



JUNK FOOD MARKETING SURVEY :

10 000 QUÉBEC TEENAGERS

SPEAK OUT



JUNK FOOD DENORMALIZATION PROJECT FOR YOUNG PEOPLE

JUNK FOOD MARKETING SURVEY :
10 000 QUEBEC TEENAGERS SPEAK OUT

A PROJECT OF THE



JANUARY 2012

This report was coordinated and written by Jacinthe Hovington, in collaboration with Jaldhara Jacinthe Ledoux and Claire David. Data analysis was coordinated by Claire David.

© RSEQ
ISBN : 978-2-923572-12-3
Legal Deposit, Bibliothèque et Archives nationales du Québec, 2012

The RSEQ would like to thank the I Get It? project production committee, who checked this report:

SUZIE PELLERIN

Director of the Coalition sur la problématique du poids.

MARION SAUCET

Research Analyst of the Coalition sur la problématique du poids.

DANIEL VEILLEUX

Director General of the Québec-Chaudière-Appalaches branch of the RSEQ.

JOHANIE PELLETIER

Coordinator of Healthy Lifestyles for the Québec-Chaudière-Appalaches branch of the RSEQ.

MARIE-ÈVE LESSARD

Coordinator of Healthy Lifestyles for the Mauricie branch of the RSEQ.

KARINE TAS

Coordinator of the Healthy Lifestyles Programs for the provincial office of the RSEQ.

JALDHARA JACINTHE LEDOUX

Health Promotion Consultant.

CLAIRE DAVID

Evaluation Consultant.

JACINTHE HOVINGTON

Health Promotion Consultant.

The RSEQ would also like to thank the Consulting Committee for its contribution to checking the different stages of design and preparation of the project :

NATHALIE ALMÉRAS

Director of the Research Group for the Prevention of Child and Teen Obesity, Researcher for the Centre de recherche de l'Institut universitaire de cardiologie et de pneumologie de Québec (Quebec Cardiology and Pneumology University Institute Research Centre);

JACQUES BRODEUR

Physical Education Teacher and ÉDUPAX designer;

PASCALE CHAUMETTE

Nutritionist, Research and Development Agent for the Direction de la santé publique de la Capitale-Nationale (Capital Region Public Health Directorate), Coordinator of the "Bien dans sa tête, bien dans sa peau" (Healthy Mind, Healthy Self-image) program;

DOMINIQUE CLAVEAU

Nutritionist from the Canadian Cancer Society;

SYLVIE LOUISE DESROCHERS

Coordinator of the Groupe de recherche Médias et santé (GRMS) (Media and Health Research Group) of the Université du Québec à Montréal;

JUDITH GAUDET

Associate Professor with the Department of Social and Public Communication of the Université du Québec à Montréal, Research Member of the Groupe de recherche Médias et santé (GRMS) of the Université du Québec à Montréal;

YANNIK ST-JAMES

Assistant Professor of Marketing at HEC Montréal.

This project is made possible by the support and financial assistance of Québec en Forme



TABLE OF CONTENTS

05	ACKNOWLEDGEMENTS
11	FOREWORD
12	SALIENT FACTS
14	INTRODUCTION
14	1. BRIEF PRESENTATION OF THE PROJECT
15	GOAL AND OBJECTIVES
15	TARGET AUDIENCE
15	PROJECT DEPLOYMENT PHASES
16	2. PROJECT EVALUATION
16	ASSESSMENT OF IMPLEMENTATION ACTIVITIES
16	ACTIVITIES FOR EVALUATION OF THE PROJECT'S IMPACT
16	3. RESULTS OF THE SURVEY OF YOUNG QUEBECERS
16	BACKGROUND
16	METHODOLOGY
18	STRUCTURE OF DATA PRESENTATION
18	DISTRIBUTION OF THE SAMPLE



18	RESULTS
18	CONSUMPTION OF JUNK FOOD AMONG YOUNG PEOPLE
18	FREQUENCY OF CONSUMPTION OF JUNK FOOD
19	CONSUMPTION OF SWEETENED DRINKS
21	OVERALL INDEX OF JUNK FOOD CONSUMPTION
22	CONSUMPTION OF WATER, FRUITS AND VEGETABLES
24	INTENTIONS OF CHANGE
26	OVERALL INDEX OF INTENTION TO CHANGE CONSUMPTION
28	PLACE OF MARKETING JUNK FOOD IN DAILY LIFE
28	FREQUENCY AND PLACES WHERE YOUNG PEOPLE SEE JUNK FOOD ADVERTIZING
29	INFLUENCE OF MARKETING
29	REASONS LEADING YOUNG PEOPLE TO CONSUME JUNK FOOD
30	RECOGNITION OF THE EFFECTS OF JUNK FOOD ADVERTIZING ON BEHAVIOUR
32	INDUSTRY PRACTICES
32	RECOGNITION OF STRATEGIES USED BY THE SWEETENED DRINK INDUSTRY
32	OPINION ABOUT SWEETENED DRINK MANUFACTURERS' MOTIVATIONS
34	EFFECTS OF MARKETING JUNK FOOD ON HEALTH
34	EFFECTS OF ENERGY DRINKS
36	OPINION OF YOUNG PEOPLE ABOUT ACTIVITIES FOR COUNTERING JUNK FOOD
36	ACTIVITIES TO REDUCE JUNK FOOD CONSUMPTION
38	INVOLVEMENT AGAINST JUNK FOOD MARKETING
39	DISCUSSION
42	COURSES OF ACTION
44	CONCLUSION

TABLE OF CONTENTS

APPENDICES

46	ANNEX 1: CREATING A HEALTHY FOOD ENVIRONMENT
47	ANNEX 2 : QUESTIONNAIRE: JUNK FOOD, SWEETENED AND ENERGY DRINKS: CONSUMPTION AND OPINIONS OF QUEBEC YOUNG PEOPLE IN SECONDARY LEVELS 1 TO 3
53	ANNEX 3 : DETAILED FREQUENCY OF CONSUMPTION
54	ANNEX 4 : DETAILED LEVEL OF INTENTION TO CHANGE CONSUMPTION
55	ANNEX 5 : INTEREST IN TAKING ACTION AGAINST JUNK FOOD MARKETING

LIST OF TABLES

19	TABLE 1 : DAILY AVERAGE CONSUMPTION OF REGULAR SOFT DRINKS AND FRUIT DRINKS AMONG 1 TO 18 YEAR OLD CANADIANS.
20	TABLE 2 : DISTRIBUTION OF THE SAMPLE
24	TABLE 3 : FREQUENCY OF CONSUMPTION BY SEX AND GRADE LEVEL
25	TABLE 4 : INTENTION OF CHANGING CONSUMPTION BY SEX AND GRADE LEVEL
28	TABLE 5 : INTENTION OF CHANGING CONSUMPTION BY FOOD AND BY SEX AND GRADE LEVEL
30	TABLE 6 : PLACES WHERE JUNK FOOD ADVERTIZING IS VIEWED BY SEX AND GRADE LEVEL
31	TABLE 7 : REASONS FOR CONSUMPTION OF JUNK FOOD BY SEX AND GRADE LEVEL
32	TABLE 8 : EFFECTS OF JUNK FOOD ADVERTIZING BY SEX AND GRADE LEVEL
33	TABLE 9 : RECOGNITION OF THE PRACTICES OF SWEETENED DRINK MANUFACTURERS BY SEX AND GRADE LEVEL
33	TABLE 10 : OPINION ABOUT SWEETENED DRINK MANUFACTURERS' MOTIVATIONS BY SEX AND GRADE LEVEL
35	TABLE 11 : RECOGNITION OF OBESOGENIC FACTORS AND HEALTH PROBLEMS BY SEX AND GRADE LEVEL
36	TABLE 12 : RECOGNITION OF ENERGY DRINKS' EFFECTS BY SEX AND GRADE LEVEL
37	TABLE 13 : ACTIVITIES TO REDUCE JUNK FOOD CONSUMPTION BY SEX AND GRADE LEVEL

LIST OF FIGURES

23	DIAGRAM 1 : OVERALL INDEX OF JUNK FOOD CONSUMPTION
27	DIAGRAM 2 : OVERALL INDEX OF INTENTION TO CHANGE CONSUMPTION OF JUNK FOOD

FOREWORD

The “Quebec survey on junk food marketing: 10,000 young people speak out” survey was conducted as part of the process of assessing the **I Get It?** junk food denormalization project. This project is led by the RSEQ¹ (Réseau du sport étudiant du Québec) in partnership with the regional branch of the RSEQ for Québec–Chaudière–Appalaches and that of the Mauricie, the Coalition québécoise sur la problématique du poids, two health promotion consultants and one assessment consultant, and it is financed by Québec en forme.

The **I Get It?** project started in November 2009 and will end in November 2012. During this period, it has been evaluated in two parts. The first relates to a formative evaluation of carrying out interventions with the aim of adapting and adjusting them based on information collected. The second part consists of a summative evaluation with the aim of measuring the impact of interventions on the main target audience of the project, young people from 13 to 17 years of age, including by means of a survey of these before the project started and after it ends.

This report, which is part of a broader assessment report², bears specifically on the survey conducted by RSEQ among 10,000 Quebec youths in Secondary levels 1 to 3, from November 2010 to the end of January 2011, prior to beginning the project’s interventions. The questions were primarily aimed at knowing the perceptions of young people in relation to the marketing of junk food and also on their consumption of junk food and their intentions to change. The results presented in the following pages will be compared later with the results of a second survey to be conducted in the fall of 2012 with 10,000 Secondary 1 to 3 students, as part of the final evaluation of the project. The analysis of pre- and post-intervention questionnaire results will let us know to what extent the project will have achieved the project’s objectives.

This report is presented in two sections. The first briefly describes the project, its purpose, objectives, values, the stages of its development and the assessment made. The second presents the results of the survey. Finally there is the discussion and courses of action likely to support the **I Get It?** project and promote the sustainability of interventions undertaken.

.....
¹ The RSEQ consists of a provincial body responsible for planning, development and coordination of the project and 14 regional offices, responsible for implementation and monitoring in the schools.

² I GET IT? – Project for denormalization of junk food among young people – Evaluation report 1, RSEQ, January 2012

SALIENT FACTS

CONSUMPTION OF JUNK FOOD

A diet that would benefit from improvement

Young Quebecers regularly consume junk food, in growing proportions : candies (76 %), salty snacks (64 %), fruit flavoured drinks (61 %) and fried foods (52 %). Soft drinks are consumed regularly by 44 % of them (53 % of boys). Adding consumption of products of several junk food sub-categories, although at a frequency of once or twice a week, suggests a daily consumption of junk food. Also, only half of young people report eating fresh fruit (47 %) and vegetables (55 %) every day.

Energy drinks - consumption to be monitored

7 % of young people consume energy drinks regularly, a proportion rising to 35 % when those who drink them occasionally are included. Given the aggressive marketing of these products and the significant increase in sales in recent years, an increase in consumption of energy drinks by young people can be expected.

Moderate intention of young people to change their eating habits

Overall, close to half (46 %) of young people are satisfied with their current diet and do not intend to change it. The foods for which the largest number of young people intend to change their consumption are mostly those that they consume the most, being candies, salty snacks and fried foods. Notably, of those who do wish to change nearly four young people in ten emphasized their intention to reduce their consumption of energy drinks (39 %) and soft drinks (38 %).

Reasons why young people consume junk food

Young Quebecers consume junk food primarily because they like it, it's easy to find and it's convenient and fast. These findings are similar to a number of studies that identify the best taste and the easy and fast aspect of junk food as significant barriers to healthy eating.

MARKETING OF JUNK FOOD

Young people aware of the presence of junk food advertizing

Close to 8 young people in 10 report often seeing advertizing for junk food every day. The most frequent place where young people report being exposed to daily junk food advertizing are unquestionably television (97 %), outdoor billboards (80 %) and public places (74 %). These results are not surprising when considering that the mass medias, especially television, play a major role in exposing young people to food advertizing.

Furthermore, just over half of young people notice advertizing for junk food when they use the internet, while a Canadian study found that 94 % of their preferred websites carry advertizing content. This finding may be due to the fact that 75 % of young people do not perceive the commercial nature of product centred games, according to the same survey.

Awareness of the influence of advertizing on behaviour

Although the majority of young people (79 %) are of the opinion that advertizing of junk food encourages young people to eat more of it, 43 % of them say that this advertizing has no effect on their own behaviour. A discrepancy can be seen here between a tendency to believe that the impact of advertizing of junk food on consumption applies to other young people while they believe themselves to be personally immune from this phenomenon. On the other hand, half of young people report having seen junk food advertizing that made them want to taste it.

Recognition of the practices of sweetened drink manufacturers

Close to half of young people do not seem able to recognize the various types of strategies put forward by manufacturers to sell more sweet drinks. In fact, only one of five strategies presented is recognized by a majority of young people (75 %) : adding sugar to give flavour. The low price, false claims, addition of caffeine and large sizes are recognized by a smaller proportion of young people.

Critical thinking in respect of the motivations of sweetened drink manufacturers

Young people are not fooled by this industry's motivations. In fact, the great majority (84 % to 95 %) recognized that these manufacturers are only interested in their own profit and not in the health and well-being of young people, by targeting places frequented by young people and adding ingredients without concern about their effects on health.

Effects of marketing junk food on health

Overall, young people clearly recognize the factors that cause obesity or health problems, such as frequent consumption of fast food meals or lack of physical activity. On the other hand, over half of young people do not recognize the influence of marketing as one of the causes that may be associated with obesity.

Effects of energy drinks

Among the effects promised by the industry, more than half of young people (54 %) believe that energy drinks provide energy, although in reality this stimulation is short-lived and is followed by a feeling of fatigue. Boys, the first target of these drinks' industry, are more likely to believe the messages sent by the industry's marketing regarding the effects of energy drinks.

Actions to reduce consumption of junk food by young people

Among the actions proposed, clearer and more complete labelling of junk food products was selected by 62 % of young people. This echoes recent measures put forward by Health Canada as requirements concerning composition and marketing of energy drinks, which will reduce the caffeine content and display a table of the complete nutritional contents. 60 % of them also think that having access to a better offer of food in the places they frequent (convenience stores, cinema, etc.) would help them reduce their consumption of junk food. About 45 % also felt it would be useful to restrict and denounce marketing of junk food to young people. However, few young people (28 %) support the option of taxing sweetened drinks as a means of reducing consumption of junk food.

Favourable to outlawing the sale of energy drinks to minors

To reduce the consumption of junk food among young people, 60 % of them support outlawing the sale of energy drinks to those under 18 years of age. The internet survey indicates that 89 % of Quebec's population would also prohibit the sale of energy drinks to minors. The recent announcement by Health Canada provides for a notice that consumption of the product is not recommended for minors, which is defined as being those under 18 years of age.

