la marque que le répondant fume est une sorte de cigarettes régulière, légère, medium, douce, extra douce, etc. Ne pas demander si King size ou format régulier.**)

- Belvedere (Régulier)..... ()01
- Belvedere Extra Douce..... ()02
- Benson & Hedges (Régulier)..... ()03
- Benson & Hedges Deluxe Ultra Légère..... ()04
- Benson & Hedges Deluxe Ultra Légère Menthol..... ()05
- Craven "A" (Régulier)..... ()06
- Craven "A" Légère ()07
- Craven "A" Menthol..... ()08
- DuMaurier (Régulier) ()09
- DuMaurier Légère..... ()10
- DuMaurier Extra Légère ()11
- DuMaurier Ultra Légère ()12
- DuMaurier Spécial ()13
- DuMaurier Spécial 100 ()14
- Export "A" (Régulier)..... ()15
- Export "A" Medium..... ()16
- Export "A" Douce ()17
- Export "A" Légère ()18
- Export "A" Ultra Légère..... ()19
- Matinée (Régulier)..... ()20
- Matinée Extra Douce ()21
- Matinée Slims ()22
- Player's (Régulier / Filtre) ()23
- Player's Légère..... ()24
- Player's Extra Légère ()25
- Rothmans (Régulier)..... ()26
- Rothmans Spécial Douce ()27
- Autre (Préciser) ()90
- Pas de marque secondaire..... ()98
- Nsp/Nrp..... ()99

1

A



1

A

Je vais vous montrer la photo d'un paquet d'une marque de cigarettes que vous connaissez déjà peut-être (**Intervieweur : montrez le paquet test / assurez-vous que le paquet correspond à la marque à tester**) Prenez le temps de regarder.

**Intervieweur : Laissez le répondant libre d'examiner la photo.
Attendez 30 secondes avant de poursuivre l'entrevue.**

Q1. J'aimerais avoir vos impressions sur ce que vous pensez qu'il pourrait arriver lorsque vous fumez cette marque de cigarettes contenues dans ce paquet. Prenez le temps de le regarder. Ensuite, j'aimerais que vous remplissiez cette partie du sondage vous-même. Voici le questionnaire et un crayon. J'attendrai ici que vous finissiez cette partie, puis nous continuerons avec quelques questions supplémentaires. Si vous avez des questions à me poser, n'hésitez pas à le faire.

Tout d'abord, vous lisez la description de ce qui pourrait arriver lorsque vous fumez des cigarettes du paquet qu'il y a sur cette photo. Ensuite, vous cochez la case qui correspond le plus à votre impression de ce qui pourrait arriver. (**Expliquer l'échelle de 1 à 5 / Laissez la photo du paquet à la vue / Auto-administration**)

Q1.1 EFFORT POUR ASPIRER / TIRER (Facile – Difficile)

Le degré d'effort nécessaire, pour aspirer ou tirer sur une cigarette de cette marque, afin d'amener une bouffée de fumée satisfaisante dans la bouche.

Facile ☐ ☐ ☐ ☐ ☐ Difficile

Q1.2 GOÛT DÉSAGRÉABLE OU AGRÉABLE

Dans quelle mesure la saveur goûtée pendant qu'on fume est agréable ou désagréable.

Désagréable ☐ ☐ ☐ ☐ ☐ Agréable

Q1.3 SATISFACTION INITIALE (Faible – Élevée)

Dans quelle mesure cette marque de cigarettes est capable de fournir des bouffées de fumée satisfaisantes, y compris lors de la première ou seconde bouffée.

Faible ☐ ☐ ☐ ☐ ☐ Élevée

Q1.4 IMPACT SUR LA GORGE (Faible – Élevée)

La sensation rapide, de courte durée et frappante ressentie dans le bas de la gorge et le haut de la poitrine lorsque la fumée est avalée. On la ressent immédiatement dès que la fumée entre en contact avec la gorge et dure une seconde ou moins.

Faible ☐ ☐ ☐ ☐ ☐ Élevée

Q1.5 TOXICITÉ (Faible – Élevée)

Dans quelle mesure fumer régulièrement cette marque de cigarettes cause des dommages à la santé.

Faible ☐ ☐ ☐ ☐ ☐ Élevée

RÉPONDANT : RETOURNEZ LE QUESTIONNAIRE À L'INTERVIEWEUR.

INTERVIEWEUR : VÉRIFIER SI COMPLET.

Q2. J'aimerais que vous remplissiez vous-même la prochaine partie du questionnaire. Si vous avez des questions à me poser, n'hésitez pas à le faire. Voici des énoncés concernant des gens comme vous qui fument des cigarettes. Complétez la phrase afin de décrire vos propres impressions des personnes qui adoptent comme leur marque principale les cigarettes contenues dans ce paquet, en encerclant un nombre de 1 à 9 sur chacun des items qui suivent l'énoncé. (*Laissez la photo du paquet à la vue / auto-administration*)

En général, les gens qui fument cette marque de cigarettes...

Q2.1	Aiment le risque	1	2	3	4	5	6	7	8	9	Très prudents
Q2.2	Tiennent compte des autres	1	2	3	4	5	6	7	8	9	Égoïstes
Q2.3	Négligent leur santé	1	2	3	4	5	6	7	8	9	Font attention à leur santé
Q2.4	À l'aise financièrement	1	2	3	4	5	6	7	8	9	Démunis
Q2.5	Conscients de leur image	1	2	3	4	5	6	7	8	9	Peu soigneux
Q2.6	Straight	1	2	3	4	5	6	7	8	9	Cool
Q2.7	Meneurs	1	2	3	4	5	6	7	8	9	Suiveurs
Q2.8	Très scolarisés	1	2	3	4	5	6	7	8	9	Ont peu d'études
Q2.9	En contrôle de leur destin	1	2	3	4	5	6	7	8	9	Fatalistes
Q2.10	Ont peur de la mort	1	2	3	4	5	6	7	8	9	Ne sont pas préoccupés par la mort
Q2.11	Disciplinés	1	2	3	4	5	6	7	8	9	Désorganisés
Q2.12	Rebelles	1	2	3	4	5	6	7	8	9	Suivent les règles

RÉPONDANT : RETOURNEZ LE QUESTIONNAIRE À L'INTERVIEWEUR.

Q3. Je vais vous montrer des photos de personnes qui fument et le paquet de cigarettes que vous venez juste de voir. Regardez-les attentivement. Pour chaque photo que je vais vous montrer, dites-moi dans quelle mesure vous pensez que ça pourrait être leur marque préférée. Nous utiliserons une échelle de 1 à 9, 1 voulant dire « pas du tout » et 9 « beaucoup ». (**Inscrire un nombre 1-9 / Laissez la photo du paquet à la vue. Commencer la rotation avec la photo du personnage cochée**)

☐ 1. Homme d'affaires	☐ 2. Garçon ado	☐ 3. Fille bike	☐ 4. Motard	☐ 5. Jeune femme	☐ 6. Homme fermier

1**B****1****B**

Je vais vous montrer la photo d'un paquet d'une marque de cigarettes que vous connaissez déjà peut-être (**Intervieweur : montrez le paquet test / assurez-vous que le paquet correspond à la marque à tester**) Prenez le temps de regarder.

**Intervieweur : Laissez le répondant libre d'examiner la photo.
Attendez 30 secondes avant de poursuivre l'entrevue.**

Q1. J'aimerais avoir vos **impressions** sur ce que vous pensez qu'il pourrait arriver lorsque vous fumez cette marque de cigarettes contenues dans ce paquet. Prenez le temps de le regarder. Ensuite, j'aimerais que vous remplissiez cette partie du sondage vous-même. Voici le questionnaire et un crayon. J'attendrai ici que vous finissiez cette partie, puis nous continuerons avec quelques questions supplémentaires. Si vous avez des questions à me poser, n'hésitez pas à le faire.

