







QUESTIONS AND ANSWERS ABOUT THE CHILEAN FOOD ACT



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Food and Agriculture Organization of the United Nations

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Acknowledgements

This document was drafted by the Food and Agriculture Organization of the United Nations (FAO) and the Pan American Health Organization/World Health Organization (PAHO/WHO) in order to share insights from the Chilean experience acquired during the process of passing Law N° 20.606 on the Nutrition Composition of Food and Advertising with members of parliament and decision makers from other countries in the Region of the Americas. This process also covers the drafting of the bill, plus its implementation and oversight, which can be applied to other similar public policy instruments aiming to benefit public health.

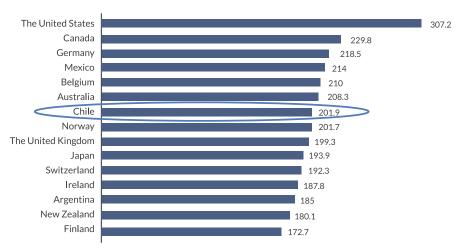
We sincerely appreciate all the support and information we received from the various actors and sectors who were involved in this process, to wit: the Chilean Congress, academia, the private sector, civil society and the Government of Chile.

1. What is the nutritional and food situation in Chile today?

In recent decades, Chile has undergone significant changes in its population's eating habits. According to Figure 1, in 2013 Chile was ranked second among Latin American countries in the sale of ultra-processed food and beverages per capita¹. The high level of consumption of these products is associated with Chile's low level of compliance with established dietary (nutrition and food) guides. In 2010, 14% of the Chilean population followed three or more recommendations on the national food and nutrition guidelines, and only 5% stated that they followed the guidelines and have a healthy diet². Socioeconomic level and education level determine what is eaten at home, with healthier diets in the highest income quintiles and groups with higher education levels.

A study based on the National Survey on Diet² revealed that more income is spent on meat, bread and grains, produce, dairy products, cheese and eggs, while less income is spent on legumes, fish and oils³. Even though Chile is a major producer of fish and shellfish, on average only 3% of households' total monthly budget in the first income quintiles is spent on these products. This percentage is higher in the upper quintiles³.

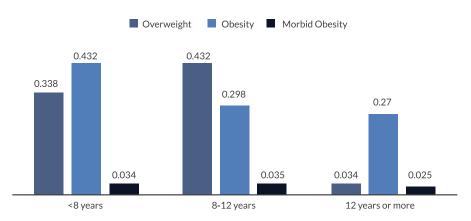
Figure 1. Annual per capita sales of ultra-processed food and beverages in the top 15 countries leading the ranking in 2013.



Source: Data obtained from own source document entitled "Ultra-processed food and beverages in Latin America: Trends, effect on obesity and public policy implications," WHO, 2015.

The World Health Organization has shown that changes in eating habits and diet⁴ and increased consumption of ultra-processed food are the main factors affecting overweight and obesity. This situation has been made quite evident in Chile in that obesity and overweight rates have increased steadily over time. The 2016-2017 National Health Survey⁵ conducted by the Ministry of Health revealed that the percentage of individuals over 15 who are overweight, obese or morbidly obese increased from 64.4% in the 2009-2010 period to 74.2% in the 2016-2017 period. Women, individuals aged 50-64 and people with fewer than eight years of education⁵ are the leading groups affected by these pathologies. Figure 2 illustrates how obesity is 16% higher among individuals with fewer than eight years of education than it is for individuals with 12 years of more of education.

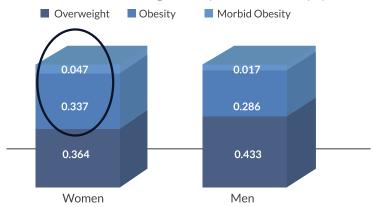
Figure 2. 2016-2017 Distribution of overweight, obesity and morbid obesity by years of education.



Source: Built by PAHO with data from the 2016-2017 National Health Survey, Ministry of Health.

Obesity and morbid obesity affect women more than men in Chile. Obesity rates among women older than 15 increased from 27.4% in 2009-2010 to 33.7% in 2016-2017 as shown in Figure 3^5 .

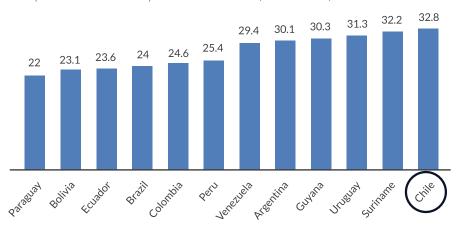
Figure 3. 2016-2017 Distribution of overweight, obesity and morbid obesity by sex.



Source: Own data drawn from 2016-2017 National Health Survey, Ministry of Health.

Obesity rates grew throughout all Latin American countries during the 1980-2014 period, with a widespread and significant impact on women in the region⁶. When compared to the rest of South America, the obesity rate of women in Chile is the highest in the region at 32.8%, as shown in Figure 4⁶.

Figure 4.Comparison of 2014 obesity rate in adult females (older than 18) in South America.



Source: Data obtained from own source document entitled "2017 Panorama of Food and Nutritional Security in Latin America and the Caribbean," WHO, PAHO and FAO.

Overweight and obesity increase one's likelihood of developing non-communicable diseases (NCD) such as heart disease, diabetes, hypertension and some types of cancer⁶. Type 2 diabetes in Chile increased from 9% to 12.3% during the 2009-2010/2016-2017 periods⁵. This jump was more significant among the female population, adults 65 years and older, and individuals with fewer than eight years of education, illustrating the effect of social determinants of health on malnutrition in our country⁵. Among the female population, the rate rose from 9.7% in 2009-2010 to 14% in 2016-2017⁵. Moreover, among the elderly, this rate rose from 25.7% in 2009-2010 to 30.6% in 2016-2017⁵. Finally, this rate jumped from 19.6% to 25.3% during those same years, respectively, among individuals with fewer than eight years of education⁵.