Moderate interest to take action

Overall, young people show a moderate interest in taking action. In fact, just over half of young people are interested in knowing more about the junk food industry's strategies of manipulation and would like to participate in certain activities, such as having an anti-junk food day at school, creation of an advertisement, writing an article, etc. On the other hand, less than one third of them show an interest in taking the initiative in an action such as talking to their family and their Facebook friends or involving themselves on a committee.

A region distinguishes itself

Among the fourteen regional branches of the RSEQ, the Greater Montreal Athletic Association (GMAA, the region comprising the English schools in Montreal) distinguishes itself in several aspects.

Primarily, 42 % of young people in this region are in favour of a tax on soft drinks, compared to 28 % for all young people in Quebec. Also, a larger proportion of GMAA young people report "never" having consumed certain junk foods (for 6 out of 8 foods, being energy drinks, fruit flavoured drinks, sports drinks, vitaminized sugary waters, candies, fast food meals), which leaves it to be understood that they consume less junk food than young people of other regions. And, despite this fact, they are also significantly more likely to want to reduce their consumption of junk food, for all junk food products presented (from 12 % to 20 %, depending on the product).

INTRODUCTION

I Get It? arose from the concern to take action on the eating behaviours of young people in Quebec in relation to the conjuncture of junk food, young people and food industry marketing. According to data both from focus groups conducted in Quebec as part of this project³ and studies conducted outside Quebec, young people have favourable perceptions, opinions and attitudes to junk food products (preferring them for better taste, price, attractiveness, convenience, independence, socialization, etc.). However, they generally perceive these factors as barriers to healthy eating. Their attitudes, opinions and perceptions towards their own consumption of junk foods and towards the food industry⁴, and more particularly its marketing strategies, indicate a certain ambivalence or confusion in this regard. These data suggest that it has become more and more acceptable, desirable and accessible for young people to frequently consume junk food and be heavily exposed to junk food industry marketing.

Mass marketing of junk food by the food industry significantly influences food preferences among young people, their requests regarding the purchase of food and their food consumption (at least in the short term), especially favouring sweetened drinks and foods with high energy density and low nutritional value.

These marketing practices of the food industry, considered irresponsible due to their negative influence on young people's eating habits, are also identified as the main target and primary subject of intervention in the prevention of obesity and early chronic diseases in young people by a large number of international experts, authors and organisations such as the World Health Organization (WHO) and the Institute of Medicine (IOM) of the Centers for Disease Control (CDC).

1. BRIEF PRESENTATION OF THE PROJECT⁵

The project promotes an approach of “denormalization” of the food industry, its practices and products associated with junk food, by concentrating on changing social norms related to irresponsible marketing by this industry to young people. It aims to put forward counter-marketing actions (counter-publicity campaign, media education, popular marketing, advocacy and public relations). It addresses the theme of junk food marketing through interventions that target specific product categories. Sweetened drinks, and more specifically soft drinks and energy drinks, have been designated as the first category of products targeted in the first stages of the project also.

The project promotes also actions that will actively bring together and involve young people and, directly or indirectly, the school, the adults around them and the community. It is part of a progressive and wider approach that shares responsibility for actions aiming to change social norms with regard to food marketing across several social players, such as communities and the governments. The diagram in Appendix 1 summarizes the project's orientations and shows where they are positioned in overall social marketing actions that focus on creating healthy food environments. The blue coloured sections refer to actions related to the **I Get It?** project.

3 Contre la malbouffe : des jeunes prêts à agir! Focus groups with 11–16 year olds. RSEQ, August 2010. www.rseq.ca

4 See the definition of terms “food industry”, “junk food” and “marketing” used in the project on pages ii and iii of the document Findings from the literature (RSEQ, June 2010). www.rseq.ca

5 To learn more about the values and principles behind the project, consult the document Cadre d'intervention provinciale (Framework for Provincial Action) from the RSEQ, November 2010. www.rseq.ca

GOAL AND OBJECTIVES

Goal

To contribute to reducing consumption of junk food among young people through a change in perceptions, opinions and attitudes towards the food marketing industry. By favouring the acquisition of knowledge and development of critical thinking skills in its target audience, the project aims to contribute to a reduction of influences that promote junk food and consequently to creating a healthy food environment for young people. Ultimately, this healthy food environment will serve to normalize healthy eating and reduce the consumption of junk food and the tendency to overeat, both for individuals and for society.

General and specific objectives :

1. Raise awareness among young people on the effects that marketing of junk food have on them and on their development
 - 1,1 Define the place that marketing of junk food has in their daily lives;
 - 1,2 Link this marketing to consumer perceptions, opinions, attitudes and behaviours in relation to junk food;
 - 1,3 Recognize the effects of marketing of junk food on health and the environment.
2. Educate young people on marketing practices
 - 2,1 Define the four types of marketing practices;
 - 2,2 Define their specific functions.
3. Develop critical and ethical sense in young people in relation to marketing of junk food
 - 3,1 Critically interpret the practices of marketing of junk food;
 - 3,2 Have opinions and a position with regards to denormalization of junk food.

Each of these objectives involves perceptions, opinions and attitudes that are desired to be manifested among the target audience as a result of being exposed to and participating in the project's activities.

THE TARGET AUDIENCE

High school age young people (13 to 17 years old) and related audiences, depending on the local and regional context (e.g., schools, parents, family, community social players).

PROJECT DEPLOYMENT PHASES

From November 2009 to June 2011, the activities will structure and put the initial phase of the project into action in two stages :

- ↳ Preparatory phase, from November 2009 to June 2010: this allowed for clearly defining the current conjuncture of junk food, young people and marketing, identifying environmental factors that could affect the project's implementation and guiding the development of interventions to be undertaken.
- ↳ Phase 1:
 - Pre-introductory, from June to December 2010: this focused on developing and structuring interventions within a provincial intervention framework on promoting the project with schools and partners and on the leadership and training of regional coordinators responsible for the project.
 - Introduction, from January to June 2011: this focused on implementation of interventions such as launching online of the www.newdrive.ca website aimed primarily at young people, conducting classroom activities and coordination at the regional and provincial level.

Phase 2 will be conducted from November 2011 to June 2012 and final assessment of the project will be done in the fall of 2012.

2. PROJECT EVALUATION

As mentioned earlier, I Get It? has been evaluated in two parts: formative evaluation of the implementation of interventions and summative evaluation of the impact of interventions on the young people targeted by the project..

ASSESSMENT OF IMPLEMENTATION ACTIVITIES

An assessment of implementation activities conducted during phase 1 of the project was conducted to identify the factors that facilitated or limited its deployment. Assessment measures include monitoring of visitor activities on the Newdrive.ca website, assessment of the site by a firm that specializes in the subject and tools for monitoring by regional coordinators responsible for the project (log book, common practices and semi-structured interviews).

Results of this assessment are shown in the assessment report of Phase 1 of the project⁶.

ACTIVITIES FOR EVALUATION OF THE PROJECT'S IMPACT

To evaluate the project's effects on young people (primary target) as a result of interventions, the RSEQ and its partners prepared a pre-introductory questionnaire. This was submitted to two categories of young people in schools for validation purposes. The questions focused primarily on consumption of junk food among young people, their intentions to reduce it and their perceptions regarding the marketing of junk food.

Ten thousand young people from Secondary levels 1 to 3 completed this questionnaire in the fall of 2010, before beginning the project's interventions. Distribution and management were provided by regional coordinators and recording and analysis of responses was done by an outside firm. The results of this questionnaire are presented later in this document. This data will provide the basis for interpretation of data which will be collected at the end of the project.

6 I Get It? Project for denormalization of junk food among young people. Evaluation report 1, RSEQ, January 2012 www.rseq.ca

3. RESULTS OF THE SURVEY OF YOUNG QUEBECERS

BACKGROUND

I Get It? is an innovative project primarily concerned with the mass marketing of junk food, a factor recognized for its major influence on young people's food environment. The project was developed without the benefit of the concepts already established in the denormalization of junk food either from the experience or evaluation of other projects addressing this theme – the few experiences reported in the literature being recent, they had been little evaluated, if at all. In addition, little recent data exists on the consumption of junk food by young people in Quebec or Canada and even less on their consumption of soft drinks or energy drinks, or on their perceptions towards the marketing of these products.

In this context, this survey will provide a basis for evaluating the impact of **I Get It?** on young people. This impact assessment will focus primarily on measuring changes in perceptions and attitudes of young people with respect to the marketing of junk food and to assess their intentions to change their consumption of junk food. No measurement of changes in behaviour with respect to their food consumption was included since we felt it unrealistic to expect such a change after only one and half years of intervention.

Where possible, the results of the survey were compared with the little data reported in the literature.

METHODOLOGY

Given that models of evaluation tools do not appear to exist that measure the level of awareness or perception of young people with respect to marketing of junk food, the RSEQ chose to develop a pre-intervention questionnaire as the principal measure of assessment for young people.

Developing the questionnaire

The questionnaire was developed using the following steps :

- ↳ Definition of objectives : collection of data on consumption of junk food by young people, on their

perceptions in relation of marketing of junk food and on their level of interest to take action against junk food.

- ↘ Development of the questionnaire by the RSEQ and validation by several project partners, by Québec en forme and by two classes of students in Secondary 1 and 2. The questions were inspired by those used in focus groups conducts during the preparatory phase.
- ↘ Revision, translation and layout by the Virus 1334 firm.
- ↘ Formatting of the questionnaire in a paper version with a nice visual presentation and including a brief introductory paragraph for young people as well as 14 questions with a choice of answers or a Likert scale.

To be noted : The questionnaire was built by providing for a change of product category targeted in Phase 2 of the project. Questions were therefore about several categories of junk food products, of which only a few were specific to soft drinks and energy drinks. With these facts, the assessment of the project's Phase 1 led the RSEQ to continue the soft drink and energy drink category as product targets during the Phase 2 interventions.

Completion of the questionnaire

- ↘ Regional coordinators presented the questionnaire to school staff who agreed or not to have them completed by their students.
- ↘ Regional coordinators distributed questionnaires to interested persons, in sufficient number for their classes.
- ↘ The questionnaire was accompanied by a letter which explained the context and gave instructions to ensure uniformity in administering the questionnaire.
- ↘ The time required to complete the questionnaire was 10 minutes. The questionnaire was completed anonymously then placed in a preaddressed envelope and sent to the RSEQ.
- ↘ A minimum number of questionnaires had to be collected per region (100) and per school (30) to allow for valid statistical analysis⁷.

7 However, due to organizational constraints, 36 out of 87 participating schools completed less than 30 questionnaires and 2 out of 14 regional branches completed less than 100 questionnaires. This does not affect the validity of results presented in this report, since they cover the entire sample. When data from regions are presented, they refer to those for which the minimum quota required from questionnaires was respected.

Data entry and analysis

- ↘ In total, 10,009 questionnaires were completed by Secondary 1, 2 and 3 students. Sixty eight (68) questionnaires were removed from the sample. These were questionnaires completed by young people not covered by the survey, students in Secondary 4 and 5, students in welcoming and special classes, and a few questionnaires in which the respondents had not written their grade level. The final sample consisted of 9,941 questionnaires.
- ↘ Entry and statistical analysis of questionnaires was entrusted to the quantitative analysis consulting firm Info Quail Data.
- ↘ Statistical processing was conducted on all data collected and the analyses were done from frequency tables and crossing of variables for which the Chi² test was performed.
- ↘ In addition to results for the entire sample, data was processed according to six variables :
 - school (when the number was sufficient)
 - region
 - sex
 - grade levels
 - girls/grade levels
 - boys/grade levels
- ↘ Preliminary results were transmitted to the schools that administered the questionnaires. Each was thus enabled to compare themselves with their region and the province⁸.

8 A reading guide was provided to the schools. As for those where the number of questionnaires completed was insufficient to allow statistical analysis, it was recommended that the data be interpreted as trends and not as facts.

STRUCTURE OF DATA PRESENTATION

All the variables surveyed were grouped into seven categories, which constituted the different sections of the report :

1. Consumption of junk food among young people
2. Intentions of changing consumption
3. Place marketing has in daily life
4. Influence of marketing
5. Industry practices
6. Effects of marketing junk food on health
7. Opinion on activities for denormalization of junk food marketing

In each section, a footnote on the page specifies which questions correspond to the results presented.

The tables present the results in three categories : total result, results by sex and results by grade level, since these are the variables that present the most significant differences. The results related to the variables boys/grade levels and girls/grade levels are only listed when there is a significant difference which is useful to point up since it supports a difference according to sex or grade level.

In all the tables presented in this section, with the exception of table 1, the percentages have been rounded to the nearest unit for ease of reading. Fractions were kept only to distinguish significant differences that only appear at a fractional level.

In addition, textboxes about differences in certain regions were inserted into the body of the text to allow rapid distinction during reading.

Vocabulary

To facilitate reading and comprehension of the text, the terms “healthy food” and “junk food” mean foods of high nutritional value and foods of high energy density and low nutritional value, respectively. Foods of high energy density and low nutritional value are generally associated with manufactured foods whose content is high in fat or sugar,

according to the World Health Organization⁹. These two categories also correspond to what the Vision de la saine alimentation (Vision for Healthy Eating) from the Ministère de la Santé et des Services sociaux¹⁰ designates as what should be “daily” and “exceptional” foods.

DISTRIBUTION OF THE SAMPLE

Table 1 illustrates the distribution of respondents by grade level, sex, language and region in the regions of the fourteen regional branches of the RSEQ.

- ↘ Each grade level holds around one third of the data.
- ↘ Girls and boys are equally represented.
- ↘ Nearly all the completed questionnaires are in French.

RESULTS

1. CONSUMPTION OF JUNK FOOD AMONG YOUNG PEOPLE

This first section enables a picture to be seen of current junk food consumption among young people and to evaluate their intention to change this consumption. Young people should indicate their frequency of consumption by a dozen items, nine for junk food and three for healthy food. They should also state their intention to change their food consumption in general, and for the same items¹¹.

Frequency of consumption of junk food

Overall, it appears that young people regularly consume junk food¹². In fact, over ¾ of young people eat sweet snacks regularly and close to 2/3 consume salty snacks and fruit flavoured drinks. Fried foods are part of the diet of half of young people (both girls and boys) while soft drinks are consumed regularly by 44 % of them (53 % of boys).

9 WORLD HEALTH ORGANIZATION (2003). Diet, Nutrition and the Prevention of Chronic Disease. Report of a Joint WHO/FAO Expert Consultation, WHO Technical Report Series 916, Geneva, p. 116: 131

10 SERVICE FOR THE PROMOTION OF HEALTHY LIFESTYLES. Vision de la saine alimentation pour la création d'environnements alimentaires favorables à la santé (Vision of healthy diet for creating food environments favourable to health), Ministère de la Santé et des Services sociaux, Government of Québec, 2010.