Tout d'abord, vous lisez la description de ce qui pourrait arriver lorsque vous fumez des cigarettes du paquet qu'il y a sur cette photo. Ensuite, vous cochez la case qui correspond le plus à votre impression de ce qui pourrait arriver. (**Expliquer l'échelle de 1 à 5 / Laissez la photo du paquet à la vue / Auto-administration**)

Q1.1 EFFORT POUR ASPIRER / TIRER (Facile – Difficile)

Le degré d'effort nécessaire, pour aspirer ou tirer sur une cigarette de cette marque, afin d'amener une bouffée de fumée satisfaisante dans la bouche.

Facile ☐ ☐ ☐ ☐ ☐ Difficile

Q1.2 GOÛT DÉSAGRÉABLE OU AGRÉABLE

Dans quelle mesure la saveur goûtée pendant qu'on fume est agréable ou désagréable.

Désagréable ☐ ☐ ☐ ☐ ☐ Agréable

Q1.3 SATISFACTION INITIALE (Faible – Élevée)

Dans quelle mesure cette marque de cigarettes est capable de fournir des bouffées de fumée satisfaisantes, y compris lors de la première ou seconde bouffée.

Faible ☐ ☐ ☐ ☐ ☐ Élevée

Q1.4 IMPACT SUR LA GORGE (Faible – Élevée)

La sensation rapide, de courte durée et frappante ressentie dans le bas de la gorge et le haut de la poitrine lorsque la fumée est avalée. On la ressent immédiatement dès que la fumée entre en contact avec la gorge et dure une seconde ou moins.

Faible ☐ ☐ ☐ ☐ ☐ Élevée

Q1.5 TOXICITÉ (Faible – Élevée)

Dans quelle mesure fumer régulièrement cette marque de cigarettes cause des dommages à la santé.

Faible ☐ ☐ ☐ ☐ ☐ Élevée

RÉPONDANT : RETOURNEZ LE QUESTIONNAIRE À L'INTERVIEWEUR.

INTERVIEWEUR : VÉRIFIER SI COMPLET.

- Q2.** J'aimerais que vous remplissiez vous-même la prochaine partie du questionnaire. Si vous avez des questions à me poser, n'hésitez pas à le faire. Voici des énoncés concernant des gens comme vous qui fument des cigarettes. Complétez la phrase afin de décrire vos propres **impressions** des personnes qui adoptent comme leur marque principale les cigarettes contenues dans ce paquet, en encerclant un nombre de 1 à 9 sur chacun des items qui suivent l'énoncé. (**Laissez la photo du paquet à la vue / auto-administration**)

En général, les gens qui fument cette marque de cigarettes...

Q2.1	Aiment le risque	1	2	3	4	5	6	7	8	9	Très prudents
Q2.2	Tiennent compte des autres	1	2	3	4	5	6	7	8	9	Égoïstes
Q2.3	Négligent leur santé	1	2	3	4	5	6	7	8	9	Font attention à leur santé
Q2.4	À l'aise financièrement	1	2	3	4	5	6	7	8	9	Démunis
Q2.5	Conscients de leur image	1	2	3	4	5	6	7	8	9	Peu soigneux
Q2.6	Straight	1	2	3	4	5	6	7	8	9	Cool
Q2.7	Meneurs	1	2	3	4	5	6	7	8	9	Suiveurs
Q2.8	Très scolarisés	1	2	3	4	5	6	7	8	9	Ont peu d'études
Q2.9	En contrôle de leur destin	1	2	3	4	5	6	7	8	9	Fatalistes
Q2.10	Ont peur de la mort	1	2	3	4	5	6	7	8	9	Ne sont pas préoccupés par la mort
Q2.11	Disciplinés	1	2	3	4	5	6	7	8	9	Désorganisés
Q2.12	Rebelles	1	2	3	4	5	6	7	8	9	Suivent les règles

RÉPONDANT : RETOURNEZ LE QUESTIONNAIRE À L'INTERVIEWEUR.

- Q3.** Je vais vous montrer des photos de personnes qui fument et le paquet de cigarettes que vous venez juste de voir. Regardez-les attentivement. Pour chaque photo que je vais vous montrer, dites-moi dans quelle mesure vous pensez que ça pourrait être leur marque préférée. Nous utiliserons une échelle de 1 à 9, 1 voulant dire « pas du tout » et 9 « beaucoup ». (**Inscrire un nombre 1-9 / Laissez la photo du paquet à la vue. Commencer la rotation avec la photo du personnage cochée**)

☐ 1. Homme d'affaires	☐ 2. Garçon ado	☐ 3. Fille bike	☐ 4. Motard	☐ 5. Jeune femme	☐ 6. Homme fermier

2	A
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2	A
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Je vais vous montrer la photo d'un paquet d'une marque de cigarettes que vous connaissez déjà peut-être (**Intervieweur : montrez le paquet test / assurez-vous que le paquet correspond à la marque à tester**) Prenez le temps de regarder.

Intervieweur : Laissez le répondant libre d'examiner la photo. Attendez 30 secondes avant de poursuivre l'entrevue.
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Q1. J'aimerais avoir vos impressions sur ce que vous pensez qu'il pourrait arriver lorsque vous fumez cette marque de cigarettes contenues dans ce paquet. Prenez le temps de le regarder. Ensuite, j'aimerais que vous remplissiez cette partie du sondage vous-même. Voici le questionnaire et un crayon. J'attendrai ici que vous finissiez cette partie, puis nous continuerons avec quelques questions supplémentaires. Si vous avez des questions à me poser, n'hésitez pas à le faire.

Tout d'abord, vous lisez la description de ce qui pourrait arriver lorsque vous fumez des cigarettes du paquet qu'il y a sur cette photo. Ensuite, vous cochez la case qui correspond le plus à votre impression de ce qui pourrait arriver. (**Expliquer l'échelle de 1 à 5 / Laissez la photo du paquet à la vue / Auto-administration**)

Q1.1 EFFORT POUR ASPIRER / TIRER (Facile – Difficile)

Le degré d'effort nécessaire, pour aspirer ou tirer sur une cigarette de cette marque, afin d'amener une bouffée de fumée satisfaisante dans la bouche.

Facile ☐ ☐ ☐ ☐ ☐ Difficile

Q1.2 GOÛT DÉSAGRÉABLE OU AGRÉABLE

Dans quelle mesure la saveur goûtée pendant qu'on fume est agréable ou désagréable.

Désagréable ☐ ☐ ☐ ☐ ☐ Agréable

Q1.3 SATISFACTION INITIALE (Faible – Élevée)

Dans quelle mesure cette marque de cigarettes est capable de fournir des bouffées de fumée satisfaisantes, y compris lors de la première ou seconde bouffée.

Faible ☐ ☐ ☐ ☐ ☐ Élevée

Q1.4 IMPACT SUR LA GORGE (Faible – Élevée)

La sensation rapide, de courte durée et frappante ressentie dans le bas de la gorge et le haut de la poitrine lorsque la fumée est avalée. On la ressent immédiatement dès que la fumée entre en contact avec la gorge et dure une seconde ou moins.

Faible ☐ ☐ ☐ ☐ ☐ Élevée

Q1.5 TOXICITÉ (Faible – Élevée)

Dans quelle mesure fumer régulièrement cette marque de cigarettes cause des dommages à la santé.

Faible ☐ ☐ ☐ ☐ ☐ Élevée

RÉPONDANT : RETOURNEZ LE QUESTIONNAIRE À L'INTERVIEWEUR.

