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**POTENTIAL EFFECTS OF THE CHOICES PROGRAMME CRITERIA ON
NUTRIENT INTAKES IN THE ADULT POPULATION OF PORTO**

**EFEITOS POTENCIAIS DA UTILIZAÇÃO DOS CRITERIOS DO CHOICES
PROGRAMME NA INGESTÃO DE NUTRIENTES NA POPULAÇÃO DO PORTO**

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RESEARCH WORK

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List of abbreviations

DNI - Daily Nutrient Intakes

DP - Dietary Patterns

GBDS - Global Burden of Disease Study

NCDs - Noncommunicable diseases

SAFA - Saturated fats

TFA - Trans fatty acids

WHO - World Health Organization

Abstract

Introduction: The application of nutrient profiling has emerged as a valuable tool that could ultimately result on intake of key nutrients in line with the World Health Organization recommendations. The Choices programme is an internationally applicable nutrient profiling system with nutrition criteria for trans fatty acids (TFA), saturated fatty acids (SAFA), sodium, added sugar and, for some food product groups, energy and fibre. These criteria determine whether foods are eligible to carry a "healthier option" stamp.

Objectives: To evaluate the potential effects on nutrient intake with the introduction of Choices compliant foods in the typical diet of the adult population of Porto.

Methodology: Average nutrient intakes, derived from EPIPorto study, were translated into Typical Daily Menus. Average intakes based on these menus were compared with average intakes from Choices Daily Menus. The Choices Daily Menus were obtained through the replacement of regular foods that do not comply with the Choices criteria by similar foods that comply with these criteria.

Results: The Choices compliant diet showed a decrease for energy intake (-14%), as well as, for total sugar (-22%), SAFA (-32%), TFA (-56%) and sodium (-30%). Fibre intake increased (15%). After energy adjustment, the results showed that these reductions were still present but became smaller.

Conclusion: The predicted intakes of key nutrients suggested that a Choices compliant diet should be able to improve nutrient intakes.

Key words

Choices Programme, nutrient intake, product reformulation, nutrient profiling.

Resumo

Introdução: A utilização de perfis nutricionais emergiu como uma ferramenta valiosa que pode contribuir para a correta ingestão de nutrientes chave de acordo com as recomendações da Organização Mundial da Saúde. O programa *Choices* é um sistema de perfil nutricional, com critérios estabelecidos para os ácidos gordos *trans* (TFA), ácidos gordos saturados (SAFA), sódio, açúcar adicionado e, para a energia e fibra para alguns grupos de produtos alimentares. Esses critérios determinam se os alimentos são elegíveis para obter um selo de "opção saudável".

Objetivo: Avaliar os potenciais efeitos na alimentação típica da população adulta do Porto, com a introdução de alimentos compatíveis com os critérios do programa *Choices*.

Metodologia: A ingestão média de nutrientes, obtida a partir do estudo EPIPorto, foi traduzida em Menus Diários Típicos. Os Menus Diários Típicos foram comparados com os Menus Diários *Choices*. Os Menus Diários *Choices* foram obtidos através da substituição dos alimentos que não cumpriram os critérios *Choices* por alimentos similares que cumprem estes critérios.

Resultados: Os Menus Diários *Choices* mostraram uma diminuição na energia total (-14%), bem como, açúcar total (-22%), SAFA (-32%), TFA (-56%) e sódio (-30%). Verificou-se também um aumento na ingestão de fibra (15%). Após o ajuste à energia total, a tendência manteve-se, mas as diferenças tornaram-se menores.

Conclusão: Os valores estimados para os nutrientes analisados sugerem que uma alimentação baseada em alimentos que cumprem com os critérios do programa *Choices* é capaz de melhorar a ingestão de nutrientes.

Palavras-chave

Choices Programme, ingestão nutricional, reformulação nutricional, perfil nutricional.

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Introduction

Analysis of the Global Burden of Disease Study (GBDS) 2010 shows that dietary factors are the most important factors that undermine health and well-being in every Member State in the World Health Organization (WHO) European Region. Of the six WHO regions, the European is the most severely affected by non-communicable diseases (NCDs), which are the leading cause of disability and death⁽¹⁾.

According to the estimates obtained for Portugal, in the framework of the GBDS, the risk factors that contribute most to the total years of healthy life lost by the Portuguese population are: inadequate eating habits (19%), hypertension (17%), high body mass index (13%) and smoking (11%). In terms of risks, excessive consumption of energy, and in particular the high intake of salt, sugar and industrial trans fatty acids (TFA) are the main problems⁽²⁾.

The strategic documents from the WHO in terms of food and nutrition policies acknowledged the importance of this problem, recommending to limit levels of saturated fats (SAFA), TFA, added sugars and salt in existing products, as well as the importance of using simple, clear and consistent food labels in order to help consumers to make informed and healthy food choices⁽³⁾.

To respond to this need, in 2009, WHO started work on an evidence-based framework and guiding principles that WHO Member States and Regions could adapt, developing and implementing the nutrient profiling of foods for various uses. Nutrient profiling is the science of classifying or ranking foods according to their nutritional composition for reasons related to preventing disease and promoting health. Nutrient profiling can be used for various applications, including marketing of foods to children, health and nutrition claims, product labelling logos or symbols,

information and education, provision of food to public institutions, and can be useful for the implementation of economic tools to orient food consumption⁽⁴⁾.

Though nutrient profiling does not address all aspects of nutrition, diet and health, it is a helpful tool to use in conjunction with interventions aimed at improving diets in a region or country. One example of a common use of nutrient profiling is in food labelling schemes aimed at helping consumers better understand the nutrient composition of foods and, on the basis of this understanding, identify foods that are healthier options ⁽⁴⁾.

Several nutrient profile models have been developed and some examples are the Nordic Keyhole model⁽⁵⁾, the Heart Symbol in Finland⁽⁶⁾, and the Choices Programme⁽⁷⁾. They serve as a “health quality mark” and are present only on products with a relatively favourable nutrient composition. They communicate the overall healthiness of the food product and no interpretation by the consumer is needed ⁽⁸⁾.

The Choices Programme is a unique multi-stakeholder cooperation that aims to make the healthy choice the easy choice. The Choices criteria are based on international dietary guidelines from the WHO, are category-specific and consider the levels of SAFA, TFA, added sugar and salt of foods and beverages. In some cases, fibre or energy is also considered. The Choices criteria defined two types of product groups: basic product groups and non-basic product groups. The products found within basic product groups contribute significantly to the daily intakes of essential nutrients (fruits and vegetables; beans and legumes; sources of carbohydrates; meat, fish, poultry, eggs, and meat substitutes; dairy products; oils, fats and fat-containing spreads; nuts; water; main meals). Healthy products like fresh fruits and vegetables get a Choices stamp by default. Food products from non-

basic product groups generally do not contribute substantially to the intake of essential nutrients, but provide a great innovation potential (soups; sauces; snacks; beverages (excluding water) and fruit juices; bread toppings). These international criteria can be seen as a global benchmark for healthy food, to be used by international organizations and international companies. Not less important is their use as a basis for national health labeling programmes or for reformulation. In that case adaptation needs to take place according to the national eating habits, food supply and nutrition issues. This adaptation is the responsibility of National Choices Scientific Committees⁽⁹⁾. These criteria can be found in Annex A.

Previous studies have applied the Daily Menu Method to estimate the potential effects of nutrient profiles on daily nutrient intakes (DNI) on a national level ^(10, 11). However, to date, no study has tested these effects in the Portuguese population. Therefore, the current study estimates whether a dietary shift in agreement with the Choices programme, could result in positive changes on intakes of key nutrients, while keeping the typical dietary patterns (DP) of the adult population of Porto, Portugal.

Objectives

General objective

To evaluate the potential effects on nutrient intake with the introduction of Choices compliant foods in the typical diet of the adult population of Porto, Portugal.

Specific objectives

1. To evaluate the potential effects of replacing non-complying foods with food products complying with the Choices criteria, on the intake of the following

key nutrients in the typical DP of the adult population of Porto: energy (kcal), SAFA (g), TFA (g), sodium (mg), sugar (g) and fibre (g).

2. To identify the percentage of food products that complies and doesn't comply with the Choices criteria in the Daily Menus created, based on the typical DP of the adult population of Porto.
3. To identify the key nutrients that did not comply with the Choices criteria in the Daily Menus created, based on the typical DP of Porto adult population.
4. To analyse if the Daily Menus based on the Choices criteria (menus were non-complying foods were replaced by Choices compliant foods) is strict enough to contribute to nutrient recommendations compliance.

Methodology

1. The Daily Menu Method

In this study, we used the Daily Menu Method, which has been used in previous studies as a tool to estimate the potential effects of nutrient profiles on DNI ^(10, 11). A figure describing the methodology is shown in Figure 1, Annex B.

Nutrient intakes, based on theoretical Typical Daily Menus, were compared with nutrient intakes from Choices Daily Menus in, which regular foods that do not comply with the Choices criteria have been replaced by similar foods that do comply with the Choices criteria.

Average intakes of nutrients were derived from the EPIPorto study, based on four DP that were identified separately for men and women ⁽¹²⁾. It was decided to compose eight menus to optimally simulate each of the DP found. Weighted average

intakes based on these eight menus were compared with weighted average intakes from the eight Choices Daily menus where foods from the Typical Menus that did not comply with the Choices criteria were replaced with similar foods that did.

2. Dietary patterns and nutrient intakes based on EPIPorto study

The dietary intake data used in this study were derived from EPIPorto study, collected between 1999 e 2003. The mentioned study aimed to collect information about health and nutrition in adults. The study was made into individuals that lived in the Porto area (located in the North region, Porto is the second largest city of Portugal). EPIPorto revealed the consumption from one final sample composed by 2415 individuals, with ages ranged between 18 and 92 years old. Dietary intake was assessed using a validated semi-quantitative Food Frequency Questionnaire. EPIPorto study identified eight *posteriori*-derived DP, four for women and four for men ⁽¹²⁾.

A brief characterization of each DP, is presented in Table 2 and 3, Annex C. Furthermore, a description of the average nutrient intake for each DP are shown in Figure 2 and 3, Annex D ⁽¹²⁾.

3. Translation of dietary patterns and measured nutrient intake data into eight Typical Daily Menus

Eight theoretical Typical Daily Menus were composed (4 for women, and 4 for men) using the quantitative and qualitative description of each DP found in the EPIPorto study (Table 1 to 16, Annex E).

The average nutrient intakes from the eight Typical Daily Menus need to approximate to the nutrient intakes for each DP identified in EPIPorto study. Therefore, the maximum allowed deviation from the actual intakes for each DP in

terms of calories, proteins, carbohydrates, simple carbohydrates, total fat, fibre, alcohol and sodium was set at 10% to adhere as closely as possible to the dietary habits of the adult population of Porto and as a stricter range compared to a previous study that used the same methodology ⁽¹¹⁾. This 10% maximum deviation could not be achieved for TFA due to lack of this information in the EPIPorto study.

As there was not an average intake of sodium per DP, it was used the average of sodium intake of the total population described in the EPIPorto study.

Although there was no information about added sugars or free sugars, this was estimated on the assumption that 2/3 of total sugars (mono + disaccharides) are delivered by free sugars (comparable to added sugar) ⁽¹³⁾.

For these Typical Daily Menus, the standard portions used for food products were the ones used in the food questionnaire of the EPIPorto study, however in some cases the portions were adjusted to better replicate the nutrient intakes obtained in EPIPorto study.

Finally, a weighted average was calculated for the eight Typical Daily Menus, using the number of people per DP in EPIPorto study.

4. The Choices Daily Menus

After evaluation of the eight Typical Daily Menus according to the Choices criteria, non-compliant food products were replaced by similar foods that did. The replaced food products were chosen from the Portuguese food composition database ⁽¹⁴⁾.

In some cases, the portions were adapted to create a more realistic scenario, for example: “Maria cookies” with a standard portion of 18 grams (3 cookies) where replaced by “whole wheat toast” with a standard portion of 50 grams (2 toasts).

For table sugar it was not possible to find any suitable replacement in the Portuguese food composition database, however, it was decided to replace it with an artificial sweetener that doesn't contain any significant number of calories and therefore doesn't affect the study results. As for the salt, it was not possible to find any suitable substitute, and as is such an essential ingredient on seasoning in Portugal, it was decided to keep it in the Choices Daily Menus.

4.1. Energy correction

The created Choices Daily Menus showed a reduction in energy intake with the consumption of a Choices-compliant diet that goes below the recommended value. In a previous study, with a similar approach, it was assumed that consumers may compensate for this decrease in energy intake by eating more foods with a lower energy density ⁽¹⁵⁾. Therefore, an energy correction was applied and when a food (e.g. butter with salt, 739 kcal/g) was replaced by a food with a lower energy density (in this case: vegetable spread 35% fat, 328 kcal/g), a multiplication factor was applied (in this case: $739/328 = 2.25$) so that the total amount of consumed energy was the same as the amount of energy delivered by the food that had been replaced. The correction was applied to all products, except for a light soft drink with 0 calories.

Results

Table 1 summarizes the overall results. In this table, intakes obtained from EPIPorto study and intakes from the Daily Menus (averaged for the eight Typical Daily Menus and averaged for the eight Choices Daily Menus, with and without energy adjustment) are shown together with the international nutrient recommendations.

Table 1. Energy, added sugars, SAFA, TFA, fibre and sodium content, obtained from the EPIPorto study, calculated from Typical Daily Menu, Choices Daily Menus and Choices Daily Menus adjusted for energy and International dietary recommendations.

Nutrient	Energy (kcal)	Added sugar (en%/d)	SAFA (en%/d)	TFA (en%/d)	Fibre (g/d)	Sodium (mg/d)
International dietary recommendations**	2000	<10*	<10	< 1	> 25	< 2400
DNI based on EPIPorto study	2189.6	12.7	9.2	-	23.9	3600
DNI calculated from the mean of Typical Daily Menus	2179.8	13	8.6	0.4	23.9	3519.1
DNI calculated from the mean of Choices Daily Menus	1870	11.8	6.8	0.2	27.6	2460
DNI calculated from the mean of Choices Daily Menus – adjusted for energy	2085.3	12.5	7.7	0.2	27.9	2649.3

En: energy

*<10 en% free sugar=added sugar⁽¹³⁾

**Recommendations for SAFA, TFA and free sugars are derived from WHO/FAO⁽¹⁶⁾ and recommendation for sodium is derived from various other references⁽¹⁷⁻²¹⁾.

The eight Typical Daily Menus were composed by a total of 53 food products, where 36% of them did not comply the Choices criteria and were replaced by ones that did. A list with all food products used on the Typical Daily Menus and its respective replacements is shown in Table 1, Annex F.

Overall, the main factors for non-compliance with the Choices criteria were the high levels of sodium and SAFA. As presented in Figure 1, for the food products that were not complying with the Choices criteria, it was calculated the percentage of all non-complying nutrients, by dividing “the amount of food products that were non-

compliant for the key-nutrient” by “the sum of all noncomplying key-nutrients for all foods”.

Examples of foods that were too high in energy were pastries, cookies and beverages. For SAFA were butter, margarine and cheese. For TFA were butter, and cheese. For sodium, were codfish, margarine and cheese. For sugar were breakfast cereal, yogurt and beverages. Typical replaced foods that were too low in fibre were breads and breakfast cereal.

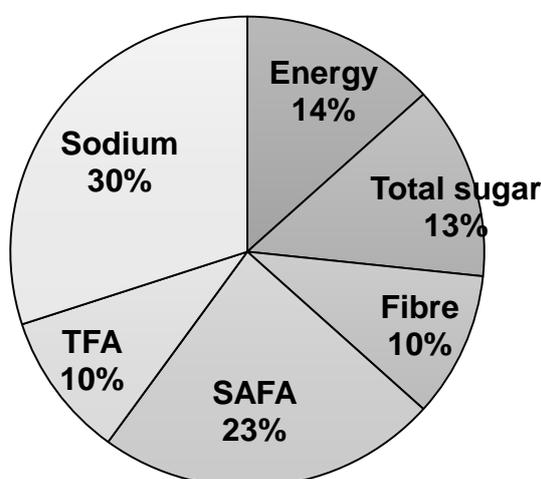


Figure 1. Percentage of all non-complying nutrients. Foods can be non-compliant for more than one key nutrient.

Figure 2 shows the relative change on nutrient intake that occurs when non-compliant foods are replaced by foods that do comply with the Choices criteria. A reduction was seen for energy intake (-14%), as well as, for total sugar (-22%), SAFA (-32%), TFA (-56%) and sodium (-30%). It was also observed an increase for fibre intake (15%). After energy adjustment, the results showed that these reductions were still present but became smaller. Decreases were seen for energy intake (-4%), total sugar (-8%), SAFA (-15%), TFA (-39%) and sodium (-25%). Fibre intake increased even more (16%).

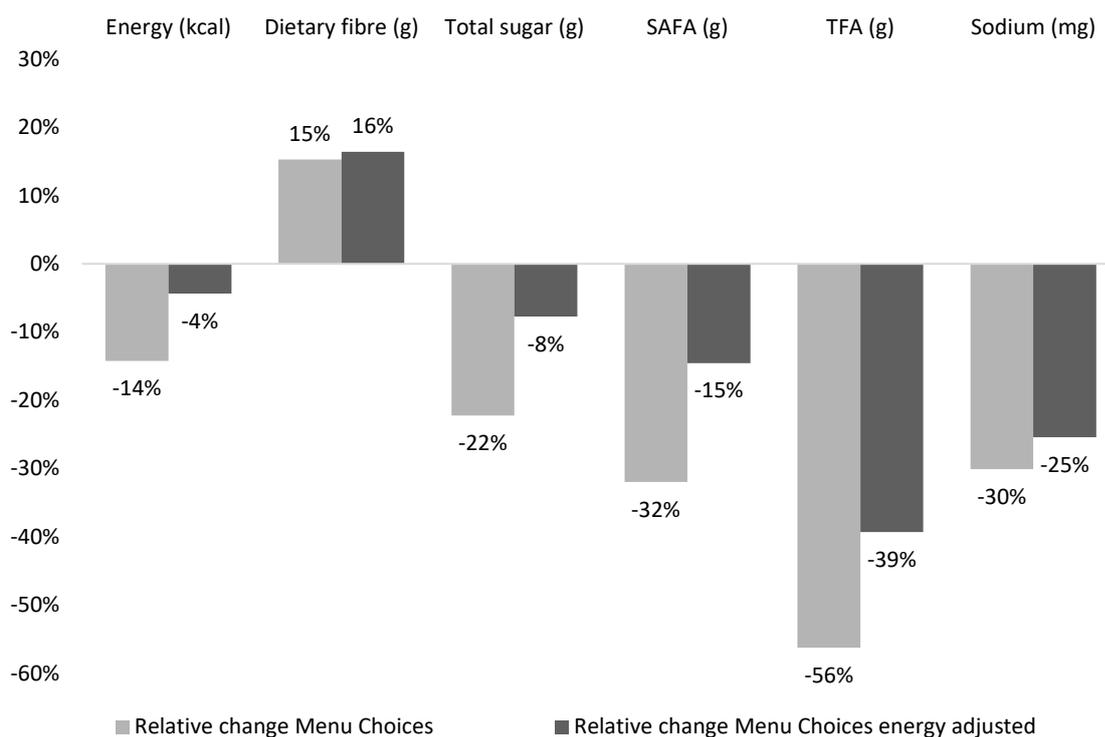


Figure 2. Relative change on nutrient intake. Results are expressed as percentage change on nutrient intake when non-compliant foods are replaced by foods that do comply with the Choices criteria (with and without energy correction).

Discussion

The present study evaluated the potential effects on nutrient intake, when non-complying food products were replaced by Choices-compliant ones, in typical Daily Menus, based on the typical DP of the adult population of Porto. The introduction of Choices-compliant food products in the typical Daily Menu demonstrate a reduction in intakes of energy, SAFA, TFA, added sugar and sodium and an increase in fibre intake.

For SAFA and TFA, intakes obtained through the typical Daily Menus were already below the recommended level, but a reduction even more profoundly were observed

after the introduction of Choices-compliant foods. For TFA, the relative change was the highest amongst all the other nutrients (with and without the energy adjustment). Regarding added sugar and sodium intakes, the results showed a shift on nutrient intake in a beneficial direction when the population consume a Choices-compliant diet, however, this improvement is not enough to meet the recommended intakes. A reason could be that the Choices criteria for total sugar and sodium are not strict enough.

However, the criteria are revised every four years by independent food and nutrition scientists ⁽²²⁾. In fact, the International Scientific Committee of Choices refers their ambition to come to a further sugar reduction, and by 2018 there will be a new sugar criteria for several products ⁽³⁾.

In the case of sodium, the fact that table salt was not removed could have led to overestimated results. It could have been possible to replace it, for example, with potassium chloride, or, fresh herbs, however, for people who are accustomed to high levels of salt in their food (as is the population of Porto), its abrupt absence could make foods. Studies suggest that after consuming a diet with a reduction in sodium content, people gradually develop a preference for foods with lower salt levels ⁽²³⁾. Therefore, it could be expected that once people start eating products with less salt, they will get acclimated to the new lower-salt diet, will also start adding less salt on their food and, as consequence in the long term, they would reach the recommended intakes.

A new global study projects that a government-supported policy to reduce salt consumption would be highly cost-effective across the world. Based on costs and a 10 percent reduction in salt over 10 years, such a program would save nearly 6 million life-years currently lost to cardiovascular disease each year, at an average

cost of \$204 per life-year saved ⁽²⁴⁾. Consequently, every reduction on the intake of sodium could be considered an important advance.

Regarding the intake of fibre, the intakes increased, meeting the recommended intake per day.

When energy correction was applied, assuming consumers might compensate for the decrease in energy intake when eating a full Choices-compliant diet, results were smaller but, still showed a substantial shift in on nutrient intakes, towards a more favourable direction.

The findings of this study support previous studies that evaluated the potential impact of Choices criteria on nutrient intakes ^(10, 11, 15, 25, 26). Overall, the introduction of Choices compliant foods in the typical diet appeared to reduce the intake of SAFA, TFA, sodium, added sugar and increase the intake of fibre.