Girls and boys in Chile are also affected by overweight and obesity. According to data from the 2017 Nutritional Map drawn up by Junta Nacional de Auxilio Escolar y Becas (JUNAEB)⁷, **26.4%** of boys and girls from the ages of 5 to 7 are overweight and **23.9%** are obese, while **31%** of ninth graders are overweight⁷. National data for first-grade girls and boys show that malnutrition dropped from 2.7% in 2011 to 2.1% in 2016⁷ while the rate of overweight and obesity among first graders (primary school) rose from 7% in 1987 to 24.6% in 2016^{7,8}.

According to data from the 2017 Socioeconomic Characterization Survey (CASEN), children ages 0 to 9 belonging to the lowest socio-economic groups are more affected by overweight and obesity. In 2017, 14.6% of boys and girls ages 0 to 9 in the first quintiles of households were overweight, compared to 9.3% of boys and girls in the fifth quintile, while 2.5% of boys and girls in this age group from the first income quintile were obese, compared to 0.4% of boys and girls in the fifth income quintiles.

2. What are the problems that the Chilean Food Act is trying to solve?

Law No. 20.606 on the Nutritional Composition of Food and Food Advertising aims to address and improve the following three problems related to an unhealthy diet that contribute to obesity and overweight:

- 1) Provide clear and simple information to the public regarding the nutritional content of packaged food, in order to contribute to healthy eating habits.
- 2) Restrict advertising of food with a high energy and critical nutrient content that affect the population's health, and that is targeted at boys and girls under age 14.

3) Prohibit the sale, distribution and/or promotion in schools of foods with high energy and critical nutrient content, in order to improve the quality of food offered at schools and create a healthy school environment.

3. What does the law regulate?

Law No. 20.606 on the Nutritional Composition of Food and Food Advertising took effect in Chile on June 27th, 2016. The overall objective of the law is to protect boys and girls from the effect of malnutrition by excess. Its specific objectives entail: protecting the health of boys and girls; favoring informed food choices; and decreasing the consumption of food that is high in calories, saturated fat, sugar and sodium.

The law contains four measures described in the figure below:

- a) Mandatory use of "High in" labels or "front-of-package stickers" warnings that the product is high in calories, saturated fats, sodium and sugars, if the product exceeds limits set by the Ministry of Health for said ingredients;
- b) Prohibition on the commercial sale in all schools nationwide of any product labeled as high in calories, saturated fats, sugars or sodium as defined by the Ministry of Health, regardless of whether the food is packaged or not;
- c) Prohibition on advertising targeted at children under 14 years old of any product that is high in calories, saturated fats, sugars or sodium as defined by the Ministry of Health, regardless of whether the food is packaged or not; and
- d) Pre-school, elementary and secondary schools in the country must include, at all levels and types of education, educational and physical activities that contribute to promoting healthy eating habits and to warning about the harmful effects of a diet high in fat, saturated fats, sugar, sodium and other nutrients that can be harmful to your health when consumed in certain quantities or volumes.

Figure 5.Summary of the content of the Food Act and its objectives.



Source: Data obtained from the law, its regulations and information submitted by the Ministry of Health.

4. How is the law regulated?

The Food and Health Regulations (hereinafter, "RSA") set forth health and sanitary rules and conditions for the production, importation, processing, packaging, storage, distribution and sale of food, with a view to protect the population's health and nutrition and ensure products are safe and harmless. These regulations were amended following the passage of the Food Act in order to regulate certain aspects requiring amendments prior to enforcing the law.

The RSA regulate the mandatory shape, color, size and location of critical nutrient warning labels, the amount of calories, fats, sugars and sodium in the food that determines the need to include front-of-package warning labels, and the definition of what is understood as product advertising targeted at children under 14 years old and those accountable for this advertising.

The table below is a summary of the regulations' content in the three subject matters described above.

Table 1. Main subject matters addressed under the regulations.

Issue Addressed	Regulated Aspects			
Label Information	Must be in Spanish with the option of possibly being repeated in another language. Data must be presented with visible, indelible and easy to read characters, under normal purchasing and usage conditions.			
	Limits are set for energy, saturated fats, sugars and sodium levels in excess of which "high in" labels will be mandatory.			
	When food or products contain added sodium, sugar or saturated fat and their content exceeds legal limits, they must be labeled as "high in."			
Size of Labels	New labels will be shaped like octagons with a black background and the words "High in" followed by "saturated fats," "sodium," "sugars," or "calories," in white lettering inside the symbols, as appropriate.			
	The symbol(s) will be placed on the front side of products.			
Advertising and Sales	Definition of advertising: All forms of promotion, communication, recommendations, propaganda, information or actions aimed at promoting the consumption of a specific product.			
	Any food or food product that contains, in its nutrient composition, energy, sodium, sugars or saturated fats, in quantities exceeding the legal limits, may not be advertised to children under 14 years old, regardless of whether it is packaged or not.			
	Advertising targeted at children under 14 is considered all advertising that uses elements such as children's characters or figures, animations, cartoons, toys, and children's music that includes the presence of people or animals that attract the attention of children under 14 years old.			
	Interactive applications, games or contests targeted at children under 14, among others.			
	Advertising targeted at children under 14 is prohibited on programs or websites aimed at children or programs where more than 20% of the target audience are children under the age of 14.			
	It is prohibited to use commercial hooks targeted at children under 14 such as toys, accessories, stickers, incentives or other items.			
	Advertising on mass media food or food products with a calorie, sodium, sugar or saturated fat nutrient composition higher than legal limits must include a message promoting a healthy lifestyle. The message currently in effect is "Prefer foods with fewer warning labels."			
	Food or products mentioned above may not be delivered, sold, promoted or advertised at pre-school, primary or secondary educational establishments.			

Source: Data obtained from own source document Food and Health Regulations (Reglamento Sanitario de Alimentos).

5. What do the law's four regulatory measures and its regulations consist of?

a) Front-of-package warning labels for critical nutrients (calories, saturated fats, sodium, sugars)

The Food Act requires that food manufacturers, producers, distributors and importers must state on food containers or labels the calorie, saturated fat, sugar and sodium content of their products, in addition to nutrition information on the products in percentage terms or units of weight. The law states that products exceeding the legal limits of calories, fat, sugar and sodium established under the regulations must be labeled as "high in calories," "high in fat," or some other equivalent description.