INTERVIEWEUR : VÉRIFIER SI COMPLET.

- Q2.** J'aimerais que vous remplissiez vous-même la prochaine partie du questionnaire. Si vous avez des questions à me poser, n'hésitez pas à le faire. Voici des énoncés concernant des gens comme vous qui fument des cigarettes. Complétez la phrase afin de décrire vos propres **impressions** des personnes qui adoptent comme leur marque principale les cigarettes contenues dans ce paquet, en encerclant un nombre de 1 à 9 sur chacun des items qui suivent l'énoncé. (**Laissez la photo du paquet à la vue / auto-administration**)

En général, les gens qui fument cette marque de cigarettes...

Q2.1	Aiment le risque	1	2	3	4	5	6	7	8	9	Très prudents
Q2.2	Tiennent compte des autres	1	2	3	4	5	6	7	8	9	Égoïstes
Q2.3	Négligent leur santé	1	2	3	4	5	6	7	8	9	Font attention à leur santé
Q2.4	À l'aise financièrement	1	2	3	4	5	6	7	8	9	Démunis
Q2.5	Conscients de leur image	1	2	3	4	5	6	7	8	9	Peu soigneux
Q2.6	Straight	1	2	3	4	5	6	7	8	9	Cool
Q2.7	Meneurs	1	2	3	4	5	6	7	8	9	Suiveurs
Q2.8	Très scolarisés	1	2	3	4	5	6	7	8	9	Ont peu d'études
Q2.9	En contrôle de leur destin	1	2	3	4	5	6	7	8	9	Fatalistes
Q2.10	Ont peur de la mort	1	2	3	4	5	6	7	8	9	Ne sont pas préoccupés par la mort
Q2.11	Disciplinés	1	2	3	4	5	6	7	8	9	Désorganisés
Q2.12	Rebelles	1	2	3	4	5	6	7	8	9	Suivent les règles

RÉPONDANT : RETOURNEZ LE QUESTIONNAIRE À L'INTERVIEWEUR.

- Q3.** Je vais vous montrer des photos de personnes qui fument et le paquet de cigarettes que vous venez juste de voir. Regardez-les attentivement. Pour chaque photo que je vais vous montrer, dites-moi dans quelle mesure vous pensez que ça pourrait être leur marque préférée. Nous utiliserons une échelle de 1 à 9, 1 voulant dire « pas du tout » et 9 « beaucoup ». (**Inscrire un nombre 1-9 / Laissez la photo du paquet à la vue. Commencer la rotation avec la photo du personnage cochée**)

☐ 1. Homme d'affaires	☐ 2. Garçon ado	☐ 3. Fille bike	☐ 4. Motard	☐ 5. Jeune femme	☐ 6. Homme fermier

2

B



2

B

Je vais vous montrer la photo d'un paquet d'une marque de cigarettes que vous connaissez déjà peut-être (Intervieweur : montrez le paquet test / assurez-vous que le paquet correspond à la marque à tester) Prenez le temps de regarder.

Intervieweur : Laissez le répondant libre d'examiner la photo. Attendez 30 secondes avant de poursuivre l'entrevue.

Q1. J'aimerais avoir vos impressions sur ce que vous pensez qu'il pourrait arriver lorsque vous fumez cette marque de cigarettes contenues dans ce paquet. Prenez le temps de le regarder. Ensuite, j'aimerais que vous remplissiez cette partie du sondage vous-même. Voici le questionnaire et un crayon. J'attendrai ici que vous finissiez cette partie, puis nous continuerons avec quelques questions supplémentaires. Si vous avez des questions à me poser, n'hésitez pas à le faire.

Tout d'abord, vous lisez la description de ce qui pourrait arriver lorsque vous fumez des cigarettes du paquet qu'il y a sur cette photo. Ensuite, vous cochez la case qui correspond le plus à votre impression de ce qui pourrait arriver. (Expliquer l'échelle de 1 à 5 / Laissez la photo du paquet à la vue / Auto-administration)

Q1.1 EFFORT POUR ASPIRER / TIRER (Facile – Difficile)

Le degré d'effort nécessaire, pour aspirer ou tirer sur une cigarette de cette marque, afin d'amener une bouffée de fumée satisfaisante dans la bouche.

Facile ☐ ☐ ☐ ☐ ☐ Difficile

Q1.2 GOÛT DÉSAGRÉABLE OU AGRÉABLE

Dans quelle mesure la saveur goûtée pendant qu'on fume est agréable ou désagréable.

Désagréable ☐ ☐ ☐ ☐ ☐ Agréable

Q1.3 SATISFACTION INITIALE (Faible – Élevée)

Dans quelle mesure cette marque de cigarettes est capable de fournir des bouffées de fumée satisfaisantes, y compris lors de la première ou seconde bouffée.

Faible ☐ ☐ ☐ ☐ ☐ Élevée

Q1.4 IMPACT SUR LA GORGE (Faible – Élevée)

La sensation rapide, de courte durée et frappante ressentie dans le bas de la gorge et le haut de la poitrine lorsque la fumée est avalée. On la ressent immédiatement dès que la fumée entre en contact avec la gorge et dure une seconde ou moins.

Faible ☐ ☐ ☐ ☐ ☐ Élevée

Q1.5 TOXICITÉ (Faible – Élevée)

Dans quelle mesure fumer régulièrement cette marque de cigarettes cause des dommages à la santé.

Faible ☐ ☐ ☐ ☐ ☐ Élevée

RÉPONDANT : RETOURNEZ LE QUESTIONNAIRE À L'INTERVIEWEUR.

INTERVIEWEUR : VÉRIFIER SI COMPLET.

- Q2.** J'aimerais que vous remplissiez vous-même la prochaine partie du questionnaire. Si vous avez des questions à me poser, n'hésitez pas à le faire. Voici des énoncés concernant des gens comme vous qui fument des cigarettes. Complétez la phrase afin de décrire vos propres **impressions** des personnes qui adoptent comme leur marque principale les cigarettes contenues dans ce paquet, en encerclant un nombre de 1 à 9 sur chacun des items qui suivent l'énoncé. (**Laissez la photo du paquet à la vue / auto-administration**)

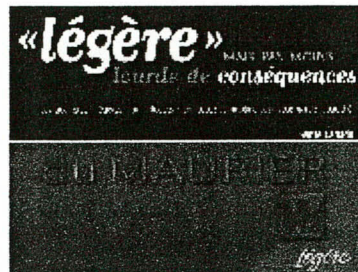
En général, les gens qui fument cette marque de cigarettes...

Q2.1	Aiment le risque	1	2	3	4	5	6	7	8	9	Très prudents
Q2.2	Tiennent compte des autres	1	2	3	4	5	6	7	8	9	Égoïstes
Q2.3	Négligent leur santé	1	2	3	4	5	6	7	8	9	Font attention à leur santé
Q2.4	À l'aise financièrement	1	2	3	4	5	6	7	8	9	Démunis
Q2.5	Conscients de leur image	1	2	3	4	5	6	7	8	9	Peu soigneux
Q2.6	Straight	1	2	3	4	5	6	7	8	9	Cool
Q2.7	Meneurs	1	2	3	4	5	6	7	8	9	Suiveurs
Q2.8	Très scolarisés	1	2	3	4	5	6	7	8	9	Ont peu d'études
Q2.9	En contrôle de leur destin	1	2	3	4	5	6	7	8	9	Fatalistes
Q2.10	Ont peur de la mort	1	2	3	4	5	6	7	8	9	Ne sont pas préoccupés par la mort
Q2.11	Disciplinés	1	2	3	4	5	6	7	8	9	Désorganisés
Q2.12	Rebelles	1	2	3	4	5	6	7	8	9	Suivent les règles

RÉPONDANT : RETOURNEZ LE QUESTIONNAIRE À L'INTERVIEWEUR.