In the present study, after applying the Choices criteria in the Typical Daily Menus it was possible to observe that 54% of food products complied with the criteria whereas previous studies found that the percentage ranged from 59% in Greece, to 29% in the United States ⁽¹¹⁾. One reason to explain the wide range could be different DP in each region.

Another study that investigated the effects of the Choices logo on the development of healthier products by food manufacturers found that, it has influenced food manufacturers to reformulate existing products and develop new products with a healthier product composition, especially where sodium and fibre are concerned ⁽⁸⁾.

Another study showed that Pick the Tick logo (programme of the National Heart Foundation of New Zealand), influenced food companies to exclude ~33 tonnes of salt over a 12-month period through the reformulation and formulation of 23 breads, breakfast cereals and margarines ⁽²⁷⁾.

In this study, it was assumed that, consumers would replace all the non-compliant Choices products, by compliant ones. Therefore, these are potential effects, and it remains to be seen whether consumers would really make these dietary changes, as it is not realistic to assume that consumers will fully replace regular products in their diet by Choices-compliant products if the manufacturers and retailers continue selling and promoting the non-compliant foods as well.

A further limitation of the study, was the use of the Portuguese food database, which gives an average of nutrient composition per product. Moreover, this database was published in 2006⁽¹⁴⁾, and the one from 2015 is still being updated⁽²⁸⁾, therefore some new products might not be present, as well as some data might be outdated. However, this was the best open source of nutritional information in Portugal, and the use of food labels would have led to incomplete results.

Also, there could be some subjectivity in the menus created, however, because the EPIPorto study had information both quantitative and qualitative regarding food and nutrient intakes, it was possible to create daily menus more objectively.

Further research could be conducted to apply a similar research approach to the whole Portuguese population (not only by means of DP of a region), using available products in the market and comparing with other nutrient profiles.

Furthermore, a pilot study where the logo is used in a real scenario, following their diets before and after its implementation, would allow to have a more accurate estimation of the impact of a nutrient profile in Portugal.

Conclusion

The present study quantified the potential impact of the Choices Programme on key nutrient intakes, on the adult population of Porto, using the Daily Menu Method.

Overall it improved nutrient intakes in the direction of the WHO recommendations by reductions of energy, SAFA, TFA, added sugar and sodium intakes, as well as an increase of fibre intakes. Energy adjustment was applied and while the reductions of energy, SAFA, TFA, added sugar and sodium seem to be modest, even small dietary changes, can have large impacts on health outcomes.

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Annexes

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Annex A. Choices criteria 2016

Choices criteria 2016⁽³⁾

International Product criteria December 2016



Choices Programme international product criteria

This document provides an overview of the product group specific criteria of the Choices Programme. These criteria have been developed by the Choices International Scientific Committee, an independent panel of leading international experts in nutrition, food technology and consumer behaviour.

The International Scientific Committee periodically evaluates the product criteria so as to keep abreast with the latest scientific and technological developments in the field of nutrition and health. This in turn provides industry with the necessary guidance to develop or reformulate products. The international criteria are a guideline for the direction into which the criteria in a country should develop. National country organisations set the criteria for the assignment of the local logo to products in that market.

As a result of the varying dietary patterns per country participating in the Choices Programme, deviations from the product criteria outlined in this document are permitted. Please contact your local Choices foundation or the Choices International Foundation for more information on the exact criteria that are applied in your country. The International Scientific Committee introduced two new elements in the criteria:

1. Sugar criteria by 2018

The International Scientific Committee has determined new sugar criteria for a number of product groups. This decision is based on new scientific insights on the role of increased sugar consumption in NCDs and obesity, the new WHO recommendations on sugar (2015) and rapid developments in food reformulation. While respecting the 3-4 year frequency of the criteria revision, ISC decided to be clear about its ambition to come to a further sugar reduction. These new criteria will come into force by 2018 by announcement of the Choices International Foundation and can be found at the end of each of the different criteria tables. Sugar cut-off points in the product groups that will change in 2018, are indicated with ¶.

2. Total sugar criteria

Total sugars criteria have been added in order to provide a guideline for sugar for countries in which insufficient data on added sugars quantities in products are available. Lack of such data makes it difficult to set realistic criteria for added sugars. For producers it takes extra efforts to obtain added sugars data to check their existing product composition against the criteria and to certify their products. For these countries the use of total sugars criteria instead of added sugars criteria is a practical solution. In those product groups where no added sugars were allowed, in most cases no total sugars criterion is given. This is done because if sugar is added it should be declared at the ingredient declaration of a package.

Second:

Excluded Products

A number of products cannot be taken into consideration for the product criteria and are not eligible to carry the stamp:

1. products containing > 0.5% alcohol;

Invoice address:
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Zeestraat 84
2518 AD The Hague
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Bankaccount ABN AMRO
Swift code - ABNANL2A
IBAN - NL58ABNA0519036816
Trade Register no. - 27302944
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2. food supplements;
3. products for use under medical supervision;
4. foods for children under a year old.

Product groups

A product must comply with the criteria of the product group to which it belongs. Two types of product groups have been defined: *basic product groups* and *non-basic product groups*.

Basic product groups (Table 1)

Basic product groups have been defined according to product group classifications that are used in more than 20 countries. The products found within basic product groups contribute significantly to the daily intakes of essential nutrients. Basic product groups can be subdivided into the following categories:

- fruits and vegetables;
- beans and legumes;
- sources of carbohydrates;
- meat, fish, poultry, eggs, and meat substitutes;
- dairy products;
- oils, fats and fat-containing spreads;
- nuts & seeds;
- water, tea, coffee;
- main meals, mixed salads, sandwiches, lunch meals.

The criteria for saturated fatty acids (SAFA), trans fatty acids (TFA), sodium and added sugars have been determined for each of these groups. Additional criteria have been drawn up in situations for which the intake of essential or useful nutrients (e.g. fiber from bread) or for which the intake of adequate amounts of energy is of importance. For situations in which no added sugars data are available, alternative total sugars criteria have been developed (see annex IV).

Non-basic product groups (Table 2)

Food products from non-basic product groups generally do not contribute substantially to the intake of essential nutrients, but provide a great innovation potential. Non-basic products can be subdivided into the following categories:

- soups;
- sauces;
- snacks (including pastry, ice cream, and sweet and savoury snacks);
- beverages (excluding water) and fruit juices;
- bread toppings;
- fruit juices.

In addition to the criteria for saturated fatty acids (SAFA), trans fatty acids (TFA), sodium and added sugars, an additional energy criterion has been established for most of these product groups. Also for the cases in which no data on added sugars are available, criteria for total sugars are developed (see annex IV).

Please note that generic criteria for SAFA, TFA, sodium and added sugars are applied for products that do not fall under any of the basic or non-basic product groups (defined as "all other products" in Table 2).



Table 1: Criteria for basic product groups

Product group	Criteria	Definition
Fruits and vegetables		
Fresh or fresh frozen fruits, vegetables and legumes	All products that do not contain additions comply. These include dried, fresh frozen and/or sliced fruits and vegetables, without additives.	All types of fresh fruit, vegetables, and legumes that are additions -free, including freshly frozen and/or sliced fruits & vegetables. E.g.: pre-cut leek, pre-sliced melon, cucumber, broccoli, frozen spinach (without added cream), and frozen raspberries. Additions are considered products changing the amounts of nutrients or energy for which criteria are set, i.e. sodium, SAFA, TFA, sugar, fiber.
Processed and dried fruits & vegetables	SAFA: ≤ 1.1 g/100g TFA: ≤ 0.1 g/100g Sodium: ≤ 100 mg/100g Added sugars: not added Fiber: ≥ 1.0 g/100g*	All types of processed fruits & vegetables, with the exception of fruit juices and frozen or pre-sliced fruit & vegetables that have not undergone further processing. E.g.: canned tomatoes, canned carrots, frozen spinach with cream, frozen vegetables, tomato juice, pickles (gherkins, pearl onions, relish), mixed vegetable juices, fruit salads in own juice or syrup, apple sauce, candied dates, strawberry purée, olives, mixed fruit & vegetable purées or juices, dried figs/prunes.
Processed beans & legumes	SAFA: ≤ 1.1 g/100g TFA: ≤ 0.1 g/100g Sodium: ≤ 200 mg/100g Added sugars: 2.5 g/100g Fiber: ≥ 3.5 g/100g*	All processed beans and legumes. E.G. canned kidney beans, dried lentils, white beans in sauce.
Water		
Water (plain), tea, coffee	SAFA: not added TFA: not added Sodium: ≤ 20 mg/100mL Added sugars: not added	Includes natural (mineral) waters and other bottled waters, regardless of whether they are carbonated or non-carbonated; tea bags; coffee (beans); milled coffee. Tea: young leaves, (leave) stalks and leave buds from varieties of <i>Camellia sinensis</i> (L) O. Kuntze, which might be fermented or roasted. With tea extract or instant tea is meant the product obtained by extraction of tea with water, followed by filtering and drying. Infusions are excluded from this group.
Nuts		
Nuts & seeds	SAFA: ≤ 8.0 g/100g TFA: ≤ 0.1 g/100g Sodium: ≤ 100 mg/100g Added sugars: not added	All ground and tree nuts and fruits perceived as nuts such as: peanuts, cashew nuts, almonds, coconuts, pecan nuts, pistachio nuts. Raw nuts as well as roasted, salted or otherwise processed nuts are included. All seeds (except grains) and kernels like sunflower seed, linseed, poppy seed; pine nuts, etc.

Table 1 continued

Product group	Criteria	Definition
Sources of carbohydrates		
Potatoes (unprocessed)	All additions -free products comply	All unprocessed, uncooked, additions -free potatoes, including peeled, sliced and/or chilled potatoes. Additions are considered products changing the amounts of nutrients or energy for which criteria are set, i.e. sodium, SAFA, TFA, sugar, fiber.
Potatoes (processed), pasta & noodles	SAFA: ≤ 1.1 g/100g TFA: ≤ 0.1 g/100g Sodium: ≤ 100 mg/100g Added sugars: not added Fiber: ≥ 2.7 g/100g* Potato products: The nutritionally preferred preparation method should be promoted on the package	All types of potato, pasta and similar grain products to be used as a main course. E.g.: boiled/fried potatoes, mashed potatoes, (wholemeal) pasta, sweet potato, chips, noodles.
Rice	SAFA: ≤ 1.1 g/100g TFA: ≤ 0.1 g/100g Sodium: ≤ 100mg/100g Added sugars: not added Fiber: ≥ 1,8 g/100g*	All types of rice to be used as a main course. E.g.: boiled, dried, unpolished rice, white rice, basmati rice, whole grain rice, and risotto.
Bread	SAFA: ≤ 1.1 g/100g TFA: ≤ 0.1 g/100g Sodium: ≤ 450 mg/100g Added sugars: ≤ 4.0 g/100g¶ Fiber: ≥ 4.0 g/100g*	All types of bread or substitutes for bread with the exception of breakfast cereals. E.g.: wheat bread, wholemeal bread, crisp breads, knäckerbrod, croissants, rye bread, speciality rolls, and crackers.
Grains and cereal products Wheat-based	SAFA: ≤ 1.1 g/100g TFA: ≤ 0.1 g/100g Sodium: ≤ 100 mg/100g Added sugars: ≤ 2.5g/100g Fiber: ≥ 5.0 g/100g*	All types of grains and cereal products (other than bread and breakfast cereals). E.g.: flour, breadcrumbs, binding agents, pancake mixes.
Grains and cereal products Non-wheat products	SAFA: ≤ 1.1 g/100g TFA: ≤ 0.1 g/100g Sodium: ≤ 100 mg/100g Added sugars: ≤ 2.5g/100g Fiber: ≥ 5.0 g/100g*	All types of grains and cereal products (other than bread and breakfast cereals). E.g.: flour from spelt, soy, sunflower, chickpea, peanut etc.
Breakfast cereal products	SAFA: ≤ 3,0 g/100g TFA: ≤ 0.1 g/100g Sodium: ≤ 400 mg/100g Added sugars: ≤ 17.5 g/100g¶ Fiber: ≥ 6,0 g/100g*	All types of breakfast cereal products. E.g.: muesli, cruesli, oats, cornflakes, honey loops, rice crispies.

Table 1 continued

Product group	Criteria	Definition
Meat, fish, poultry, eggs, meat substitutes		
Meat, poultry, eggs (unprocessed)	SAFA: ≤ 3.2 g/100g TFA: ≤ 0.1 g/100g** Sodium: ≤ 100 mg/100g Added sugars: not added	All types of unprocessed meat, poultry and eggs (including frozen meat that has not undergone further processing). E.g.: beef, pork, turkey, egg, game, lamb, and offal.
Processed meat, meat products and meat substitutes	SAFA: ≤ 5.0 g/100g TFA: ≤ 0.1 g/100g** Sodium: ≤ 820 mg/100g Added sugars: ≤ 2.5g/100g	All types of processed meat/poultry, meat products and (vegetable) meat substitutes. E.g.: ready-to-eat meatballs, spiced or salted meat (fresh or frozen), salami, smoke-dried beef, grilled ham, tempeh, tofu, dairy-based meat substitute, fungus-based meat substitute.
Fresh or fresh frozen fish, shellfish and crustaceans	SAFA: ≤ 4.0 g/100g TFA: ≤ 0.1 g/100g Sodium: ≤ 130 mg/100g Added sugars: not added	All types of unprocessed fish, crustaceans and shellfish (including frozen, steamed or smoked fish that has not undergone further processing). E.g.: uncooked herring, cod (fresh or deep-frozen), fresh eel, lobster crab, mussel, and shrimp.
Processed fish or fish products	SAFA: ≤ 4.0 g/100g TFA: ≤ 0.1 g/100g Sodium: ≤ 450 mg/100g Added sugars: not added	All types of processed fish, processed crustaceans and processed shellfish. E.g.: cod parings, fried fillet of haddock, deep-fried octopus/ squid (cephalopod), pickled mussels, herring in tomato sauce, canned sardines, canned tuna, spiced or salted fish (fresh or frozen).
Dairy		
Milk (-products)	SAFA: ≤ 1.4 g/100g TFA: ≤ 0.1 g/100g** Sodium: ≤ 100 mg/100g Added sugars: ≤ 5.0 g/100g¶	All types of milk and milk products. E.g.: low fat milk, buttermilk, semi-skimmed milk, full-cream milk, low fat yoghurt, semi-skimmed yoghurt, yoghurt drink, low fat custard, low fat fruit yoghurt, evaporated milk, coffee cream, cream (for culinary use), milk substitutes such as soy milk.
Cheese (-products)	SAFA: ≤ 15.0 g/100g TFA: ≤ 0.1 g/100g** Sodium: ≤ 830 mg/100g Added sugars: not added	All types of cheese and cheese products. E.g.: 20+ cheese, 30+ cheese, Edam, Brie 50+, 48+ Gouda cheese, blue cheese, gorgonzola, gruyere, soft herb cheese.
Oils, fats and fat containing spreads		
Oils, fats and fat containing spreads	SAFA: ≤ 28,0 g/100g TFA: ≤ 1,0 g/100g Sodium: ≤ 160 mg/100g Added sugars: not added	All types fats and oils to be used as spreads on bread and/or in the preparation of food. E.g.: oil (all types), low-fat margarine, margarine, butter, oil/fat products for roasting and frying (solid or liquid).



Table 1 continued

Product group	Criteria	Definition
Meals		
Main course***	SAFA: ≤ 2.0 g/100g TFA: ≤ 0.15 g/100g Sodium: ≤ 240 mg/100g Added sugars: ≤ 3.0 g/100g Fiber ≥ 1.2 g/100g Energy: 400 – 700 kcal/portion	All types of ready-to-cook meals that are intended for consumption as a main dish during lunch or dinner. E.g.: meals for steaming, ready-to-cook meals, pizza, frozen meals.
Sandwiches/rolls***	SAFA: ≤ 2.2 g/100g TFA: ≤ 0.15 g/100g Sodium: ≤ 450 mg/100g Added sugars: ≤ 8.0 g/100g¶ Fiber ≥ 1.4 g/100g Energy: ≤ 350 kcal/portion	All types of ready-to-eat filled sandwiches/rolls.
Mixed salads	SAFA: ≤ 2.6 g/100g TFA: ≤ 0,10 g/100g Sodium: ≤ 170 mg/100g Added sugars: ≤ 1.25 g/100g Fiber ≥ 0.80 g/100g Energy: ≤ 110 kcal/portion	Salads containing at least 70% fruit or vegetables Salads include sauce and toppings.
Small meals***	SAFA: ≤ 4.0 g/100g TFA: ≤ 0,15 g/100g Sodium: ≤ 450 mg/100g Fiber ≥ 1.4 g/100g Energy: 350 - 550 kcal/portion	Lunch meals like pasta salads, wraps, sandwiches with > 80 g bread.

* The source of fiber in a product must be naturally occurring in one of the main ingredients of the product group.

** Naturally occurring trans fatty acids from meat or milk are excluded.

*** If all of the components of the product comply with the criteria of their respective product group, and if the product is in line with the energy and fiber criterion for its product group, then the product also complies with the criteria.

¶ Criteria will be revised in 2018.

Table 1, expected changes 2018

Product group	Foreseen changes to be implemented in 2018
Bread	Added sugars : ≤ 2.0 g/100g
Breakfast cereal products	Added sugars: ≤ 14.0 g/100g Total sugars: ≤ 16.0 g/100g
Milk (-products)	Added sugars: ≤ 4.0 g/100g Total sugars: ≤ 10.0 g/100g For milk substitutes: Total sugars: ≤ 4.0 g/100g
Sandwiches/rolls***	Added sugars: ≤ 3.0 g/100g Total sugars: ≤ 8.0 g/100g
Small meals***	Added sugars: ≤ 3.0 g/100g

Table 2: Criteria for non-basic product groups

Product group	Criteria	Definition
Soups	SAFA: ≤ 1.1 g/100g TFA: ≤ 0.1 g/100g Sodium: ≤ 300 mg/100g Added sugars: ≤ 2.5 g/100g¶ Energy: ≤ 100 kcal/100g	All types of soups and broths. E.g.: canned soup, frozen soup, soup in stand-up pouches, soup powder, stock cubes, soup served by the catering industry.
Meal sauces	SAFA: ≤ 1.1 g/100g TFA: ≤ 0.1 g/100g Sodium: ≤ 450 mg/100g Added sugars: ≤ 2.5 g/100g* Energy: ≤ 100 kcal/100g	All types of sauces that make up a substantial portion of the meal (portion size > 35 g). E.g.: pasta sauce, béchamel sauce, vegetable sauce, meat sauce, fish sauce, cheese sauce, mustard sauce, gravy.
Other sauces (water-based)	SAFA: ≤ 1.1 g/100g TFA: ≤ 0.1 g/100g Sodium: ≤ 750 mg/100g Energy: ≤ 100 kcal/100g	All types of sauces that only make up a small portion of the meal (portion size < 35 g), that do not have an emulsifying agent AND which have a fat content < 10% w/w. E.g.: ketchup, soy sauce, chocolate sauce, fruit sauce, barbecue sauce.
Other sauces (emulsions)	SAFA: ≤ 4.0 g/100g TFA: $\leq 0,35$ g/100g Sodium: ≤ 750 mg/100g Added sugars: ≤ 11.0 g/100g¶ Energy: ≤ 350 kcal/100g	All types of sauces that only make up a small portion of the meal (portion size < 35 g) to which an emulsifying agent has been added OR which have a fat content $\geq 10\%$ w/w. E.g.: mayonnaise, salad dressing, dip sauce, marinade, mustard, vinaigrette.
Snacks (Including pastry, ice cream, sweet snacks and savoury snacks)	SAFA: ≤ 6.0 g/100g TFA: ≤ 0.4 g/100g Sodium: ≤ 400 mg/100g Added sugars: ≤ 20 g/100g Energy: ≤ 110 kcal/portion	All types of sweet, savoury, and baked products intended for consumption as a small snack between meals or as a minor component of a meal. E.g.: <ul style="list-style-type: none"> - Savoury products: potato crisps, popcorn, salted sticks, Japanese mix, mini pizzas, small pre-packaged salads. - Sweet products: sweets, all types of chocolate, candy bars, marzipan, wine gums, liquorice. - Baked products: biscuits, cookies, all types of cakes



Table 1, expected changes 2018

Product group	Foreseen changes to be implemented in 2018
Bread	Added sugars : ≤ 2.0 g/100g
Breakfast cereal products	Added sugars: ≤ 14.0 g/100g Total sugars: ≤ 16.0 g/100g
Milk (-products)	Added sugars: ≤ 4.0 g/100g Total sugars: ≤ 10.0 g/100g For milk substitutes: Total sugars: ≤ 4.0 g/100g
Sandwiches/rolls***	Added sugars: ≤ 3.0 g/100g Total sugars: ≤ 8.0 g/100g
Small meals***	Added sugars: ≤ 3.0 g/100g

Table 2: Criteria for non-basic product groups

Product group	Criteria	Definition
Soups	SAFA: ≤ 1.1 g/100g TFA: ≤ 0.1 g/100g Sodium: ≤ 300 mg/100g Added sugars: ≤ 2.5 g/100g [¶] Energy: ≤ 100 kcal/100g	All types of soups and broths. E.g.: canned soup, frozen soup, soup in stand-up pouches, soup powder, stock cubes, soup served by the catering industry.
Meal sauces	SAFA: ≤ 1.1 g/100g TFA: ≤ 0.1 g/100g Sodium: ≤ 450 mg/100g Added sugars: ≤ 2.5 g/100g* Energy: ≤ 100 kcal/100g	All types of sauces that make up a substantial portion of the meal (portion size > 35 g). E.g.: pasta sauce, béchamel sauce, vegetable sauce, meat sauce, fish sauce, cheese sauce, mustard sauce, gravy.
Other sauces (water-based)	SAFA: ≤ 1.1 g/100g TFA: ≤ 0.1 g/100g Sodium: ≤ 750 mg/100g Energy: ≤ 100 kcal/100g	All types of sauces that only make up a small portion of the meal (portion size < 35 g), that do not have an emulsifying agent AND which have a fat content < 10% w/w. E.g.: ketchup, soy sauce, chocolate sauce, fruit sauce, barbecue sauce.
Other sauces (emulsions)	SAFA: ≤ 4.0 g/100g TFA: ≤ 0.35 g/100g Sodium: ≤ 750 mg/100g Added sugars: ≤ 11.0 g/100g [¶] Energy: ≤ 350 kcal/100g	All types of sauces that only make up a small portion of the meal (portion size < 35 g) to which an emulsifying agent has been added OR which have a fat content ≥ 10% w/w. E.g.: mayonnaise, salad dressing, dip sauce, marinade, mustard, vinaigrette.
Snacks (including pastry, ice cream, sweet snacks and savoury snacks)	SAFA: ≤ 6.0 g/100g TFA: ≤ 0.4 g/100g Sodium: ≤ 400 mg/100g Added sugars: ≤ 20 g/100g Energy: ≤ 110 kcal/portion	All types of sweet, savoury, and baked products intended for consumption as a small snack between meals or as a minor component of a meal. E.g.: <ul style="list-style-type: none"> - Savoury products: potato crisps, popcorn, salted sticks, Japanese mix, mini pizzas, small pre-packaged salads. - Sweet products: sweets, all types of chocolate, candy bars, marzipan, wine gums, liquorice. - Baked products: biscuits, cookies, all types of cakes

Table 2 continued

Product group	Criteria	Definition
		<ul style="list-style-type: none"> - and pastries. - Ice cream: vanilla ice cream, sorbet, yoghurt ice, sorbet ice, milkshake. Dried fruits positioned as snack: dried apple, raisins
Beverages	SAFA: ≤ 1.1 g/100g TFA: ≤ 0.1 g/100g Sodium: ≤ 20 mg/100 mL Energy: ≤ 20 kcal/100 mL¶	Liquid food products that are normally consumed from a cup, mug or glass (incl. products packed in portions in packaging, bottles, etc.), with the exception of plain water, dairy products and fruit juices. E.g.: coffee, tea, (light) soft drinks, fruit drinks, drinks containing $<0.5\%$ alcohol, sport drinks (including powder).
Fruit juices	SAFA: ≤ 1.1 g/100g TFA: ≤ 0.1 g/100g Sodium: ≤ 100 mg/100g Added sugars: not added Fiber: ≥ 0.30 g/100 g Energy: ≤ 48 kcal/100mL	All kinds of fruit juices with a minimum of 98% pure juice. E.g.: orange juice, apple juice, multi-fruit juice, grape juice, berry juice.
Bread toppings incl. hummus-type products	SAFA: ≤ 4.0 g/100g TFA: ≤ 0.3 g/100g Sodium: ≤ 400 mg/100g Added sugars: ≤ 30 g/100g Energy: 350 kcal/100g	All types of food product that are meant to be put on bread or toast and that do not fall under the above-mentioned product groups. E.g.: jam, peanut butter, tuna salad, hummus, tahini.
All other products	SAFA: ≤ 1.1 g/100g or ≤ 10 en% TFA: ≤ 0.1 g/100g or ≤ 1.0 en% Sodium: ≤ 100 mg/100g Added sugars: ≤ 2.5 g/100g or ≤ 10 en%	All types of food product that do not fall within any of the above mentioned product groups. E.g.: baking product, seasonings, vinegar.