Under these regulations the Ministry of Health determines the shape, size, color, proportion and characteristics of nutrition panels and labels, as well as which food products are high in calories, fats, sugars and sodium content based on their unit of weight, volume or serving size. The following figures illustrate the shape, content, color and container location of front-of-package warning labels regulated by law. These labels identify critical nutrients exceeding the maximum limits, and must be used on all packaged products on sale nationwide.

Figure 6. "High in" warning labels.









Source: Ministry of Health, 2016.

Figure 7. Products with effective front-of-package labels.



Source: Ministry of Health, 2018

The Ministry of Health is in charge of executing, overseeing, enforcing and evaluating this law. The Ministry also set up committees made up of members of academia and experts entrusted with defining the law's legal limits on the basis of scientific evidence available. These limits were regulated under the law's body of regulations and are applied to every 100 grams of solids and every 100 milliliters of liquids, during the stages and in the quantities described in Tables 2 and 3.

Table 2. Solid Food Limits.

Nutrient or Energy	Phase 1: Effective June 2016	Phase 2: 24 months after effective date	Phase 3: 36 months after effective date	
Energy Kcal/100g	350	300	275	
Sodium mg/100g	800	500	400	
Total Sugar g/100g	22.5	15	10	
Saturated Fats g/100g	6	5	4	

Source: Ministry of Health, 2015.

Table 3. Liquid Food Limits.

Nutrient or Energy	Phase 1: Effective June 2016	Phase 2: 24 months after effective date	Phase 3: 36 months after effective date	
Energy Kcal/100g	100	80	70	
Sodium mg/100g	100	100	100	
Total Sugar g/100g	6	5	5	
Saturated Fats g/100g	3	3	3	

Source: Ministry of Health, 2015.

b) Prohibition on the sale in schools of products exceeding legal limits.

The Food Act states that it is prohibited to distribute, sell, promote and advertise in pre-school, primary and secondary school establishments providing an education to boys and girls between the ages of 0 and 18 all food exceeding legal limits, regardless of whether the food is packaged or not.

c) A prohibition on advertising targeted at children under 14 years old of food exceeding legal limits.

The law states that it is prohibited to offer or hand out for free and to advertise to children under age 14 all food products labeled as "high in" regardless of whether the food is packaged or not. It also states that it is not allowed to encourage the consumption of these products or employ means to persuade gullible minors, or sell products using commercial hooks unrelated to the actual advertising of the products, such as gifts, toys or other means to attract children.

The regulations define advertising as "all forms of promotion, communication, propaganda, information or actions aimed at promoting the consumption of a certain product." These regulations also state that advertising may be considered as targeting children age 14 and under when:

- 1. It has commercial hooks, toys, contests or other similar ploys targeting this age group;
- 2. More than 20% of the media's target audience is children;
- 3. Products are provided free of charge to this age group;
- 4. It relies on certain elements such as: cartoons, toys, children's language, music and characters that appeal to boys and girls in this age group;
- 5. Products are advertised, for example, on programs or websites aimed at this age group.

d) Schools must carry out activities that promote healthy habits.

The law states that all pre-school, primary and secondary educational establishments in Chile must include, at all levels and types of education, educational and physical activities that contribute to promoting a healthy diet and eating habits and to warn of the harmful effects of a diet high in fat, saturated fats, sugars, sodium and other nutrients that could be harmful to health when consumed. Likewise, Article 4 provides that "Educational establishments in the country must include physical activity and sports in order to promote an active and healthy lifestyle of their students" 11.

6. What studies were conducted prior to enacting the law?

Included among studies conducted prior to passing the law were studies conducted by Feedback Comunicaciones in 2009, and studies conducted by the Institute for Nutrition and Food Technology (INTA) from 2011 to 2012.

The Ministry of Health hired Feedback Comunicaciones to conduct a two-fold study¹² whose purpose was: to assess nutrition information models that are designed to guide consumers on nutritional facts; to understand the opinions and practices of consumers related to healthy and unhealthy eating habits/diets; and to evaluate the understanding and pre-existing notions surrounding the information people have about the concept of nutrition labeling and how related these are to personal and family self-care strategies. Ultimately, the study concluded that the best alternative nutrition information warning label was a black label with white lettering.

Moreover, Universidad de Chile's INTA was entrusted by the Ministry of Health to conduct two studies. The overall objective of the first study was to propose critical nutrient limits that food should have in order to reduce the effect it has on the population's health. The study entailed a review of existing evidence under similar regulations and developed a model that served as the basis for proposed cut off limits for the energy (calories), fat, sugar and sodium content per each standard serving¹³. To this end, INTA conducted a review of the reference values submitted by international organizations and current national standards. A general limit applicable to all product categories was set and chosen as the study sample, plus a specific limit selected for the special cases listed in Figure 8¹³.

Figure 8. Limits set by the 2011 INTA study.

LITHUS SEL BY THE ZOTT IN TA STUDY.						
	Energy Kcal/ serving**	Sodium mg/ serving**	Total simple sugar g/serving**	Added simple sugar g/serving**	Saturated fats g/serving**	Trans fats g/serving**
GENERAL LIMIT values equal to or greater than:	200	300	18	8	3	0,3
Specific limits for some ca	tegories no	t subject to	the general limit; va	lues are equal to or	greater than:	
Whole milk meeting RSA requirements (Art. 203, 205)	*	*	*	*	5	0,6
Evaporated milk meeting RSA requirements (Art 214)	*	*	*	*	5	0,6
Cheese and milk-based creams	*	*	*	*	*	0,6
Grated Cheese	*	*	*	*	*	2
Fish and Shellfish	*	*	*	*	4	*
Rice, Noodles and Pasta	300	*	*	*	*	
Hamburgers	*	*	*	*	5	*
Hot dogs and Hams	*	350	*	*	*	*
Other Cured Meats	*	350	*	*	5	*
Powdered Broths and Soup	*	400	*	*	*	*
Margarine	*	*	*	*	10	*
Sweet Snacks (cookies, chocolate, and others)	*	150	13	*	*	*
Ice Cream	*	150	*	*	*	*
Savory Snacks	*	*	9	4	*	*
Breakfast Cereals	*	150	10	*	*	*
Baked Goods	*	250	*	*	*	*
Packaged and Freshly Baked Bread	*	450	*	*	*	*
Dried Products (peanuts, almonds, walnuts, etc.)	250	*	*	*	4	*
Dried Fruit with No Sugar Added	300	*	45	*	*	*
Natural Fruit Juice (Art 482-487 RSA)	*	*	25	0 is valid for what the RSA does not allow	*	*
Oils	450	*	*	*	10	*
Ready-to-Eat Meals	500	700	*	*	*	*
Powdered Drinks and Jell-O	*	*	7	7	*	*

^{*} Categories of products that do not require specific limits and that are subject to the general limit.