- Q3.** Je vais vous montrer des photos de personnes qui fument et le paquet de cigarettes que vous venez juste de voir. Regardez-les attentivement. Pour chaque photo que je vais vous montrer, dites-moi dans quelle mesure vous pensez que ça pourrait être leur marque préférée. Nous utiliserons une échelle de 1 à 9, 1 voulant dire « pas du tout » et 9 « beaucoup ». (**Inscrire un nombre 1-9 / Laissez la photo du paquet à la vue. Commencer la rotation avec la photo du personnage cochée**)

☐ 1. Homme d'affaires	☐ 2. Garçon ado	☐ 3. Fille bike	☐ 4. Motard	☐ 5. Jeune femme	☐ 6. Homme fermier



Je vais vous montrer la photo d'un paquet d'une marque de cigarettes que vous connaissez déjà peut-être (**Intervieweur : montrez le paquet test / assurez-vous que le paquet correspond à la marque à tester**) Prenez le temps de regarder.

**Intervieweur : Laissez le répondant libre d'examiner la photo.
Attendez 30 secondes avant de poursuivre l'entrevue.**

- Q1.** J'aimerais avoir vos impressions sur ce que vous pensez qu'il pourrait arriver lorsque vous fumez cette marque de cigarettes contenues dans ce paquet. Prenez le temps de le regarder. Ensuite, j'aimerais que vous remplissiez cette partie du sondage vous-même. Voici le questionnaire et un crayon. J'attendrai ici que vous finissiez cette partie, puis nous continuerons avec quelques questions supplémentaires. Si vous avez des questions à me poser, n'hésitez pas à le faire.

Tout d'abord, vous lisez la description de ce qui pourrait arriver lorsque vous fumez des cigarettes du paquet qu'il y a sur cette photo. Ensuite, vous cochez la case qui correspond le plus à votre impression de ce qui pourrait arriver. (**Expliquer l'échelle de 1 à 5 / Laissez la photo du paquet à la vue / Auto-administration**)

Q1.1 EFFORT POUR ASPIRER / TIRER (Facile – Difficile)

Le degré d'effort nécessaire, pour aspirer ou tirer sur une cigarette de cette marque, afin d'amener une bouffée de fumée satisfaisante dans la bouche.

Facile ☐ ☐ ☐ ☐ ☐ Difficile

Q1.2 GOÛT DÉSAGRÉABLE OU AGRÉABLE

Dans quelle mesure la saveur goûtée pendant qu'on fume est agréable ou désagréable.

Désagréable ☐ ☐ ☐ ☐ ☐ Agréable

Q1.3 SATISFACTION INITIALE (Faible – Élevée)

Dans quelle mesure cette marque de cigarettes est capable de fournir des bouffées de fumée satisfaisantes, y compris lors de la première ou seconde bouffée.

Faible ☐ ☐ ☐ ☐ ☐ Élevée

Q1.4 IMPACT SUR LA GORGE (Faible – Élevée)

La sensation rapide, de courte durée et frappante ressentie dans le bas de la gorge et le haut de la poitrine lorsque la fumée est avalée. On la ressent immédiatement dès que la fumée entre en contact avec la gorge et dure une seconde ou moins.

Faible ☐ ☐ ☐ ☐ ☐ Élevée

Q1.5 TOXICITÉ (Faible – Élevée)

Dans quelle mesure fumer régulièrement cette marque de cigarettes cause des dommages à la santé.

Faible ☐ ☐ ☐ ☐ ☐ Élevée

RÉPONDANT : RETOURNEZ LE QUESTIONNAIRE À L'INTERVIEWEUR.

INTERVIEWEUR : VÉRIFIER SI COMPLET.

- Q2.** J'aimerais que vous remplissiez vous-même la prochaine partie du questionnaire. Si vous avez des questions à me poser, n'hésitez pas à le faire. Voici des énoncés concernant des gens comme vous qui fument des cigarettes. Complétez la phrase afin de décrire vos propres **impressions** des personnes qui adoptent comme leur marque principale les cigarettes contenues dans ce paquet, en encerclant un nombre de 1 à 9 sur chacun des items qui suivent l'énoncé. (*Laissez la photo du paquet à la vue / auto-administration*)

En général, les gens qui fument cette marque de cigarettes...

Q2.1	Aiment le risque	1	2	3	4	5	6	7	8	9	Très prudents
Q2.2	Tiennent compte des autres	1	2	3	4	5	6	7	8	9	Égoïstes
Q2.3	Négligent leur santé	1	2	3	4	5	6	7	8	9	Font attention à leur santé
Q2.4	À l'aise financièrement	1	2	3	4	5	6	7	8	9	Démunis
Q2.5	Conscients de leur image	1	2	3	4	5	6	7	8	9	Peu soigneux
Q2.6	Straight	1	2	3	4	5	6	7	8	9	Cool
Q2.7	Meneurs	1	2	3	4	5	6	7	8	9	Suiveurs
Q2.8	Très scolarisés	1	2	3	4	5	6	7	8	9	Ont peu d'études
Q2.9	En contrôle de leur destin	1	2	3	4	5	6	7	8	9	Fatalistes
Q2.10	Ont peur de la mort	1	2	3	4	5	6	7	8	9	Ne sont pas préoccupés par la mort
Q2.11	Disciplinés	1	2	3	4	5	6	7	8	9	Désorganisés
Q2.12	Rebelles	1	2	3	4	5	6	7	8	9	Suivent les règles

RÉPONDANT : RETOURNEZ LE QUESTIONNAIRE À L'INTERVIEWEUR.

- Q3.** Je vais vous montrer des photos de personnes qui fument et le paquet de cigarettes que vous venez juste de voir. Regardez-les attentivement. Pour chaque photo que je vais vous montrer, dites-moi dans quelle mesure vous pensez que ça pourrait être leur marque préférée. Nous utiliserons une échelle de 1 à 9, 1 voulant dire « pas du tout » et 9 « beaucoup ». (**Inscrire un nombre 1-9 / Laissez la photo du paquet à la vue. Commencer la rotation avec la photo du personnage cochée**)

☐ 1. Homme d'affaires	☐ 2. Garçon ado	☐ 3. Fille bike	☐ 4. Motard	☐ 5. Jeune femme	☐ 6. Homme fermier

3**B****3****B**

Je vais vous montrer la photo d'un paquet d'une marque de cigarettes que vous connaissez déjà peut-être (**Intervieweur : montrez le paquet test / assurez-vous que le paquet correspond à la marque à tester**) Prenez le temps de regarder.

**Intervieweur : Laissez le répondant libre d'examiner la photo.
Attendez 30 secondes avant de poursuivre l'entrevue.**

Q1. J'aimerais avoir vos impressions sur ce que vous pensez qu'il pourrait arriver lorsque vous fumez cette marque de cigarettes contenues dans ce paquet. Prenez le temps de le regarder. Ensuite, j'aimerais que vous remplissiez cette partie du sondage vous-même. Voici le questionnaire et un crayon. J'attendrai ici que vous finissiez cette partie, puis nous continuerons avec quelques questions supplémentaires. Si vous avez des questions à me poser, n'hésitez pas à le faire.

Tout d'abord, vous lisez la description de ce qui pourrait arriver lorsque vous fumez des cigarettes du paquet qu'il y a sur cette photo. Ensuite, vous cochez la case qui correspond le plus à votre impression de ce qui pourrait arriver. (**Expliquer l'échelle de 1 à 5 / Laissez la photo du paquet à la vue / Auto-administration**)

C	A
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C	A
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C1A

ou



C2A

ou



C3A

Je vais vous montrer la photo d'un paquet d'une marque de cigarettes que vous connaissez déjà peut-être (**Intervieweur : montrez le paquet test / assurez-vous que le paquet correspond à la marque à tester**) Prenez le temps de regarder.