* In Europe the criteria will develop stepwise towards this criterion.

¶ Criteria will be revised in 2018.



Table 2, expected changes 2018

Product group	Foreseen changes to be implemented in 2018
Soups	Added sugars: ≤ 1.25 g/100g Total sugars: ≤ 4.0 g/100g
Meal sauces	Added sugars: ≤ 1.25 g/100g Total sugars: ≤ 5.0 g/100g
Other sauces (water-based)	Total sugars: ≤ 16.0 g/100g
Other sauces (emulsions)	Added sugars: ≤ 8.5 g/100g Total sugars: ≤ 9.5 g/100g
Beverages	Energy: ≤ 18 kcal/100mL Total sugars ≤ 4.5 g/100mL



Annexes

Annex I provides an overview of the nutrient definitions. Almost all food products can be categorised according to one of the specified product groups. In order to facilitate the process of assigning a product to the correct product group, a decision tree has been developed (Annex II).

In the case of reasonable doubt on how to assign a product to a product group, the product is assessed according to the positioning of a product in the shop and the 70% rule: it must be made up of at least 70% of the basic raw material of the main product group. For instance, a dairy product must be made up of at least 70% dairy. If a product cannot be assigned to any of the product groups, it must be assessed according to the criteria for "all other products". If you are uncertain about the categorisation within a product group, you can contact your national foundation, who – if necessary – can contact the Scientific Committee.

Equivalence criteria have been established for situations in which there is uncertainty as to how a specific food product should be classified. The equivalence criteria are indicative and can only be applied to replacement products such as meat- or milk substitutes. For the time being, the stamp clearance authority will check and decide whether the product has been correctly categorised. For other product groups, such as processed fruit & vegetables, the criteria will be further determined. The equivalence criteria can be found in Annex III.

Total sugars criteria have been defined for most product groups in Annex IV. These can be used instead of added sugars criteria in the case of no or not enough available data of added sugars contents of products. In this Annex IV, also foreseen adaptations in 2018 of the current criteria are given at the end of Table 1 and Table 2.

Preparation

In principle, products are registered and assessed as 'as sold'.

Food products may only be registered as 'as prepared' if the method of preparation (rehydration/dilution with fluid) is unambiguous, and if they are dried products in powder, concentrated or condensed form. This refers, for example, to dried and concentrated soups, broths, and sauces in powder form, potatoes in powder form and syrups. The nutrient declaration for these products is registered as 'as prepared'. The basis for this must be the standard preparation method as explained on the packaging.

- The standard preparation method should be unambiguous, so that it is not subject to interpretation by consumers. For example: if the directions state that milk should be added, it should be clear whether it is full fat, skimmed or semi-skimmed milk that should be added.
- Variable components (in sort or in amount) should not be taken into consideration (for instance the suggestion that a meal component should be served with rice or pasta).
- For products that are added during preparation, the nutrient declaration can be calculated using the values from the Dutch NEVO-table (for instance fresh meat or vegetables) or other recognised food composition tables like USDA ARS (<http://www.nal.usda.gov/fnic/foodcomp/search/>).
- Variations on the standard preparation method (such as variations or suggestions for serving) are not used for the calculation of the nutrient declaration and are not allowed to be shown on the packaging.
- Serving suggestions that have a direct influence on the criteria nutrients (such as the addition of sugar or salt for taste) are not allowed.



- For products that are to be assessed 'as prepared', the standard preparation method should also be submitted for assessment.

Preparation instructions in general

At some packages, advice on the preparation of the product is given. In the case of heating the product, the foundation prefers the nutritional best practice to be mentioned first. In the case of fish preparation, steaming, cooking, grilling or heating in the oven is preferred above baking in oil. Preparation advice for baking in hard fats should be avoided. Serving suggestions that have a direct influence on the criteria nutrients (such as the addition of sugar or salt for taste) are not allowed.

Preparation instructions for processed potatoes

For processed potato products it is obligatory to advise the nutritional best practice first. The order of preferred preparation is as follows (first is best):

1. Cooking, steaming, heating in oven
2. Baking in oil
3. Frying in oil
4. Baking/frying in hard fats.



Annex I: Definitions of nutrients

Added sugars – All monosaccharides and disaccharides with a calorific value of > 3.5 kcal/g, derived from sources other than fresh fruits and vegetables and milk products. Sugars from products that (mainly) contain natural sugars such as honey, syrups and (more than twice) concentrated fruit drinks are considered to be added sugars. For example: when glucose-fructose syrups are added to a fruit product, the sugars from the syrup must be counted as added sugars.

Examples of sugars and sugar containing ingredients that are considered to be "added sugars":

- monosaccharides: glucose/dextrose, (liquid) fructose, galactose;
- disaccharides: sucrose, lactose, maltose, trehalose;
- sugars: white sugar, brown sugar, raw sugar, invert sugar, granulated sugar, powdered/solved sugar, fruit sugar, etc.;
- syrups: (dried) corn syrup, corn syrup high in fructose, malt syrup, maple syrup, pancake syrup, fructose/glucose syrup, starch syrup, brown-rice syrup, etc.;
- miscellaneous: honey, malt, molasses, fruit and vegetable extracts (of which one or more components of fruit or vegetables are used), fruit concentrates except lemon juice concentrates (> 2 x concentrated).

Examples that do not fall under "added sugars":

- fruit: fresh fruit, fruit juice, fruit pulp, fruit concentrate (up to a maximum of twice the concentration), canned fruit, dried fruit, frozen fruit;
- vegetables: fresh or frozen vegetables, vegetable juice, vegetable pulp, canned vegetables;
- dairy: all kinds of (non-isolated) ingredients, in liquid or powdered form, derived from milk (i.e. milk, powder milk, cream, yoghurt). Lactose may be restored to the original level in dairy products. Isolated lactose is considered an added sugar.

Carbohydrates – The carbohydrates that are metabolised by the human body.

The scientific committee is aware of the fact that people react differently on the same kind of food. Therefore some foods are fitting better in the diet of someone than others. In the case of products with a different glycemic index or glycemic load, the committee did agree that while there is some value in the concept, the use of whole grains and fiber as criteria along with the promotion of a healthy balanced diet fulfills a similar role but does not get caught with a factor that is unmeasured at this point and terribly complex to implement. In addition, because personal metabolism along with the type of preparation and use of various fats affects greatly the glycemic load of a product, the committee decided that a criterion for glycemic index/load of a product would not be appropriate to include in the tables at this point in our knowledge of this topic.

Dietary fiber – The collective term for carbohydrate polymers with three or more monomeric units that are neither digested, nor absorbed in a human's small intestine and which fall under the following categories:

- edible carbohydrates naturally occurring in food products as consumed;
- edible carbohydrates that are obtained from the raw material of food products by means of physical, enzymatic or chemical methods, and;
- edible synthetic carbohydrates.

Examples of substances that fall under the definition of dietary fiber are: cellulose, hemicellulose, pectin, inulin,



galacto-oligosaccharides, non-digestible dextrins, polydextrose, and lignin. The source of fiber in a product must be naturally occurring in one of the main ingredients of the product group. This means, for example, that within fruit or vegetable products, added oligosaccharides are not considered as fiber, and that in products from the bread or breakfast cereal product group, inulin cannot be considered as fiber.

The methods of analysis are as proposed by the Association of Official Analytical Chemists (AOAC): methods 991.43 and 997.08. Calculation of the total amount of fiber is done by enzymatic-gravimetric method based on digestion resistance. The method relies on enzymatic digestion to remove non-fibers from the product, after which quantification is carried out by weighing the residues.

The commission is aware that the current definition covers mainly fibers that contribute to stool bulk.

Energy – The amount of energy from food products that is available for the metabolism by the body, expressed in kJ or kcal. The following conversion factors should be used for the calculation of the energy value:

– carbohydrates:	4 kcal/g or 17 kJ/g
– polyols:	2.4 kcal/g or 10 kJ/g
– erythritol:	0 kcal/g or 0 kJ/g
– protein:	4 kcal/g or 17 kJ/g
– fat:	9 kcal/g or 37 kJ/g
– alcohol (ethanol):	7 kcal/g or 29 kJ/g
– fiber:	2 kcal/g or 8 kJ/g
– organic acids:	3 kcal/g or 13 kJ/g

Energy percentage (en%) – The part of the total energy content of a food product that is provided by one nutrient. For example: $en\% (SAFA) = [\text{amount of energy from SAFA per } 100g / \text{amount of total energy per } 100g] * 100\%$

Fat – All types of lipids, including triglycerides and phospholipids.

The commission is aware of the different roles of saturated fatty acids with different chain lengths. The used SAFA definition of SAFA in the criteria makes the criteria more conservative. In addition the commission advises the substitution of SAFA by PUFA instead of (refined) carbohydrates (publications from Jacobsen et al.). This issue represents a major shift in understanding of the roles of fats and carbohydrates globally and it is very possible a global consensus is being changed with regard to these two issues of fats and carbohydrates.

Polyols – Sugar alcohols such as sorbitol, xylitol, mannitol, and lactitol, containing more than two hydroxylgroups and that are only partly metabolised by the human organism.

Note: considering that the substitution of sugars by polyols only serves to partly reduce the energy content of a product, we advise you to opt for other sugars replacement or reduction options.

Portion – The portion size of a product as indicated by the supplier (e.g. in separate packets or as indicated on packaging). When the packaging information does not clearly specify what is to be considered a portion, (internationally) available, standardised portion sizes are to be used.

Protein – Protein content is calculated according to the following formula: $\text{protein} = \text{total Kjeldahl-nitrogen} \times 6.25$. In dairy products, a multiplication factor of 6.38 is applied.

Saturated fatty acids – The sum of all types and sources of saturated fatty acids without double conjugations.

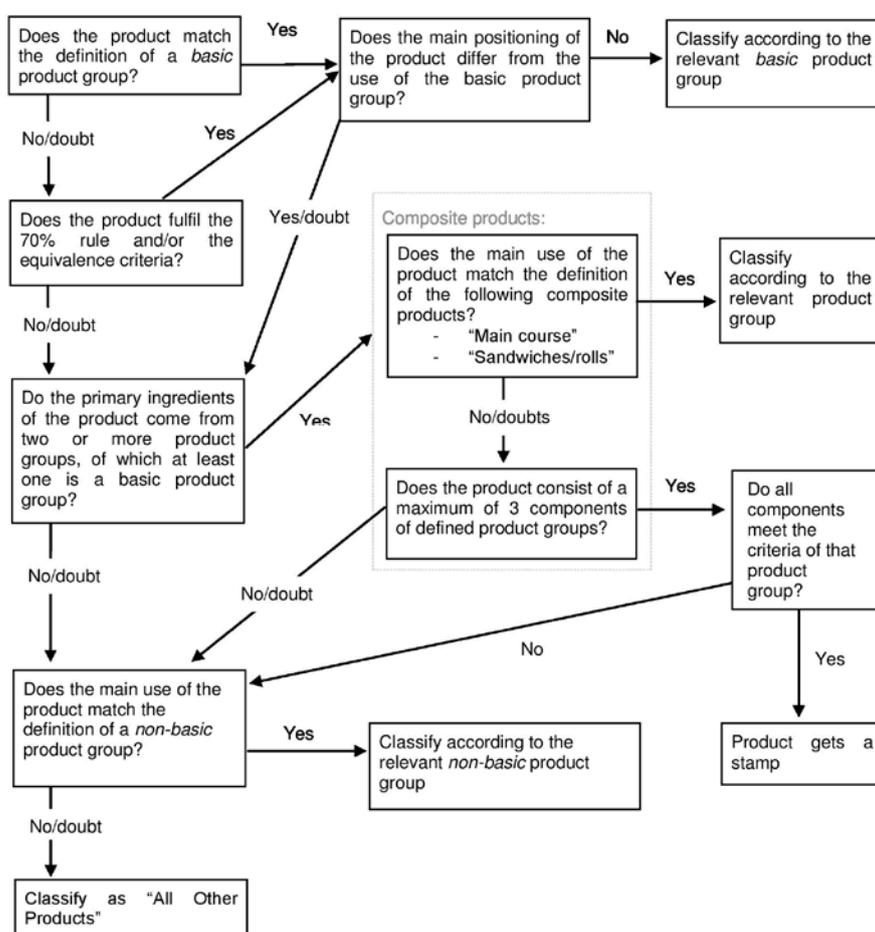


Sodium – This includes both added sodium (e.g. through salt or monosodium glutamate: MSG) and sodium that is naturally present in one of the ingredients (e.g. in yeast extract or in protein hydrolysates).

Trans fatty acids – All the geometric isomers of mono- and polyunsaturated fatty acids with non-conjugated, interrupted by at least one methylene group, double carbon-carbon conjugations in the trans-configuration. Natural trans fatty acids from meat and milk are not included. The amount of TFA present can be calculated by: [total trans fat – natural trans fat from meat/dairy].



Annex II: Decision tree for product group classification





Note

- In principle, products are registered and assessed as "as sold". Food products may only be registered as 'as prepared' if the method of preparation (rehydration/dilution with fluid) is unambiguous, and if they are dried products in powder, concentrated or condensed form. This refers, for example, to dried and concentrated soups, broths, and sauces in powder form, potatoes in powder form and syrups. The nutrient declaration for these products is registered as 'as prepared'. In this case, within the decision tree, the "product" can be referred to as "product as prepared according to the standard preparation method as indicated on the packaging".
- A *main course* is a food that as sold [e.g. based on FDA definition]:
 - Represents, or is intended to be consumed as (part of) a main dish during lunch or dinner, and;
 - Contains per serving (as sold) at least 40 grams of food, or combination of foods, from at least two of the four main product group clusters: sources of carbohydrates (1), vegetables (2), dairy products (3), meat, fish, poultry, eggs, and meat substitutes (4).

Decision tree instructions

The decision tree has been developed to support the assignment of a product to a product group, especially in the instance where the use of the product is doubtful or the composition of the product raises questions. When the product group and the use of the product is clear, this decision tree is not needed.



Annex III: Equivalence criteria

Equivalence criteria have been defined for situations in which uncertainty arises as to which product group a certain food belongs to. The equivalence criteria are always applied for replacements of main products such as meat and milk substitutes. For other product groups, these equivalence values merely indicate the contents of a product.

An equivalent food product must contain a minimum quantity of two of the following nutrients:

- for fruit & vegetables: vitamin C, dietary fiber, folic acid and vitamin A.
- for bread and grains: dietary fiber, vitamin B6, folic acid, iron, vitamin B1.
- for milk (products): calcium, vitamin B2, folic acid, vitamin B12.
- for meat, poultry, fish: Retinol, vitamin A, vitamin B1, vitamin D, iron, vitamin B12.
- for fats, oils and fat containing spreads: vitamins D+E, vitamin A.

From two of the above-mentioned nutrients, a product has to contain at least the following amount per 100 gram:

Nutrient	Value per 100g
Vitamin A (retinol equivalents)	70 µg
Vitamin E	1.5 mg
Vitamin D	0.5 µg
Vitamin B1	0.11 mg
Vitamin B2	0.11 mg
Vitamin B6	0.13 mg
Vitamin B12	0.24 µg
Folic acid	40 µg
Vitamin C	7.5 mg
Calcium	100 mg
Iron	0.8 mg
Dietary fiber	2.5 g



Annex IV: Total sugars criteria and expected changes of the criteria in 2018

Annex IV gives a guideline of total sugars criteria that can be used in countries when insufficient insight is present in added sugars levels. In addition this annex gives the foreseen changes of criteria in 2018. When no changes are foreseen, this does not mean there will be no changes in the criteria in 2018.

Table 1: Criteria for basic product groups with total sugars

Product group	Criteria	Definition
Fruits and vegetables		
Fresh or fresh frozen fruits, vegetables and legumes	All products that do not contain additions comply. These include dried, fresh frozen and/or sliced fruits and vegetables, without additives.	All types of fresh fruit, vegetables, and legumes that are additions -free, including freshly frozen and/or sliced fruits & vegetables. E.g.: pre-cut leek, pre-sliced melon, cucumber, broccoli, frozen spinach (without added cream), and frozen raspberries. Additions are considered products changing the amounts of nutrients or energy for which criteria are set, i.e. sodium, SAFA, TFA, sugar, fiber.
Processed and dried fruits & vegetables	SAFA: ≤ 1.1 g/100g TFA: ≤ 0.1 g/100g Sodium: ≤ 100 mg/100g Added sugars: not added Total sugars: ≤ 10 g/100g (vegs) or ≤ 17 g/100g (fruit) Fiber: ≥ 1.0 g/100g*	All types of processed fruits & vegetables, with the exception of fruit juices and frozen or pre-sliced fruit & vegetables that have not undergone further processing. E.g.: canned tomatoes, canned carrots, frozen spinach with cream, frozen vegetables, tomato juice, pickles (gherkins, pearl onions, relish), mixed vegetable juices, fruit salads in own juice or syrup, apple sauce, candied dates, strawberry purée, olives, mixed fruit & vegetable purées or juices, dried vigs/prunes.
Processed beans & legumes	SAFA: ≤ 1.1 g/100g TFA: ≤ 0.1 g/100g Sodium: ≤ 200 mg/100g Added sugars: ≤ 2.5 g/100g Total sugars: ≤ 5.7 g/100g Fiber: ≥ 3.5 g/100g*	All processed beans and legumes. E.G. canned kidney beans, dried lentils, white beans in sauce.



Table 1 continued

Product group	Criteria	Definition
Water		
Water (plain), tea, coffee	SAFA: not added TFA: not added Sodium: ≤ 20 mg/100mL Added sugars: not added	Includes natural (mineral) waters and other bottled waters, regardless of whether they are carbonated or non-carbonated; tea bags; coffee (beans); milled coffee. Tea: young leaves, (leave) stalks and leave buds from varieties of <i>Camellia sinensis</i> (L.) O. Kuntze, which might be fermented or roasted. With tea extract or instant tea is meant the product obtained by extraction of tea with water, followed by filtering and drying.
Nuts		
Nuts & seeds	SAFA: ≤ 8.0 g/100g TFA: ≤ 0.1 g/100g Sodium: ≤ 100 mg/100g Added sugars: not added Total sugars ≤ 7.5 g/100g	All ground and tree nuts and fruits perceived as nuts such as: peanuts, cashew nuts, almonds, coconuts, pecan nuts, pistachio nuts. raw nuts as well as roasted, salted or otherwise processed nuts are included. All seeds (except grains) and kernels like sunflower seed, linseed, poppy seed; pine nuts, etc.
Sources of carbohydrates		
Potatoes (unprocessed)	All additions -free products comply	All unprocessed, uncooked, additions -free potatoes, including peeled, sliced and/or chilled potatoes. Additions are considered products changing the amounts of nutrients or energy for which criteria are set, i.e. sodium, SAFA, TFA, sugar, fiber.
Potatoes (processed), pasta & noodles	SAFA: ≤ 1.1 g/100g TFA: ≤ 0.1 g/100g Sodium: ≤ 100 mg/100g Added sugars: not added Total sugars: ≤ 3.0 g/100 g. Total sugars in sweet potatoes: ≤ 6.5 g/100g Fiber: ≥ 2.7 g/100g* Potato products: The nutritionally preferred preparation method should be promoted on the package	All types of potato, pasta and similar grain products to be used as a main course. E.g.: boiled/fried potatoes, mashed potatoes, (wholemeal) pasta, sweet potato, chips, noodles.