Source: http://nutricionyvida.cl/wp-content/uploads/NUTRI_Y_VIDA_5.pdf

^{**}When the serving is equal to or less than 30g or 30ml, the requirement must be evaluated for every 50g or 50ml of solid or liquid food, respectively. For foods that are only consumed after being reconstituted, the serving should be evaluated after the food has been reconstituted.

The purpose of the second study was to design and evaluate critical nutrient warning messages that are visible, comprehensible and that give the population guidance on healthy eating. This study evaluated two alternative warning messages that should appear on the front of products high in critical nutrients in order to inform consumers of the nutritional content of processed foods¹⁴. Researchers conducted a review of literature and pilot experiences, and a quantitative and qualitative study including focus groups with housewives and adolescents, aimed at identifying the best front-of-package label option. Moreover, researchers organized a panel of marketing experts and decision makers to evaluate the alternatives¹⁴.

This study concluded that the most effective warning messages consisted of symbols and logos that were big enough to be seen and placed on the front of containers. Likewise, according to the study, the sentence "Excess..." was more accepted than "High in." The octagon won out over the upside-down triangle, and the black and white prototypes performed better than the color ones. Finally, the study also concluded that it would be useful to add a simple and clear message for each critical nutrient contained in a product¹⁴, so that when the product has an excess of more than one critical nutrient, multiple messages covering all the nutrients should be added¹⁴.

7. Is there any evidence that the warning labels have encouraged consumers to adopt healthy eating habits and thereby prevent obesity?

With the understanding that obesity is a multifactorial public health problem that calls for a set of policies and not just a single strategy, as shown by evidence, from the Ministry of Health's perspective, the overall objective of the law is to supplement efforts aimed at preventing malnutrition by excess using the three aforementioned measures. Accordingly, laws similar to this one must be applied in conjunction with other plans, programs and policies in order to bring about the expected impact on health outcomes.

When the Food Act was sent to Congress in 2007, there wasn't any evidence of the legal measure's impact even though research and studies had been conducted on the effects of ultra-processed food advertising on adult and child consumption. During the years leading up to passage of the law, evidence of the effect that ultra-processed food has on obesity in individuals was building and published. However, up until the date the law was enacted there weren't any ex ante evaluations of the law itself or the measures regulated therein, nor was

there any evidence as to the effect that front-of-package warning labels on food products would have on purchasing and consuming said products.

In spite of the above, this law made a name for itself in the world as an innovative initiative, gradually gaining validation by international organizations and soon after known and accepted by consumers.

Today there are more studies highlighting the impact of front-of-package warning labels on consumers. The 2012 INTA study showed how study participants were able to identify front-of-package food warning labels, with certain colors, shapes and messages, as warning about the health risks involved in consuming said products 14 .

According to a recent study conducted by universities in Uruguay¹⁵ involving five other studies with 496 individuals to assess consumer perception of front-of-package food labels, these labels are identified as warnings to consumers on the risks incurred in consuming certain foods. Research findings revealed that the black octagon shaped labels stating "excess..." are more effective than other colors, shapes and texts in terms of how the warning is conveyed and subsequently perceived by consumers⁴¹.

Furthermore, early evidence of the impact of said labels on food and diet choices suggests that easily interpreted labels lead to a higher consumer response rate than nutrition facts alone¹⁶. There is also evidence of how front-of-package labels have encouraged food manufacturers to reformulate their products to lower the levels of nutrients leading to obesity and non-communicable diseases¹⁷.

When comparing the performance of various front-of-package labels in terms of how consumers see them (i.e., how correctly, quickly, and easily distinguishable they are when looking at the front of the package) and considering the nutritional value of the food, a nutritional warning (the Chilean model) fared better than other systems 18, 19, 20, 21.

8. Can having warning labels on the front of food packages affect consumers' freedom of choice?

Some parties in the food industry have claimed that the Food Act impinges upon corporate and consumer freedom because it does not allow companies to freely sell or advertise their products and coerces consumers into choosing, consuming and purchasing certain food. Nonetheless, there isn't any evidence or jurisprudence demonstrating that this law impinges upon corporate or consumer freedom. The counter argument suggests that front-of-package warning messages encourage more freedom of choice among consumers who can make informed decisions about the products they purchase and consume, thereby fostering healthier eating habits and environments²².

9. When did the law take effect?

A group of members of parliament (Guido Girardi Lavín, Carlos Ignacio Kuschel Silva, Mariano Ruiz-Esquide Jara, Evelyn Matthei Fornet and Carlos Ominami Pascual) and academia (notably Ricardo Uauy and Cecilia Castillo) began drafting the Food Act back in 2006. Subsequently, five senators from various political parties submitted the bill to Congress in 2007, where it was passed five years later.

The Food Act was published in 2012 under President Piñera's administration. That same year work began on the law's body of regulations, which were published in 2015, making the law effective in June 2016, during President Bachelet's administration. However, in terms of the maximum limits of calories, fats, sugars and sodium, the law establishes a gradual application broken down into three phases (2016, 2018 and 2019). The limits become more stringent in each phase (see tables 2 and 3 herein). This measure was implemented gradually in order to give food companies the opportunity to reformulate and/or adapt their products to the new regulations.

10. What types of products and companies are subject to the warning labels regulated under the law?

The Food Act applies to all packaged products that have added sugar, saturated fats or sodium and that exceed the legal calorie, saturated fat, sugar and sodium limits. Chile's Ministry of Health established that the legal limits would be applied to every 100 grams or 100 milliliters of product.