**Intervieweur : Laissez le répondant libre d'examiner la photo.
Attendez 30 secondes avant de poursuivre l'entrevue.**

Q1. J'aimerais avoir vos impressions sur ce que vous pensez qu'il pourrait arriver lorsque vous fumez cette marque de cigarettes contenues dans ce paquet. Prenez le temps de le regarder. Ensuite, j'aimerais que vous remplissiez cette partie du sondage vous-même. Voici le questionnaire et un crayon. J'attendrai ici que vous finissiez cette partie, puis nous continuerons avec quelques questions supplémentaires. Si vous avez des questions à me poser, n'hésitez pas à le faire.

Tout d'abord, vous lisez la description de ce qui pourrait arriver lorsque vous fumez des cigarettes du paquet qu'il y a sur cette photo. Ensuite, vous cochez la case qui correspond le plus à votre impression de ce qui pourrait arriver. (**Expliquer l'échelle de 1 à 5 / Laissez la photo du paquet à la vue / Auto-administration**)

Q1.1 EFFORT POUR ASPIRER / TIRER (Facile – Difficile)

Le degré d'effort nécessaire, pour aspirer ou tirer sur une cigarette de cette marque, afin d'amener une bouffée de fumée satisfaisante dans la bouche.

Facile ☐ ☐ ☐ ☐ ☐ Difficile

Q1.2 GOÛT DÉSAGRÉABLE OU AGRÉABLE

Dans quelle mesure la saveur goûtée pendant qu'on fume est agréable ou désagréable.

Désagréable ☐ ☐ ☐ ☐ ☐ Agréable

Q1.3 SATISFACTION INITIALE (Faible – Élevée)

Dans quelle mesure cette marque de cigarettes est capable de fournir des bouffées de fumée satisfaisantes, y compris lors de la première ou seconde bouffée.

Faible ☐ ☐ ☐ ☐ ☐ Élevée

Q1.4 IMPACT SUR LA GORGE (Faible – Élevée)

La sensation rapide, de courte durée et frappante ressentie dans le bas de la gorge et le haut de la poitrine lorsque la fumée est avalée. On la ressent immédiatement dès que la fumée entre en contact avec la gorge et dure une seconde ou moins.

Faible ☐ ☐ ☐ ☐ ☐ Élevée

Q1.5 TOXICITÉ (Faible – Élevée)

Dans quelle mesure fumer régulièrement cette marque de cigarettes cause des dommages à la santé.

Faible ☐ ☐ ☐ ☐ ☐ Élevée

RÉPONDANT : RETOURNEZ LE QUESTIONNAIRE À L'INTERVIEWEUR.

INTERVIEWEUR : VÉRIFIER SI COMPLET.

Q2. J'aimerais que vous remplissiez vous-même la prochaine partie du questionnaire. Si vous avez des questions à me poser, n'hésitez pas à le faire. Voici des énoncés concernant des gens comme vous qui fument des cigarettes. Complétez la phrase afin de décrire vos propres **impressions** des personnes qui adoptent comme leur marque principale les cigarettes contenues dans ce paquet, en encerclant un nombre de 1 à 9 sur chacun des items qui suivent l'énoncé. (**Laissez la photo du paquet à la vue / auto-administration**)

En général, les gens qui fument cette marque de cigarettes...

Q2.1	Aiment le risque	1	2	3	4	5	6	7	8	9	Très prudents
Q2.2	Tiennent compte des autres	1	2	3	4	5	6	7	8	9	Égoïstes
Q2.3	Négligent leur santé	1	2	3	4	5	6	7	8	9	Font attention à leur santé
Q2.4	À l'aise financièrement	1	2	3	4	5	6	7	8	9	Démunis
Q2.5	Conscients de leur image	1	2	3	4	5	6	7	8	9	Peu soigneux
Q2.6	Straight	1	2	3	4	5	6	7	8	9	Cool
Q2.7	Meneurs	1	2	3	4	5	6	7	8	9	Suiveurs
Q2.8	Très scolarisés	1	2	3	4	5	6	7	8	9	Ont peu d'études
Q2.9	En contrôle de leur destin	1	2	3	4	5	6	7	8	9	Fatalistes
Q2.10	Ont peur de la mort	1	2	3	4	5	6	7	8	9	Ne sont pas préoccupés par la mort
Q2.11	Disciplinés	1	2	3	4	5	6	7	8	9	Désorganisés
Q2.12	Rebelles	1	2	3	4	5	6	7	8	9	Suivent les règles

RÉPONDANT : RETOURNEZ LE QUESTIONNAIRE À L'INTERVIEWEUR.

Q3. Je vais vous montrer des photos de personnes qui fument et le paquet de cigarettes que vous venez juste de voir. Regardez-les attentivement. Pour chaque photo que je vais vous montrer, dites-moi dans quelle mesure vous pensez que ça pourrait être leur marque préférée. Nous utiliserons une échelle de 1 à 9, 1 voulant dire « pas du tout » et 9 « beaucoup ». (**Inscrire un nombre 1-9 / Laissez la photo du paquet à la vue. Commencer la rotation avec la photo du personnage coché**)

☐ 1. Homme d'affaires	☐ 2. Garçon ado	☐ 3. Fille bike	☐ 4. Motard	☐ 5. Jeune femme	☐ 6. Homme fermier

C	B
---	---

C	B
---	---



C1B

ou



C2B

ou



C3B

Je vais vous montrer la photo d'un paquet d'une marque de cigarettes que vous connaissez déjà peut-être (**Intervieweur : montrez le paquet test / assurez-vous que le paquet correspond à la marque à tester**) Prenez le temps de regarder.

**Intervieweur : Laissez le répondant libre d'examiner la photo.
Attendez 30 secondes avant de poursuivre l'entrevue.**

Q1. J'aimerais avoir vos **impressions** sur ce que vous pensez qu'il pourrait arriver lorsque vous fumez cette marque de cigarettes contenues dans ce paquet. Prenez le temps de le regarder. Ensuite, j'aimerais que vous remplissiez cette partie du sondage vous-même. Voici le questionnaire et un crayon. J'attendrai ici que vous finissiez cette partie, puis nous continuerons avec quelques questions supplémentaires. Si vous avez des questions à me poser, n'hésitez pas à le faire.

Tout d'abord, vous lisez la description de ce qui pourrait arriver lorsque vous fumez des cigarettes du paquet qu'il y a sur cette photo. Ensuite, vous cochez la case qui correspond le plus à votre impression de ce qui pourrait arriver. (**Expliquer l'échelle de 1 à 5 / Laissez la photo du paquet à la vue / Auto-administration**)

Q1.1 EFFORT POUR ASPIRER / TIRER (Facile – Difficile)

Le degré d'effort nécessaire, pour aspirer ou tirer sur une cigarette de cette marque, afin d'amener une bouffée de fumée satisfaisante dans la bouche.

Facile ☐ ☐ ☐ ☐ ☐ Difficile

Q1.2 GOÛT DÉSAGRÉABLE OU AGRÉABLE

Dans quelle mesure la saveur goûtée pendant qu'on fume est agréable ou désagréable.

Désagréable ☐ ☐ ☐ ☐ ☐ Agréable

Q1.3 SATISFACTION INITIALE (Faible – Élevée)

Dans quelle mesure cette marque de cigarettes est capable de fournir des bouffées de fumée satisfaisantes, y compris lors de la première ou seconde bouffée.