11 The results presented in this section relate to questions 1, 13 and 14 of the questionnaire.

12 The detailed table of results for each frequency of consumption for all respondents is in Annex 3.

TABLE 1

DISTRIBUTION OF THE SAMPLE

Grade level	%	n=9941
Secondary 1	31	3105
Secondary 2	30	3000
Secondary 3	39	3836
Sex	%	n=9059
Girls	51	4583
Boys	49	4476
Language	%	n=9941
French	98	9732
English	2	209
Regions (RSEQ regional branches)	%	n=9941
Cantons-de-l'Est	42,1	4181
Est-du-Québec	17,5	1738
Montérégie	11,4	1129
Côte-Nord	5,5	548
Greater Montreal Athletic Association (GMAA)	4,4	439
Montréal	3,8	380
Mauricie	3,4	333
Laurentides-Lanaudière	3,3	323
Saguenay-Lac-Saint-Jean	2,6	261
Outaouais	2	196
Québec-Chaudière-Appalaches	1,3	130
Abitibi-Témiscamingue	1,1	109
Lac-Saint-Louis	1	99
Laval	0,5	54

The results of other Quebec surveys also show that young people of different age groups consume junk food regularly. Forty four percent (44 %) of 15-16 year olds consume snacks, soft drinks or sweet snacks daily¹³. Around 25 % of teens (12-16 years old) eat fried foods every day or every second day. In 2003, over 70 % of young people in Montreal in high school (secondary 1, 3 and 5) consumed fast foods at least once a week¹⁴.

It can be observed in Table 2 that boys are bigger consumers of junk food than girls, and that consumption of these products increases with age. In fact, boys are significantly more likely than girls to consume five of the nine junk foods presented, being fried foods, soft drinks, fast food, sports drinks and vitaminized sugary waters. In addition, boys in secondary 3 are much more likely (59 %) than other groups to eat fried foods on a regular basis¹⁵.

Consumption of sweetened drinks

Each sweetened drink consumed daily increases the risk of childhood obesity by 60 %, according to two studies, including one reported by a WHO committee of experts¹⁶. This type of drink includes fruit flavoured drinks, soft drinks, energy drinks, sports drinks and vitaminized waters. In this sense, we note that 18 % of the young people in our survey consume fruit flavoured drinks daily (every day or nearly every day) and 7 % of them consume soft drinks.

↳ Energy drinks

7 % of young people consume energy drinks regularly, a proportion rising to 35 % when those who drink them occasionally are included (or those who ticked "rarely"). These results are comparable with those of other studies which showed that 25 % of young people in Quebec consume them often or occasionally¹⁷. A survey

13 BERTRAND, L. (2004). "Consommations alimentaires" (Food Consumption), in Enquête sociale et de santé auprès des enfants et des adolescents québécois, volet nutrition (Quebec Child and Adolescent Social and Health Inquiry), Québec, Institut de la statistique du Québec, Chapter 5, p. 89-102.

14 AGENCE DE LA SANTÉ ET DES SERVICES SOCIAUX DE MONTRÉAL (MONTREAL HEALTH AND SOCIAL SERVICES AGENCY) (2010). Les jeunes de 5 à 17 ans à Montréal – portrait sommaire (Children aged 5 to 17 in Montreal – brief profile), 5 pages.

15 One of the variables created for data analysis is sex/grade level. Only significant results relevant to this variable are reported in this report.

16 LUDWIG, D. S., K. E. PETERSON and S. L. GORTMAKER (2001) Relation between consumption of sugar-sweetened drinks and childhood obesity: a prospective, observational analysis. *Lancet* 2001; 357: 505-508. In BROWNELL, K. D., and T. R. FRIEDEN (2009) "Ounces of Prevention - The Public Policy Case for taxes on Sugared Beverages", *New England Journal of Medicine*, 360 (18): 1805-1808

17 PLAMONDON, L. (2011). Les boissons énergisantes : entre menace et banalisation (Energy drinks – between threat and trivialization), Montreal: Institut national de santé publique. [Online] http://www.inspq.qc.ca/pdf/publications/1311_BoissonsEnergisantes.pdf (consulted Oct. 14, 2011).

TABLE 2

FREQUENCY OF CONSUMPTION BY SEX AND GRADE LEVEL*

Do you eat...	TOTAL	Sex		Grade level		
	%	% Girls	% Boys	% Sec.1	% Sec.2	% Sec.3
Sweet snacks (e.g., candies, chocolate, cupcakes, etc.)	76	78	75	75	76	78
Salty snacks (e.g., chips, pretzels, nachos, etc.)	64	61	66	62	63	66
Fruit flavoured drinks (e.g., Fruitopia)	61	59	62	58	60	63
Fried foods (e.g., fries, fried chicken, etc.)	52	48	55	49	50	55
Soft drinks	44	36	53	44	44	45
Fast food meals (e.g., McDonald, Pizza Hut, etc.)	28	25	31	26	27	31
Sports drinks (e.g., Gatorade, Powerade, etc.)	28	17	36	29	27	29
Vitaminized sugary waters	15	13	17	17	15	14
Energy drinks (e.g., Red Bull, Monster, Guru, etc.)	7	5	8	6	7	7
Water, bottled or tap	96	96	95	96	96	95
Fresh fruits	94	95	92	94	94	93
Vegetables	93	95	91	93	93	93

* Five response options were offered to respondents: "every day or nearly every day", "3 or 4 times a week", "1 or 2 times a week", "rarely" or "never". The table presents the results grouped by responses "every day or nearly every day", "3 or 4 times a week" or "1 or 2 times a week". Note that these percentages in bold indicate statistically significant differences compared to other respondents.

conducted in 2008 in three regions of Quebec found that close to 12 % of high school age young people report having consumed this type of drink more than once a week, while a little more than half of them drank it occasionally (less than once a week)¹⁸. In the United States, in 2009, 30 % of teens took it on a regular basis¹⁹.

↳ **Soft drinks**

Regular consumption of soft drinks reported by 44 % of young people in this survey is similar to that which is reported in other findings from the literature. In 2003, over 40 % of young people in secondary 1 and over 30 % of those in secondary 5 in Montreal consumed soft drinks and chips at least once a day²⁰. In the United States, soft drinks represented, in 2005, 50 % of all drinks consumed by young people²¹.

18 GAUDREAU, M., M. GAGNON, and N. ARBOUR (2009). Being young today - lifestyles and aspirations of young people in the Capitale-Nationale, Saguenay-Lac-Saint-Jean and Laurentides regions, from the series Enquête interrégionale 2008, ÉCOBES, Cégep de Jonquières, 2009, p. 78.

19 BLANCHET, R., A. BWENGE and J. N. (2010). Les boissons énergisantes : Énoncé de position (Energy drinks – position statement), Association québécoise des médecins du sport. [Online] http://www.aqms.org/meganet/media/docs/doc/enonce_de_position_-_boissons_energisantes_mai_2011_.pdf (consulted Oct. 14, 2011).

20 AGENCE DE LA SANTÉ ET DES SERVICES SOCIAUX DE MONTRÉAL (MONTREAL HEALTH AND SOCIAL SERVICES AGENCY) (2010). Les jeunes de 5 à 17 ans à Montréal – portrait sommaire (Children aged 5 to 17 in Montreal – brief profile), 5 pages.

21 CONSUMERS UNION (CU). "Out of balance: Marketing of soda, candy, snacks and fast food drowns out healthful messages", September 2005. In CONSUMERS UNION (2006). Marketing of junk food for children, Final Report presented to the Industry Canada Office of Consumer Affairs, 89 p.

REGIONS

In the Greater Montreal Athletic Association (GMAA) and in Lanaudière, a greater proportion of young people “never” consume certain junk foods. For the GMAA, this is 6 out of 9 junk foods presented: energy drinks, fruit flavoured drinks, sports drinks, vitaminized sugary waters, sweet snacks, fast food.

For Lanaudière it was 5 out of 9 foods: soft drinks, energy drinks, fruit flavoured drinks, sports drinks and vitaminized waters.

Young people in Montréal are more likely to consume “every day or nearly every day” 7 out of 9 junk foods: soft drinks, fruit flavoured drinks, vitaminized sugary waters, fried foods, salty snacks, fast food.

Striking fact - consumption of soft drinks increased by over 100 % among children and teens from 1977 to 1997²².

The results of this survey indicate a significant difference in consumption between the sexes. Boys consume more soft drinks than girls and these differences remain significant across grade levels (55 % of secondary 2 boys and 53 % of those in sec. 3, compared to 35 % of secondary 2 girls and 37 % of those in sec. 3).

↳ Sports drinks

Although 28 % of young people consume them regularly, boys drink them twice as much as girls and this proportion rises to four times for frequent consumption (“every day or nearly every day” and “3 or 4 times a week”), or 4 % of girls compared to 16 % of boys. This difference is maintained at all grade levels.

Overall index of junk food consumption

The overall index lets all results related to consumption of junk food before the interventions be seen, and permits them to be compared with those that will be obtained later. Thus, an overall index of junk food consumption was

22 BÉLIVEAU, R. (2009). “Les boissons gazeuses, de vrais “bonbons liquides”, (Soft drinks, real “liquid candy”). [Online] <http://espaceparents.canoe.ca/sante/nutrition/2009/10/05/11308201-jdm.html> (consulted January 2011).

calculated by attributing a score to each consumption frequency indicated by respondents for all junk food items. The average of indices gives the average consumption results for all young people surveyed.

Here is the score attributed to each answer choice allowing the average consumption reported for each item to be calculated :

Hence, a young person who might have indicated that they consume all the junk food items on the list “every day or nearly every day” would receive a junk food index of 100.

Conversely, a young person who might have indicated that they “never” consume any of the junk food items would receive a junk food consumption index of 0.

This overall index provides information on the cumulative daily consumption of junk food sub-categories, which represents a major challenge on young people’s eating habits. According to the Vision de la saine alimentation (Vision for Healthy Eating) from the Ministère de la Santé et des Services sociaux²³ it is indeed advisable to recommend avoiding the accumulation of so-called “exceptional” foods (corresponding to junk foods in the context of this survey).

Young people in Quebec receive an index of 37, which indicates moderate consumption of junk food, according to the items presented²⁴. On the following page, a table shows the indices for each item.

JUNK FOOD ITEMS

Every day or nearly every day	(100)
4 or 4 times per week	(75)
1 or 2 times per week	(25)
Never	(0)

23 MSSS. “Vision de la saine alimentation pour la création d’environnements favorables à la santé” (Vision for healthy eating to create environments favourable to health), 2010. En ligne : www.msss.gouv.qc.ca/Documentation/section/Publications/heading.

24 Note that this index does not take into account the cumulative consumption of several subcategories of junk food products by the same individual.

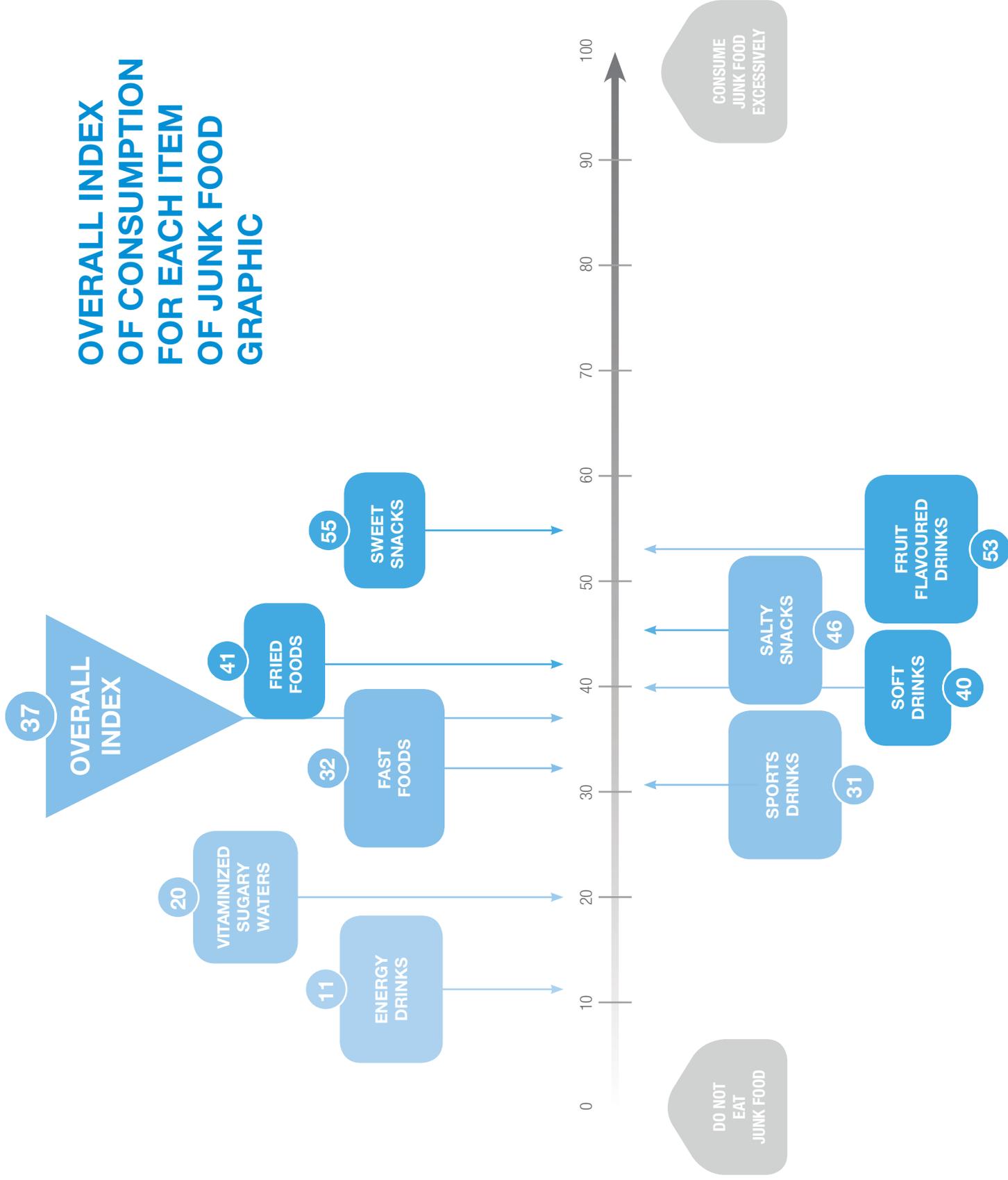
Consumption of water, fruits and vegetables

Since consumption of water, fruits and vegetables is not the focus of **I Get It?** young people have had very little to say on the subject. However, the question relating to the frequency of consumption of these products showed that only about half of young people consume fresh fruits (47 %) and vegetables (55 %) daily. Our data do not allow us to know, however, if these young people eat the daily quantity of 7 to 8 servings recommended by the Canada Food Guide²⁵. In addition, 5 % of young people report drinking water (in bottles or tap water) only once or twice per week and this consumption is the same as that of energy drinks in this category. This result shows that a certain number of young people, including minorities, drink very little water, this vital liquid to health. Nothing in this survey allows a connection to be established between these frequencies of consumption of water and energy drinks. This data may nonetheless suggest the parallel drawn by some studies between the normalization of regular consumption of sweetened drinks and the reduction of consumption of a high value food, milk, among young people²⁶.