All manufacturers, producers, distributors and importers of food for human consumption must abide by the law during all processes involved in food production, importation, processing, packaging, storage and sales. This means that food products made in Chile or abroad and that are sold in Chile must comply with the law and its regulations, and consequently, use the labels when products exceed the legal limit. The regulations provide that "microenterprises" and "small companies" meeting the Chilean legal definition of such will have a 36-month grace period beginning in June 2016 (the date the law took effect) and ending in 2019, to meet the legal "high in" labeling requirement.

11. Why doesn't the law apply to unprocessed food?

The law does not apply to products with no added sugar, saturated fats or sodium because they do not constitute a public health risk. Nor does it apply to warning labels on unpackaged food because they are not subject to a mandatory nutrition facts labeling system, which makes it easier to apply the law to the other products.

The law applies to food with sugar, sodium or saturated fat added during processing. Food warning labels are applied to packaged food because, since 2006, it is mandatory in Chile to include nutritional fact labels on packaged food to state its energy, fat, protein, carbohydrate, sugar and sodium content. However, there are restrictions in place on advertising targeted at children under 14, and on offering and selling all products that have critical nutrients added and that exceed the legal limits.

12. It is true that the law applies to all products in the supermarket?

No, because the law applies to certain products regardless of where they are located or sold. One must not confuse the law's scope of application with food that may contain labels. All food products with added sugar, fat or sodium exceeding the legal limits fall within the law's scope of application.

13. Is it easier for large companies to abide by the law than small companies?

The government took into consideration the costs incurred by companies in connection with the law and the need to modify their containers, add the new labels, and possibly invest in new technology and reformulate their products to make them label-free. That is why the law has been implemented gradually, and why small and microenterprises have been awarded a 36-month grace period (starting on the date the law took effect) to prepare for implementation of the third legal limit provided under the law.

14. What is the relevance of World Trade Organization agreements in regards to the Food Act?

The Food Act constitutes a measure related to the labeling of products—both imported and domestic—sold in Chile. Accordingly, they fall under the Technical Barriers to Trade (TBT) Agreement of the World Trade Organization (WTO). The WTO ensures that country laws, regulations and standards are not discriminatory and that they do not create unnecessary barriers to international trade. However, this agreement does recognize the rights of member countries, such as Chile, to apply consumer information and health protection measures, as long as they do not constitute unnecessary barriers to international trade.

Some member countries have raised the issue before the TBT Committee saying that there is insufficient scientific evidence of the health risks posed by the nutrients deemed harmful under the law; they have also claimed that the law is potentially discriminatory to foreign companies that have to adapt their product containers solely and exclusively for the Chilean market. Nonetheless, Chile has responded to the TBT Committee that the Food Act may be considered the most appropriate measure, once it is evidence-based, and that it is not discriminatory in that it is applied to domestic and imported products uniformly.

15. Could the Food Act affect companies' intellectual property?

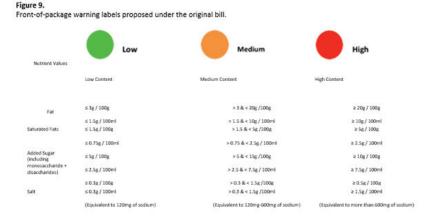
Some of the companies that were audited and fined for resorting to characters, cartoons and other images that constitute advertising targeted at children under 14 years old have filed legal actions in court arguing that the law does not apply, in their opinion, since these constitute logotypes duly registered as trademarks in the Chilean intellectual property registry. The companies claim that by

prohibiting the use of these logotypes, the health authority could be infringing upon constitutionally- and legally-recognized intellectual property rights. One of these legal actions was ruled inadmissible by the courts for being beyond the purview of matters addressed by this body. The company appealed the ruling before the supreme courts, which in turn rejected the company's petition.

16. Why are black labels used instead of a food traffic light system?

According to Congressional documents, the original bill proposed a three-color traffic light for food labels, as illustrated below in Figure 9.

Figure 9. Front-of-package warning labels proposed under the original bill.



Source: Library of National Congress, The History of Law 20,606, 2011.

Information gathered under two studies was used (i.e., the Feedback Comunicaciones and INTA studies) to select the label with white lettering on a black octagon-shaped background.

Feedback Comunicaciones' study evaluated six alternative labels based on a combination of the labels shown in Figure 10. The primary findings were:

- The black warning message appeals to consumers because it is direct, making it easy to understand, and because the black color sets the warning message apart from other advertising messages on the container.
- The color warning message only has value if one understands the logic behind the traffic light. However, when considering the alternatives tested, this association is not spontaneous, and therefore its contribution is reduced to something merely aesthetic.
- The gray daily dietary guidelines (DDG) was broadly accepted by those interviewed for giving off the feeling of providing more information and at an individual, serving-size level. However, consumers are unable to interpret the percentages and do not understand what they refer to (Do they refer to the entire package? A single serving? The total amount that should be consumed daily?)
- Color DDGs, given their structure, do not convey the traffic light image (because there are three simultaneous, horizontally-placed messages). Although data provided do boost consumer confidence (i.e., the statistics back the message), just like the previous alternative, the information is not easily understood and therefore reduced to pseudo-information.

Finally, the study concludes that the best alternative for conveying a nutritional warning message to consumers is white lettering on a black background.

Figure 10. Front-of-package label alternatives evaluated by Feedback Comunicaciones:

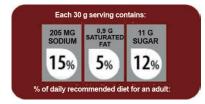
Warning message (high in) on black background:



Warning message (high in) on red background:



Gray DDG:



Color DDG:



Source: Feedback Comunicaciones, 2009.

Moreover, findings from the INTA quali-quantitative study on consumer assessment of critical nutrient warning messages on food labels also revealed that the traffic light was not the most effective way to provide information to the people consuming these products. According to the study, the warning message should be as big and as noticeable as possible since this alternative scored better in terms of consumer comprehension, visibility and intent to purchase, and because consumers recalled the black octagon graphics more. The Figure below was the prototype selected in this study.

Figure 11.Prototype selected by the INTA Study before the law was passed.



Source: Study on evaluation of critical nutrient warning messages on food labels. INTA. 2012

17. What are schools' responsibilities under the law?

Pre-school, elementary and secondary education establishments in Chile are forbidden to sell and advertise food that exceeds legal limits at school kiosks or on school premises. The purpose of this measure is to make schools healthy places for boys and girls with the objective of reducing childhood obesity.