Faible ☐ ☐ ☐ ☐ ☐ Élevée

Q1.4 IMPACT SUR LA GORGE (Faible – Élevée)

La sensation rapide, de courte durée et frappante ressentie dans le bas de la gorge et le haut de la poitrine lorsque la fumée est avalée. On la ressent immédiatement dès que la fumée entre en contact avec la gorge et dure une seconde ou moins.

Faible ☐ ☐ ☐ ☐ ☐ Élevée

Q1.5 TOXICITÉ (Faible – Élevée)

Dans quelle mesure fumer régulièrement cette marque de cigarettes cause des dommages à la santé.

Faible ☐ ☐ ☐ ☐ ☐ Élevée

RÉPONDANT : RETOURNEZ LE QUESTIONNAIRE À L'INTERVIEWEUR.

INTERVIEWEUR : VÉRIFIER SI COMPLET.

- Q2.** J'aimerais que vous remplissiez vous-même la prochaine partie du questionnaire. Si vous avez des questions à me poser, n'hésitez pas à le faire. Voici des énoncés concernant des gens comme vous qui fument des cigarettes. Complétez la phrase afin de décrire vos propres **impressions** des personnes qui adoptent comme leur marque principale les cigarettes contenues dans ce paquet, en encerclant un nombre de 1 à 9 sur chacun des items qui suivent l'énoncé. (**Laissez la photo du paquet à la vue / auto-administration**)

En général, les gens qui fument cette marque de cigarettes...

Q2.1	Aiment le risque	1	2	3	4	5	6	7	8	9	Très prudents
Q2.2	Tiennent compte des autres	1	2	3	4	5	6	7	8	9	Égoïstes
Q2.3	Négligent leur santé	1	2	3	4	5	6	7	8	9	Font attention à leur santé
Q2.4	À l'aise financièrement	1	2	3	4	5	6	7	8	9	Démunis
Q2.5	Conscients de leur image	1	2	3	4	5	6	7	8	9	Peu soigneux
Q2.6	Straight	1	2	3	4	5	6	7	8	9	Cool
Q2.7	Meneurs	1	2	3	4	5	6	7	8	9	Suiveurs
Q2.8	Très scolarisés	1	2	3	4	5	6	7	8	9	Ont peu d'études
Q2.9	En contrôle de leur destin	1	2	3	4	5	6	7	8	9	Fatalistes
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RÉPONDANT : RETOURNEZ LE QUESTIONNAIRE À L'INTERVIEWEUR.

- Q3.** Je vais vous montrer des photos de personnes qui fument et le paquet de cigarettes que vous venez juste de voir. Regardez-les attentivement. Pour chaque photo que je vais vous montrer, dites-moi dans quelle mesure vous pensez que ça pourrait être leur marque préférée. Nous utiliserons une échelle de 1 à 9, 1 voulant dire « pas du tout » et 9 « beaucoup ». (**Inscrire un nombre 1-9 / Laissez la photo du paquet à la vue. Commencer la rotation avec la photo du personnage cochée**)

☐ 1. Homme d'affaires	☐ 2. Garçon ado	☐ 3. Fille bike	☐ 4. Motard	☐ 5. Jeune femme	☐ 6. Homme fermier

COMPARAISON

L.1 Pensez aux différences possibles entre les cigarettes étiquetées sur les paquets comme légères et les cigarettes étiquetées comme régulières. Tout d'abord, en ce qui a trait (**LIRE EN ROTATION**), pensez-vous que les cigarettes légères, comparées aux régulières, sont (ont)...? (**Lire en rotation à partir de l'item coché**)

[]A **Niveau de nicotine...**

- Beaucoup plus élevé (légères) ()1
- Un peu plus élevé ()2
- Le même ()3
- Un peu moins élevé ou ()4
- Beaucoup moins élevé? ()5
- Nsp/Nrp ()9

[]B **Quantité d'additifs et de substances chimiques...**

- Beaucoup plus élevée (légères) ()1
- Un peu plus élevée ()2
- La même ()3
- Un peu moins élevée ou ()4
- Beaucoup moins élevée? ()5
- Nsp/Nrp ()9

[]C **Dépendance physiologique causée par le tabac...**

- Beaucoup moins de dépendance (légères) ()1
- Un peu moins de dépendance ()2
- Autant de dépendance ()3
- Un peu plus de dépendance ou ()4
- Beaucoup plus de dépendance? ()5
- Nsp/Nrp ()9

[]D **Dommages à la santé causés par le tabac...**

- Beaucoup plus (légères) ()1
- Un peu plus ()2
- Autant ()3
- Un peu moins ou ()4
- Beaucoup moins? ()5
- Nsp/Nrp ()9

[]E **Quantité de goût ou de saveur de la cigarette...**

- Beaucoup plus (légères) ()1
- Un peu plus ()2
- Autant ()3
- Un peu moins ou ()4
- Beaucoup moins? ()5
- Nsp/Nrp ()9

L.2 Dans votre choix de cigarettes qui conviennent à vos besoins, quelle importance accordez-vous à l'étiquette Légère, Douce, Extra Douce, Extra Légère, Ultra Légère ou Régulière qui figure proche du nom de la marque? Diriez-vous ...? **(Lire)**

- Très important..... ()1
- Plutôt important..... ()2
- Pas très important..... ()3
- Pas du tout important..... ()4
- Nsp/Nrp..... ()9

L.3 Jusqu'à quel point êtes-vous convaincu que les cigarettes étiquetées comme Légère ou Extra Légère sont plus « légères » ou plus « douces » que les cigarettes régulières? Diriez-vous...? **(Lire)**

- Très convaincu ()1
- Assez convaincu..... ()2
- Pas très convaincu ()3
- Pas du tout convaincu ()4
- Nsp/Nrp..... ()9

L.4 Jusqu'à quel point seriez-vous contrarié si toute mention « Légère », « Douce », « Extra Douce », « Extra Légère », « Ultra Légère » ou « Régulière » était enlevée des paquets étiquetés présentement de cette façon? Diriez-vous...? **(Lire)**

- Très contrarié..... ()1
- Assez contrarié ()2
- Pas très contrarié..... ()3
- Pas du tout contrarié..... ()4
- Nsp/Nrp..... ()9

CLASSIFICATION

Il ne me reste plus que quelques questions pour nous aider à classer vos réponses et compléter nos statistiques.

C.1 Quel est le niveau de scolarité le plus élevé que vous avez atteint? **(NE PAS LIRE)**

- Cours primaire ou moins ()1
- Une partie du cours secondaire ()2
- Le cours secondaire..... ()3
- Une partie du cours collégial, du cours professionnel ou du cours technique (ou une partie du cégep) ()4
- Le cours collégial, professionnel ou technique (ou le cégep) ()5
- Une partie du cours universitaire (sans diplôme)..... ()6
- Un baccalauréat ()7
- Des études supérieures (maîtrise ou doctorat, terminé ou non)..... ()8
- NSP/NRP ()9

C.2 Laquelle des catégories suivantes décrit le mieux votre statut d'emploi? Est-ce que vous êtes...? (LIRE)

- Au travail à temps plein (30 heures par semaine ou plus)..... ()1
- Au travail à temps partiel..... ()2
- Sans emploi ou à la recherche d'un emploi ()3
- Au foyer à temps plein (au foyer, aide sociale)..... ()4
- Aux études ()5
- À la retraite ()6
- AUTRE ()8
- NSP/NRP ()9

C.3 Est-ce que vous êtes...? (LIRE)

- Marié ou vivant en couple ()1
- Célibataire ()2
- Veuf / veuve ()3
- Séparé..... ()4
- Divorcé ()5
- NSP/NRP ()9

C.4 Parmi les catégories de revenus suivantes, laquelle décrit le mieux le revenu total pour l'an 2003 de tous les membres de votre foyer, en vous incluant, avant taxes et déductions? Est-ce...? (LIRE)

- Moins de 10 000 \$..... ()1
- 10 000 \$ à 19 999 \$ ()2
- 20 000 \$ à 39 999 \$ ()3
- 40 000 \$ à 59 999 \$ ()4
- 60 000 \$ à 79 999 \$ ()5
- 80 000 \$ à 99 999 \$ ()6
- 100 000 \$ à 119 999 \$ ()7
- 120 000 \$ et plus..... ()8
- Refus/NSP/NRP ()9

**MERCI BEAUCOUP D'AVOIR PARTICIPÉ,
C'EST TERMINÉ. MERCI**

APPENDIX 2

HEALTH WARNING MESSAGES USED IN THE EXPERIMENT



WARNING
TOBACCO SMOKE
HURTS BABIES

Tobacco use during pregnancy increases the risk of preterm birth. Babies born preterm are at an increased risk of infant death, illness and disability.