.....
25 "Canada's Food Guide". Online: <http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/track-suivi/index-fra.php>

26 COALITION QUÉBÉCOISE SUR LA PROBLÉMATIQUE DU POIDS. "Problématique du poids, maladies chroniques et finances publiques" (The problem of weight, chronic diseases and public finances), Montréal, Québec, unpublished document.

OVERALL INDEX OF CONSUMPTION OF JUNK FOOD FOR EACH ITEM GRAPHIC



2. INTENTIONS TO CHANGE

TABLE 3
INTENTION TO CHANGE CONSUMPTION BY SEX AND GRADE LEVEL

Do you intend to change your consumption of junk food in the next few months?	TOTAL	Sex		Grade level		
	% (n=9416)	% Girls (n=4370)	% Boys (n=4222)	% Sec.1 (n=2904)	% Sec.2 (n=2829)	% Sec.3 (n=3683)
No, I am happy with my consumption	46	40	51	40	48	50
Yes, I would like to eat less often	24	27	20	29	2	21
Yes, I would like to eat less often	15	15	14	19	14	12
I do not eat junk food	15	17	13	15	15	15
I haven't thought about it	13	13	12	13	14	12

Overall, close to half (46 %) of young people are satisfied with their current consumption and do not intend to change it. This proportion is higher among boys and older students. However, close to 4 young people in 10 report wanting to reduce their consumption of junk food (that is, they answered "...by eating less often" or "... in smaller quantities").

Note that 15 % of young people report that they do not eat junk food.

The results of focus groups conducted by the RSEQ in 2010 (See document "Contre la malbouffe: des jeunes prêts à agir" on www.rseq.ca) reveal that nonetheless 75 % of participants considered that they have a good diet. This difference could be explained by the fact that these groups include young people from 11 and 12 years old, who still take most of their meals in a family environment.

REGIONS

Young people from the Greater Montreal Athletic Association are significantly more likely to have the intention of changing their consumption of junk food in the next few months :

- ↘ 34 % want to eat less often, compared to 24 % for all young people
- ↘ 24 % want to eat in smaller quantities, compared to 15 % for all young people

TABLE 4

INTENTION OF CHANGING CONSUMPTION BY FOOD AND BY SEX AND GRADE LEVEL*

Do you intend to consume (much less or less)...	TOTAL	Sex		Grade level		
	%	% Girls	% Boys	% Sec.1	% Sec.2	% Sec.3
Sweet snacks (e.g., candies, chocolate, cupcakes, etc.)	50	57	43	53	50	49
Fried foods (e.g., fries, fried chicken, etc.)	48	55	41	52	48	45
Salty snacks (e.g., chips, pretzels, nachos, etc.)	47	53	39	50	46	44
Fast food meals (e.g., McDonald, Pizza Hut, etc.)	46	51	40	50	45	43
Energy drinks (e.g., Red Bull, Monster, Guru, etc.)	39	40	38	46	38	35
Soft drinks	38	42	35	43	38	35
Vitaminized sugary waters	31	33	29	37	31	27
Fruit flavoured drinks (e.g., Fruitopia)	30	34	27	34	32	26
Sports drinks (e.g., Gatorade, Powerade, etc.)	28	32	23	33	28	23
Water, bottled or tap	4	3	5	4	3	4
Vegetables	4	3	6	5	4	5
Fresh fruits	3	3	4	4	3	3

* Note that five response options were offered to respondents: "much less", "less", "the same quantity as now", "more" or "much more". The table presents the results for young people who responded "much less" or "less" for each of the foods presented. The detailed table of results for each frequency of change of consumption for all respondents is in Annex 4. Note that these percentages in bold indicate statistically significant differences compared to other respondents.

In examining in more detail the intentions of changing consumption by food, we note that the intentions to reduce consumption of the junk foods involve, once again, between 3 to 5 young people out of 10, depending on the product. The foods for which the largest number of young people intend to change their consumption are mostly those that they consume the most, being candies, salty snacks and fried foods.

Notably, nearly four young people in ten emphasized their intention to reduce their consumption of energy drinks and soft drinks.

The greater concern of girls in respect of their diet is well illustrated by the results. In fact, girls are significantly more likely than boys to intend to reduce their consumption of junk foods for nearly all foods.

In the same vein, there is a clear difference between secondary 1 and 3 students for all items of junk food. The intention to reduce consumption of junk food is much higher among young people of secondary 1.

Overall index of intention to change consumption

An index of intention to change consumption was also calculated by attributing a score for the responses associated with all junk food items and for all respondents. The average of these indices give the results on the overall intention to change consumption for all young people.

With an overall index of 40, the young people surveyed have a more moderate intention to change their junk food consumption. On the following page, a table shows the indices for each item.

REGIONS

The young people of the Greater Montreal Athletic Association are much more likely (from 12 % to 20 %) than elsewhere in Quebec to want to reduce their junk food consumption, for all products presented.

The young people of the Mauricie are less likely than those of other regions to want to reduce their junk food consumption, for 5 of 9 products presented: soft drinks, fruit flavoured drinks, energy drinks, vitaminized sweetened waters and sports drinks.

OVERALL INDEX OF INTENTION TO CHANGE TO CONSUMPTION FOR EACH JUNK FOOD ITEM

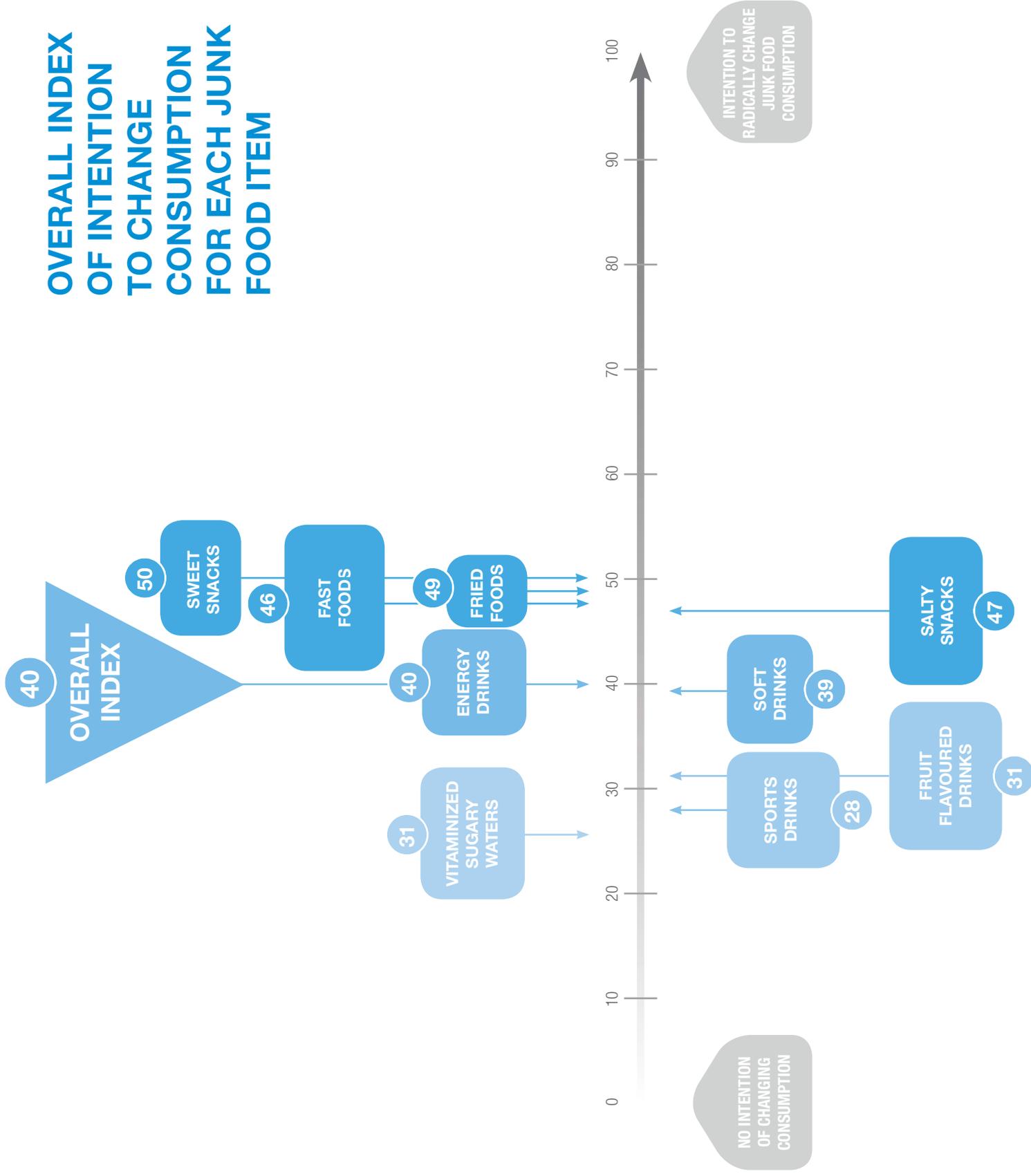


TABLE 5

PLACES WHERE JUNK FOOD ADVERTIZING IS VIEWED BY SEX AND GRADE LEVEL.

In your daily life, where do you see junk food advertized?	TOTAL	Sex		Grade level		
	% (n=9898)	% Girls (n=4573)	% Boys (n=4457)	% Sec.1 (n=3086)	% Sec.2 (n=2988)	% Sec.3 (n=3824)
On television	97	97,3	97	97	97	97,4
On outdoor billboards	80	82	79	77	80	82
In public places	74	78	71	72	74	77
On the internet	54	54	54	53	53	56
On the radio	36	37	34	37	36	35
In the newspaper	34	32	36	39	33	32
In magazines	34	36	32	37	32	33
At school	7	6	8	8	7	7
Others	26	22	30	31	25	22

3. PLACE MARKETING HAS IN DAILY LIFE

One of the objectives of the **I Get It?** project is to make young people aware of the place that marketing of junk food has in their daily lives. To do this, we asked young people two questions to check the level of their awareness of the place that advertising of junk food has in their environment²⁷.

Frequency and places where young people see junk food advertizing

Young people are aware of the major place that junk food advertizing occupies in their daily life, with nearly 8 young people out of 10 (78 %) reporting seeing it often (“quite often” or “very often”). Note that girls (80 %) and young people of Secondary 3 age (80 %) are more likely to recognize the pervasiveness of junk food in their environment.

Among young people, the most frequent place where they feel they are particularly exposed to junk food advertizing are unquestionably television, outdoor billboards and public places. This corresponds to the medias and places frequented a great deal by young people.

Table 5 shows that nearly all young people report seeing advertizing of junk food on television (97 %), that 80 % of them also noted this type of advertizing on outdoor billboards and that close to 3/4 of them have seen them in public places. These results are not surprising when considering that the mass medias, especially television, play a major role in exposing young people to food advertizing. In 2007, for example, Coca-Cola devoted no less than 777 million dollars to its advertizing budget²⁸.

These high percentages contrast with the less significant observation of junk food advertizing by only one third of young people on the radio, in the newspaper and

²⁷ The results presented in this section relate to questions 3 and 4 of the questionnaire.

²⁸ MONTGOMERY, K. C., et J. CHESTER (2009). « Interactive food and beverage marketing: targeting adolescents in the digital age, *Journal of Adolescent Health*, 45(3 Suppl): S18-29.

magazines. This is probably explained by the habits of today's young people, who much prefer television or the internet over these medias and who like to frequent public places (cinemas, arenas, etc.). In this regard, note that a higher number of young people in secondary 3 report seeing such advertizing on television, on outdoor billboards and in public places than young people in secondary 1.

Just over half of young people notice advertizing for junk food on the internet, while a Réseau éducation-médias survey conducted among 5200 Canadian young people found that 94 % of their preferred websites carry advertizing content²⁹. This finding may be due to the fact that 75 % of young people do not perceive the commercial nature of product centred games. However, those older are more aware. According to the Réseau éducation-médias, 31 % of secondary (grade 11) 5 students recognize the commercial nature of these sites, compared to 18 % in fourth grade³⁰.

On average, young people reported having seen junk food advertizing in 4.4 medias/place out of the nine choices presented.

REGIONS

Young people in the Cantons-de-l'Est, the Lanaudière and the Mauricie reported in greater numbers having seen junk food advertizing on outdoor billboards and in public places, while young people of the Côte-Nord are less likely to see advertizing in these same places.

Young people from the Est-du-Québec are less likely than elsewhere in Québec to see junk food advertizing, for 7 of 9 places presented: on the internet, at school, in the newspaper, magazines, on outdoor billboards, public places and others.

29 RÉSEAU ÉDUCATION-MÉDIAS (2005). "Jeunes Canadiens dans un monde branché – Phase II (JCMB II). Faits saillants (Young Canadians in a connected world – Phase II (JCMB II). Salient facts.). Online: http://www.media-awareness.ca/francais/recherche/JCMB/phasell/faits_saillants.cfm (consulted on October 25, 2011).

30 RÉSEAU ÉDUCATION-MÉDIAS (2005). "Jeunes Canadiens dans un monde branché – Phase II (JCMB II). Faits saillants (Young Canadians in a connected world – Phase II (JCMB II). Salient facts.). Online: http://www.media-awareness.ca/francais/recherche/JCMB/phasell/faits_saillants.cfm (consulted on October 25, 2011).

4. INFLUENCE OF MARKETING

Young people also remarked on the reasons that lead them to consume junk food and on the effects of advertizing that they recognize as affecting their behaviour³¹.

Reasons leading young people to consume junk food

Young Quebecers consume junk food primarily because "they like it" (79 %), it's "easy to find" (68 %) and it's "convenient and fast" (50 %). These results confirm those of other studies conducted among teens aged 11 to 18, which attribute the main motivations to consuming junk food to "tastes better" along with "easy and fast" and "practical"^{32, 33, 34, 35}. The authors also report that these motivations constitute two major barriers to a healthy diet.