Likewise, the law suggests that pre-school, elementary and secondary education establishments in Chile must include, at every educational level and learning modality, teaching and physical activities that contribute to fostering healthy eating habits and that warn of the harmful effects of diets high in fat, saturated fats, sugar, sodium and other nutrients that when consumed in certain quantities may constitute a health risk. Moreover, the regulations provide that schools must offer physical activity and sports, with a view to fostering healthy and active lifestyles among students¹¹.

The Ministry of Health, through a series of educational materials, has issued practical and concrete recommendations to schools so that they create a healthy environment for their student body. These materials consist of: Healthy Kiosks Leaflet, School Director Recommendations Leaflet, Guide to Healthy Kiosks and School Snacks, and Guidelines for Evaluating Healthy Kiosks. These materials may be downloaded at no charge from the Ministry of Health's website²³. Figure 12 illustrates the Guide to Healthy Kiosks and School Snacks.

Figure 12. Ministry of Health Guide to Healthy Kiosks and School Snacks.



READ GUIDE HERE

Source: Ministry of Health, 2017.

18. Why do the regulations set limits for critical nutrients at 100 grams and 100 milliliters and not by serving size?

The law provides that product limits may be set by unit of weight, volume or serving size, which entrusts the Ministry of Health with the task of developing the regulations and setting these limits. The decision to set the legal limit at 100 grams and 100 milliliters was the outcome of a lengthy debate and a complex process between the Ministry of Health and academia. The Ministry of Health drew up several draft proposals and two draft regulations, which were submitted to public consultation and sent to publication. The main difference between the two versions was that the first version set the legal limits on critical nutrients according to serving size and provided for categories, while the second version (in effect) set legal limits at 100 grams for solids and 100 milliliters for liquids, regardless of the food category.

The first version stated that the legal limits would be based on serving size and food categories. This version was drafted during 2012 and 2013 and was partly based on the INTA study submitted to the Ministry of Health in 2011. This proposal was criticized by various sectors for not entirely abiding by the law, and for being very difficult to implement since there aren't any official recommended serving sizes in Chile and not all foods are categorized.

The new Ministry of Health administration that took office in 2014 until 2018 decided to repeal the previous regulations and begin a new process to draft new

ones. During this process, a committee of experts and members of academia concluded that the legal limits should be set at 100 grams and 100 milliliters, since there aren't any regulations in existence to determine serving sizes, and because recommended serving sizes vary according to dietary guidelines, types of food, age, sex, and other consumer characteristics.

If legal limits were based on serving size, then the onus to determine the legal volume would be on the regulated party and not on the regulator. In addition, as stated above, it is very difficult to determine the most suitable serving size for each food product. By measuring the ingredients in 100 grams or 100 ml portions, it is possible to truly observe the nutritional composition and quality of the food, and not merely focus on the serving size or amount of food consumed. These make it easier to compare products on the basis of nutritional composition and quality.

19. What type of food advertising is forbidden?

The law prohibits: 1) advertising targeted at children under 14 of food with added or excess calories, saturated fats, sugar and/or sodium; 2) taking advantage of minors' credulity by offering them these foods for free; and 3) using promotional "hooks" such as gifts, contests, toys, stickers and games, to sell said food products.

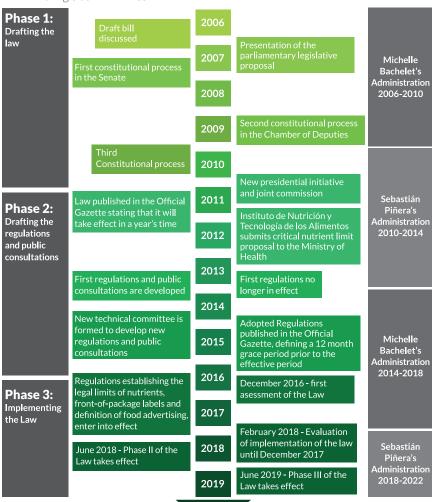
The regulations define advertising targeted at children under 14 years old as advertisements that use certain elements such as characters, children's figures, animation, cartoons, toys, and children's music. It also includes advertisements that contain characters or animals that appeal to children under 14 or imaginary statements or arguments regarding the product or its effects, childlike voices, children's own language or expressions, or situations that represent their daily lives (such as school, recess or jungle gyms/children's games).

This law and Law 20.869 (on food advertising in effect as of May 2018) complement each other in that Article II of Law 20.869 sets programming restrictions as to when food with front-of-package warning labels can be advertised. Likewise, Decree 1 from 2017 establishes that it is mandatory for companies advertising these products as part of mass media campaigns to include public service messages promoting healthy lifestyles, as defined by the Ministry of Health. The message currently in effect is: "Prefer foods with fewer warning labels."

20. How would you summarize the process leading up to passing the law and its regulations?

The legislative process was complicated and lengthy. It formally began back in 2007 when the bill was sent to Congress, and will be complete in 2019 once the law in its entirety takes effect. The legislative process can be divided into three phases: 1) drafting the bill, 2) drafting the regulations and conducting public consultations, and 3) implementing the law and its regulations. Each phase is marked by several different milestones, described in the Figure below.

Figure 13. Food Act Legislative Process.



21. How is the law enforced?

The law states that manufacturers, importers, processors and distributers are responsible for abiding by all obligations and restrictions provided under the law, and that the Ministry of Health, under the RSA, defines the legal limits of critical nutrients and warning labels for food exceeding said limits.

The Ministry of Health and Regional Health Ministry Secretariats (SEREMI de Salud) are tasked with regulating and enforcing health and sanitary matters on behalf of the Chilean State. Accordingly, the Ministry of Health has internal directives²⁵ containing guidelines for SEREMI regulators; these are updated as necessary on the basis of regulatory and enforcement experience.

Warning label compliance is enforced through visits and inspections conducted at points of sales, warehouses or manufacturing sites where regulators verify legal compliance and register their findings in a paper certificate and on-line in the Health Authority's Digital Information System (MIDAS)²⁶.