Table 1 continued

Product group	Criteria	Definition
Rice	SAFA: ≤ 1.1 g/100g TFA: ≤ 0.1 g/100g Sodium: ≤ 100mg/100g Added sugars: not added Fiber: ≥ 1,8 g/100g*	All types of rice to be used as a main course. E.g.: boiled, dried, unpolished rice, white rice, basmati rice, whole grain rice, and risotto.
Bread	SAFA: ≤ 1.1 g/100g TFA: ≤ 0.1 g/100g Sodium: ≤ 450 mg/100g Added sugars: ≤ 4.0 g/100g¶ Total sugars: ≤ 6.0 g/100g Fiber: ≥ 4.0 g/100g*	All types of bread or substitutes for bread with the exception of breakfast cereals. E.g.: wheat bread, wholemeal bread, crisp breads, knäckerbrod, croissants, rye bread, speciality rolls, and crackers.
Grains and cereal products Wheat-based	SAFA: ≤ 1.1 g/100g TFA: ≤ 0.1 g/100g Sodium: ≤ 100 mg/100g Added sugars: ≤ 2.5g/100g Total sugars: ≤ 4.5 g/100g Fiber: ≥ 5.0 g/100g*	All types of grains and cereal products (other than bread and breakfast cereals). E.g.: flour, breadcrumbs, binding agents, pancake mixes.
Grains and cereal products Non-wheat products	SAFA: ≤ 1.1 g/100g TFA: ≤ 0.1 g/100g Sodium: ≤ 100 mg/100g Added sugars: ≤ 2.5g/100g Total sugars: ≤ 11.0 g/100g Fiber: ≥ 5.0 g/100g*	All types of grains and cereal products (other than wheat-based grains, bread and breakfast cereals). E.g.: flour from spelt, soy, sunflower, chickpea, peanut etc.
Breakfast cereal products	SAFA: ≤ 3,0 g/100g TFA: ≤ 0.1 g/100g Sodium: ≤ 400 mg/100g Added sugars: ≤ 17.5 g/100g¶ Total sugars: ≤ 19.5 g/100g¶ Fiber: ≥ 6,0 g/100g*	All types of breakfast cereal products. E.g.: muesli, cruesli, oats, cornflakes, honey loops, rice crispies.

Table 1 continued

Product group	Criteria	Definition
Meat, fish, poultry, eggs, meat substitutes		
Meat, poultry, eggs (unprocessed)	SAFA: ≤ 3.2 g/100g TFA: ≤ 0.1 g/100g** Sodium: ≤ 100 mg/100g Added sugars: not added	All types of unprocessed meat, poultry and eggs (including frozen meat that has not undergone further processing). E.g.: beef, pork, turkey, egg, game, lamb, and offal.
Processed meat, meat products and meat substitutes	SAFA: ≤ 5.0 g/100g TFA: ≤ 0.1 g/100g** Sodium: ≤ 820 mg/100g Added sugars: ≤ 2.5g/100g Total sugars: ≤ 2.5 g/100g and Total sugars for meat substitutes: ≤ 5.0 g/100g	All types of processed meat/poultry, meat products and (vegetable) meat substitutes. E.g.: ready-to-eat meatballs, spiced or salted meat (fresh or frozen), salami, smoke-dried beef, grilled ham, tempeh, tofu, dairy-based meat substitute, fungus-based meat substitute.
Fresh or fresh frozen fish, shellfish and crustaceans	SAFA: ≤ 4.0 g/100g TFA: ≤ 0.1 g/100g Sodium: ≤ 130 mg/100g Added sugars: not added	All types of unprocessed fish, crustaceans and shellfish (including frozen, steamed or smoked fish that has not undergone further processing). E.g.: uncooked herring, cod (fresh or deep-frozen), fresh eel, lobster crab, mussel, and shrimp.
Processed fish or fish products	SAFA: ≤ 4.0 g/100g TFA: ≤ 0.1 g/100g Sodium: ≤ 450 mg/100g Added sugars: not added Total sugars: ≤ 0.1 g/100g	All types of processed fish, processed crustaceans and processed shellfish. E.g.: cod parings, fried fillet of haddock, deep-fried octopus/ squid (cephalopod), pickled mussels, herring in tomato sauce, canned sardines, canned tuna, spiced or salted fish (fresh or frozen).
Dairy		
Milk (-products)	SAFA: ≤ 1.4 g/100g TFA: ≤ 0.1 g/100g** Sodium: ≤ 100 mg/100g Added sugars: ≤ 5.0 g/100g¶ Total sugars: ≤ 11.0 g/100g¶ For milk substitutes: Total sugars: ≤ 5.0 g/100g¶	All types of milk and milk products. E.g.: low fat milk, buttermilk, semi-skimmed milk, full-cream milk, low fat yoghurt, semi-skimmed yoghurt, yoghurt drink, low fat custard, low fat fruit yoghurt, evaporated milk, coffee cream, cream (for culinary use), milk substitutes such as soy milk.
Cheese (-products)	SAFA: ≤ 15.0 g/100g TFA: ≤ 0.1 g/100g** Sodium: ≤ 830 mg/100g Added sugars: not added	All types of cheese and cheese products. E.g.: 20+ cheese, 30+ cheese, Edam, Brie 50+, 48+ Gouda cheese, blue cheese, gorgonzola, gruyere, soft herb cheese.

Table 1 continued

Product group	Criteria	Definition
Oils, fats and fat containing spreads		
Oils, fats and fat containing spreads	SAFA: ≤ 28,0 g/100g TFA: ≤ 1,0 g/100g Sodium: ≤ 160 mg/100g Added sugars: not added Total sugars: ≤ 1.5 g/100g	All types fats and oils to be used as spreads on bread and/or in the preparation of food. E.g.: oil (all types), low-fat margarine, margarine, butter, oil/fat products for roasting and frying (solid or liquid).
Meals		
Main course***	SAFA: ≤ 2.0 g/100g TFA: ≤ 0.15 g/100g Sodium: ≤ 240 mg/100g Added sugars: ≤ 3.0 g/100g Total sugars: ≤ 5.0 g/100g Fiber ≥ 1.2 g/100g Energy: 400 – 700 kcal/portion	All types of ready-to-cook meals that are intended for consumption as a main dish during lunch or dinner. E.g.: meals for steaming, ready-to-cook meals, pizza, frozen meals.
Sandwiches/rolls***	SAFA: ≤ 2.2 g/100g TFA: ≤ 0.15 g/100g Sodium: ≤ 450 mg/100g Added sugars: ≤ 8.0 g/100g¶ Total sugars sandwiches: ≤ 10.0 g/100g¶ Total sugars rolls: ≤ 8.2 g/100g¶ Fiber: ≥ 1.4 g/100g Energy: ≤ 350 kcal/portion	All types of ready-to-eat filled sandwiches/rolls.

**Table 1 continued**

Product group	Criteria	Definition
Mixed salads	SAFA: ≤ 2.6 g/100g TFA: ≤ 0,10 g/100g Sodium: ≤ 170 mg/100g Added sugars: ≤ 1.25 g/100g ≥ 70% fruit: total sugars: ≤ 15.0 g/100g ≥ 70% vegetables: total sugars ≤ 5.0 g/100g Fiber: ≥ 0.80 g/100g Energy: ≤ 110 kcal/portion	Salads containing at least 70% fruit or vegetables Salads include sauce and toppings.
Small meals***	SAFA: ≤ 4.0 g/100g TFA: ≤ 0,15 g/100g Sodium: ≤ 450 mg/100g Total sugars: ≤ 6.0 g/100g¶ Fiber: ≥ 1.4 g/100g Energy: 350 - 550 kcal/portion	Lunch meals like pasta salads, wraps, sandwiches with > 80 g bread.

* The source of fiber in a product must be naturally occurring in one of the main ingredients of the product group.

** Naturally occurring trans fatty acids from meat or milk are excluded.

*** If all of the components of the product comply with the criteria of their respective product group, and if the product is in line with the energy and fiber criterion for its product group, then the product also complies with the criteria.

¶ Criteria will be revised in 2018.

Table 1, expected changes 2018

Product group	Foreseen changes to be implemented in 2018
Bread	Added sugars : ≤ 2.0 g/100g Total sugars : ≤ 4.0 g/100g
Breakfast cereal products	Added sugars: ≤ 14.0 g/100g Total sugars: ≤ 16.0 g/100g
Milk (-products)	Added sugars: ≤ 4.0 g/100g Total sugars: ≤ 10.0 g/100g For milk substitutes: Total sugars: ≤ 4.0 g/100g
Sandwiches/rolls***	Added sugars: ≤ 3.0 g/100g Total sugars: ≤ 8.0 g/100g
Small meals***	Added sugars: ≤ 3.0 g/100g

Table 2: Criteria for non-basic product groups with total sugars

Product group	Criteria	Definition
Soups	SAFA: ≤ 1.1 g/100g TFA: ≤ 0.1 g/100g Sodium: ≤ 300 mg/100g Added sugars: ≤ 2.5 g/100g¶ Total sugars: ≤ 5.0 g/100g¶ Energy: ≤ 100 kcal/100g	All types of soups and broths. E.g.: canned soup, frozen soup, soup in stand-up pouches, soup powder, stock cubes, soup served by the catering industry.
Meal sauces	SAFA: ≤ 1.1 g/100g TFA: ≤ 0.1 g/100g Sodium: ≤ 450 mg/100g Added sugars: ≤ 2.5 g/100g¶ Total sugars: ≤ 6.0 g/100g ¶	All types of sauces that make up a substantial portion of the meal (portion size > 35 g). E.g.: pasta sauce, béchamel sauce, vegetable sauce, meat sauce, fish sauce, cheese sauce, mustard sauce, gravy.
Other sauces (water-based)	SAFA: ≤ 1.1 g/100g TFA: ≤ 0.1 g/100g Sodium: ≤ 750 mg/100g Total sugars: < 25.0 g/100g¶ Energy: ≤ 100 kcal/100g	All types of sauces that only make up a small portion of the meal (portion size < 35 g), that do not have an emulsifying agent AND which have a fat content < 10% w/w. E.g.: ketchup, soy sauce, chocolate sauce, fruit sauce, barbecue sauce.
Other sauces (emulsions)	SAFA: ≤ 4.0 g/100g TFA: ≤ 0,35 g/100g Sodium: ≤ 750 mg/100g Added sugars: ≤ 11.0 g/100g¶ Total sugars: ≤ 11.0 g/100g¶ Energy: ≤ 350 kcal/100g	All types of sauces that only make up a small portion of the meal (portion size < 35 g) to which an emulsifying agent has been added OR which have a fat content ≥ 10% w/w. E.g.: mayonnaise, salad dressing, dip sauce, marinade, mustard, vinaigrette.
Snacks (including pastry, ice cream, sweet snacks and savoury snacks)	SAFA: ≤ 6.0 g/100g TFA: ≤ 0.4 g/100g Sodium: ≤ 400 mg/100g Added sugars: ≤ 20 g/100g Total sugars: - Savoury snacks ≤ 4.0 g/100g - ice creams ≤ 20.0 g/100g - liquorice ≤ 1.0 g/100g - confectionaries and baked snacks, pastries ≤ 20.0 g/100g Energy: ≤ 110 kcal/portion	All types of sweet, savoury, and baked products intended for consumption as a small snack between meals or as a minor component of a meal. E.g.: <ul style="list-style-type: none"> - Savoury products: potato crisps, popcorn, salted sticks, Japanese mix, mini pizzas, small pre-packaged salads. - Sweet products: sweets, all types of chocolate, candy bars, marzipan, wine gums, liquorice. - Baked products: biscuits, cookies, all types of cakes and pastries. - Ice cream: vanilla ice cream, sorbet, yoghurt ice, sorbet ice, milkshake. - Dried fruits positioned as snack: dried apple, raisins

**Table 2 continued**

Product group	Criteria	Definition
Beverages	SAFA: ≤ 1.1 g/100mL TFA: ≤ 0.1 g/100mL Sodium: ≤ 20 mg/100mL Total sugars: ≤ 5.0 g/100mL [¶] Energy: ≤ 20 kcal/100mL [¶]	Liquid food products that are normally consumed from a cup, mug or glass (incl. products packed in portions in packaging, bottles, etc.), with the exception of plain water, dairy products and fruit juices. E.g.: coffee, tea, (light) soft drinks, fruit drinks, drinks containing $<0.5\%$ alcohol, sport drinks (including powder).
Fruit juices	SAFA: ≤ 1.1 g/100g TFA: ≤ 0.1 g/100g Sodium: ≤ 100 mg/100g Added sugars: not added Total sugars: ≤ 12.0 g/100g Fiber: ≥ 0.75 g/100 g Energy: ≤ 48 kcal/100mL	All kinds of fruit juices with a minimum of 98% pure juice. E.g.: orange juice, apple juice, multi-fruit juice, grape juice, berry juice.
Bread toppings incl. hummus-type products	SAFA: 4.0 g/100g TFA: ≤ 0.3 g/100g Sodium: ≤ 400 mg/100g Added sugars: ≤ 30.0 g/100g Total sugars: ≤ 30.0 g/100g Energy: 350 kcal/100g	All types of food product that are meant to be put on bread or toast and that do not fall under the above-mentioned product groups. E.g.: jam, peanut butter, tuna salad, hummus, tahini.
All other products	SAFA: ≤ 1.1 g/100g or ≤ 10 en% TFA: ≤ 0.1 g/100g or ≤ 1.0 en% Sodium: ≤ 100 mg/100g Added sugars: ≤ 2.5 g/100g or ≤ 10 en%	All types of food product that do not fall within any of the above mentioned product groups. E.g.: baking product, seasonings, vinegar.

[¶] Criteria will be revised in 2018.



Table 2, expected changes 2018

Product group	Foreseen changes to be implemented in 2018
Soups	Added sugars: ≤ 1.25 g/100g Total sugars: ≤ 4.0 g/100g
Meal sauces	Added sugars: ≤ 1.25 g/100g Total sugars: ≤ 5.0 g/100g
Other sauces (water-based)	Total sugars: ≤ 16.0 g/100g
Other sauces (emulsions)	Added sugars: ≤ 8.5 g/100g Total sugars: ≤ 9.5 g/100g
Beverages	Energy: ≤ 18 kcal/100mL Total sugars ≤ 4.5 g/100mL

Annex B. Description of the Daily Menu Method used in this study

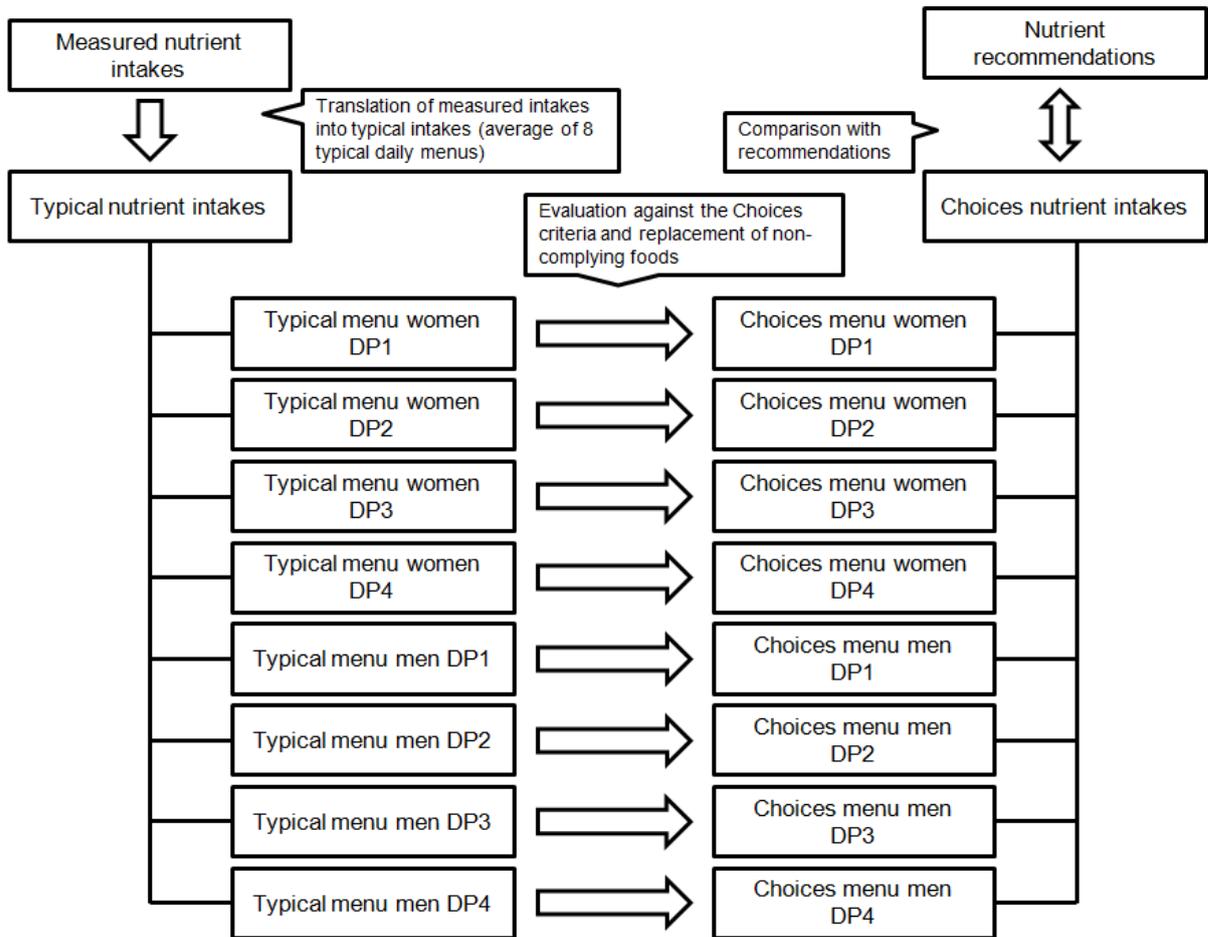


Figure 1. Description of the Daily Menu Method used in this study.

**Annex C. Characterization of food patterns by food groups from EPIPorto
study**

Table 1. Characterization of food patterns by food groups from EPIPorto study (women)⁽¹²⁾.

	Padrão 1	Padrão 2	Padrão 3	Padrão 4
	n=345	n=410	n=263	n=439
Maior Consumo	Iogurte Queijo Peixe Azeite Fl. Cereais/Bolachas Saladas Fruta	Leite Manteiga Hortícolas Sopa	Carne branca Snacks Margarina Pão Batatas fritas Cerveja/B. brancas Açúcar Doces Refrigerantes Café	Carne vermelha Peixe Arroz/Massa/Batatas Vinho
Menor Consumo	Leite Carne vermelha Carne branca Pão Arroz/Massa/Batatas Batatas fritas Açúcar Refrigerantes	Carne vermelha Peixe Bacalhau Margarina	Peixe Manteiga Hortícolas Sopa	Leite Iogurte Queijo Carne branca Snacks Fl. Cereais/Bolachas Hortícolas Saladas Doces Refrigerantes

Table 2. Characterization of food patterns by food groups from EPIPorto study (men)⁽¹²⁾.