Health Canada

du MAURIER



Light



WARNING
TOBACCO SMOKE
HURTS BABIES

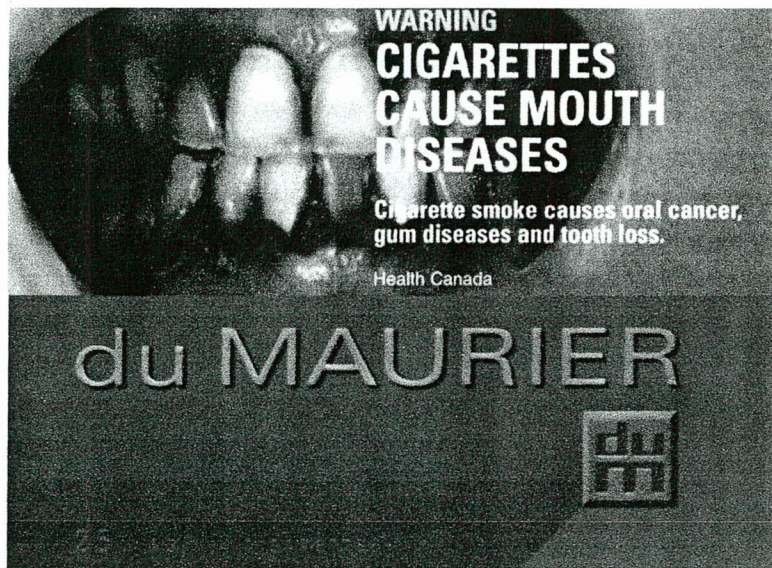
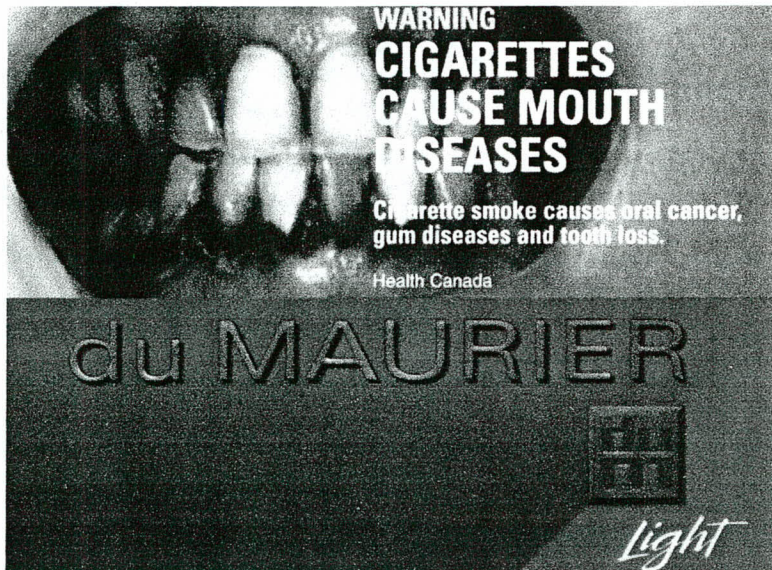
Tobacco use during pregnancy increases the risk of preterm birth. Babies born preterm are at an increased risk of infant death, illness and disability.

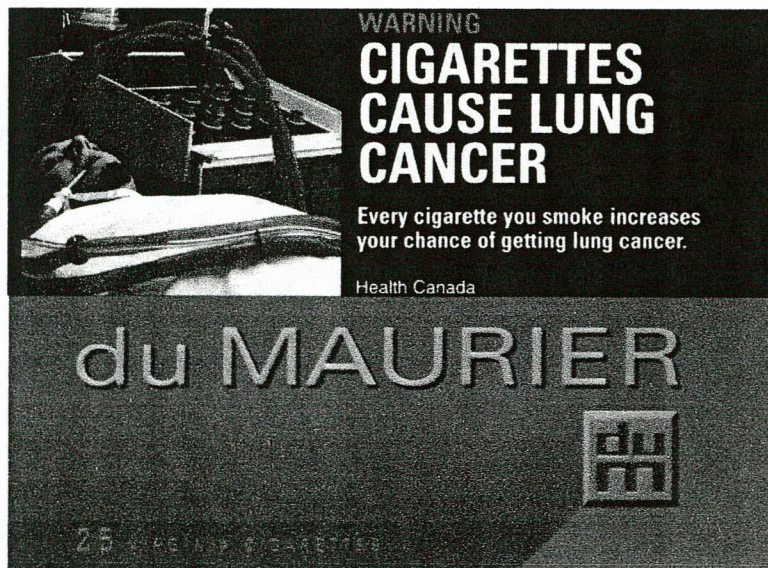
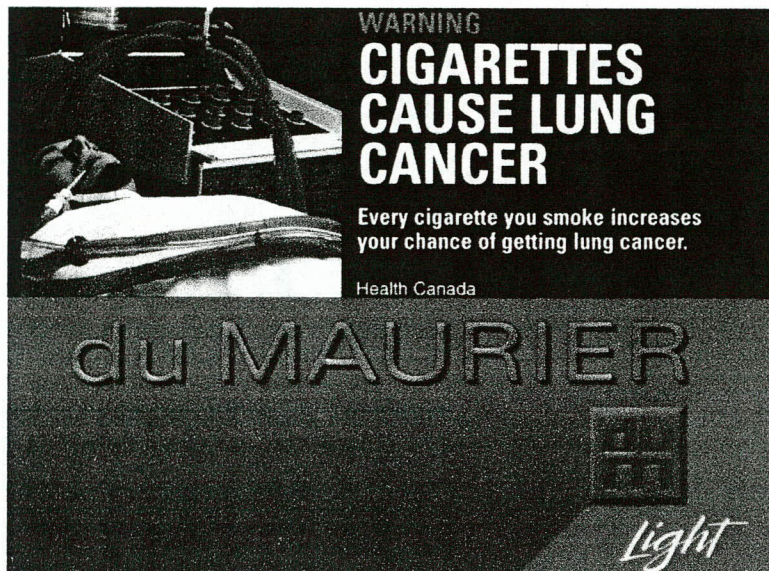
Health Canada

du MAURIER



25 MILD & SMOOTH CIGARETTES





"mild" flavour,
harsh reality

"My wife preferred the taste of 'mild' cigarettes.
Last summer, she died of lung cancer."

John Doe, Scarborough, ON

Health Canada

du MAURIER



light

"mild" flavour,
harsh reality

"My wife preferred the taste of 'mild' cigarettes.
Last summer, she died of lung cancer."