As of December 2017, more than 4,000 inspections had been conducted at food distributers and supermarkets, food processing centers with and without delivery services, educational establishments, and movie theaters, as well as mass media outlets such as network and satellite TV, the internet, radio stations, public spaces, magazines and newspapers²⁶. According to inspection results, 71.9% of all parties inspected were not in violation of the law, while 28.1% ended up in legal proceedings for having violated the law.

Sanctions for violating the law are progressive, ranging from warnings, to fines, removal of products in violation, and company shut down. First-time offenders may receive a warning and a deadline by which they must be in compliance. A fine will be issued if the situation persists¹⁰.

22. Can citizens report violations of the law?

Citizens can report suspected violations of the law either electronically or in person at the Regional Ministry of Health's Office for Information, Complaints and Suggestions (OIRS, SEREMI de Salud).

23. What do preliminary assessments say about the law?

Findings from the policy's impact assessment on health are expected in the medium term, but there is already preliminary information on consumer knowledge and acceptance of the law. Numerous public and private entities have conducted impact assessments on this policy, as well as consumer perception and opinion surveys regarding the regulations.

One of these is a nationwide survey conducted by Universidad de Chile's Institute for Communications and Image at the request of the Ministry of Health, revealing the following substantial discoveries into the law's implementation: 92.4% of those surveyed responded that it is good or very good to make it mandatory to label food as "high in" sugar, saturated fat and calories; 91.3% stated that it is good or very good to prohibit the sale of food "high in..." at educational establishments; and 74.5% stated that it is good or very good to prohibit advertising targeted at children under 14. Regarding how much influence the warning labels have on purchasing decisions, 91.6% responded that they do influence their decision to either choose food with fewer labels (67.8%), not purchase food with labels (9.7%) or purchase fewer of these food products than they would have, had they not been labeled (14.1)²⁶.

As for the results of the Cadem survey²⁷, 87% of those interviewed were familiar with or had heard of the new food law, and 51% of them thought that it would have a positive impact. In addition, the Institute's study²⁸ shows that 63% of individuals surveyed took into consideration the presence and number of labels on a product when deciding on whether to purchase, which shows that those interviewed perceive the law as a positive measure.

Researchers from INTA, Universidad Diego Portales, Universidad Central and the University of North Carolina are conducting their own impact assessment of the law, independent of the Ministry of Health, with funding from Chile's National Council for Science and Technology (CONICYT), Canada's International Development Research Center (IDRC) and Bloomberg Philanthropies in the United States. According to preliminary results, 63% of the products studied contain a warning label; this figure will increase to 83% once legal limits set for the third phase of the law take effect²⁶. Likewise, early findings on the law's effect on 700 adolescents and 900 mothers indicate that 91% of mothers of preschoolers and 81% of mothers of adolescents associated the presence and number of labels with unhealthy food²⁶. In addition, according to more preliminary findings from the same study, there has been a drop in exposure of preschoolers and teenagers to TV advertising for foods "high in..." (46% and 62% drop among preschoolers

and adolescents, respectively, in the southeast area of Santiago); a percentage reduction in the average content of sodium and sugar in packaged food (5%-10% in sodium and a 20%-35% reduction in sugar); individuals are more aware of the nutritional quality of packaged food since the advent of food warning labels; and there has been a drop in household purchases of beverages (25%) and breakfast cereals labeled as "high in" $(14\%)^{29}$.

With regard to the outcome of food law compliance inspections, 64.4% of all inspections conducted at supermarkets and food distributors, educational establishments, movie theaters and food processing centers with and without delivery services met the legal requirements, whereas 35.6% did not. As for the breakdown of legal proceedings filed for non-compliance, 52.2% correspond to educational establishments and 44% to supermarkets and food distributors. Grounds for legal proceedings range from incorrect labeling (missing label, label in the wrong place, incompatible labels, etc.) which accounted for 53.8% of infractions, educational establishments selling food labeled as "high in", 36.3%, and food advertising targeted at children under 14, 9.9%. As far as incorrect labeling is concerned, the following food categories recorded the highest number of observations: baked goods, cakes and pastries (35.6%); confectionery (candy) and similar products (17%); and meat products (12%). Finally, it is worth pointing out that the percentage of compliance rose from less than 40% in June 2016 to approximately 80% in December 2016²⁶.

24. Was there a communications campaign launched for the law?

The Ministry of Health launched two mass media campaigns consisting of announcements, videos and posters available for download in order to advertise the new law (see Figure 14). The purpose of the campaign was to position the "high in" warning label as a necessary information tool making it easier to choose and purchase healthier food. Likewise, the campaign was also designed to publicize the legal measure prohibiting the sale of foods high in calories, saturated fats, sugar and sodium at educational establishments and reach out to boys, girls and adolescents.

Figure 14. Advertisements and User Manuals included in the Law's Advertising Campaign.



Source: Food Act – Materials for Downloading. Ministry of Health. 2016. Available at: http://web.minsal.cl/ley-de-alimentos-material-de-descarga/

25. What was the main role of each sector?

Numerous sectors were involved in the legislative process. Their participation, roles and influence varied. For instance, members of parliament from all sectors, members of academia, and Ministry of Health representatives were involved in drafting the bill. Representatives from academia, civil society and industry were invited to take part in committee discussions on the law in Congress. At that stage, every sector had validated the intent of the law. However, some sectors of academia criticized the content of the original bill for lacking evidence on the impact of the legal measures. Industry was also opposed to the idea of legislating food content, sales at schools and advertising.

A group of parliament members led the process during the three different Administrations that were involved in the process, while the Ministry of Health was in charge of preparing the regulations once the law was passed and published. Academic support for the law gained momentum over time and as evidence of the public health impact of ultra-processed foods grew. Accordingly, the Ministry of Health began providing technical support for the preparation of the two versions of the law's regulations.

Civil society played an active role in preparing the law and its regulations, providing key support during the law's implementation phase by publicly supporting the Ministry of Health and citizen dialogues that were held nationwide.