	Padrão 1	Padrão 2	Padrão 3	Padrão 4
	n=197	n=216	n=175	n=313
Maior Consumo	Carne vermelha Carne branca Snacks Margarina Batatas fritas Cerveja/B. brancas Açúcar Doces Refrigerantes Café	Bacalhau Hortícolas Sopa	Leite Queijo Manteiga Pão Fruta Açúcar Doces Café	
Menor Consumo	Peixe Bacalhau Fruta Sopa	Iogurte Doces Café		Carne vermelha Snacks Bacalhau Arroz/Massa/Batatas Batatas fritas Açúcar Doces Refrigerantes Café Sopa

**Annex D. Confidence intervals at 95% for the means of the food groups, and
relevant nutrients by cluster from EPIPorto study**

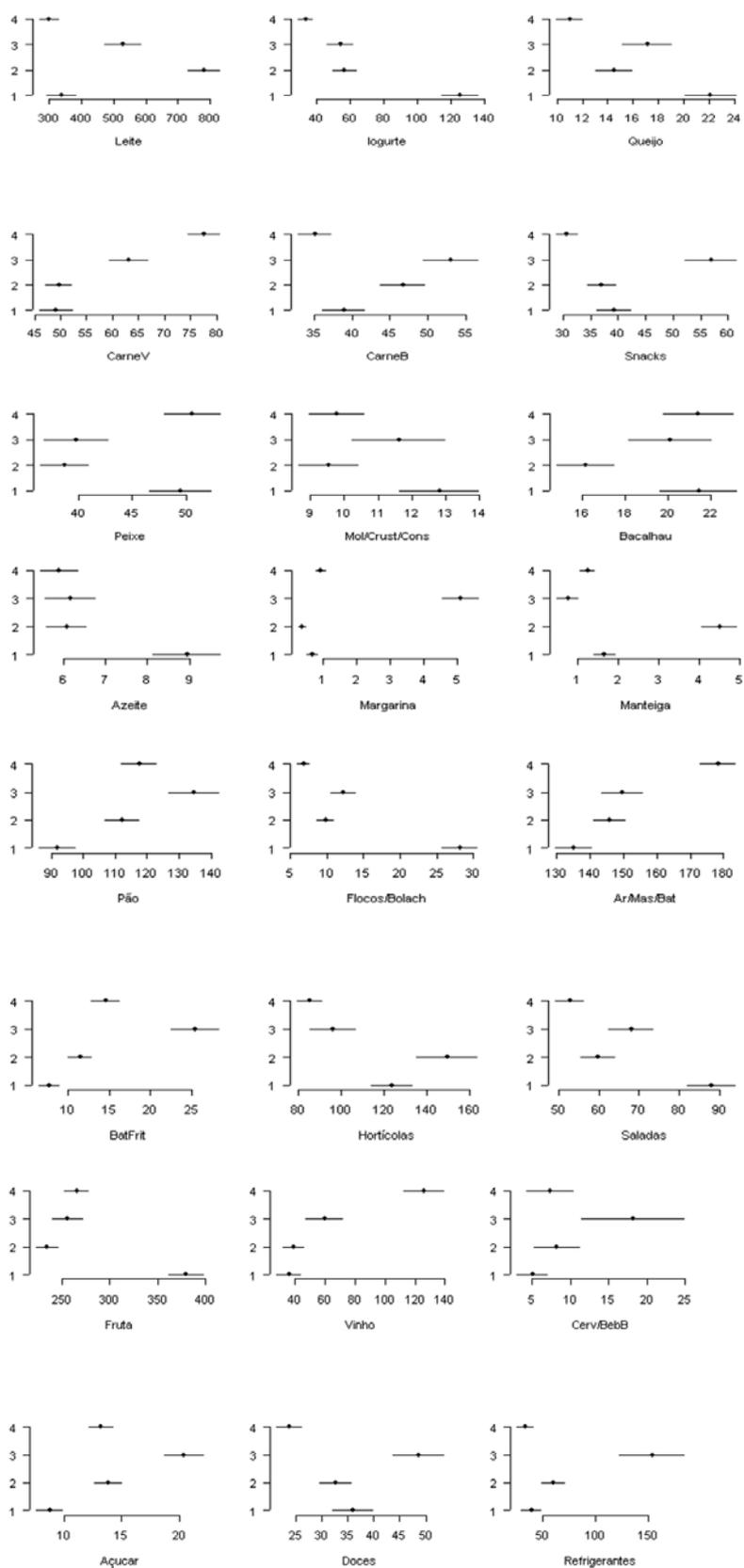


Figure 1. Confidence intervals at 95% for the means of the food groups, and relevant nutrients by cluster from EPIPorto study (women)⁽¹²⁾

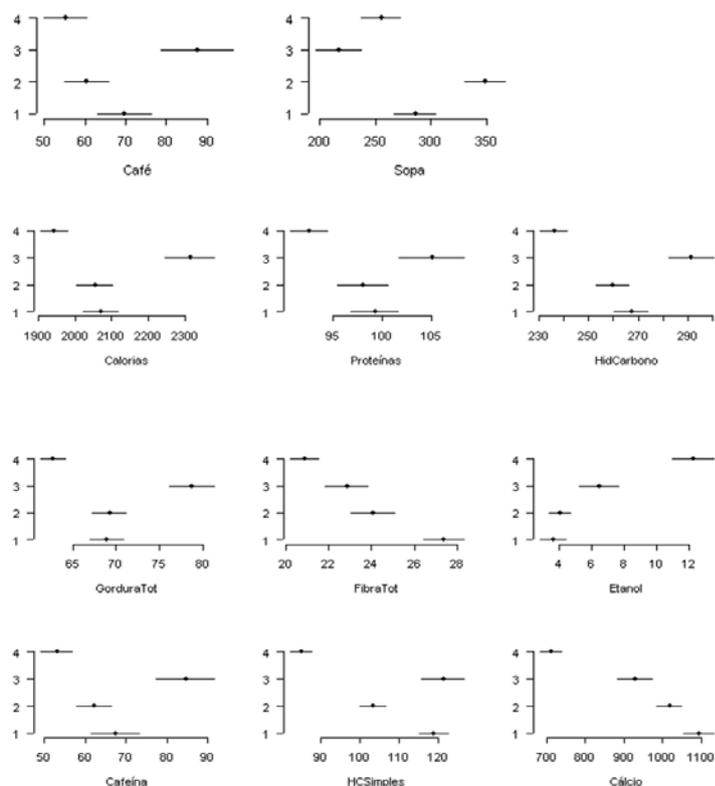


Figure 1. Continuation

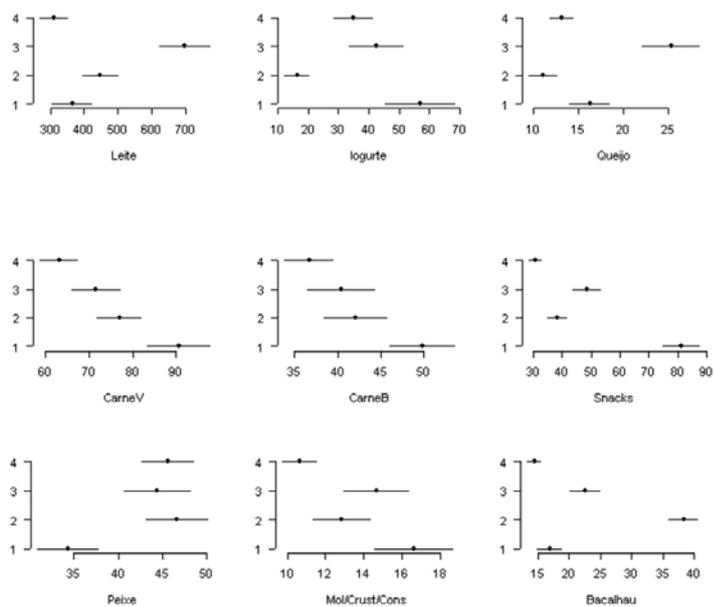


Figure 2. Confidence intervals at 95% for the means of the food groups, and relevant nutrients by cluster (men)⁽¹²⁾

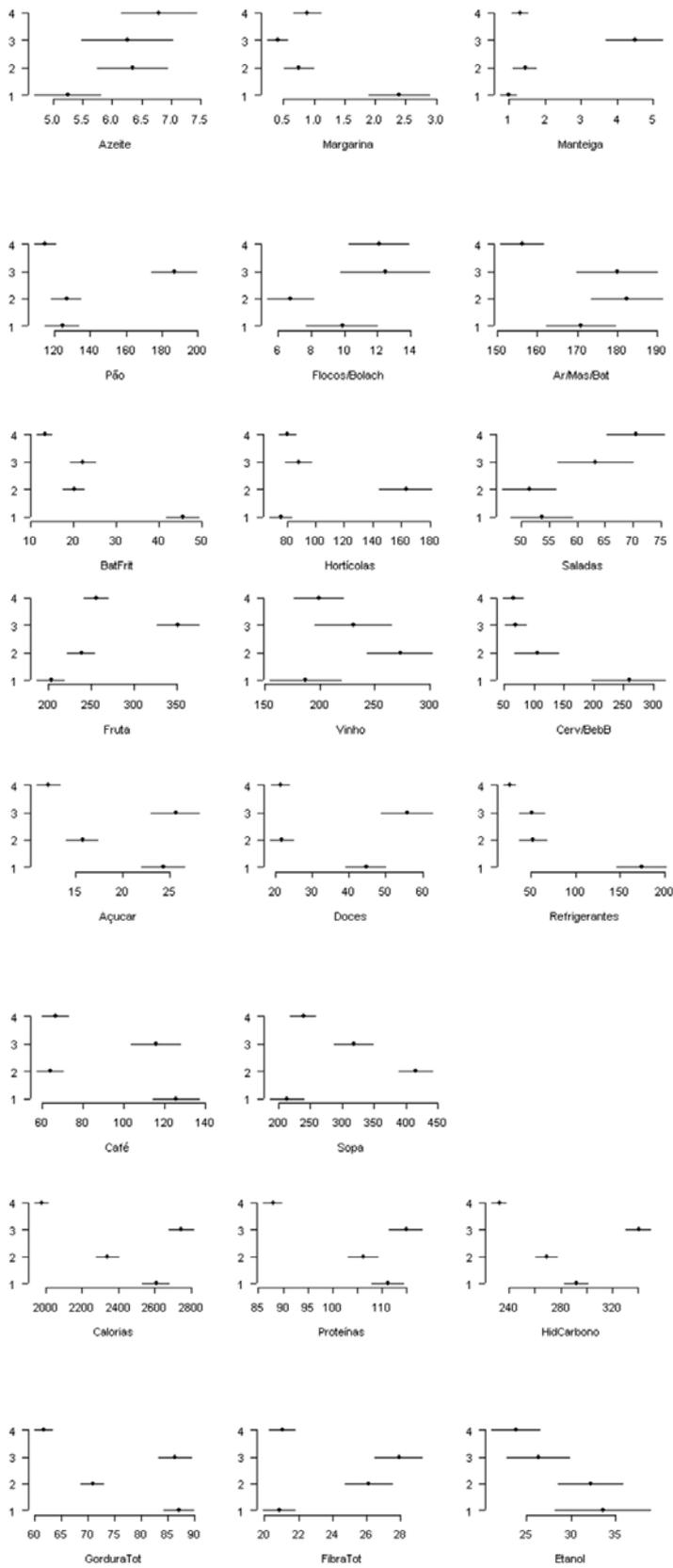


Figure 2. Continuation

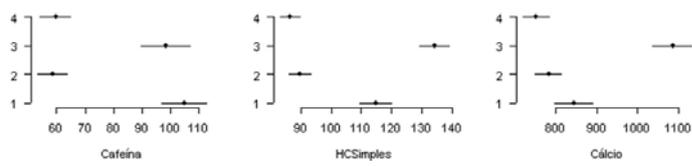


Figure 2. Continuation

Annex E. Typical and Choices Daily Menus

Table 1. Typical Daily Menu 1 "Healthy" – Women.

Typical Daily Menu 1 "Healthy" - Women	Choices product group	Food products	Portion (g)	Energy (kcal)	Protein (g)	Total HC disponíveis (g)	Total fat (g)	Dietary fibre (g)	Alcohol (g)	Total sugar (g)	Ca (mg)	SAFA (g)	TFA (g)	Sodium (mg)	
EPIPorto DP guide				2070	100	268	68	27	3	120	1100			3600	
Breakfast															
	Grains and cereal products Non-wheat products	Flocos de cereais e frutos secos tipo "Muesli"	60	227,3	6,2	41,5	3,8	4,1	0,0	10,1	9,6	0,7	0,0	138,0	
	Milk (-products)	leite Aromatizado açucarado sólido meio gordo	125	88,7	5,1	12,6	2,0	0,0	0,0	12,6	162,5	1,1	0,1	72,5	
	Fresh or fresh frozen fruits, vegetables and legumes	Uva branca (5 variedades)	136	97,5	0,4	23,5	0,7	1,1	0,0	23,5	13,6	0,1	0,0	2,7	
total breakfast in between 1				413,5	11,8	77,6	6,5	5,2	0,0	48,2	185,7	1,9	0,1	213,2	
	Confectionaries and baked snacks, pastries	Bolacha Maria	18	78,5	1,5	13,0	2,2	0,4	0,0	3,9	6,8	1,1	0,0	75,2	
	Milk (-products)	Leite Vaca UHT meio gordo	300	140,5	9,9	14,7	4,8	0,0	0,0	14,7	338,0	2,7	0,2	120,0	
	Water (plain), tea, coffee	Não Alcoólicas, Café Infusão - valor médio (bica 60% e café de cafeteira 40%)	30	1,0	0,1	0,1	0,0	0,0	0,0	0,0	0,9	0,0	0,0	0,6	
total in between 1				220,0	11,5	27,8	7,0	0,4	0,0	18,6	343,7	3,8	0,2	195,8	
Lunch															
	Fresh or fresh frozen fruits, vegetables and legumes	Couve lombarda crua	38	7,4	0,9	0,8	0,1	1,2	0,0	0,8	19,4	0,0	0,0	3,4	
	Fresh or fresh frozen fruits, vegetables and legumes	Cenoura crua	21	4,1	0,1	0,9	0,0	0,5	0,0	0,9	8,6	0,0	0,0	12,2	
	Potatoes (unprocessed)	Batata crua	87	77,5	2,2	16,7	0,0	1,4	0,0	1,0	7,8	0,0	0,0	7,8	
	Fresh or fresh frozen fruits, vegetables and legumes	Nabo (raiz) cru	10	1,6	0,0	0,3	0,0	0,2	0,0	0,3	1,2	0,0	0,0	2,0	
	Fresh or fresh frozen fruits, vegetables and legumes	Cebola crua	18	3,1	0,2	0,6	0,0	0,2	0,0	0,4	5,6	0,0	0,0	1,8	
	Fresh or fresh frozen fruits, vegetables and legumes	Bacalhau Seco e salgado, demolhado cru	50	39,8	9,5	0,0	0,2	0,0	0,0	0,0	16,5	0,1	0,0	741,5	
	Fresh or fresh frozen fruits, vegetables and legumes	Cebola crua	10	1,7	0,1	0,3	0,0	0,1	0,0	0,2	3,1	0,0	0,0	1,0	
	Potatoes (unprocessed)	Batata crua	60	53,5	1,5	11,5	0,0	1,0	0,0	0,7	5,4	0,0	0,0	5,4	
	Fresh or fresh frozen fruits, vegetables and legumes	Brócolos crus	82	21,9	2,8	1,2	0,7	2,1	0,0	1,0	54,9	0,1	0,0	6,6	
	Fresh or fresh frozen fruits, vegetables and legumes	Alface crua	30	3,6	0,5	0,2	0,1	0,4	0,0	0,2	21,0	0,0	0,0	0,9	
	Fresh or fresh frozen fruits, vegetables and legumes	Tomate cru	63	12,0	0,5	2,2	0,2	0,8	0,0	2,2	6,9	0,0	0,0	8,2	
	Fresh or fresh frozen fruits, vegetables and legumes	Maçã com casca	143	81,3	0,3	19,2	0,7	3,0	0,0	19,2	8,6	0,1	0,0	8,6	
total lunch in between 2				307,7	18,6	54,0	2,0	11,0	0,0	28,9	159,1	0,3	0,0	799,4	
	Bread	Tosta de trigo integral	50	182,1	7,7	31,3	2,6	3,7	0,0	1,8	38,0	0,5	0,0	216,0	
	Cheese (-products)	Queijo Fiamengo 30% gordura	70	172,7	21,0	0,1	9,8	0,0	0,0	0,1	595,0	5,3	0,4	722,4	
total in between 2				354,8	28,7	31,4	12,4	3,7	0,0	1,9	633,0	5,8	0,4	938,4	
Dinner															
	Fresh or fresh frozen fruits, vegetables and legumes	Couve lombarda crua	38	7,4	0,9	0,8	0,1	1,2	0,0	0,8	19,4	0,0	0,0	3,4	
	Fresh or fresh frozen fruits, vegetables and legumes	Cenoura crua	21	4,1	0,1	0,9	0,0	0,5	0,0	0,9	8,6	0,0	0,0	12,2	
	Potatoes (unprocessed)	Batata crua	87	77,5	2,2	16,7	0,0	1,4	0,0	1,0	7,8	0,0	0,0	7,8	
	Fresh or fresh frozen fruits, vegetables and legumes	Nabo (raiz) cru	10	1,6	0,0	0,3	0,0	0,2	0,0	0,3	1,2	0,0	0,0	2,0	
	Fresh or fresh frozen fruits, vegetables and legumes	Cebola crua	18	3,1	0,2	0,6	0,0	0,2	0,0	0,4	5,6	0,0	0,0	1,8	
	Fresh or fresh frozen fruits, vegetables and legumes	Atum fresco cru	80	112,0	19,3	0,0	3,9	0,0	0,0	0,0	3,2	1,4	0,0	36,0	
	Fresh or fresh frozen fruits, vegetables and legumes	Brócolos crus	83	22,2	2,8	1,2	0,7	2,2	0,0	1,0	55,6	0,1	0,0	6,6	
	Rice	Arroz comum cru	30	105,7	2,0	23,4	0,1	0,6	0,0	0,0	3,9	0,0	0,0	1,8	
	Fresh or fresh frozen fruits, vegetables and legumes	Pêra (5 variedades)	86	34,9	0,3	8,1	0,3	1,9	0,0	8,1	7,7	0,0	0,0	6,9	
	Confectionaries and baked snacks, pastries	Pastel de nata	70	208,6	2,0	34,0	7,1	0,7	0,0	19,6	18,2	3,2	0,2	94,5	
	N.A.	Alcoólicas Fermentadas - Vinho verde tinto	40	22,8	0,0	0,1	0,0	0,0	0,0	0,1	5,2	0,0	0,0	6,0	
total dinner				808,1	29,9	86,1	12,3	8,9	3,2	32,2	136,5	4,7	0,2	178,1	
	ADDITION	Azeite (4 marcas)	33	297,0	0,0	0,0	33,0	0,0	0,0	0,0	0,0	4,8	0,0	0,0	
		Sal	3	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	1200,0	
TOTAL Typical Daily Menu 1 "Healthy" - Women				2193,1	100,4	278,9	73,1	29,2	3,2	125,7	1457,9	21,2	0,9	3525,9	
Weighted average				14,8	320,9	14,7	40,5	10,7	4,3	0,5	18,4	213,3	3,1	0,1	515,9

Table 2. Typical Daily Menu 2 "Milk/soup" – Women.

Typical Daily Menu 2 "Milk/soup" - Women	Choices product group	Food products	Portion (g)	Energy (kcal)	Protein (g)	Total HC disponíveis (g)	Total fat (g)	Dietary fibre (g)	Alcohol (g)	Total sugar (g)	Ca (mg)	SAFA (g)	TFA (g)	Sodium (mg)
EPIPorto DP guide				2050	95.5	260	69	24	4	100	1000			3600
Breakfast														
	Milk (-products)	Leite Vaca UHT meio gordo	366	171.4	12.1	17.9	5.9	0.0	0.0	17.9	409.9	3.3	0.2	146.4
	Water (plain), tea, coffee	Não Alcoólicas, Café Infusão - valor médio (bica 60% e café de cafeteira 40%)	245	8.2	0.7	0.7	0.2	0.0	0.0	0.0	7.4	0.0	0.0	4.9
	All other products	Açúcar branco	15	58.6	0.0	14.9	0.0	0.0	0.0	14.9	0.3	0.0	0.0	0.0
total breakfast				238.3	12.8	33.6	6.1	0.0	0.0	32.8	417.6	3.3	0.2	151.3
In between 1														
	Milk (-products)	Leite Vaca UHT meio gordo	366	171.4	12.1	17.9	5.9	0.0	0.0	17.9	409.9	3.3	0.2	146.4
	Bread	Pão de Trigo	80	231.1	6.7	45.8	1.8	3.0	0.0	1.7	34.4	0.4	0.0	488.0
	Oils, fats and fat containing spreads	Manteiga com sal	15	110.9	0.0	0.1	12.3	0.0	0.0	0.1	2.3	6.9	0.5	112.7
total in between 1				513.4	18.8	63.9	19.9	3.0	0.0	19.7	446.6	10.6	0.7	747.1
Lunch														
	Fresh or fresh frozen fruits, vegetables and legumes	Couve lombarda crua	76	14.7	1.8	1.6	0.2	2.4	0.0	1.5	38.8	0.0	0.0	6.8
	Fresh or fresh frozen fruits, vegetables and legumes	Cenoura crua	42	8.1	0.3	1.8	0.0	1.1	0.0	1.7	17.2	0.0	0.0	24.4
	Potatoes (unprocessed)	Batata crua	174	155.1	4.4	33.4	0.0	2.8	0.0	2.1	15.7	0.0	0.0	15.7
	Fresh or fresh frozen fruits, vegetables and legumes	Nabo (raiz) cru	20	3.3	0.1	0.6	0.1	0.4	0.0	0.6	2.4	0.0	0.0	4.0
	Fresh or fresh frozen fruits, vegetables and legumes	Cebola crua	36	6.3	0.3	1.1	0.1	0.5	0.0	0.8	11.2	0.0	0.0	3.8
	Meal, poultry, eggs (unprocessed)	Frango, Perna sem pele crua	90	100.2	19.8	0.0	2.3	0.0	0.0	0.0	16.2	0.5	0.0	81.0
	Fresh or fresh frozen fruits, vegetables and legumes	Cebola crua	60	10.5	0.5	1.9	0.1	0.8	0.0	1.3	18.6	0.0	0.0	6.0
	Rice	Arroz comum cru	25	88.1	1.7	18.5	0.1	0.5	0.0	0.0	3.3	0.0	0.0	1.5
	Fresh or fresh frozen fruits, vegetables and legumes	Espinafres crus	72	15.5	1.9	0.6	0.6	1.9	0.0	0.5	74.9	0.1	0.0	124.6
	Fresh or fresh frozen fruits, vegetables and legumes	Cenoura crua	140	27.1	0.8	6.2	0.0	3.6	0.0	5.7	57.4	0.0	0.0	81.2
	Confectionaries and baked snacks, pastries	Pastel de nata	70	208.6	2.0	34.0	7.1	0.7	0.0	19.6	18.2	3.2	0.2	94.5
total lunch				637.5	33.6	100.6	10.7	14.6	0.0	33.9	273.7	3.9	0.2	443.2
In between 2														
	Milk (-products)	Leite Vaca UHT meio gordo	244	114.3	8.1	12.0	3.9	0.0	0.0	12.0	273.3	2.2	0.1	97.8
	Bread	Pão de Trigo	40	115.6	3.4	22.9	0.9	1.5	0.0	0.8	17.2	0.2	0.0	244.0
	Oils, fats and fat containing spreads	Manteiga com sal	5	37.0	0.0	0.0	4.1	0.0	0.0	0.0	0.8	2.3	0.2	37.6
total in between 2				266.8	11.4	34.9	8.9	1.5	0.0	12.8	291.2	4.7	0.3	379.2
Dinner														
	Meat, poultry, eggs (unprocessed)	Pezu Peito com pele cru	80	107.4	18.4	0.0	3.8	0.0	0.0	0.0	5.6	1.2	0.0	51.2
	Rice	Arroz cozido simples	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Rice	Arroz comum cru	25	88.1	1.7	19.5	0.1	0.5	0.0	0.0	3.3	0.0	0.0	1.5
	Fresh or fresh frozen fruits, vegetables and legumes	Cebola crua	60	10.5	0.5	1.9	0.1	0.8	0.0	1.3	18.6	0.0	0.0	6.0
	Fresh or fresh frozen fruits, vegetables and legumes	Cenoura crua	140	27.1	0.8	6.2	0.0	3.6	0.0	5.7	57.4	0.0	0.0	81.2
	N.A.	Alcoólicas Destiladas, Licor de ginja	17	40.1	0.0	3.2	0.0	0.0	3.9	3.2	0.3	0.0	0.0	0.9
total dinner				273.2	21.5	30.8	4.0	4.9	3.9	10.3	65.2	1.2	0.0	140.8
	ADDITION	Azeite (4 marcas)	20	180.0	0.0	0.0	20.0	0.0	0.0	0.0	0.0	2.9	0.0	0.0
		Sal	5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2000.0
TOTAL Typical Daily Menu 2 "Milk/soup" - Women				2108.2	88.1	263.8	68.5	24.1	3.9	109.5	1514.3	28.6	1.4	3861.5
Weighted average		17.4		366.7	17.1	45.9	12.1	4.2	0.7	19.0	263.3	4.6	0.2	671.4

Table 3. Typical Daily Menu 3 "Fast-food" - Women.