In contrast, "want to be like others" (3 %) or "because the servings are larger" (12 %) do not seem to be motivations for young people to consume it. These reasons were also found in focus groups conducted in year 1 of the project with young Quebec teens³⁶. On the other hand, when asked "If young people of your age eat junk food, it's because...", young people are ten times more likely to say that young people of their age eat junk food "because they want to be like the others" (30 %) than to associate this motivation with their own behaviour. According to the IOM (Institute of Medicine of the National Academies)³⁷, the influence of peers on young people's eating behaviour remains inexact or uncertain.

Moreover, it is notable that boys are more likely than girls to agree with all the sources of motivation to consume junk

31 The results presented in this section relate to questions 2, 5 and 10 of the questionnaire.

32 SHEPHERD, J., et al. (2006). "Young people and healthy eating: a systematic review or research on barriers and facilitators", *Health Education Research*, 21 (2) : 239-257.

33 MCKINLEY, M. C., et al.(2005). "It's good to talk: children's view on food and nutrition", *European Journal of Clinical Nutrition*, 59 : 542-551.

34 CONTENTO, I. R, et al. (2006). "Understanding the food choice process of adolescents in the context of family and friends", *Journal of Adolescent Health*, 38: 575-582.

35 NSW CENTRE FOR PUBLIC HEALTH NUTRITION (2009). *Soft drinks (SD), Weight Status and Health: A review*, Sydney, University of Sydney, 56 p.

36 HOVINGTON, J. (2010). *Contre la malbouffe: des jeunes prêts à agir! Focus groups with 11-16 year olds Junk Food Denormalization Project*. Réseau du sport étudiant du Québec. [Online] http://il.rseq.ca/download/attachments/15958040/article_des_jeunes_prets_a_agir.pdf?version=1&modificationDate=1296749875370 (consulted on October 24, 2011).

37 Institute of Medicine of the National Academies (2006). *Food Marketing to Children and Youth: Threat or Opportunity?*, National Academy of Sciences. Committee on Food Marketing and the Diets of Children, Washington D.C., The National Academy Press, 536 p.

TABLE 6
REASONS FOR CONSUMPTION OF JUNK FOOD BY SEX AND GRADE LEVEL*

If you consume junk food, it's because...	TOTAL	Sex		Grade level		
	%	% Girls	% Boys	% Sec.1	% Sec.2	% Sec.3
...you like it	79	77	81	74	78	83
...it's easy to find, it's everywhere	68	66	70	61	67	73
...it's convenient and fast	50	50	50	37	50	60
...it doesn't cost much	35	33	38	27	34	43
...the servings are larger	12	7	16	11	11	13
...you want to be like others	3	2,5	4	4	3	2,7

* Note that four response options were offered to respondents: "Don't agree at all", "Don't really agree", "Somewhat agree", "Fully agree". To ease reading the table, only the results for the response choices "Somewhat agree" and "Fully agree" are presented.

foods. The tendency for girls to be more "pro-health" than boys perhaps partially explains these differences, as well as the fact that boys are more likely than girls to consume junk food. Finally, secondary 3 students are much more in agreement than secondary 1 students with 5 of the 6 statements proposed.

Recognition of the effects of junk food advertizing on behaviour

Generally speaking, close to 8 young people out of 10 (79 %) are of the opinion that junk food advertizing prompts young people to eat more of it³⁸. They seem to recognize this effect of marketing. Girls are much more likely (82 %) than boys (76 %) to believe in this direct link between advertizing and increased consumption of junk food.

However, when young people are asked about the effects of junk food advertizing on their own behaviour, some responses are puzzling. Table 7 shows that a little more than 4 young people in 10 report that junk food advertizing

"has no effect on them" while close to 80 % recognize that exposure to junk food advertizing prompts young people to eat more of it. A tendency can be seen here between to believe that the impact of advertizing of junk food on consumption applies to other young people while they believe themselves to be personally immune from this phenomenon.

Another interesting finding results from the fact that half of young people report that junk food advertizing "makes them want to taste it". A similar result was obtained in a study conducted in France, where 47 % of young people from 8 to 14 years old said that the advertizing that they see makes them want to eat or drink³⁹.

According to the percentages shown in this table, it appears that the behaviour of young people is moderately or slightly influenced by junk food advertizing, although the

39 INSTITUT NATIONAL DE PRÉVENTION ET D'ÉDUCATION POUR LA SANTÉ (ministère de la Santé, de la Jeunesse et des Sports) (2008). "Nutrition et obésité : Nouvelles mesures pour 2008 & Évaluation des messages accompagnant les publicités de l'industrie agro-alimentaire" (Nutrition and obesity – new measures for 2008 & Evaluation of messages accompanying advertizing for the agrifood industry), press kit, (Consulted on August 28, 2011) <http://www.inpes.sante.fr/70000/dp/08/dp080204.pdf>. In COALITION QUÉBÉCOISE SUR LA PROBLÉMATIQUE DU POIDS. Advertizing to children. Summary of knowledge and initiatives, last updated: September 2011, 28 p.

38 Question 10 reads as follows: "Do you think that junk food advertizing leads young people to eat more of it?" Three response choices were offered: "yes", "no", "I don't know".

TABLE 7

EFFECTS OF JUNK FOOD ADVERTIZING BY SEX AND GRADE LEVEL

When you see junk food advertized, what do you feel?	TOTAL	Sex		Grade level		
	% (n=9941)	% Girls (n=4583)	% Boys (n=4476)	% Sec.1 (n=3105)	% Sec.2 (n=3000)	% Sec.3 (n=3836)
You want to taste it	50	50	50	51	48	50
It doesn't have any effect on you	43	42	43	44	44	41
You want to eat it even if you're not hungry	26	28	24	21	25	30
You ask your parents to buy it	12	13	11	13	12	11
It produces other effects on you	9	8	9	10	9	8
You buy it	6	5	7	6	6	7
You choose this product over another	5	4	6	5	5	4

World Health Organization (WHO) and the IOM (Institute of Medicine of the National Academies) state that junk food advertizing has a strong persuasive power on young people^{40,41}. This apparent contradiction is likely explained by the fact that young people are not fully aware of the actual influence of advertizing on their behaviours related to diet. In addition, according to some authors⁴², young people would strongly resist the suggestion that they would be under the influence of what they see in the media, since it would force them to admit their weakness and vulnerability. In response to questionable marketing strategies, young people rather tend to reinterpret what has been transmitted, to distance themselves or discredit the content in order to assume their ambivalent position with regard to the tactics in question.

40 WORLD HEALTH ORGANIZATION (2009). Prevention and control of noncommunicable diseases: implementation of the global strategy, Geneva, World health Organization, Executive board, 126 Session, EB126/12, Nov. 26, 2009, 15 p.

41 INSTITUTE OF MEDECINE OF THE NATIONAL ACADEMIES (2006). Food marketing to Children and Youth : Threat or Opportunity?, National Academy of Science, Committee on Food Marketing and Diets of Children, Washington D.C., The National Academy Press, 536 p.

42 MCCOOL, J. P., L. D. CAMERON et K. P. PETRIE (2001). « Adolescent perceptions of smoking imagery in film. », Social Science and Medicine, 52 (10): 1577-1587. Dans DOREY, E., et J. MCCOOL (2009). « The Role of the Media in Influencing Children's Nutritional Perceptions » Qualitative Health Research, 19 (5) : 645-654.

REGIONS

It appears that the behaviours of young people in the Montérégie are more influenced by junk food advertizing. In fact, greater proportions of young people in this region report being influenced by advertizing for 4 of the 6 effects presented: wanting to taste it, wanting to eat it even if they are not hungry, asking their parents to buy it or buying it.

TABLE 8

RECOGNITION OF THE PRACTICES OF SWEETENED DRINK MANUFACTURERS BY SEX AND GRADE LEVEL

In your opinion, what are the tricks used by manufacturers to sell more sweetened drinks?	TOTAL	Sex		Grade level		
	% (n=9873)	% Girls (n=4571)	% Boys (n=4436)	% Sec.1 (n=3084)	% Sec.2 (n=2974)	% Sec.3 (n=3815)
Adding sugar to give flavour	75	75	75	74	75	76
Saying that it gives energy even if it is not true	59	62	57	62	61	56
Selling sweetened drinks at a lower price than other drinks	55	53	57	56	52	57
Adding caffeine to make them addictive	53	53	53	53	53	53
Increasing servings to increase consumption	38	36	41	41	37	37

5. INDUSTRY PRACTICES

The following section presents how young people are able to recognize the strategies out forward by the junk food industry to prompt them to consume their products⁴³. In other words, do they have a sharp critical view of the multiple strategies used by this industry?

Recognition of strategies used by the food industry

According to the literature, several practices are used by manufacturers to influence the eating behaviour of young people in order to generate loyalty to their products.

Hence, of the practices mentioned for selling sweetened drinks, 75 % of young people recognized that of “adding sugar to give taste”. Low price, adding an “addictive” substance such as caffeine and a false claim on the energy effect are strategies recognized by just over half of young people. This shows that a significant proportion of young people do not appear to be able to recognize several junk food marketing practices, especially those linked to increasing portions.

Opinion about sweetened drink manufacturers’ motivations

The vast majority of young people (from 84 % to 93 %) appear to understand that the search for profits, the presence of junk food in their environment and the composition of products without regards for health constitute the real intentions of sweetened drink manufacturers.

In parallel, they are less likely to believe that these manufacturers concern themselves about the health and welfare of young people. Just over half (56 %) also recognize the desire of manufacturers to preserve their good image.

These therefore suggest that most young people are not fooled by the motivations of sweetened drink manufacturers in their production and marketing practices.

Overall, girls are slightly more aware of the intentions of sweetened drink manufacturers than boys. Also, the older students are the more they recognize manufacturers’ intentions.

⁴³ The results presented in this section relate to questions 7 and 8 of the questionnaire.

TABLE 9

OPINION ABOUT SWEETENED DRINK MANUFACTURERS'
MOTIVATIONS BY SEX AND GRADE LEVEL*

Sweetened drink manufacturers...	TOTAL	Sex		Grade level		
	%	% Girls	% Boys	% Sec.1	% Sec.2	% Sec.3
...want to make a lot of money, regardless of the means used	93	94	92	91	94	95
...want to offer products to young people in the places they frequent	90	92	88	87	90	92
...add ingredients without really being concerned about the health effects	84	87	81	82	85	85
...want to give a good image of themselves	56	56	56	47	56	63
...especially want to please young people	31	32	30	32	30	31
...are concerned about the well-being of young people	10	9	11	11	10	9
...are concerned about the health of young people	5	4	5,4	5	5	4

* Note that four response options were offered to respondents: "Don't agree at all", "Don't really agree", "Somewhat agree", "Fully agree". To ease reading the table, only the results for the response choices "Somewhat agree" and "Fully agree" are presented.

TABLE 10

RECOGNITION OF OBESOGENIC FACTORS AND HEALTH
PROBLEMS BY SEX AND GRADE LEVEL

Factors that cause obesity or health problems	TOTAL	Sex		Grade level		
	% (n=9873)	% Girls (n=4561)	% Boys (n=4436)	% Sec.1 (n=3084)	% Sec.2 (n=2974)	% Sec.3 (n=3815)
Frequent consumption of fast food meals	89	92	87	87	89	91
Lack of physical activity	86	87	85	83	85	89
Frequent consumption of soft drinks and sweetened drinks	69	69	69	69	70	68
Influence of junk food marketing	42	45	40	44	42	41
Don't know	3	3	3	4	3	2

6. EFFECTS OF MARKETING JUNK FOOD ON HEALTH⁴⁴

Overall, young people clearly recognize the factors that cause obesity or health problems, such as frequent consumption of fast food meals or lack of physical activity. Girls are more likely than boys to recognize these factors as causes of obesity and health problems.

Studies show that young people generally understand the basic principles of healthy diet, such as moderation, variety and balance, despite their frequently lacking knowledge of nutrition and health⁴⁵. They also know how to distinguish between “healthy” and “unhealthy” foods, which they equate with junk foods^{46 - 51}.

The results of our survey show, on the other hand, that close to six out of ten (58 %) young people do not recognize the influence of marketing as one of the factors that may be associated with obesity.

Effects of energy drinks

Do young people have a good understanding of the actual effects of these drinks? The following presented six statements, three relating to the undesirable effects of energy drinks (difficulty sleeping, increasing fatigue after a certain period of time, increasing fat) and three others representing effects promised by marketing of these products (giving more energy, increasing physical performance, helping concentration).

44 The results presented in this section relate to questions 6 and 9 of the questionnaire.

45 CROLL, J. K., D. NEUMARK-STZAINER and M. STORY (2001). “Healthy eating : What does it mean to adolescents?”, *Journal of Nutrition Education*, 33 (4): 193-198.

46 TAYLOR, J. P., S. EVERS and M. McKenna (2005). “Les déterminants de la saine alimentation chez les enfants et les jeunes” (Determinants for healthy eating among children and young people), *Canadian Journal of Public Health*, 96(Supplement 3) : S23-S29.

47 MCKINLEY, M. C., et al. (2005). “It’s good to talk: children’s view on food and nutrition”, *European Journal of Clinical Nutrition*, 59 : 542–551.

48 WOODWARD, D. R., et al. (1996). “Adolescents’ Reported Usage of Selected Foods in Relation to Their Perceptions and Social Norms for Those Foods”, *Appetite*, 27:109–117.

49 FRENCH, S. A., et al. (2001). “Fast food restaurant use among adolescents: associations with nutrient intake, food choices and behavioral and psychosocial variables”, *International Journal of Obesity*, 25 : 1823–1833.

50 HARRISON, M., and L. A. Jackson (2009). “Meanings That Youth Associate with Healthy and Unhealthy Food”, *Canadian Journal of Dietetic Practice and Research*, 70: 6-12.

51 CROLL, J. K., D. NEUMARK-STZAINER and M. STORY (2001). “Healthy eating : What does it mean to adolescents?”, *Journal of Nutrition Education*, 33 (4): 193-198.

Among the promised effects, over half of young people (54 %) believe that energy drinks give energy. The stimulant effect of these drinks is due to their high caffeine content and when this effect fades it is followed by an increase in fatigue (also called the “rebound effect”)⁵², in addition to other potentially adverse effects on health depending on the dose of energy drinks consumed^{53, 54, 55}.

About one young person out of five (19 %) attribute an effect of increased physical performance to energy drinks. Hoffman (2010)⁵⁶ points out that the increase in physical performance and control of body fat are the main reasons for athletes consuming energy drinks; his study showed that these products are considered to be the most popular supplements by 41.7 % of elite athletes in England (average age 17). Yet it has not been proven that the caffeine in energy drinks effectively improves physical performance in the case of muscular exertion⁵⁷. This supposed effect is probably more sought after by young athletes than by young people in general represented by our sample. It can be supposed that they perceive energy drinks as a source of supplementary energy more for their daily activities in general than for a specific performance.