During the regulation-drafting period, all participants had the opportunity to take part in the public consultation process that lasted 60 days. Close to 3,000 comments were received from citizens, domestic and international institutions, academia, trade unions, consumer organizations, and the food industry. Remarks from Chilean and international food industry players were very similar and consistent, which demonstrated this sector's organizational capacity. Moreover, 37 citizen dialogue sessions were held at educational establishments and community organizations to inform society about the law. A total of 3,369 individuals attended.

Additionally, food companies opposed the set of measures explained in TV and social media campaigns. One sector of the food industry launched a counter campaign with well-known TV, theatre and sports celebrities. The purpose was to express their opposition to setting food legal limits at 100 grams or 100 milliliters as touted on network television channels (Figure 15). In response to this counter campaign, a group of parliament members called upon the government, academia and civil society to respond by holding a press conference in defense of the law, as shown below in Figure 16.

In the following months, other industry players continued showing campaigns on social media, primarily before the law's second phase of implementation. Authorities held another press conference to reinforce this second phase of implementation and answered questions from the press related to industry statements in various media outlets (Figure 17).

Figure 15. Advertisements included in AB Chile's Food Law advertising campaign.



Source: Chilean Media

Figure 16.Press Conference held by Members of Parliament, civil society, government agencies and academia in response to AB Chile's campaign.



Source: Chilean Media

Figure 17.
Press Conference held at the beginning of Phase II of the Law.



Source: Chilean Media

26. Have food companies reformulated their products as a result of the law being implemented?

Some food companies have accepted the regulations as an incentive to reformulate their products.

The Ministry of Health submitted a request to SOFOFA (a trade federation representing 4,000 corporate members, 43 sectoral associations, and 14 regional trade unions) to issue a report on changes experienced by the food industry in the wake of the law's implementation in December 2016. SOFOFA reported that out of all the products for which reports were received, nearly 20% were

reformulated—most notably dairy products (65%) and cured meats (48%)—in order to reduce the number of mandatory front-of-package warning labels required under the new law and its regulations²⁶.

27. What mechanisms are in place to ensure the law prevails over time?

- 1. The policy measures are established by law, and laws in Chile must undergo legislative proceedings, which implies that it is very complex and difficult to repeal or amend the law. Moreover, the justice system through its courts of law has recognized the legal merit of this law, by pointing out during specific cases filed by industry that the Ministry of Health has correctly implemented the law.
- 2. The law and its regulations govern these policy measures. The regulations have been enacted under Supreme Decree and, as such, would need to undergo a complicated administrative procedure to render them null and void or to amend them. This would entail involvement and approval by both the Ministry of Health and the Republic's Office of the General Comptroller.
- 3. A strategy involving citizen dialogue with different people and organizations was employed to make the Food Act sustainable. This made it easier for the population at large to understand the importance of the law and thus accept its content as acquired rights that cannot be taken away.
- 4. Support from international organizations such as PAHO/WHO and FAO, plus backing from academia, are considered to be actions that facilitate continuity of these policy measures over time.
- 5. The fact that other countries such as Peru and Israel have implemented similar laws, and that other nations, such as Brazil, Canada, Uruguay and Argentina, are in the process of designing legislation on the basis of the Chilean model, constitute international recognition of this good practice providing greater sustainability over time.

28. What are the costs of drafting, implementing and enforcing the law?

So far, there is no exact calculation of the financial cost of designing and implementing the law; however, estimates have been drawn up on the cost of items that must be considered prior to implementing the law. They are as follows:

- **I. Costs incurred by Parliament:** Associated with the drafting policy and legislative proceedings required if the policy means to be turned into a law. In this case, mostly human resources are involved.
- **II. Costs incurred by the health authority:** The term health authority is understood as national and regional offices of the Ministry of Health.
 - i. Cost of preparing the law's regulations corresponds mainly to human resources.
 - ii. Cost of ex ante and ex post mid- and long-term studies to gather evidence, monitor and evaluate the outcome and impact of the policy. These studies may involve costs for the health authority or for other actors such as academia and civil society.
 - iii. Cost of implementing a food oversight and enforcement system made up of technical equipment and specialized human resources to conduct inspections in all fields of action (at the very least, production, imports, sales and advertising).

An initial investment in food law oversight and enforcement actions has already been made in Chile since food labeling was made mandatory in 2006.

- III. Cost of financing the mass media citizen education and awareness campaign, plus advertising on other media outlets to prevent obesity.
- IV. Costs incurred by industry players that must invest in new containers, warning stickers, specialized human resources, and food reformulation and innovation. Moreover, eventually the fact that companies no longer advertise labeled food to children under 14 years old could represent an additional cost cutting into their profits while at the same time representing savings in advertising. There is no global estimate of industry-reported costs incurred as a result of the law.

29. Can you justify having new institutions to implement the law?

Implementing a law of this nature calls for political will by the executive and legislative branches, but new institutions to develop the policy are not necessarily required. It is more important to have a food labeling system and surveillance system for food products within the Ministry of Health or another agency. This system already exists in Chile, which is why the law did not call for a significant investment. If a country wishes to implement a law similar to this one and it does not already have a system in place, it may want to consider the possibility of creating a food administration agency.

30. What challenges has the law faced in terms of its implementation?

- 1. Strengthening ongoing oversight and enforcement actions, including constant technical support by the central government for the appropriate and correct interpretation of the law.
- 2. Coordinating with the National Congress on the development of new laws to foster healthy eating habits and contexts that add to existing legislations.
- 3. Promoting obesity prevention policies, plans and programs jointly with various sectors, for instance, the Ministries of Education, Agriculture, Social Development, Sports, and Economy, among others. In addition, ensuring there is a government agency with an institutional mandate to make comprehensive policies, and facilitate, coordinate and monitor intersectional work.
- 4. Promoting a reduction in critical nutrients and product reformulation among the industry players.
- 5. Relying on a plan to implement the final phase of the law, including education/ awareness campaigns and a support system for small companies that prepare, distribute and sell products labeled with "high in" stickers that must comply with the law beginning in 2019.
- 6. Following up on and continuing implementation of Law 20.606.
- 7. Conducting assessments on the process itself and the impact of the law in the ministry in order to boost its implementation.
- 8. Promoting academic and other types of research to further assess the law.
- 9. Designing and implementing an Obesity Prevention Action Plan that adds other food-related measures to this law.

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