Typical Daily Menu 3 "Fast-food" - Women	Choices product group	Food products	Portion (g)	Energy (kcal)	Protein (g)	Total HC disponiveis (g)	Total fat (g)	Dietary fibre (g)	Alcohol (g)	Total sugar (g)	Ca (mg)	SAFA (g)	TFA (g)	Sodium (mg)
EPIPorto DP guide				2300.0	105.0	290.0	78.0	23.0	6.0	120.0	900.0			3600.0
Breakfast														
	Milk (-products)	Iogurte Açucarado batido gordo com cereais e fruta	125	138.6	5.3	19.8	4.0	1.0	0.0	19.8	152.5	2.3	0.2	60.0
	Milk (-products)	Leite Vaca UHT meio gordo	244	114.3	8.1	12.0	3.9	0.0	0.0	12.0	273.3	2.2	0.1	97.6
	Water (plain), tea, coffee	Não Alcoólicas, Café Infusão - valor médio (bica 80% e café de cafeteira 40%)	45	1.5	0.1	0.1	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.9
total breakfast				254.4	13.4	31.8	7.9	1.0	0.0	31.7	427.1	4.4	0.3	158.5
In between 1														
	Confectionaries and baked snacks, pastries	Pastel de nata	70	208.6	2.0	34.0	7.1	0.7	0.0	19.6	18.2	3.2	0.2	94.5
	Fresh or fresh frozen fruits, vegetables and legumes	Maça com casca	143	81.3	0.3	19.2	0.7	3.0	0.0	19.2	8.6	0.1	0.0	8.6
total in between 1				289.9	2.3	53.1	7.9	3.7	0.0	38.8	26.8	3.4	0.2	103.1
Lunch														
	Meat, poultry, eggs (unprocessed)	Frango, Perna sem pele crua	150	167.0	33.0	0.0	3.9	0.0	0.0	0.0	27.0	0.9	0.0	135.0
	Fresh or fresh frozen fruits, vegetables and legumes	Cebola crua	60	10.5	0.5	1.9	0.1	0.8	0.0	1.3	18.6	0.0	0.0	6.0
	Potatoes (unprocessed)	Balata crua	150	133.7	3.8	28.8	0.0	2.4	0.0	1.8	13.5	0.0	0.0	13.5
	Oils, fats and fat containing spreads	Óleo alimentar	15	134.4	0.0	0.0	14.9	0.0	0.0	0.0	0.0	1.7	0.0	0.0
	Fresh or fresh frozen fruits, vegetables and legumes	Brócolos crus	83	22.2	2.8	1.2	0.7	2.2	0.0	1.0	55.6	0.1	0.0	6.6
	Fresh or fresh frozen fruits, vegetables and legumes	Tomate cru	62	11.9	0.5	2.2	0.2	0.8	0.0	2.2	6.8	0.0	0.0	8.1
	Beverages	Não Alcoólicas, Bebida Refrigerante cola	330	113.6	0.0	29.7	0.0	0.0	0.0	29.7	19.9	0.0	0.0	16.5
total lunch				593.2	40.6	63.8	19.8	6.1	0.0	36.0	141.3	2.7	0.1	185.7
In between 2														
	Confectionaries and baked snacks, pastries	Bola de Berlim sem creme	70	279.2	4.8	30.6	15.1	2.1	0.0	6.0	24.5	4.9	0.1	201.6
	Water (plain), tea, coffee	Não Alcoólicas, Café Infusão - valor médio (bica 80% e café de cafeteira 40%)	45	1.5	0.1	0.1	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.9
	Milk (-products)	Leite Vaca UHT meio gordo	122	57.1	4.0	6.0	2.0	0.0	0.0	6.0	136.6	1.1	0.1	48.8
total in between 2				337.8	8.9	36.7	17.0	2.1	0.0	11.9	162.5	6.0	0.2	251.3
Dinner														
	Meat, poultry, eggs (unprocessed)	Coelho cru	150	175.6	30.5	0.0	6.0	0.0	0.0	0.0	25.5	1.9	0.0	87.0
	Oils, fats and fat containing spreads	Margarina vegetal culinária, 80% gordura, com sal	10	72.2	0.0	0.0	8.0	0.0	0.0	0.0	0.3	4.0	0.0	120.0
	Rice	Arroz comum cru	100	352.5	6.7	78.1	0.4	2.1	0.0	0.0	13.0	0.1	0.0	6.0
	Processed beans & legumes	Ervilhas grão, congeladas cruas	41	22.2	2.2	2.9	0.2	2.9	0.0	0.6	13.1	0.0	0.0	4.5
	Fresh or fresh frozen fruits, vegetables and legumes	Cenoura crua	72	13.9	0.4	3.2	0.0	1.9	0.0	3.0	29.5	0.0	0.0	41.8
	Fresh or fresh frozen fruits, vegetables and legumes	Couve roxa crua	67	15.2	1.3	2.6	0.0	2.2	0.0	2.2	40.2	0.0	0.0	7.4
	N.A.	Alcoólicas Fermentadas - Cerveja branca	150	44.1	0.6	0.8	0.0	0.0	5.6	0.8	13.5	0.0	0.0	16.5
total dinner				695.8	41.7	87.5	14.6	9.1	5.6	6.5	135.1	6.1	0.0	283.1
	ADITION	Azeite (4 marcas)	5	45.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0
		Sal	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2400.0
TOTAL Typical Daily Menu 3 "Fast-food" - Women				2216.2	107.0	273.0	72.2	22.0	5.6	124.9	892.9	23.3	0.8	3381.7
Weighted average		11.15		247.2	11.9	30.4	8.1	2.5	0.6	13.9	99.6	2.6	0.1	377.2

Table 4. Typical Daily Menu 4 "Wine/low consume" – Women.

Typical Daily Menu 4 "Wine/low consume" - Women	Choices product group	Food products	Portion (g)	Energy (kcal)	Protein (g)	Total HC disponíveis (g)	Total fat (g)	Dietary fibre (g)	Alcohol (g)	Total sugar (g)	Ca (mg)	SAFA (g)	TFA (g)	Sodium (mg)
EPIPorto DP guide				1950	90	235	60	21	12	80	700			3600
Breakfast														
	Milk (-products)	Leite Vaca UHT meio gordo	244	114.3	8.1	12.0	3.9	0.0	0.0	12.0	273.3	2.2	0.1	97.6
	Water (plain), tea, coffee	Não Alcoólicas, Café Infusão - valor médio (bica 60% e café de cafeteira 40%)	45	1.5	0.1	0.1	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.9
	All other products	Açúcar branco	24	93.8	0.0	23.8	0.0	0.0	0.0	23.8	0.5	0.0	0.0	0.0
total breakfast				209.6	8.2	35.9	3.9	0.0	0.0	35.8	275.1	2.2	0.1	98.5
In between 1														
	Bread	Pão de trigo	80	231.1	6.7	45.8	1.8	3.0	0.0	1.7	34.4	0.4	0.0	488.0
total in between 1				231.1	6.7	45.8	1.8	3.0	0.0	1.7	34.4	0.4	0.0	488.0
Lunch														
	Fresh or fresh frozen fruits, vegetables and legumes	Couve lombarda crua	76	14.7	1.8	1.6	0.2	2.4	0.0	1.5	38.8	0.0	0.0	6.8
	Fresh or fresh frozen fruits, vegetables and legumes	Cenoura crua	42	8.1	0.3	1.8	0.0	1.1	0.0	1.7	17.2	0.0	0.0	24.4
	Potatoes (unprocessed)	Batata crua	174	155.1	4.4	33.4	0.0	2.8	0.0	2.1	15.7	0.0	0.0	15.7
	Fresh or fresh frozen fruits, vegetables and legumes	Nabo (raiz) cru	20	3.3	0.1	0.6	0.1	0.4	0.0	0.6	2.4	0.0	0.0	4.0
	Fresh or fresh frozen fruits, vegetables and legumes	Cebola crua	36	6.3	0.3	1.1	0.1	0.5	0.0	0.8	11.2	0.0	0.0	3.6
	Meat, poultry, eggs (unprocessed)	Vaca para Cozer ou Estufar meio gorda crua	120	272.7	25.6	0.0	19.0	0.0	0.0	0.0	15.6	7.3	0.9	63.6
	Rice	Arroz comum cru	50	178.2	3.4	39.1	0.2	1.1	0.0	0.0	6.5	0.1	0.0	3.0
	Processed beans & legumes	Ervilhas grão, congeladas cruas	82	44.5	4.3	5.7	0.4	5.7	0.0	1.1	26.2	0.1	0.0	9.0
	N.A.	Alcoólicas Fermentadas - Vinho maduro palhete	74	48.3	0.1	0.1	0.0	0.0	6.8	0.1	11.1	0.0	0.0	6.7
total lunch				729.2	40.2	83.4	19.9	13.9	6.8	7.9	144.6	7.5	0.9	136.7
In between 2														
	Beverages	Não Alcoólicas, Chá, Infusão, preto	39	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.8
	All other products	Açúcar branco	32	125.1	0.0	31.8	0.0	0.0	0.0	31.8	0.6	0.0	0.0	0.0
total in between 2				125.3	0.0	31.8	0.0	0.0	0.0	31.8	1.0	0.0	0.0	0.8
Dinner														
		Bacalhau Seco e saijado, demolhado cru	100	79.6	19.0	0.0	0.4	0.0	0.0	0.0	33.0	0.1	0.0	1483.0
	Fresh or fresh frozen fruits, vegetables and legumes	Cebola crua	10	1.7	0.1	0.3	0.0	0.1	0.0	0.2	3.1	0.0	0.0	1.0
	Potatoes (unprocessed)	Batata crua	250	222.8	6.3	48.0	0.0	4.0	0.0	3.0	22.5	0.0	0.0	22.5
	N.A.	Alcoólicas Fermentadas - Cerveja branca	165	48.5	0.7	0.8	0.0	0.0	6.1	0.8	14.9	0.0	0.0	18.2
total dinner				352.7	26.0	49.1	0.4	4.1	6.1	4.0	73.5	0.1	0.0	1524.7
	ADDITION	Azeite (4 marcas)	30	270.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	4.3	0.0	0.0
		Sal	3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1200.0
TOTAL Typical Daily Menu 4 "Wine/low consume" - Women				1918.0	81.1	246.1	56.0	21.1	12.9	81.2	528.6	14.5	1.0	3448.7
Weighted average		18.6		357.1	15.1	45.8	10.4	3.9	2.4	15.1	98.4	2.7	0.2	642.1

Table 5. Typical Daily Menu 1 "Fast-food" – Men.

Typical Daily Menu 1 "Fast-food" - Men	Choices product group	Food products	Portion (g)	Energy (kcal)	Protein (g)	Total HC disponíveis (g)	Total fat (g)	Dietary fibre (g)	Alcohol (g)	Total sugar (g)	Ca (mg)	SAFA (g)	TFA (g)	Sodium (mg)
EPIPorto DP guide				2600	110	290	85	21	35	115	850			3600
Breakfast														
	Milk (-products)	Iogurte Açucarado batido gordo com cereais e fruta	125	136.6	5.3	19.8	4.0	1.0	0.0	19.8	152.5	2.3	0.2	60.0
	Grains and cereal products Non-wheat products	Flocos de milho tipo "Com Flakes"	40	149.8	3.2	32.4	0.4	1.6	0.0	2.5	0.8	0.1	0.1	280.8
	Water (plain), tea, coffee	Não Alcoólicas, Café Infusão - valor médio (bica 60% e café de cafeteira 40%)	45	1.5	0.1	0.1	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.9
	All other products	Açúcar branco	10	39.1	0.0	9.9	0.0	0.0	0.0	9.9	0.2	0.0	0.0	0.0
total breakfast				329.0	8.5	62.3	4.5	2.6	0.0	32.2	154.9	2.4	0.2	341.7
In between 1														
	Confectionaries and baked snacks, pastries	Pudim instantâneo preparado com leite meio gordo	125	140.1	3.9	22.9	3.8	0.3	0.0	17.4	125.0	2.9	0.1	205.0
	Fresh or fresh frozen fruits, vegetables and legumes	Maçã com casca	143	81.3	0.3	19.2	0.7	3.0	0.0	19.2	8.6	0.1	0.0	8.6
total in between 1				221.4	4.2	42.0	4.5	3.3	0.0	36.5	133.6	3.0	0.1	213.6
Lunch														
	Meat, poultry, eggs (unprocessed)	Frango, Pema sem pele crua	160	176.2	35.2	0.0	4.2	0.0	0.0	0.0	28.8	1.0	0.0	144.0
	Fresh or fresh frozen fruits, vegetables and legumes	Cebola crua	60	10.5	0.5	1.9	0.1	0.8	0.0	1.3	18.6	0.0	0.0	6.0
	Potatoes (unprocessed)	Batata crua	150	133.7	3.8	28.8	0.0	2.4	0.0	1.8	13.5	0.0	0.0	13.5
	Oils, fats and fat containing spreads	Óleo alimentar	15	134.4	0.0	0.0	14.9	0.0	0.0	0.0	0.0	1.7	0.0	0.0
	Fresh or fresh frozen fruits, vegetables and legumes	Tomate cru	63	12.0	0.5	2.2	0.2	0.8	0.0	2.2	6.9	0.0	0.0	8.2
	Fresh or fresh frozen fruits, vegetables and legumes	Brócolos crus	41	11.0	1.4	0.6	0.3	1.1	0.0	0.5	27.5	0.0	0.0	3.3
	Bread	Pão de Trigo	40	115.6	3.4	22.9	0.9	1.5	0.0	0.8	17.2	0.2	0.0	244.0
	Oils, fats and fat containing spreads	Margarina vegetal culinária, 80% gordura, com sal	10	72.2	0.0	0.0	8.0	0.0	0.0	0.0	0.3	4.0	0.0	120.0
	Beverages	Não Alcoólicas, Bebida Refrigerante cola	330	113.6	0.0	29.7	0.0	0.0	0.0	29.7	19.8	0.0	0.0	16.5
total lunch				781.1	44.8	86.1	28.6	6.6	0.0	36.4	132.6	6.9	0.1	555.5
In between 2														
	Confectionaries and baked snacks, pastries	Bola de Berlim sem creme	70	279.2	4.8	30.6	15.1	2.1	0.0	6.0	24.5	4.9	0.1	201.6
	Water (plain), tea, coffee	Não Alcoólicas, Café Infusão - valor médio (bica 60% e café de cafeteira 40%)	45	1.5	0.1	0.1	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.9
	All other products	Açúcar branco	5	19.5	0.0	5.0	0.0	0.0	0.0	5.0	0.1	0.0	0.0	0.0
	N.A.	Alcoólicas Fermentadas - Cerveja branca	330	97.0	1.3	1.7	0.0	0.0	12.2	1.7	29.7	0.0	0.0	36.3
total in between 2				397.2	6.2	37.3	15.1	2.1	12.2	12.6	55.7	4.9	0.1	238.8
Dinner														
	Meat, poultry, eggs (unprocessed)	Vaca para Cozer ou Estufar meio gorda crua	150	340.9	32.0	0.0	23.7	0.0	0.0	0.0	19.5	9.2	1.1	79.5
	Rice	Arroz comum cru	50	176.2	3.4	39.1	0.2	1.1	0.0	0.0	6.5	0.1	0.0	3.0
	Processed beans & legumes	Ervilhas grão, congeladas cruas	35	19.0	1.9	2.5	0.2	2.5	0.0	0.5	11.2	0.0	0.0	3.9
	Fresh or fresh frozen fruits, vegetables and legumes	Cenoura crua	72	13.9	0.4	3.2	0.0	1.9	0.0	3.0	29.5	0.0	0.0	41.8
	Fresh or fresh frozen fruits, vegetables and legumes	Couve roxa crua	65	14.8	1.3	2.5	0.0	2.1	0.0	2.1	38.0	0.0	0.0	7.2
	N.A.	Alcoólicas Fermentadas - Vinho maduro tinto	250	163.7	0.3	0.5	0.0	0.0	23.0	0.5	37.5	0.0	0.0	22.5
total dinner				728.5	39.1	47.7	24.1	7.5	23.0	6.1	143.2	9.2	1.1	157.8
	ADDITION	Azeite (4 marcas)	5	45.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0
		Sal	5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2000.0
TOTAL Typical Daily Menu 1 "Fast-food" - Men				2502.2	102.8	275.5	81.7	22.0	35.2	123.7	619.9	27.2	1.6	3507.3
Weighted average			8.4	209.1	8.6	23.0	6.9	1.8	2.9	10.3	51.8	2.3	0.1	293.0

Table 6. Typical Daily Menu 2 "Codfish/soup" – Men.

Typical Daily Menu 2 "Codfish/soup" - Men	Choices product group	Food products	Portion (g)	Energy (kcal)	Protein (g)	Total HC disponíveis (g)	Total fat (g)	Dietary fibre (g)	Alcohol (g)	Total sugar (g)	Ca (mg)	SAFA (g)	TFA (g)	Sodium (mg)
EPIPorto DP guide				2300	105	270	70	28	32	90	750			3600
Breakfast														
	Milk (-products)	Leite Vaca UHT meio gordo	244	114.3	8.1	12.0	3.9	0.0	0.0	12.0	273.3	2.2	0.1	97.6
	Grains and cereal products Non-wheat products	Flocos de milho tipo "Com Flakes"	40	149.8	3.2	32.4	0.4	1.6	0.0	2.5	0.8	0.1	0.1	280.8
	Water (plain), tea, coffee	Não Alcoólicas, Café Infusão - valor médio (bica 80% e café de cafeteira 40%)	45	1.5	0.1	0.1	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.9
	All other products	Açúcar branco	8	31.3	0.0	7.9	0.0	0.0	0.0	7.9	0.2	0.0	0.0	0.0
total breakfast				296.9	11.3	52.5	4.4	1.6	0.0	22.4	275.6	2.3	0.2	379.3
In between 1														
	Confectionaries and baked snacks, pastries	Pudim instantâneo preparado com leite meio gordo	125	140.1	3.9	22.9	3.8	0.3	0.0	17.4	125.0	2.9	0.1	205.0
	Fresh or fresh frozen fruits, vegetables and legumes	Maçã com casca	143	81.3	0.3	19.2	0.7	3.0	0.0	19.2	8.6	0.1	0.0	8.6
total in between 1				221.4	4.2	42.0	4.5	3.3	0.0	36.5	133.6	3.0	0.1	213.6
Lunch														
	Fresh or fresh frozen fruits, vegetables and legumes	Couve lombarda crua	76	14.7	1.8	1.6	0.2	2.4	0.0	1.5	38.8	0.0	0.0	6.8
	Fresh or fresh frozen fruits, vegetables and legumes	Cenoura crua	42	8.1	0.3	1.8	0.0	1.1	0.0	1.7	17.2	0.0	0.0	24.4
	Potatoes (unprocessed)	Batata crua	174	155.1	4.4	33.4	0.0	2.8	0.0	2.1	15.7	0.0	0.0	15.7
	Fresh or fresh frozen fruits, vegetables and legumes	Nabo (raiz) cru	20	3.3	0.1	0.6	0.1	0.4	0.0	0.6	2.4	0.0	0.0	4.0
	Fresh or fresh frozen fruits, vegetables and legumes	Cebola crua	36	6.3	0.3	1.1	0.1	0.5	0.0	0.8	11.2	0.0	0.0	3.6
	Meat, poultry, eggs (unprocessed)	Frango, Perna sem pele crua	160	178.2	35.2	0.0	4.2	0.0	0.0	0.0	28.8	1.0	0.0	144.0
	Fresh or fresh frozen fruits, vegetables and legumes	Cebola crua	60	10.5	0.5	1.9	0.1	0.8	0.0	1.3	16.6	0.0	0.0	6.0
	Potatoes (processed), pasta & noodles	Esparguete cru	30	107.4	3.6	21.3	0.6	1.5	0.0	0.9	6.6	0.1	0.0	1.5
	Bread	Pão de trigo	40	115.6	3.4	22.9	0.9	1.5	0.0	0.8	17.2	0.2	0.0	244.0
total lunch				599.1	49.6	84.7	6.0	10.9	0.0	9.8	156.4	1.3	0.0	450.0
In between 2														
	Confectionaries and baked snacks, pastries	Bola de Berlim sem creme	70	279.2	4.8	30.6	15.1	2.1	0.0	6.0	24.5	4.9	0.1	201.6
	Water (plain), tea, coffee	Não Alcoólicas, Café Infusão - valor médio (bica 80% e café de cafeteira 40%)	45	1.5	0.1	0.1	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.9
	All other products	Açúcar branco	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
total in between 2				280.7	4.9	30.7	15.1	2.1	0.0	6.0	25.9	4.9	0.1	202.5
Dinner														
	Fresh or fresh frozen fruits, vegetables and legumes	Couve lombarda crua	76	14.7	1.8	1.6	0.2	2.4	0.0	1.5	38.8	0.0	0.0	6.8
	Fresh or fresh frozen fruits, vegetables and legumes	Cenoura crua	42	8.1	0.3	1.8	0.0	1.1	0.0	1.7	17.2	0.0	0.0	24.4
	Potatoes (unprocessed)	Batata crua	174	155.1	4.4	33.4	0.0	2.8	0.0	2.1	15.7	0.0	0.0	15.7
	Fresh or fresh frozen fruits, vegetables and legumes	Nabo (raiz) cru	20	3.3	0.1	0.6	0.1	0.4	0.0	0.6	2.4	0.0	0.0	4.0
	Fresh or fresh frozen fruits, vegetables and legumes	Cebola crua	36	6.3	0.3	1.1	0.1	0.5	0.0	0.8	11.2	0.0	0.0	3.6
		Bacalhau Seco e salgado, demolidado cru	100	79.6	19.0	0.0	0.4	0.0	0.0	0.0	33.0	0.1	0.0	1483.0
	Fresh or fresh frozen fruits, vegetables and legumes	Cebola crua	10	1.7	0.1	0.3	0.0	0.1	0.0	0.2	3.1	0.0	0.0	1.0
	Rice	Arroz comum cru	30	105.7	2.0	23.4	0.1	0.6	0.0	0.0	3.9	0.0	0.0	1.8
	Fresh or fresh frozen fruits, vegetables and legumes	Couve roxa crua	40	9.1	0.8	1.6	0.0	1.3	0.0	1.3	24.0	0.0	0.0	4.4
	N.A.	Alcoólicas Fermentadas - Vinho maduro tinto	375	245.5	0.4	0.8	0.0	0.0	34.5	0.8	56.3	0.0	0.0	33.8
total dinner				629.2	29.1	64.6	0.8	9.2	34.5	9.0	205.5	0.1	0.0	1578.4
	ADDITION	Azeite (4 marcas)	42	378.0	0.0	0.0	42.0	0.0	0.0	0.0	0.0	6.0	0.0	0.0
		Sal	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	800.0
TOTAL Typical Daily Menu 2 "Codfish/soup" - Men				2405.3	99.1	274.5	72.8	27.0	34.5	83.7	796.9	17.7	0.4	3623.9
Weighted average		9.2		220.3	9.1	25.1	6.7	2.5	3.2	7.7	73.0	1.6	0.0	331.9

Table 7. Typical Daily Menu 3 "Milk/sugars" – Men.