52 PION, Isabelle (2010). “Le café ne réveille pas” (Coffee doesn’t awaken), *La Tribune, Actualités*, July 28, 2010, p. 4.

53 PLAMONDON, L. (2011). “Les boissons énergisantes : entre menace et banalisation” (Energy drinks – between threat and trivialization), Montreal: Institut national de santé publique. [Online] http://www.inspq.qc.ca/pdf/publications/1311_BoissonsEnergisantes.pdf (consulted Oct. 14, 2011).

54 BLANCHET, R., A. BWENGE and J. N. Blanchet (2010). “Les boissons énergisantes et le sport. Énoncé de position (Energy and sports drinks – position statement), Association québécoise des médecins du sport. [Online] http://www.aqms.org/meganet/media/docs/doc/enonce_de_position_-_boissons_energisantes_mai_2011_.pdf (consulted 2011-10-14).

55 NANCY, D. (2009). “Doit-on s’inquiéter de la consommation de boissons énergisantes?” (Should we worry about energy drinks?), *Forum journal, Université de Montréal*. [Online] <http://www.nouvelles.umontreal.ca/recherche/capsule-science/doit-on-sinquieter-de-la-consommation-de-boissons-energisantes.html> (consulted 2011-10-14).

56 HOFFMAN, J. R (2010). “Caffeine and Energy Drinks”, *Strength & Conditioning Journal*, Feb. 2010 - volume 32- Issue 1- pp. 15-20. Online http://journals.lww.com/nsca-scj/Abstract/2010/02000/Caffeine_and_Energy_Drinks.2.aspx (consulted on October 18, 2011).

57 Passeportsanté.net. Caféine. Online: http://www.passeportsante.net/fr/Solutions/PlantesSupplements/Fiche.aspx?doc=cafe_ps (consulted on September 20, 2010).

TABLE 11

RECOGNITION OF ENERGY DRINKS' EFFECTS BY SEX AND GRADE LEVEL

In your opinion, what are the effects of energy drinks?	TOTAL	Sex		Grade level		
	% (n=9873)	% Girls (n=4561)	% Boys (n=4436)	% Sec.1 (n=3084)	% Sec.2 (n=2974)	% Sec.3 (n=3815)
Prevents sleep	72	72	72	73	72	71
Increases fatigue after a certain period of time	67	69	65	63	68	69
Gives energy	54	50	57	49	52	60
Increases fat	39	43	35	44	40	35
Increase physical performance	19	14	24	18	18	19
Helps concentration	7	5	10	6	6	9
Don't know	9	9,4	8	10	10	7

Boys, the first target of these drinks' industry, are significantly more likely to believe the messages sent by the industry's marketing regarding the effects of energy drinks.

In addition, more than two thirds of young people recognize the undesirable effects of energy drinks on their sleep and the subsequent energy deficit rebound. This is one of the most common complaints associated with energy drinks⁵⁸. The data was also divided into two groups, according to two types of respondents :

- a. those who selected only the three statements related to the undesirable effects of energy drinks.
- b. those who selected only the three statements related to the effects of energy drinks promised by the industry.

Only recognizing the undesirable effects suggests that the young person has a more accurate perception of what energy drinks are and is less taken in by their marketing. Conversely, recognizing only the promised effects suggests that the young persons has been "effectively" influenced by the industry's marketing strategies.

58 AGRICULTURE AND AGRIFOOD CANADA (2009). "State of the market: energy drinks in North America". Online: <http://www.ats.agr.gc.ca/info/5234-fra.htm> (consulted on September 20, 2010).

Just over one third of young people (36 %) recognize only the undesirable effects of energy drinks, boys (32 %) being always less likely than girls (41 %) to recognize these effects. As age increases, fewer young people recognize only the undesirable effects (32 % in sec. 3, compared to 40 % in sec. 1). 5 % of young people believe only the effects promised by marketing, boys (6 %) and sec 3. students (6 %) being significantly more likely.

REGIONS

Young people in the Est-du-Québec (39 %) and Québec-Chaudière-Appalaches (46 %) are more likely to recognize only the undesirable effects of energy drinks.

TABLE 12

ACTIVITIES TO REDUCE JUNK FOOD CONSUMPTION BY SEX AND GRADE LEVEL

In your opinion, what activities could reduce consumption of junk food by young people?	TOTAL	Sex		Grade level		
	% (n=9666)	% Girls (n=4491)	% Boys (n=4325)	% Sec.1 (n=3022)	% Sec.2 (n=2911)	% Sec.3 (n=3736)
Show all the ingredients in junk food products more clearly	62	64	61	64	62	61
Outlaw the sale of energy drinks to those under 18 years old	60	56	57	63	57	51
Offer better food products in convenience stores, at the cinema, etc.	60	64	56	60	61	59
Prohibit all advertizing of junk food to children and teens	48	47	49	49	48	47
Denounce marketing of junk food to young people through reporting or advertizing campaigns	45	44	46	45	47	43
Make attractive packaging for healthy foods	32	33	32	33	31	33
Tax soft drinks	28	25	33	29	29	27

7. OPINION OF YOUNG PEOPLE ABOUT ACTIVITIES FOR COUNTERING JUNK FOOD

What are the activities that young people would like to see taken up in society to restrict the influence of junk food marketing and to reduce consumption by young people? And finally, are they willing to become actively involved to counter junk food marketing?⁵⁹.

Activities to reduce junk food consumption

Among the actions proposed, clearer and more complete labelling of junk food products was selected by the largest number of young people (62 %). This suggests that a significant proportion of young people is likely to be favourable to the latest measures put forward by Health

59 The results presented in this section relate to questions 11 and 12 of the questionnaire.

REGIONS

Young people from the Greater Montreal Athletic Association (GMAA) stand out again. They are 42 % in favour of a tax on soft drinks, compared to 28 % of all young people in Quebec. Young people from the Cantons-de-l'Est (30 %) and the Outaouais (35 %) are significantly more likely to support this measure.

Canada⁶⁰ regarding requirements for the composition and marketing of energy drinks, which relate to limiting the caffeine content and displaying the complete nutritional content.

60 HEALTH CANADA. "Caffeine in energy drinks: information for parents", information document, 2011. Online: http://www.hc-sc.gc.ca/ahc-asc/media/nr-cp/_2011/2011-132-fra.php

TABLE 13

**INTEREST IN TAKING ACTION AGAINST JUNK FOOD
ADVERTIZING BY SEX AND GRADE LEVEL*.**

For each of the following statements, write the answer that you agree with	TOTAL	Sex		Grade level		
	% (n=9941)	% Girls (n=4583)	% Boys (n=4476)	% Sec.1 (n=3105)	% Sec.2 (n=3000)	% Sec.3 (n=3836)
You would like to propose activities against junk food (e.g., create an ad, write an article, take on a challenge or something else)	57	61	53	66	58	49
You would like to have the opportunity to show those who sell junk food that you do not agree with the way they do it (e.g., anti-junk food days in your school, petitions, etc.)	56	60	52	64	57	49
You are interested in knowing more about the means used by junk food companies to influence you to buy their products.	55	55	55	53	58	54
You intend to participate in activities against junk food if there are those that are being developed in your school (e.g., create an ad, write an article, take on a challenge or something else)	46	49	42	55	48	39
You intend to become involved in a committee that would create anti-junk food activities in your school.	32	34	30	40	33	24
You intend to speak about junk food and its marketing with your family or in Facebook exchanges with your friends.	29	30	29	34	28	27

* Note that three response options were offered to respondents: "yes", "a little" or "no". The table presents the results of responses for young people who responded "yes" or "a little" to each of the statements.

This is closely (60 %) followed by two other activities, providing access to a better offer of food in the places they frequent (convenience stores, cinema, etc.) and outlawing energy drinks for those under 18 years of age. According to several studies, young people perceive as a barrier to healthy diet the combination of ease of access to junk food^{61, 62} and the nonexistent or very limited access to healthy foods in the places they frequent – school (cafeteria, vending machines, canteens), cinemas, shopping centres, fast food restaurants, etc.⁶³ The tendency of young people to prefer the prohibition of energy drinks to minors is similar to that of the general population of Quebec which, at 89 %, desires this ban, according to a recent popular online survey⁶⁴. The Association québécoise des médecins du sport (Quebec Association of Sports Doctors) recommends banning the sale of this type of drink to those 14 years old and younger⁶⁵. A similar proposal from Health Canada would prohibit the sale to those under the age of 18⁶⁶.

Nearly half (from 45 % to 48 %) agree with actions explicitly denouncing and restricting marketing of junk food to young people, including advertizing.

It seems interesting to note the little interest on the part of young people (3 out of 10) in a strategy of marketing of healthy foods in attractive packaging to reduce their consumption of junk foods. In 2010, a consortium of carrot producers in the United States launched a marketing campaign imitating the tactics used by manufacturers of snack foods, including attractive packaging⁶⁷. This initiative could point to a tendency in healthy food marketing by the food industry sectors that produce it. On the other hand, this manner of promoting healthy eating may not be successful with young Quebecers, according to our data.

.....

61 SHEPHERD, J., et al. (2006). "Young people and healthy eating: a systematic review or research on barriers and facilitators", *Health Education Research*, 21 (2) : 239-257.

62 MCKINLEY, M. C., et al. (2005). "It's good to talk: children's view on food and nutrition", *European Journal of Clinical Nutrition*, 59 : 542-551.

63 SHEPHERD, J., et al. (2006). "Young people and healthy eating: a systematic review or research on barriers and facilitators", *Health Education Research*, 21 (2) : 239-257.

64 The Canoë question on Thursday, October 6, was: "Should we prohibit the sale of energy drinks to those under 18 years old?" Today, over 10,000 people answered "yes" at 89 %!

65 BLANCHET, R., A. BWENGE and J. N. Blanchet (2010). "Les boissons énergisantes et le sport. Énoncé de position (Energy and sports drinks – position statement), Association québécoise des médecins du sport. [Online] http://www.aqms.org/megamet/media/docs/doc/enonce_de_position_-_boissons_energisantes_mai_2011_.pdf (consulted Oct. 14, 2011).

66 HEALTH CANADA. "Caffeine in energy drinks: information for parents", information document, 2011. Online: http://www.hc-sc.gc.ca/ahc-asc/media/nr-cp/_2011/2011-132-fra.php

67 WIKIPEDIA. "Baby carrot". Online: http://en.wikipedia.org/wiki/Baby_carrot (consulted on October 31, 2011).

Finally, the least chosen activity is to tax soft drinks (less than three young people out of ten). However, this activity was proposed by the young people themselves during focus groups conducted by the RSEQ in 2010.

Involvement against junk food marketing

Overall, young people show a moderate interest in taking action. Half the respondents identify themselves slightly or not at all with the six statements, which indicates a rather mixed attitude towards any involvement in denormalization of junk food marketing. The young people identifying themselves clearly with the statements proposed represent the lower proportion compared to those expressing little or no interest or intention; this finding applies to each of the statements⁶⁸.

By grouping young people that show an interest in action (whether clear or ambiguous), it can be seen that there are major variations depending on whether the type of action calls for a role of participant or a role of an instigator. Review of Table 13 shows that close to 60 % of young people are interested in taking part in three of the six activities that lead to simply participating. In fact, young people are interested in knowing more about the junk food industry's strategies of manipulation and would like to participate in certain activities, such as having an anti-junk food day at school, creation of an advertisement, writing an article, etc. On the other hand, less than one third of them show an interest in taking the initiative in an action such as talking to their family and their Facebook friends or involving themselves on a committee.

Secondary 1 young people are clearly more likely than those in secondary 3 to want to take action, for five of the six activities proposed.

Finally, the average index of interest calculated for all respondents for all statements is 31 out of 100 (0 = not interested, 100 = very interested), which confirms the moderate interest of young people in taking action.

Recent data on junk food consumption by young people in Quebec, in particular soft drinks and energy drinks, are limited and those on their perceptions with regard to junk food marketing are practically nonexistent. The results of the survey undertaken as part of the **I Get It?** project support several conclusions from the literature, shedding new light on some more specific aspects of marketing, provoking reflection and allowing several courses of action to be proposed.

.....

68 Annex 5 presents the detailed table of results for each option (yes, a little, no) for all respondents.

1. PORTRAIT OF FOOD CONSUMPTION

Generally, young people are not concerned about health issues when it comes to their food choices. They seem to distinguish between “healthy” foods from junk foods but tend not to follow the recommendations for healthy diet.

Consumption of junk food

Overall, the results do not provide any real surprises about the consumption of junk food by young people, since our data are consistent with those found in the literature. Over 50 % of young people surveyed consume junk food every week. Among others, sweetened drinks are consumed regularly by many of them, with fruit flavoured drinks winning the prize with 61 %. Boys passed girls in several categories of product, and the greatest difference is in the consumption of soft drinks. This data confirms the relevance of targeting sweetened drinks as the first junk food product category in **I Get It?**.

Consumption of “healthy” foods

In regard to the consumption of fruits and vegetables, results of the survey report that only about half of young people consume them every day or nearly every day, without specifying the daily amount. Although the majority of young people say they drink water every day, 5 % of them say they only consume it once or twice a week, which is far less than the recommended frequency, or even that essential to the body. This data reminds us that while consumption of

sweetened drinks (energy, soft or sports drinks) tends to normalize, water tends to lose its popularity as the main source of hydration, particularly in sports. In aiming to denormalize sweetened drinks while returning water to its place of honour, **I Get It?** can take action on this tendency.

Intentions to change

Young people are aware that they should improve their diet, since around 50 % of them (and even more for girls and for younger ages) say that they intend to reduce their consumption of various types of junk food in the next few months. On the other hand, this proportion decreases when it comes to sweetened drinks. Could this finding be related to some confusion among young people about the real fruit content of fruit flavoured drinks, such as Fruitopia, and to the lack of knowledge about the amount of sugar contained in all soft drinks (for sports, soft, energy drinks)?

2. MARKETING AND ITS POWER

Marketing practices

In analyzing the results of this survey according to the 4 P’s of marketing (product, price, publicity and promotion), it is clear that the level that young people are aware of marketing practices developed by the industry is limited to a few of them out of the existing array of practices.

As expected, our results show that television advertizing is seen by the majority of young people, followed by those presented in public places and on outdoor billboards. However, young people do not seem able to recognize all the strategies used as means to influence their food choices, since nearly half of young people did not recognize strategies such as promotion on the internet, the low price of the product, adding an “addictive” substance such as caffeine, a false claim on the energy effect of a product and, for almost two thirds of young people, increasing serving size.