John Doe, Scarborough, ON

Health Canada

du MAURIER



25 VIRGINIA CIGARETTES

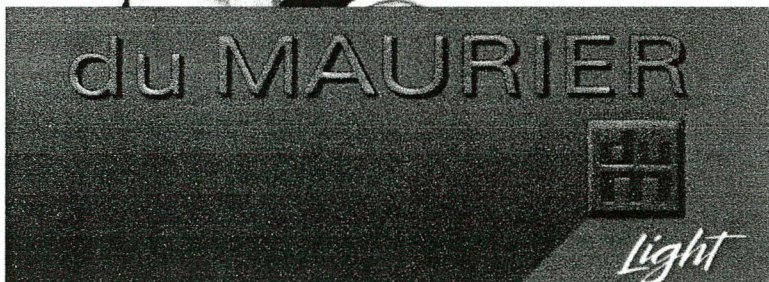


Taste can kill you

"My wife preferred the taste of 'light' cigarettes.
Last summer, she died of lung cancer."

John Doe, Scarborough, ON

Health Canada



Taste can kill you

"My wife preferred the taste of 'light' cigarettes.
Last summer, she died of lung cancer."

John Doe, Scarborough, ON

Health Canada



"light" IS NOT
less **addictive**

"Light" or "mild" cigarettes have enough nicotine to keep you hooked.

Health Canada

du MAURIER



light

"light" IS NOT
less **addictive**

"Light" or "mild" cigarettes have enough nicotine to keep you hooked.

Health Canada

du MAURIER





AVERTISSEMENT

LA FUMÉE DU TABAC NUIT AUX BÉBÉS

L'usage du tabac pendant la grossesse accroit le risque d'un accouchement prématuré. Les bébés prématurés font face à des risques plus grands de mort infantile, de maladies et d'incapacités.

Santé Canada

du MAURIER



Légère



AVERTISSEMENT

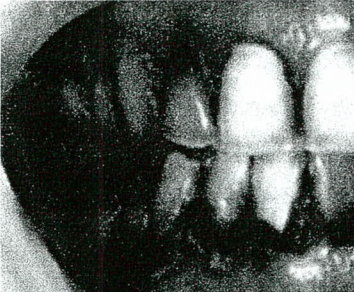
LA FUMÉE DU TABAC NUIT AUX BÉBÉS

L'usage du tabac pendant la grossesse accroit le risque d'un accouchement prématuré. Les bébés prématurés font face à des risques plus grands de mort infantile, de maladies et d'incapacités.

Santé Canada

du MAURIER





AVERTISSEMENT
LA CIGARETTE CAUSE
DES MALADIES
DE LA BOUCHE

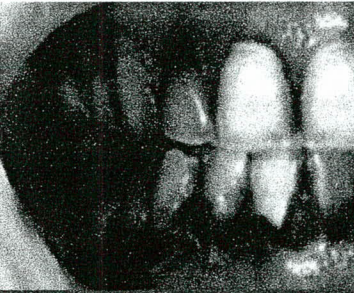
La fumée de cigarette cause le cancer buccal, des maladies de gencives et la perte de dents.

Santé Canada

du MAURIER



légère



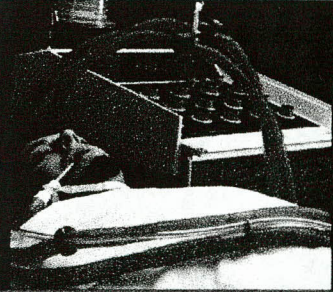
AVERTISSEMENT
LA CIGARETTE CAUSE
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La fumée de cigarette cause le cancer buccal, des maladies de gencives et la perte de dents.

Santé Canada

du MAURIER





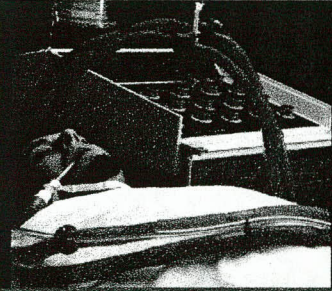
AVERTISSEMENT
LA CIGARETTE
CAUSE LE CANCER
DU POUMON

Chaque cigarette que vous fumez
augmente vos chances de contracter
le cancer du poumon.

Santé Canada

du MAURIER

Légère



AVERTISSEMENT
LA CIGARETTE
CAUSE LE CANCER
DU POUMON

Chaque cigarette que vous fumez
augmente vos chances de contracter
le cancer du poumon.

Santé Canada

du MAURIER

25 cigarettes



goût « léger »
dure réalité

« Ma femme préférait le goût des cigarettes « légères ».
L'été dernier, elle est décédée du cancer du poumon. »

John Doe, Scarborough, ON

Santé Canada

du MAURIER

25 cigarettes

légère



goût « léger »
dure réalité

« Ma femme préférait le goût des cigarettes « légères ».
L'été dernier, elle est décédée du cancer du poumon. »

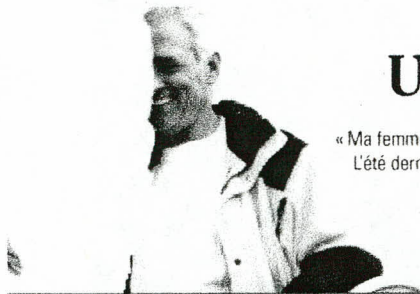
John Doe, Scarborough, ON

Santé Canada

du MAURIER

25 cigarettes

légère

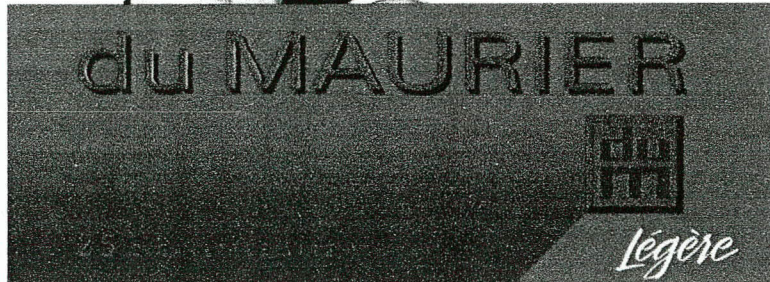


Un goût mortel

« Ma femme préférait le goût des cigarettes « légères ».
L'été dernier, elle est décédée du cancer du poumon. »

John Doe, Scarborough, ON

Santé Canada

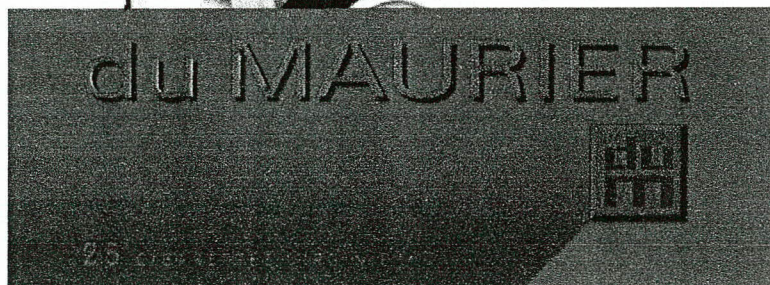


Un goût mortel

« Ma femme préférait le goût des cigarettes « légères ».
L'été dernier, elle est décédée du cancer du poumon. »

John Doe, Scarborough, ON

Santé Canada



«*légère*»

MAIS PAS MOINS
lourde de **conséquences**

Les cigarettes « légères » ou « douces » ont assez de nicotine pour vous garder accroché.

Santé Canada

du MAURIER



légère

«*légère*»

MAIS PAS MOINS
lourde de **conséquences**

Les cigarettes « légères » ou « douces » ont assez de nicotine pour vous garder accroché.

Santé Canada

du MAURIER



25 cigarettes

APPENDIX 3

PHOTOS OF CHARACTERS USED IN THE EXPERIMENT