Typical Daily Menu 3 "Milk/sugars" - Men	Choices product group	Food products	Portion (g)	Energy (kcal)	Protein (g)	Total HC disponíveis (g)	Total fat (g)	Dietary fibre (g)	Alcohol (g)	Total sugar (g)	Ca (mg)	SAFA (g)	TFA (g)	Sodium (mg)
EPIPorto DP guide														
Breakfast														
	Milk (-products)	Leite Vaca UHT meio gordo	244	2700	120	340	85	28	27	135	1100			3600
	Grains and cereal products Non-wheat products	Flocos de milho tipo "Com Flakes"	40	114.3	8.1	12.0	3.9	0.0	0.0	12.0	273.3	2.2	0.1	97.6
	Water (plain), tea, coffee	Não Alcoólicas, Café Infusão - valor médio (bica 60% e café de cafeteira 40%)	45	1.5	0.1	0.1	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.9
	All other products	Açúcar branco	16	62.6	0.0	15.9	0.0	0.0	0.0	15.9	0.3	0.0	0.0	0.0
	total breakfast			328.1	11.3	60.4	4.4	1.6	0.0	30.3	275.8	2.3	0.2	379.3
In between 1														
	Bread	Pão de leite (trigo)	40	98.8	3.1	20.6	0.8	1.0	0.0	1.2	25.2	0.2	0.0	177.2
	Cheese (-products)	Queijo "Emmental"	30	115.3	8.7	0.0	8.9	0.0	0.0	0.0	324.0	5.6	0.0	118.2
	Water (plain), tea, coffee	Não Alcoólicas, Café Infusão - valor médio (bica 60% e café de cafeteira 40%)	45	1.5	0.1	0.1	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.9
	All other products	Açúcar branco	24	93.8	0.0	23.8	0.0	0.0	0.0	23.8	0.5	0.0	0.0	0.0
	total in between 1			309.4	11.9	44.5	9.7	1.0	0.0	25.1	351.0	5.8	0.0	296.3
Lunch														
	Fresh or fresh frozen fruits, vegetables and legumes	Couve lombarda crua	38	7.4	0.9	0.8	0.1	1.2	0.0	0.8	19.4	0.0	0.0	3.4
	Fresh or fresh frozen fruits, vegetables and legumes	Cenoura crua	21	4.1	0.1	0.9	0.0	0.5	0.0	0.9	8.6	0.0	0.0	12.2
	Potatoes (unprocessed)	Batata crua	87	77.5	2.2	16.7	0.0	1.4	0.0	1.0	7.8	0.0	0.0	7.8
	Fresh or fresh frozen fruits, vegetables and legumes	Nabo (raiz) cru	10	1.6	0.0	0.3	0.0	0.2	0.0	0.3	1.2	0.0	0.0	2.0
	Fresh or fresh frozen fruits, vegetables and legumes	Cebola crua	18	3.1	0.2	0.6	0.0	0.2	0.0	0.4	5.6	0.0	0.0	1.8
	Meat, poultry, eggs (unprocessed)	Franco, Perna sem pele crua	200	222.7	44.0	0.0	5.2	0.0	0.0	0.0	36.0	1.2	0.0	180.0
	Fresh or fresh frozen fruits, vegetables and legumes	Cebola crua	60	10.5	0.5	1.9	0.1	0.8	0.0	1.3	18.6	0.0	0.0	6.0
	Potatoes (processed), pasta & noodles	Esparguete cru	50	179.0	6.1	35.6	1.0	2.6	0.0	1.6	11.0	0.2	0.0	2.5
	Fresh or fresh frozen fruits, vegetables and legumes	Tomate cru	78	14.9	0.6	2.7	0.2	1.0	0.0	2.7	8.6	0.0	0.0	10.1
	Fresh or fresh frozen fruits, vegetables and legumes	Maçã com casca	143	81.3	0.3	19.2	0.7	3.0	0.0	19.2	8.6	0.1	0.0	8.6
	Confectionaries and baked snacks, pastries	Pastel de nata	70	208.6	2.0	34.0	7.1	0.7	0.0	19.6	18.2	3.2	0.2	94.5
	total lunch			810.8	58.9	112.5	14.5	11.8	0.0	47.7	143.6	4.8	0.2	329.0
In between 2														
	Confectionaries and baked snacks, pastries	Bola de Berlim sem creme	70	278.2	4.8	30.6	15.1	2.1	0.0	6.0	24.5	4.9	0.1	201.6
	Water (plain), tea, coffee	Não Alcoólicas, Café Infusão - valor médio (bica 60% e café de cafeteira 40%)	45	1.5	0.1	0.1	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.9
	All other products	Açúcar branco	24	93.8	0.0	23.8	0.0	0.0	0.0	23.8	0.5	0.0	0.0	0.0
	total in between 2			374.5	4.9	54.6	15.1	2.1	0.0	29.8	26.3	4.9	0.1	202.5
Dinner														
		Bacalhau Seco e salgado, demolidado cru	30	23.9	5.7	0.0	0.1	0.0	0.0	0.0	9.9	0.0	0.0	444.9
	Fresh or fresh frozen fruits, vegetables and legumes	Cebola crua	10	1.7	0.1	0.3	0.0	0.1	0.0	0.2	3.1	0.0	0.0	1.0
		Arroz comum cru	30	105.7	2.0	23.4	0.9	0.6	0.0	0.0	3.9	0.0	0.0	1.8
	Processed beans & legumes	Ervilhas grão, congeladas cruas	35	19.0	1.9	2.5	0.2	2.5	0.0	0.5	11.2	0.0	0.0	3.9
	Fresh or fresh frozen fruits, vegetables and legumes	Cenoura crua	72	13.9	0.4	3.2	0.0	1.9	0.0	3.0	29.5	0.0	0.0	41.8
	Fresh or fresh frozen fruits, vegetables and legumes	Couve roxa crua	67	15.2	1.3	2.6	0.0	2.2	0.0	2.2	40.2	0.0	0.0	7.4
	Bread	Pão de trigo	80	231.1	6.7	45.8	1.8	3.0	0.0	1.7	34.4	0.4	0.0	488.0
	Cheese (-products)	Queijo "Emmental"	30	115.3	8.7	0.0	8.9	0.0	0.0	0.0	324.0	5.6	0.0	118.2
	N.A.	Alcoólicas Fermentadas - Cerveja branca	660	194.0	2.6	3.3	0.0	0.0	24.4	3.3	59.4	0.0	0.0	72.6
	total dinner			719.9	29.5	81.1	11.1	10.3	24.4	10.9	515.6	6.1	0.0	1179.5
	ADITION	Azeite (4 marcas)	28	252.0	0.0	0.0	28.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0
		Sal	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1600.0
	TOTAL Typical Daily Menu 3 "Milk/sugars" - Men			2794.8	114.6	353.2	82.8	26.6	24.4	143.7	1312.3	27.9	0.6	3986.5
	Weighted average		7.4	207.4	8.5	26.2	6.1	2.0	1.8	10.7	97.4	2.1	0.0	295.9

Table 8. Typical Daily Menu 4 "Low consume"- Men.

Typical Daily Menu 4 "Low consume"- Men	Choices product group	Food products	Portion (g)	Energy (kcal)	Protein (g)	Total HC disponíveis (g)	Total fat (g)	Dietary fibre (g)	Alcohol (g)	Total sugar (g)	Ca (mg)	SAFA (g)	TFA (g)	Sodium (mg)
EPIPorto DP guide				2000	85	230	60	21	24	85	700			3600
Breakfast														
	Milk (-products)	Leite Vaca UHT meio gordo	244	114.3	8.1	12.0	3.9	0.0	0.0	12.0	273.3	2.2	0.1	97.6
	Grains and cereal products Non-wheat products	Flocos de milho tipo "Com Flakes"	40	149.8	3.2	32.4	0.4	1.6	0.0	2.5	0.8	0.1	0.1	280.8
	All other products	Agúcar branco	16	62.6	0.0	15.9	0.0	0.0	0.0	15.9	0.3	0.0	0.0	0.0
	Water (plain), tea, coffee	Não Alcoólicas, Café Infusão - valor médio (bica 60% e café de cafeleira 40%)	45	1.5	0.1	0.1	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.9
total breakfast				328.1	11.3	60.4	4.4	1.6	0.0	30.3	275.8	2.3	0.2	379.3
In between 1														
	Confectionaries and baked snacks, pastries	Bolacha Maria	18	78.5	1.5	13.0	2.2	0.4	0.0	3.9	6.8	1.1	0.0	75.2
	MIK (-products)	logurte Açucarado batido meio gordo	125	113.5	5.9	16.4	2.6	0.0	0.0	16.4	202.5	1.5	0.1	101.3
total in between 1				192.0	7.4	29.3	4.8	0.4	0.0	20.2	209.3	2.6	0.1	176.5
Lunch														
	Fresh or fresh frozen fruits, vegetables and legumes	Couve lombarda crua	38	7.4	0.9	0.8	0.1	1.2	0.0	0.8	19.4	0.0	0.0	3.4
	Fresh or fresh frozen fruits, vegetables and legumes	Cenoura crua	21	4.1	0.1	0.9	0.0	0.5	0.0	0.9	8.6	0.0	0.0	12.2
	Potatoes (unprocessed)	Batata crua	87	77.5	2.2	16.7	0.0	1.4	0.0	1.0	7.8	0.0	0.0	7.8
	Fresh or fresh frozen fruits, vegetables and legumes	Nabo (raiz) cru	10	1.6	0.0	0.3	0.0	0.2	0.0	0.3	1.2	0.0	0.0	2.0
	Fresh or fresh frozen fruits, vegetables and legumes	Cebola crua	18	3.1	0.2	0.6	0.0	0.2	0.0	0.4	5.6	0.0	0.0	1.8
	Fresh or fresh frozen fish, shellfish and crustaceans	Robalo cru	100	145.1	18.5	0.0	7.9	0.0	0.0	0.0	52.0	1.8	0.0	95.0
	Potatoes (unprocessed)	Batata crua	100	89.1	2.5	19.2	0.0	1.6	0.0	1.2	9.0	0.0	0.0	9.0
	Fresh or fresh frozen fruits, vegetables and legumes	Tomate cru	78	14.9	0.6	2.7	0.2	1.0	0.0	2.7	8.6	0.0	0.0	10.1
total lunch				342.9	25.0	41.2	8.3	6.2	0.0	7.3	112.2	1.8	0.0	141.4
In between 2														
	Confectionaries and baked snacks, pastries	Bolacha Maria	18	78.5	1.5	13.0	2.2	0.4	0.0	3.9	6.8	1.1	0.0	75.2
	N.A.	Alcoólicas Fermentadas - Vinho maduro tinto	125	81.8	0.1	0.3	0.0	0.0	11.5	0.3	18.8	0.0	0.0	11.3
total in between 2				81.8	0.1	0.3	0.0	0.0	11.5	0.3	18.8	0.0	0.0	11.3
Dinner														
	Fresh or fresh frozen fruits, vegetables and legumes	Salmão cru	130	340.5	21.1	0.0	28.5	0.0	0.0	0.0	15.6	5.5	0.0	49.4
	Fresh or fresh frozen fruits, vegetables and legumes	Brdolos cru	83	22.2	2.8	1.2	0.7	2.2	0.0	1.0	55.6	0.1	0.0	6.6
	Rice	Arroz comum cru	30	105.7	2.0	23.4	0.1	0.6	0.0	0.0	3.9	0.0	0.0	1.8
	Fresh or fresh frozen fruits, vegetables and legumes	Cenoura crua	72	13.9	0.4	3.2	0.0	1.9	0.0	3.0	29.5	0.0	0.0	41.8
	Fresh or fresh frozen fruits, vegetables and legumes	Couve roxa crua	67	15.2	1.3	2.6	0.0	2.2	0.0	2.2	40.2	0.0	0.0	7.4
	Bread	Pão de trigo	80	231.1	6.7	45.8	1.8	3.0	0.0	1.7	34.4	0.4	0.0	488.0
	Fresh or fresh frozen fruits, vegetables and legumes	Pêra (5 variedades)	143	58.1	0.4	13.4	0.6	3.1	0.0	13.4	12.9	0.0	0.0	11.4
	N.A.	Alcoólicas Fermentadas - Cerveja branca	330	97.0	1.3	1.7	0.0	0.0	12.2	1.7	29.7	0.0	0.0	36.3
total dinner				883.8	36.1	91.4	31.6	13.1	12.2	22.9	221.8	6.0	0.0	642.7
	ADITION	Azeite (4 marcas)	7	63.0	0.0	0.0	7.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
		Sal	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1600.0
TOTAL Typical Daily Menu 4 "Low consume"- Men				1891.7	80.0	222.6	56.1	21.2	23.7	81.0	837.8	13.7	0.3	2951.1
Weighted average		13.3		251.1	10.6	29.5	7.4	2.8	3.1	10.8	111.2	1.8	0.0	391.7
AVERAGE TOTAL 8 MENUS - Typical Daily Menus				2179.8	95.6	266.6	68.3	23.9	15.2	105.9	1008.0	20.8	0.9	3519.1
%				100.0	17.5	48.9	28.2	4.9	19.4	8.6	0.4			

Table 9. Choices Daily Menu 1 "Healthy" – Women.

Choices Daily Menu 1 "Healthy" - Women	Choices product group	Food products	Portion (g)	Energy (kcal)	Protein (g)	Total HC disponíveis (g)	Total fat (g)	Dietary fibre (g)	Alcohol (g)	Total sugar (g)	Ca (mg)	SAFA (g)	TFA (g)	Sodium (mg)
EPIPorto DP guide				2070	100	268	68	27	3	120	1100			3600
Breakfast														
	Breakfast cereal products	Flocos de trigo	80	216.2	8.4	41.4	1.5	5.6	0.0	4.1	6.6	0.4	0.0	8.6
	Milk (-products)	Iogurte Aromatizado açucarado sólido meio gordo	125	88.7	5.1	12.6	2.0	0.0	0.0	12.6	162.5	1.1	0.1	72.5
	Fresh or fresh frozen fruits, vegetables and legumes	Uva branca (5 variedades)	136	97.5	0.4	23.5	0.7	1.1	0.0	23.5	13.6	0.1	0.0	2.7
total breakfast				402.4	13.9	77.6	4.2	6.7	0.0	40.2	182.7	1.6	0.1	81.8
In between 1														
	Bread	Tosta de trigo integral	50	182.1	7.7	31.3	2.6	3.7	0.0	1.8	38.0	0.5	0.0	216.0
	Milk (-products)	Leite Vaca UHT meio gordo	300	140.5	9.9	14.7	4.8	0.0	0.0	14.7	336.0	2.7	0.2	120.0
	Water (plain), tea, coffee	Não Alcoólicas, Café Infusão - valor médio (bica 60% e café de cafeteira 40%)	30	1.0	0.1	0.1	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.6
total in between 1				323.6	17.7	46.1	7.4	3.7	0.0	16.5	374.9	3.2	0.2	336.6
Lunch														
	Fresh or fresh frozen fruits, vegetables and legumes	Couve lombarda crua	38	7.4	0.9	0.8	0.1	1.2	0.0	0.8	19.4	0.0	0.0	3.4
	Fresh or fresh frozen fruits, vegetables and legumes	Cenoura crua	21	4.1	0.1	0.9	0.0	0.5	0.0	0.9	8.6	0.0	0.0	12.2
	Potatoes (unprocessed)	Batata crua	87	77.5	2.2	16.7	0.0	1.4	0.0	1.0	7.8	0.0	0.0	7.8
	Fresh or fresh frozen fruits, vegetables and legumes	Nabo (raiz) cru	10	1.6	0.0	0.3	0.0	0.2	0.0	0.3	1.2	0.0	0.0	2.0
	Fresh or fresh frozen fruits, vegetables and legumes	Cebola crua	18	3.1	0.2	0.6	0.0	0.2	0.0	0.4	5.6	0.0	0.0	1.8
	Fresh or fresh frozen fruits, vegetables and legumes	Bacalhau Fresco cru	50	37.9	8.9	0.0	0.3	0.0	0.0	0.0	7.5	0.1	0.0	32.5
	Fresh or fresh frozen fruits, vegetables and legumes	Cebola crua	10	1.7	0.1	0.3	0.0	0.1	0.0	0.2	3.1	0.0	0.0	1.0
	Potatoes (unprocessed)	Batata crua	80	53.5	1.5	11.5	0.0	1.0	0.0	0.7	5.4	0.0	0.0	5.4
	Fresh or fresh frozen fruits, vegetables and legumes	Brócolos crus	82	21.9	2.8	1.2	0.7	2.1	0.0	1.0	54.9	0.1	0.0	6.6
	Fresh or fresh frozen fruits, vegetables and legumes	Alface crua	30	3.6	0.5	0.2	0.1	0.4	0.0	0.2	21.0	0.0	0.0	0.9
	Fresh or fresh frozen fruits, vegetables and legumes	Tomate cru	63	12.0	0.5	2.2	0.2	0.8	0.0	2.2	6.9	0.0	0.0	8.2
	Fresh or fresh frozen fruits, vegetables and legumes	Maçã com casca	143	81.3	0.3	19.2	0.7	3.0	0.0	19.2	8.6	0.1	0.0	8.6
total lunch				305.8	18.0	54.0	2.0	11.0	0.0	26.9	150.1	0.3	0.0	90.4
In between 2														
	Bread	Tosta de trigo integral	50	182.1	7.7	31.3	2.6	3.7	0.0	1.8	38.0	0.5	0.0	216.0
	Cheese (-products)	Queijo "Quark" natural magro	70	41.7	7.2	2.8	0.2	0.0	0.0	2.8	84.0	0.1	0.0	28.7
total in between 2				223.8	14.9	34.1	2.8	3.7	0.0	4.6	122.0	0.6	0.0	244.7
Dinner														
	Fresh or fresh frozen fruits, vegetables and legumes	Couve lombarda crua	38	7.4	0.9	0.8	0.1	1.2	0.0	0.8	19.4	0.0	0.0	3.4
	Fresh or fresh frozen fruits, vegetables and legumes	Cenoura crua	21	4.1	0.1	0.9	0.0	0.5	0.0	0.9	8.6	0.0	0.0	12.2
	Potatoes (unprocessed)	Batata crua	87	77.5	2.2	16.7	0.0	1.4	0.0	1.0	7.8	0.0	0.0	7.8
	Fresh or fresh frozen fruits, vegetables and legumes	Nabo (raiz) cru	10	1.6	0.0	0.3	0.0	0.2	0.0	0.3	1.2	0.0	0.0	2.0
	Fresh or fresh frozen fruits, vegetables and legumes	Cebola crua	18	3.1	0.2	0.6	0.0	0.2	0.0	0.4	5.6	0.0	0.0	1.8
	Fresh or fresh frozen fruits, vegetables and legumes	Alum fresco cru	80	112.0	19.3	0.0	3.9	0.0	0.0	0.0	3.2	1.4	0.0	36.0
	Fresh or fresh frozen fruits, vegetables and legumes	Brócolos crus	83	22.2	2.8	1.2	0.7	2.2	0.0	1.0	55.6	0.1	0.0	6.6
	Rice	Arroz comum cru	30	105.7	2.0	23.4	0.1	0.6	0.0	0.0	3.9	0.0	0.0	1.8
	Fresh or fresh frozen fruits, vegetables and legumes	Pêra (5 variedades)	86	34.9	0.3	8.1	0.3	1.9	0.0	8.1	7.7	0.0	0.0	6.9
	Confectionaries and baked snacks, pastries	Pudim instantâneo preparado com leite meio gordo	125	140.1	3.9	22.9	3.8	0.3	0.0	17.4	125.0	2.8	0.1	205.0
	N.A.	Alcoólicas Fermentadas - Vinho verde tinto	40	22.8	0.0	0.1	0.0	0.0	3.2	0.1	5.2	0.0	0.0	6.0
total dinner				531.6	31.7	75.0	9.0	8.5	3.2	29.9	243.3	4.3	0.1	289.6
	ADDITION	Azeite (4 marcas)	53	297.0	0.0	0.0	33.0	0.0	0.0	0.0	0.0	4.8	0.0	0.0
		Sai	3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1200.0
TOTAL Choices Daily Menu 1 "Healthy" - Women				2084.3	98.2	286.7	58.3	33.5	3.2	118.0	1072.9	14.8	0.3	2243.0
Weighted average			14.6	305.0	14.1	42.0	8.5	4.9	0.5	17.3	157.0	2.2	0.0	328.2

Table 10. Choices Daily Menu 2 "Milk/soup" – Women.