If we take the case of energy drinks, we find that 54 % of respondents assumed that they give energy, while in fact these drinks were not designed for sports. Their intense marketing, logos and colours refer to energy and power, while sports sponsorships – events and famous athletes – have shaped the minds of consumers, especially young people, which has contributed to the growing popularity and consumption of these products. Also, the association of energy drinks with physical performance and control of body fat among athletes as well as their use as a supplement shows how powerful the marketing is⁶⁹.

.....
69 HOFFMAN, J. R. (2010). “Caffeine and Energy Drinks”, *Strength & Conditioning Journal*, Feb. 2010. vol. 32, issue 1, pp 15-20. Online http://journals.lww.com/nsca-scj/Abstract/2010/02000/Caffeine_and_Energy_Drinks.2.aspx (consulted on October 18, 2011).

Also, numerous studies show that price constitutes the second most important factor for young people in choosing a food, according to the food preferences^{70, 71, 72}. For this reason, it can be said that low prices constitute a major marketing strategy for producers of junk food and sweetened drinks.

The literature also points out that the tactic of increasing product sizes appeals to many unconscious aspects of perception, which could explain the ignorance of many young people in this regard. Hence, few consumers of large sizes realize or admit that they consume 20 % to 50 % more product in such containers. In addition, the more large sizes are on the market the more they become the norm.

Furthermore, only 54 % of young people in our survey see advertizing on the internet, while the literature shows clearly how the internet is a place of choice for promotion and advertizing placement, since it permits reaching an impressive number of young people. For example, Coca-Cola had 9 million Facebook fans in August 2010 and close to 18 million by mid-November 2010 ! Young people themselves become promoters of drinks by inviting their friends to participate in contests, receive virtual gifts, etc., which contributes to increased publicity for the brand without costing the manufacture a cent. Marketing on the internet also includes the creation of events surrounding the product, philanthropy, distribution of videos by YouTube, etc. In addition, the impact of advertizing on the internet is immense while the costs of investment are less than for traditional media such as television⁷³. In this context, actions favouring the use of the internet, such as the **I Get It?** www.newdrive.ca website, should enable reaching more young people, as evidenced by the results of the [Newdrive.ca](http://www.newdrive.ca) contest⁷⁴.

Finally, note that the questionnaire given to young people did not include an exhaustive or detailed list of all the marketing practices used by the industry, to ease the evaluation process. The survey's results reveal however, in a substantial proportion of young people, a misunderstanding of the range of tactics used to get them to regularly consume junk food products. Regular consumption of junk food, recognized by a significant proportion of young people, reflects the influence that this multiplicity of strategies has on them.

Impacts of marketing on diet behaviour

The results of this survey confirm those found in the literature, that young people consume junk food because they prefer it, that they have easy access to it and that it is fast and practical. According to the literature, food preferences represent the most important factor in food consumption and food choices both with children and teens^{75, 76, 77}. The price and availability follow in second place as the most influential factors. Even more, preferences depend greatly on the exposure and familiarity with a food, hence the direct and major impact of junk food marketing on consumption by young people. For example, the omnipresence of promoting these products and their wide availability in the immediate environment of young people greatly promote this exposure. The addition of large amounts of fats, sugar and salt would also stimulate preference for junk food, by favouring a dependence on the product^{78, 79}, to the detriment of healthy foods.

The literature clearly shows that seeing attractive advertizing stimulates the consumer to buy the product. In this sense, our survey shows that 50 % of young people want to taste a junk food when they see it in an advertisement. A nice package, a song or a slogan running through the head, a logo which brands – all these strategies attract and affect the consumer's desire for one product over another. According to certain studies, television advertizing triggers

70 TAYLOR, J. P., S. EVERS and M. McKenna (2005). "Les déterminants de la saine alimentation chez les enfants et les jeunes" (Determinants for healthy eating among children and young people), Canadian Journal of Public Health, 96(Supplement 3) : S23-S29.

71 SHEPHERD, J., et al. (2006). "Young people and healthy eating: a systematic review or research on barriers and facilitators", Health Education Research, 21 (2) : 239-257.

72 INSTITUTE OF MEDICINE OF THE NATIONAL ACADEMIES (2006). Food Marketing to Children and Youth: Threat or Opportunity?, National Academy of Science, Committee on Food Marketing and Diets of Children, Washington D.C., The National Academy Press, 536 p.

73 For more information, see the supplementary sheets presented in the Teacher's Tab of the website www.newdrive.ca

74 RSEQ. "I GET IT? Evaluation report 1", January 2012. Online: www.rseq.ca

75 TAYLOR, J. P., S. EVERS and M. McKenna (2005). "Les déterminants de la saine alimentation chez les enfants et les jeunes" (Determinants for healthy eating among children and young people), Canadian Journal of Public Health, 96(Supplement 3) : S23-S29.

76 SHEPHERD, J., et al.(2006). "Young people and healthy eating: a systematic review or research on barriers and facilitators", Health Education Research, 21 (2) : 239-257.

77 MCKINLEY, M. C., et al. (2005). "It's good to talk: children's view on food and nutrition", European Journal of Clinical Nutrition, 59 : 542-551..

78 For information, see the supplementary sheets presented in the Teacher's Tab of the website www.newdrive.ca

79 LAYTON, L. (2009). "Crave Man – David Kessler Knew That Some Foods Are Hard to Resist; Now He Knows Why", Washington Post, Monday, April 27, 2009. Online: <http://www.washingtonpost.com/wp-dyn/content/article/2009/04/26/AR2009042602711.html>

an automatic response in food consumption, which is beyond the control and consciousness of the individual and leads him to eat more of the foods advertized^{80, 81}. But when one considers that in Quebec nearly 75 % of advertizing messages from the food industry are promoting food that has too much fat, too much sugar or too much salt, the connection can easily be made between this fact and the data relating to obesity and early development of chronic diseases⁸². Thus, the World Health Organization and other experts do not hesitate to describe as irresponsible the marketing practices of the junk food industry.

Awareness of the effect of marketing on their behaviour

It is interesting to note that 80 % of young people in this survey said they are aware of the effects of marketing on their generation and seem to understand the motivations of producers, which are not necessarily benevolent towards them. However, over 40 % consider themselves to be immune to these effects and do not feel personally concerned.

According to some author⁸³, young people refuse to see themselves as manipulated; conceding that they are influenced by advertizing is to admit their weakness and vulnerability. Yet they can hardly escape this influence. According to Pechman⁸⁴, changes experienced by the brain during adolescence render young people vulnerable to certain influences, including those of marketing based on brand image and risky behaviours, to which they are particularly sensitive due to their propensity for impulsiveness and insecurity.

In addition to their vulnerability, adolescents represent a gold mine for the industry and a prime target for food marketing.

80 HARRIS, J., et al. (2009). "A Crisis in the Marketplace: How Food Marketing Contributes to Childhood Obesity and What Can Be Done", *Annual Review of Public Health*, 30: 211-25..

81 HARRIS, J. L., J. A. BARGH and K. D. Brownell (2009). "Priming Effects of Television Food Advertising on Eating Behavior", *Health Psychology*, 28 (4) : 404-413.

82 COALITION QUÉBÉCOISE SUR LA PROBLÉMATIQUE DU POIDS. "Problématique du poids, maladies chroniques et finances publiques" (The problem of weight, chronic diseases and public finances), Montréal, Québec. (unpublished document)

83 MCCOOL, J. P., L. D. CAMERON and K. P. PETRIE (2001). "Adolescent perceptions of smoking imagery in film.", *Social Science and Medicine*, 52 (10): 1577-1587. Dans DOREY, E., and J. MCCOOL (2009). "The Role of the Media in Influencing Children's Nutritional Perceptions" *Qualitative Health Research*, 19 (5) : 645-654.

84 PECHMAN, L., et al. (2005). Impulsive and Self-conscious: Adolescent's Vulnerability to Advertising and Promotion. *American Marketing Association*, 24 (2) : 202-221.

Their growing purchasing power, their ease of adopting new media technologies, their interest in buying and social interaction through the internet quickly makes them loyal and ready to "sell" the brand to those around them⁸⁵. These authors suggest that producers' strategies have become so sophisticated that counting on the cognitive maturity of adolescents to defend against this type of marketing has serious limitations.

In this context, actions to raise awareness and educate young people on industry practices, such as those favoured in **I Get It?**, thereby appealing to their intelligence and ability to think critically about these practices, are relevant. Moreover, they should be supported by measures to regulate marketing to young people so as to achieve greater impact.

Impacts of marketing on consumption of energy drinks

In this survey, regular consumption (every day, 3 or 4 times a week, 1 or 2 times a week) of energy drinks among 7 % of young people seems at first glance quite low when compared to that of other studies. We can consider this data as an alarm signal indicating that there is still time to act before the reality such as that experienced in other countries catches up with us. We can also attribute this data to the fact that our questionnaire targeted young people of secondary 1 to 3, while these products seem more popular among older teens and with athletes.

In this context, it would be interesting to explore the field of energy drinks further, by questioning athletes, for example, on the reasons for consuming them, their expectations for practicing sports, etc. Recall that this questionnaire covered junk food overall, since at the time when it was created it was expected that Phase 2 of **I Get It?** would target marketing of a new category of products not then determined while in fact sweetened drinks remained the target product.

Nevertheless, consumption of energy drinks will increase significantly unless action is taken, given the increase in actions taken by the industry to promote energy drinks and the results achieved in terms of sales. In this sense, Agriculture Canada confirms the explosive growth in energy drink sales. The market grew from 200 million dollars in 2002 to one billion US dollars in 2007, although some reports set

85 MONTGOMERY, K. C., and J. CHESTER (2009). "Interactive food and beverage marketing: targeting adolescents in the digital age, *Journal of Adolescent Health*, 45(3 Suppl): S18-29.

the size of the market at two or three billion US dollars. This growth concerns, among others, young consumers over 14 years old.

This market targets youth in particular (teens and young adults), and expands to reach an even younger clientele, with growth in versions of popular energy drinks for children⁸⁶.

3. ACTIONS PROPOSED BY YOUNG PEOPLE TO COUNTER JUNK FOOD

A significant proportion of young people (45 % to 60 %) appear to be open to actions by the government to regulate the industry (mandatory national labelling, prohibition of sales of energy drinks to minors, prohibitions of advertising junk food), as well as the principle of publicly denouncing the marketing of junk food to young people. The prohibition of selling energy drinks to minors is interesting, since it was targeted by 60 % of respondents, themselves minors. It thus supports the statement of statement by the Association québécoise des médecins du sport (Quebec Association of Sports Doctors), which recommends banning the sale of this type of drink to those 14 years old and younger⁸⁷. Although the proposal of a tax on soft drinks was not very popular with young people in this survey, a tax on junk food products had been proposed as an anti-junk food action by young people in focus groups conducted by the RSEQ⁸⁸. In addition, 77 % of Quebec's population are favourable to a tax on soft drinks and energy drinks, according to a survey commissioned by the Coalition québécoise sur la problématique du poids (Quebec Coalition on Weight Related problems⁸⁹, which advocates for such a law.

As to involving themselves in actions to counter junk food, young people seem more inclined to do so as participants in opportunities available in their environment than as instigators of these actions. On the other hand, young people in secondary 1 are more motivated to act, compared to those of other grade levels. We could attribute this finding to the fact that young people newly arrived in high school

86 Source: <http://www.ats.agr.gc.ca/info/4387-fra.htm> (January 2008)

87 ASSOCIATION QUÉBÉCOISE DES MÉDECINS DU SPORT. "Énoncé de position : La vente de boissons énergisantes et le sport" (Energy and sports drinks – position statement), 2010 Online: <http://www.aqms.org/position-aqms.html>

88 RSEQ. "Contre la malbouffe: des jeunes prêts à agir!", 2010. Online: www.rseq.ca

89 COALITION SUR LA PROBLÉMATIQUE DU POIDS. "Taxer les boissons gazeuses et énergisantes. Un consensus existe." (Taxing soft and energy drinks – a consensus exists), May 2010. Online: <http://www.cqpp.qc.ca/fr/priorites/taxe-boissons-gazeuses-et-energisantes>

have retained the energy and dynamism of elementary school pupils and that they have not yet had the opportunity to be exposed to the influence of those older and to the range of fast food restaurants present around schools.

COURSES OF ACTION

Based on the findings of this survey, we found different avenues that, in our opinion, should be followed, reinforced or initiated, to contribute to transforming the junk food promoting environment that currently predominates in favour of an environment favourable to healthy diet.

Here are several ideas to this effect :

- ↘ Pursue interventions to raise awareness, educate and develop critical thinking with regard to the marketing of junk food and sweetened drinks.

 - Raise awareness among young people to the fact that despite their intentions to change their consumption, the omnipresence and multiplicity of forms of marketing junk food in their daily environment makes the task of taking care of their diet difficult.
 - Raise awareness among young people of two particular aspects of marketing of sweetened drinks : 1) deceptive messages and particularly those relating to fruit flavoured drinks (with sugar in large quantities and without fruit), since according to our survey, 61 % consume them regularly; 2) the increase in sizes, since 62 % do not recognize this tactic.
- ↘ Continue to integrate with the primary messages of denormalization of sweetened drinks a secondary message reinforcing the benefits of water as a fuel, especially in sports.
- ↘ Focus more on young athletes, who have beliefs and expectations specific to energy drinks, as well as their trainers.
- ↘ Target young people at the end of elementary school and continue interventions to the end of high school.
- ↘ Explore the phenomenon of immunity felt by young people in relation to the influence of marketing on them.
- ↘ Identify ways to unsettle this perception of immunity that young people have.
- ↘ Explore the question of peer influence and the perception of the norm on diet behaviour (e.g., all young people prefer junk food).

↳ Take action on environmental factor which teens are subjected to :

- Help to promote implementation of government measures that will regulate marketing practices by :
 - × regulating marketing of soft drinks and energy drinks;
 - × imposing a tax on junk food products such as sweetened drinks;
 - × prohibiting sales of certain products to minors, energy drinks in particular;
 - × requiring all the ingredients to be shown on junk food packaging.
- Contribute to changing standards with regard to marketing of junk food at the community level, by a major media counter-marketing campaign (television, internet).

Denormalizing the junk food industry promotion marketing practices requires the synergy of counter-marketing activities (counter-advertising, public relations, advocacy) and regulation (laws, policies and regulations). This work has already begun by Health Canada, which has put in place the first measures to regulate the sale of energy drinks to minors and displaying ingredients on the packaging, as well as by the Coalition québécoise sur la problématique sur le poids who is advocating a levy on sweetened drinks.

The RSEQ has also joined the initiative of the Coalition québécoise sur la problématique du poids by serving on its scientific committee on sweetened drinks and by collaborating with preparing a brief submitted to the Ministry of Finance as part of 2011-2012 pre-budget consultation⁹⁰. It has, moreover, joined with other organizations to support the Coalition sur la problématique du poids with the official presentation of a letter to the Premier of Quebec⁹¹, proposing creation of a levy on soft drinks and energy drinks, in order to improve the food provided at schools.

.....

90 COALITION QUÉBÉCOISE SUR LA PROBLÉMATIQUE DU POIDS. Creating wealth to invest in the future, memorandum produce as part of 2011-2012 pre-budget consultations, January 2011. Online: http://www.cqpp.qc.ca/documents/file/2011/Memoire_Consultations-prebudgetaires_2011-2012.pdf

91 Letter addressed to Premier Charest by the Coalition québécois sur la problématique du poids and its partners, on August 31, 2011. Online: http://www.cqpp.qc.ca/documents/file/2011/Lettre-au-premier-ministre_Taxe-Hongrie_2011-08-31.pdf

CONCLUSION

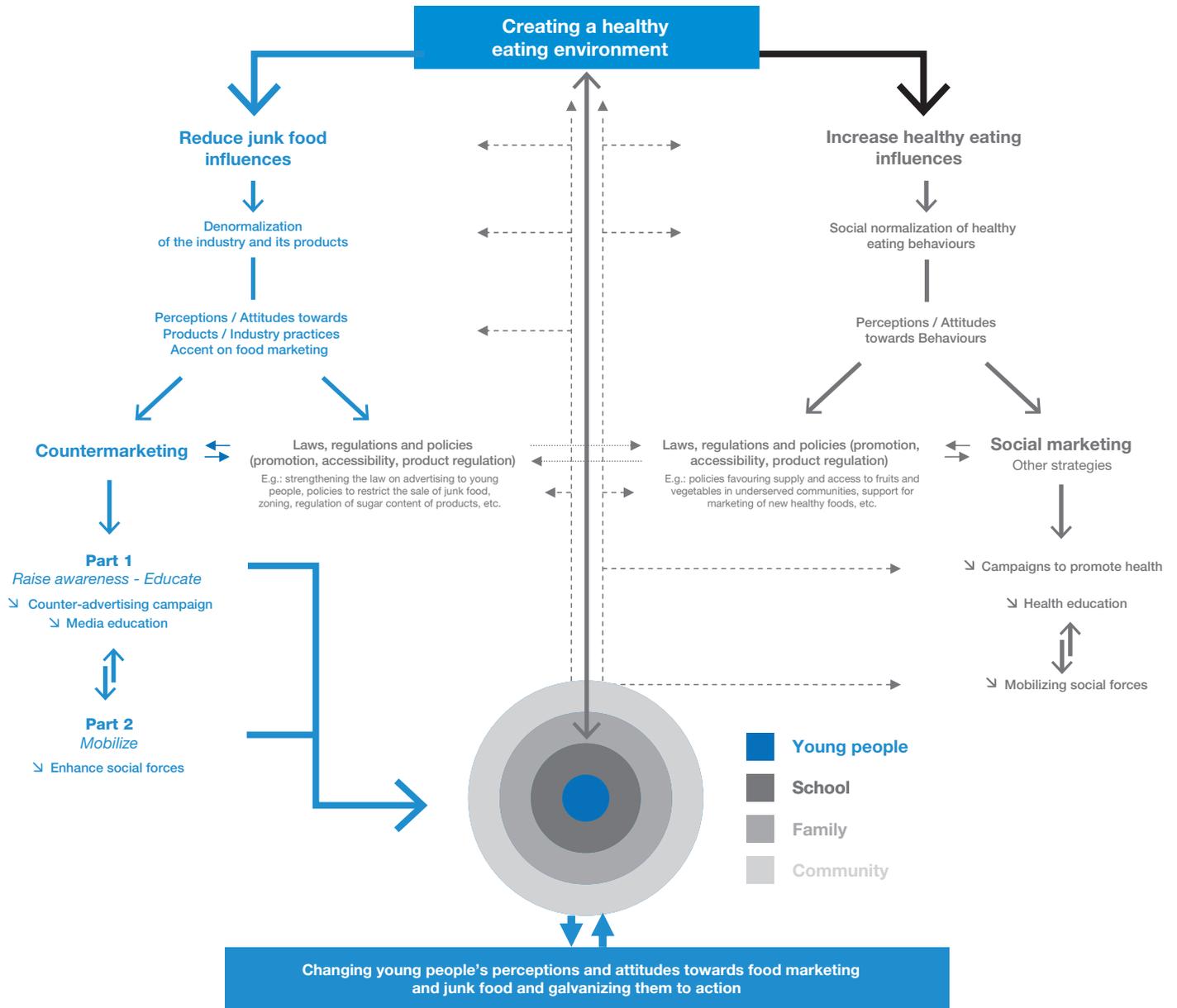
The results of this survey show clearly that although combating producers' junk food marketing is a challenge, there is an urgency for action and much work remains to be done. The literature clearly indicates that the denormalization of junk food, including energy drinks and soft drinks, is a desirable and promising avenue which can however only be done through the synergy of several complementary actions involving several bodies.

I Get It? contributes to this, by seeking a change in social norms with regard to junk food marketing and, more than junk food and more specifically, a change in the perceptions, opinions and attitudes towards it by young people. It also constitutes one of the actions for denormalization that form part of the range of actions required to achieve a change in diet behaviour of young people with regard to junk food. Given that the environment in which an individual develops greatly influences their behaviours and perceptions, government laws and policies combined with interventions in education and counter-marketing should prove to be effective.



ANNEX 1

CREATING A HEALTHY FOOD ENVIRONMENT



ANNEX 2

QUESTIONNAIRE

JUNK FOOD, SWEETENED AND ENERGY DRINKS:
CONSUMPTION AND OPINIONS OF QUEBEC YOUNG PEOPLE IN SECONDARY LEVELS 1 TO 3

The following questions will help us to know what you eat in general
and what you know about junk food.

Here are some examples of junk food :
Fast food meals such as McDonald's, Harvey's, KFC, Pizza Hut, etc.
Soft drinks such as Coke, Pepsi, etc.
Sweetened drinks such as Fruitopia, Fruit Punch, etc.
Energy drinks such as Red Bull, Monster, Guru, etc.
Snacks such as chocolate, candies, chips, etc.

What grade level are you?

- Secondary 1
- Secondary 2
- Secondary 3

Are you a boy or a girl?

- a girl
- a boy

What is the name of your school?

In which month are you completing this questionnaire?

- november
- december
- january

Question 1. "Do you eat or drink..."	Every day or nearly every day	3 or 4 times per week	1 or 2 times per week	Rarely	Never
Soft drinks					
Fruit flavoured drinks (e.g., Fruitopia)					
Energy drinks (e.g., Red Bull, Monster, Guru, etc.)					
Water, bottled or tap					
Vitaminized sugary waters					
Sports drinks (e.g., Gatorade, Powerade, etc.)					
Fried foods (e.g., fries, fried chicken, etc.)					
Sweet snacks (e.g., candies, chocolate, cupcakes, etc.)					
Salty snacks (e.g., chips, pretzels, nachos, etc.)					
Fast food meals (e.g., McDonald's, Pizza Hut, etc.)					
Fresh fruits					
Vegetables					

Question 2. If you consume junk food, it's because...

	Don't agree at all	Don't agree very much	Tend to agree	Agree fully
It's convenient and fast				
It doesn't cost much				
You like it				
It's easy to find, it's everywhere				
You want to be like the others				
The servings are larger				

Question 3. In your daily life, you see junk food advertized...

- Rarely
- From time to time
- Quite often
- Very often

Question 4. In your daily life, where do you see junk food advertized?

(You may check one or more answers)

- On television
- On the radio
- On the internet
- At school
- In the newspaper
- In magazines
- On outdoor billboards
- In public places
- Others

Question 5. When you see junk food advertized, what do you feel?

(You may check one or more answers)

- You choose this product rather than another
- You want to eat it even if you're not hungry
- You buy it
- You ask your parents to buy it
- You want to taste it
- You don't feel any of these effects
- It produces other effects on you

Question 6. In your opinion, which of the following factors can cause obesity or health problems?

(You may check one or more answers)

- Frequent consumption of soft drinks and sweetened drinks
- Frequent consumption of fast food meals
- Lack of physical activity
- The influence of marketing of junk food (e.g., advertizing, packaging, low prices, etc.)
- You don't know

Question 8. "Sweetened drink manufacturers..."	Don't agree at all	Don't agree very much	Tend to agree	Agree fully	I don't know
Especially want to please young people					
Are concerned about the health of young people					
Are concerned about the well-being of young people (e.g., energy, happiness, etc.)					
Want to offer products to young people in the places they frequent (e.g., cinema counter, arena, convenience stores, etc.)					
Want to make a lot of money, regardless of the means used					
Add ingredients without really being concerned about the health effects					

Question 7. In your opinion, what are the tricks used by manufacturers to sell more sweetened drinks?

(You may check one or more answers)

- Adding caffeine to make them addictive
- Adding a lot of sugar to give flavour
- Saying that it gives energy even if it is not true
- Selling sweetened drinks at a lower price than other drinks
- Increasing servings to increase consumption
- You don't know

Question 9. In your opinion, what are the effects of energy drinks? (eg. Red Bull, Guru, Monster...)?

(You may check one or more answers)

- Gives energy
- Prevents sleep
- Helps concentration
- Increases fat
- Increase physical performance
- Increases fatigue after a certain period of time
- You don't know

Question 10. Do you think that junk food advertizing leads young people to eat more of it?

- Yes
- No
- You don't know

Question 11. In your opinion, what activities could reduce consumption of junk food by young people?

(You may check one or more answers)

- Prohibit all advertizing of junk food to children and teens
- Tax soft drinks
- Outlaw the sale of energy drinks to those under 18 years old
- Offer better food products in convenience stores, at the cinema, etc.
- Show all the ingredients in junk food products more clearly
- Make attractive packaging for healthy foods
- Denounce marketing of junk food to young people through reporting or advertizing campaigns

Question 12.

For each of the following statements, write the answer that you agree with

	Yes	A little	No
You would like to propose activities against junk food (e.g., create an ad, write an article, take on a challenge or something else)			
You are interested in knowing more about the means used by junk food companies to influence you to buy their products.			
You would like to have the opportunity to show those who sell junk food that you do not agree with the way they do it (e.g., anti-junk food days in your school, petitions, etc.)			
You intend to participate in activities against junk food if there are those that are being developed in your school (e.g., create an ad, write an article, take on a challenge or something else)			
You intend to speak about junk food and its marketing with your family or in Facebook exchanges with your friends.			
You intend to become involved in a committee that would create anti-junk food activities in your school.			

Question 13. Do you intend to change your consumption of junk food in the next few months?

(You may check one or more answers)

- Yes, you would like to eat less often
- Yes, you would like to eat in smaller quantities
- No, you are happy with your consumption
- You do not eat junk food
- You haven't thought about it

Question 14. In the next few months, do you intend to consume...	Much less	Less	The same quantity as now	More	Much more
Soft drinks					
Fruit flavoured drinks (e.g., Fruitopia)					
Energy drinks (e.g., Red Bull, Monster, Guru, etc.)					
Water, bottled or tap					
Vitaminized sugary waters					
Sports drinks (e.g., Gatorade, Powerade, etc.)					
Fried foods (e.g., fries, fried chicken, etc.)					
Sweet snacks (e.g., candies, chocolate, cupcakes, etc.)					
Salty snacks (e.g., chips, pretzels, nachos, etc.)					
Fast food meals (e.g., McDonald's, Pizza Hut, etc.)					
Fresh fruits					
Vegetables					

ANNEX 3

DETAILED FREQUENCY OF CONSUMPTION OF JUNK FOOD

Do you eat...	Every day or nearly every day %	3 or 4 times per week %	1 or 2 times per week %	Rarely %	Never %
Sweet snacks (e.g., candies, chocolate, cupcakes, etc.)	10	25	41	23	1
Fruit flavoured drinks (e.g., Fruitopia)	18	20	23	32	7
Salty snacks (e.g., chips, pretzels, nachos, etc.)	5	17	42	33	3
Fried foods (e.g., fries, fried chicken, etc.)	2	8	41	47	1
Soft drinks	7	11	26	44	11
Fast food meals (e.g., McDonald, Pizza Hut, etc.)	2	3	24	67	5
Sports drinks (e.g., Gatorade, Powerade, etc.)	3	7	18	56	16
Fresh fruits	47	32	15	6	1
Vitaminized sugary waters	2	4	9	42	43
Vegetables	55	26	12	6	2
Energy drinks (e.g., Red Bull, Monster, Guru, etc.)	1	1	5	28	65
Water, bottled or tap	80	11	5	3	1

ANNEX 4

DETAILED LEVEL OF INTENTION TO CHANGE CONSUMPTION

In the next few months, do you intend to consume...	Much less %	Less %	The same quantity as now %	More %	Much more %
Fresh fruits	2	2	33	34	30
Vegetables	3	2	37	31	29
Water, bottled or tap	2	2	42	26	29
Sweet snacks (e.g., candies, chocolate, cupcakes, etc.)	14	36	45	2	2
Fried foods (e.g., fries, fried chicken, etc.)	15	34	48	2	2
Salty snacks (e.g., chips, pretzels, nachos, etc.)	13	33	50	2	2
Fast food meals (e.g., McDonald's, Pizza Hut, etc.)	18	28	52	2	2
Energy drinks (e.g., Red Bull, Monster, Guru, etc.)	31	9	57	2	2
Soft drinks	17	22	60	1	1
Vitaminized sugary waters	17	14	60	7	3
Fruit flavoured drinks (e.g., Fruitopia)	10	20	64	4	2
Sports drinks (e.g., Gatorade, Powerade, etc.)	12	15	64	6	3

ANNEX 5

INTEREST IN TAKING ACTION AGAINST JUNK FOOD MARKETING

For each of the following statements, write the answer that you agree with	Interest in taking action		
	YES	A LITTLE	NO
You are interested in knowing more about the means used by junk food companies to influence you to buy their products.	26 %	29 %	42 %
You would like to have the opportunity to show those who sell junk food that you do not agree with the way they do it (e.g., anti-junk food days in your school, petitions, etc.)	24 %	32 %	41 %
You would like to propose activities against junk food (e.g., create an ad, write an article, take on a challenge or something else)	18 %	39 %	41 %
You intend to participate in activities against junk food if there are those that are being developed in your school (e.g., create an ad, write an article, take on a challenge or something else)	14 %	32 %	52 %
You intend to speak about junk food and its marketing with your family or in Facebook exchanges with your friends.	8 %	21 %	68 %
You intend to become involved in a committee that would create anti-junk food activities in your school.	8 %	24 %	66 %