Choices Daily Menu 2 "Milk/soup" - Women	Choices product group	Food products	Portion (g)	Energy (kcal)	Protein (g)	Total HC disponíveis (g)	Total fat (g)	Dietary fibre (g)	Alcohol (g)	Total sugar (g)	Ca (mg)	SAFA (g)	TFA (g)	Sodium (mg)
EPIPorto DP guide				2050	95.5	260	69	24	4	100	1000			3600
Breakfast														
	Milk (-products)	Leite Vaca UHT meio gordo	366	171.4	12.1	17.9	5.9	0.0	0.0	17.9	409.9	3.3	0.2	146.4
	Water (plain), tea, coffee	Não Alcoólicas, Café Infusão - valor médio (bica 60% e café de cafeteira 40%)	245	8.2	0.7	0.7	0.2	0.0	0.0	0.0	7.4	0.0	0.0	4.9
	All other products	Açúcar branco	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
total breakfast				179.6	12.8	18.7	6.1	0.0	0.0	17.9	417.3	3.3	0.2	151.3
In between 1														
	Milk (-products)	Leite Vaca UHT meio gordo	366	171.4	12.1	17.9	5.9	0.0	0.0	17.9	409.9	3.3	0.2	146.4
	Bread	Pão de trigo integral com sementes de sésamo	80	195.4	6.2	34.6	3.2	6.6	0.0	1.8	73.6	0.7	0.0	44.0
	Oils, fats and fat containing spreads	Creme vegetal para barrar 35% gordura, com fitosteróis	15	49.3	0.0	0.5	5.3	0.0	0.0	0.0	0.6	1.2	0.1	5.9
total in between 1				416.1	18.3	53.0	14.3	6.6	0.0	19.8	484.1	5.2	0.3	196.3
Lunch														
	Fresh or fresh frozen fruits, vegetables and legumes	Couve lombarda crua	76	14.7	1.8	1.6	0.2	2.4	0.0	1.5	38.8	0.0	0.0	6.8
	Fresh or fresh frozen fruits, vegetables and legumes	Canouira crua	42	8.1	0.3	1.8	0.0	1.1	0.0	1.7	17.2	0.0	0.0	24.4
	Potatoes (unprocessed)	Batala crua	174	155.1	4.4	33.4	0.0	2.8	0.0	2.1	15.7	0.0	0.0	15.7
	Fresh or fresh frozen fruits, vegetables and legumes	Nabo (raiz) cru	20	3.3	0.1	0.6	0.1	0.4	0.0	0.6	2.4	0.0	0.0	4.0
	Fresh or fresh frozen fruits, vegetables and legumes	Cebola crua	36	6.3	0.3	1.1	0.1	0.5	0.0	0.8	11.2	0.0	0.0	3.6
	Meat, poultry, eggs (unprocessed)	Frango, Perna sem pele crua	90	100.2	19.8	0.0	2.3	0.0	0.0	0.0	16.2	0.5	0.0	81.0
	Fresh or fresh frozen fruits, vegetables and legumes	Cebola crua	60	10.5	0.5	1.9	0.1	0.8	0.0	1.3	18.6	0.0	0.0	6.0
	Rice	Arroz comum cru	25	88.1	1.7	19.5	0.1	0.5	0.0	0.0	3.3	0.0	0.0	1.5
	Fresh or fresh frozen fruits, vegetables and legumes	Espinafres crus	72	15.5	1.9	0.6	0.6	1.9	0.0	0.5	74.9	0.1	0.0	124.6
	Fresh or fresh frozen fruits, vegetables and legumes	Canouira crua	140	27.1	0.8	6.2	0.0	3.6	0.0	5.7	57.4	0.0	0.0	81.2
	Confectionaries and baked snacks, pastries	Pudim instantâneo preparado com leite meio gordo	125	140.1	3.9	22.9	3.8	0.3	0.0	17.4	125.0	2.9	0.1	205.0
total lunch				569.0	35.4	89.6	7.3	14.2	0.0	31.6	380.5	3.5	0.1	553.7
In between 2														
	Milk (-products)	Leite Vaca UHT meio gordo	244	114.3	8.1	12.0	3.9	0.0	0.0	12.0	273.3	2.2	0.1	97.6
	Bread	Pão de trigo integral com sementes de sésamo	40	97.7	3.1	17.3	1.6	3.3	0.0	0.9	36.8	0.4	0.0	22.0
	Oils, fats and fat containing spreads	Creme vegetal para barrar 35% gordura, com fitosteróis	5	16.4	0.0	0.2	1.8	0.0	0.0	0.0	0.2	0.4	0.0	2.0
total in between 2				228.4	11.1	29.4	7.3	3.3	0.0	12.9	310.3	3.0	0.2	121.6
Dinner														
	Meat, poultry, eggs (unprocessed)	Peru Peito com pele cru	80	107.4	18.4	0.0	3.8	0.0	0.0	0.0	5.6	1.2	0.0	51.2
	Rice	Arroz comum cru	25	88.1	1.7	19.5	0.1	0.5	0.0	0.0	3.3	0.0	0.0	1.5
	Fresh or fresh frozen fruits, vegetables and legumes	Cebola crua	60	10.5	0.5	1.9	0.1	0.8	0.0	1.3	18.6	0.0	0.0	6.0
	Fresh or fresh frozen fruits, vegetables and legumes	Canouira crua	140	27.1	0.8	6.2	0.0	3.6	0.0	5.7	57.4	0.0	0.0	81.2
	N.A.	Alcoólicas Destiladas, Licor de ginja	17	40.1	0.0	3.2	0.0	0.0	3.9	3.2	0.3	0.0	0.0	0.9
total dinner				273.2	21.5	30.8	4.0	4.9	3.9	10.3	85.2	1.2	0.0	140.8
	ADDITION	Azeite (4 marcas)	20	180.0	0.0	0.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		Sal	5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2000.0
TOTAL Choices Daily Menu 2 "Milk/soup" - Women				1846.3	99.1	221.4	58.9	29.0	3.9	92.6	1677.4	19.1	0.7	3163.6
Weighted average		17.4		321.0	17.2	38.5	10.2	5.0	0.7	16.1	291.7	3.3	0.1	550.1

Table 11. Choices Daily Menu 3 "Fast-food" – Women.

Choices Daily Menu 3 "Fast-food" - Women	Choices product group	Food products	Portion (g)	Energy (kcal)	Protein (g)	Total HC disponíveis (g)	Total fat (g)	Dietary fibre (g)	Alcohol (g)	Total sugar (g)	Ca (mg)	SAFA (g)	TFA (g)	Sodium (mg)
EPIPorto DP guide				2300.0	105.0	290.0	78.0	23.0	6.0	120.0	900.0			3600.0
Breakfast														
	Milk (-products)	Iogurte Natural sólido meio gordo	125	67.5	5.3	6.3	2.3	0.0	0.0	6.3	147.5	1.3	0.1	77.5
	Milk (-products)	Leite Vaca UHT meio gordo	244	114.3	8.1	12.0	3.9	0.0	0.0	12.0	273.3	2.2	0.1	97.6
	Water (plain), tea, coffee	Não Alcoólicas, Café Infusão - valor médio (bica 60% e café de cafeteira 40%)	45	1.5	0.1	0.1	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.9
total breakfast				183.3	13.4	18.3	6.2	0.0	0.0	18.2	422.1	3.4	0.2	176.0
In between 1														
	Confectionaries and baked snacks, pastries	Pudim instantâneo preparado com leite meio gordo	125	140.1	3.9	22.9	3.8	0.3	0.0	17.4	125.0	2.9	0.1	205.0
	Fresh or fresh frozen fruits, vegetables and legumes	Maçã com casca	143	81.3	0.3	19.2	0.7	3.0	0.0	19.2	8.6	0.1	0.0	8.6
total in between 1				221.4	4.2	42.0	4.5	3.3	0.0	36.5	133.6	3.0	0.1	213.6
Lunch														
	Meat, poultry, eggs (unprocessed)	Frango, Perna sem pele crua	150	167.0	33.0	0.0	3.9	0.0	0.0	0.0	27.0	0.9	0.0	135.0
	Fresh or fresh frozen fruits, vegetables and legumes	Cebola crua	60	10.5	0.5	1.9	0.1	0.8	0.0	1.3	18.6	0.0	0.0	6.0
	Potatoes (unprocessed)	Batata crua	150	133.7	3.8	28.8	0.0	2.4	0.0	1.8	13.5	0.0	0.0	13.5
	Oils, fats and fat containing spreads	Óleo alimentar	15	134.4	0.0	0.0	14.9	0.0	0.0	0.0	0.0	1.7	0.0	0.0
	Fresh or fresh frozen fruits, vegetables and legumes	Brócolos crus	83	22.2	2.8	1.2	0.7	2.2	0.0	1.0	55.6	0.1	0.0	6.6
	Fresh or fresh frozen fruits, vegetables and legumes	Tomate cru	62	11.9	0.5	2.2	0.2	0.8	0.0	2.2	6.8	0.0	0.0	8.1
	Beverages	Não Alcoólicas, Bebida Refrigerante cola	330	113.6	0.0	29.7	0.0	0.0	0.0	29.7	19.8	0.0	0.0	16.5
total lunch				593.2	40.6	63.8	19.8	6.1	0.0	36.0	141.3	2.7	0.1	185.7
In between 2														
	Confectionaries and baked snacks, pastries	Pudim instantâneo preparado com leite meio gordo	125	140.1	3.9	22.9	3.8	0.3	0.0	17.4	125.0	2.9	0.1	205.0
	Water (plain), tea, coffee	Não Alcoólicas, Café Infusão - valor médio (bica 60% e café de cafeteira 40%)	45	1.5	0.1	0.1	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.9
	Milk (-products)	Leite Vaca UHT meio gordo	122	57.1	4.0	6.0	2.0	0.0	0.0	6.0	136.6	1.1	0.1	48.8
total in between 2				198.7	8.0	29.0	5.7	0.3	0.0	23.4	263.0	4.0	0.1	254.7
Dinner														
	Meat, poultry, eggs (unprocessed)	Coelho cru	150	175.6	30.5	0.0	6.0	0.0	0.0	0.0	25.5	1.9	0.0	87.0
	Oils, fats and fat containing spreads	Creme vegetal para barrar 35% gordura, com fitosteróis	10	32.8	0.0	0.3	3.5	0.0	0.0	0.0	0.4	0.8	0.1	3.9
	Rice	Arroz comum cru	100	352.5	6.7	78.1	0.4	2.1	0.0	0.0	13.0	0.1	0.0	6.0
	Processed beans & legumes	Ervilhas grão, congeladas cruas	41	22.2	2.2	2.9	0.2	2.9	0.0	0.6	13.1	0.0	0.0	4.5
	Fresh or fresh frozen fruits, vegetables and legumes	Cenoura crua	72	13.9	0.4	3.2	0.0	1.9	0.0	3.0	29.5	0.0	0.0	41.8
	Fresh or fresh frozen fruits, vegetables and legumes	Couve roxa crua	67	15.2	1.3	2.6	0.0	2.2	0.0	2.2	40.2	0.0	0.0	7.4
	N.A.	Alcoólicas Fermentadas - Cerveja branca	150	44.1	0.6	0.8	0.0	0.0	5.6	0.8	13.5	0.0	0.0	16.5
total dinner				656.4	41.7	87.8	10.1	9.1	5.6	6.5	135.2	2.9	0.1	167.0
	ADDITION	Azelle (4 marcas)	5	45.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0
		Sal	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2400.0
TOTAL Choices Daily Menu 3 "Fast-food" - Women			7	1898.2	108.0	241.0	51.3	18.7	5.6	120.6	1095.3	16.7	0.5	3397.0
Weighted average		11.15		211.7	12.0	26.9	5.7	2.1	0.6	13.4	122.2	1.9	0.1	378.9

Table 12. Choices Daily Menu 4 "Wine/low consume" – Women.

Choices Daily Menu 4 "Wine/low consume" - Women	Choices product group	Food products	Portion (g)	Energy (kcal)	Protein (g)	Total HC disponíveis (g)	Total fat (g)	Dietary fibre (g)	Alcohol (g)	Total sugar (g)	Ca (mg)	SAFA (g)	TFA (g)	Sodium (mg)
EPIPorto DP guide				1950	90	235	60	21	12	80	700			3600
Breakfast														
	Milk (-products)	Leite Vaca UHT meio gordo	244	114.3	8.1	12.0	3.9	0.0	0.0	12.0	273.3	2.2	0.1	97.6
	Water (plain), tea, coffee	Não Alcoólicas, Café Infusão - valor médio (bica 80% e café de cafeteira 40%)	45	1.5	0.1	0.1	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.9
	All other products	Açúcar branco	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
total breakfast				115.8	8.2	12.1	3.9	0.0	0.0	12.0	274.6	2.2	0.1	98.5
In between 1														
	Bread	Pão de trigo Integral com sementes de sésamo	80	195.4	6.2	34.6	3.2	6.6	0.0	1.8	73.6	0.7	0.0	44.0
total in between 1				195.4	6.2	34.6	3.2	6.6	0.0	1.8	73.6	0.7	0.0	44.0
Lunch														
	Fresh or fresh frozen fruits, vegetables and legumes	Couve lombarda crua	76	14.7	1.8	1.6	0.2	2.4	0.0	1.5	38.8	0.0	0.0	6.8
	Fresh or fresh frozen fruits, vegetables and legumes	Cenoura crua	42	8.1	0.3	1.8	0.0	1.1	0.0	1.7	17.2	0.0	0.0	24.4
	Potatoes (unprocessed)	Batata crua	174	155.1	4.4	33.4	0.0	2.8	0.0	2.1	15.7	0.0	0.0	15.7
	Fresh or fresh frozen fruits, vegetables and legumes	Nabo (raiz) cru	20	3.3	0.1	0.6	0.1	0.4	0.0	0.6	2.4	0.0	0.0	4.0
	Fresh or fresh frozen fruits, vegetables and legumes	Cebola crua	36	6.3	0.3	1.1	0.1	0.5	0.0	0.8	11.2	0.0	0.0	3.6
	Meat, poultry, eggs (unprocessed)	Vaca Lombo magro cru	120	136.4	25.2	0.0	4.0	0.0	0.0	0.0	12.0	1.7	0.2	72.0
	Rice	Arroz comum cru	50	176.2	3.4	39.1	0.2	1.1	0.0	0.0	6.5	0.1	0.0	3.0
	Processed beans & legumes	Ervilhas grão, congeladas cruas	82	44.5	4.3	5.7	0.4	5.7	0.0	1.1	26.2	0.1	0.0	9.0
	N.A.	Alcoólicas Fermentadas - Vinho maduro palhete	74	48.3	0.1	0.1	0.0	0.0	6.8	0.1	11.1	0.0	0.0	6.7
total lunch				592.9	39.9	83.4	4.9	13.9	6.8	7.9	141.0	1.8	0.2	145.1
In between 2														
	Beverages	Não Alcoólicas, Chá, infusão, preto	39	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.8
	All other products	Açúcar branco	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
total in between 2				0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.8
Dinner														
		Bacalhau Seco e salgado, demolhado cru	100	75.8	17.8	0.0	0.5	0.0	0.0	0.0	15.0	0.1	0.0	65.0
	Fresh or fresh frozen fruits, vegetables and legumes	Cebola crua	10	1.7	0.1	0.3	0.0	0.1	0.0	0.2	3.1	0.0	0.0	1.0
	Potatoes (unprocessed)	Batata crua	250	222.8	6.3	48.0	0.0	4.0	0.0	3.0	22.5	0.0	0.0	22.5
	N.A.	Alcoólicas Fermentadas - Cerveja branca	165	48.5	0.7	0.8	0.0	0.0	6.1	0.8	14.9	0.0	0.0	18.2
total dinner				348.8	24.8	49.1	0.5	4.1	6.1	4.0	55.5	0.1	0.0	106.7
	ADDITION	Azeite (4 marcas)	30	270.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	4.3	0.0	0.0
		Sal	3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1200.0
TOTAL Choices Daily Menu 4 "Wine/low consume" - Women				1523.1	79.0	179.2	42.5	24.6	12.9	25.8	545.1	9.1	0.3	1595.1
Weighted average		18.6		283.6	14.7	33.4	7.9	4.6	2.4	4.8	101.5	1.7	0.1	297.0

Table 13. Choices Daily Menu 1 "Fast-food" – Men.

Choices Daily Menu 1 "Fast-food" - Men	Choices product group	Food products	Portion (g)	Energy (kcal)	Protein (g)	Total HC disponiveis (g)	Total fat (g)	Dietary fibre (g)	Alcohol (g)	Total sugar (g)	Ca (mg)	SAFA (g)	TFA (g)	Sodium (mg)
EPIPorto DP guide				2600	110	290	85	21	35	115	850			3600
Breakfast														
	Milk (-products)	logurte Natural sólido meio gordo	125	67.5	5.3	6.3	2.3	0.0	0.0	6.3	147.5	1.3	0.1	77.5
	Breakfast cereal products	Flocos de trigo	40	144.1	5.6	27.6	1.0	3.7	0.0	2.7	4.4	0.2	0.0	4.4
	Water (plain), tea, coffee	Não Alcoólicas, Café Infusão - valor médio (bica 60% e café de cafeteira 40%)	45	1.5	0.1	0.1	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.9
	All other products	Açúcar branco	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
total breakfast				213.2	11.0	34.0	3.3	3.7	0.0	9.0	153.3	1.5	0.1	82.8
In between 1														
	Confectionaries and baked snacks, pastries	Pudim instantâneo preparado com leite meio gordo	125	140.1	3.9	22.9	3.8	0.3	0.0	17.4	125.0	2.9	0.1	205.0
	Fresh or fresh frozen fruits, vegetables and legumes	Maçã com casca	143	81.3	0.3	19.2	0.7	3.0	0.0	19.2	8.6	0.1	0.0	8.6
total in between 1				221.4	4.2	42.0	4.5	3.3	0.0	36.5	133.6	3.0	0.1	213.6
Lunch														
	Meat, poultry, eggs (unprocessed)	Frango, Pema sem pele crua	160	178.2	35.2	0.0	4.2	0.0	0.0	0.0	28.8	1.0	0.0	144.0
	Fresh or fresh frozen fruits, vegetables and legumes	Cebola crua	60	10.5	0.5	1.9	0.1	0.8	0.0	1.3	18.6	0.0	0.0	6.0
	Potatoes (unprocessed)	Batata crua	150	133.7	3.8	28.8	0.0	2.4	0.0	1.8	13.5	0.0	0.0	13.5
	Oils, fats and fat containing spreads	Óleo alimentar	15	134.4	0.0	0.0	14.9	0.0	0.0	0.0	0.0	1.7	0.0	0.0
	Fresh or fresh frozen fruits, vegetables and legumes	Tomate cru	63	12.0	0.5	2.2	0.2	0.8	0.0	2.2	6.9	0.0	0.0	8.2
	Fresh or fresh frozen fruits, vegetables and legumes	Brócolos crus	41	11.0	1.4	0.6	0.3	1.1	0.0	0.5	27.5	0.0	0.0	3.3
	Bread	Pão de trigo integral com sementes de sésamo	40	97.7	3.1	17.3	1.6	3.3	0.0	0.9	36.8	0.4	0.0	22.0
	Oils, fats and fat containing spreads	Creme vegetal para barrar 35% gordura, com fitosteróis	10	32.8	0.0	0.3	3.5	0.0	0.0	0.0	0.4	0.8	0.1	3.9
	Beverages	Não Alcoólicas, Bebida Refrigerante cola	330	113.6	0.0	29.7	0.0	0.0	0.0	29.7	19.8	0.0	0.0	16.5
total lunch				723.9	44.5	80.8	24.8	8.3	0.0	36.5	152.3	3.9	0.1	217.4
In between 2														
	Confectionaries and baked snacks, pastries	Pudim instantâneo preparado com leite meio gordo	125	140.1	3.9	22.9	3.8	0.3	0.0	17.4	125.0	2.9	0.1	205.0
	Water (plain), tea, coffee	Não Alcoólicas, Café Infusão - valor médio (bica 60% e café de cafeteira 40%)	45	1.5	0.1	0.1	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.9
	All other products	Açúcar branco	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	N.A.	Alcoólicas Fermentadas - Cerveja branca	330	97.0	1.3	1.7	0.0	0.0	12.2	1.7	29.7	0.0	0.0	36.3
total in between 2				238.6	5.3	24.7	3.8	0.3	12.2	19.0	156.1	2.9	0.1	242.2
Dinner														
	Meat, poultry, eggs (unprocessed)	Vaca Lombo magro cru	150	170.5	31.5	0.0	5.0	0.0	0.0	0.0	15.0	2.1	0.2	90.0
	Rice	Arroz comum cru	50	178.2	3.4	39.1	0.2	1.1	0.0	0.0	6.5	0.1	0.0	3.0
	Processed beans & legumes	Ervilhas grão, congeladas cruas	35	19.0	1.9	2.5	0.2	2.5	0.0	0.5	11.2	0.0	0.0	3.9
	Fresh or fresh frozen fruits, vegetables and legumes	Cenoura crua	72	13.9	0.4	3.2	0.0	1.9	0.0	3.0	29.5	0.0	0.0	41.8
	Fresh or fresh frozen fruits, vegetables and legumes	Couve roxa crua	65	14.8	1.3	2.5	0.0	2.1	0.0	2.1	39.0	0.0	0.0	7.2
	N.A.	Alcoólicas Fermentadas - Vinho maduro tinto	250	163.7	0.3	0.5	0.0	0.0	23.0	0.5	37.5	0.0	0.0	22.5
total dinner				558.1	39.7	47.7	5.3	7.5	23.0	6.1	138.7	2.2	0.2	168.3
	ADDITION	Azeite (4 marcas)	5	45.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0
		Sal	5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2000.0
TOTAL Choices Daily Menu 1 "Fast-food" - Men				2000.2	103.6	229.2	46.7	23.1	35.2	107.1	733.9	14.1	0.5	2924.2
Weighted average		8.4		167.1	8.7	19.1	3.9	1.9	2.9	8.9	81.3	1.2	0.0	244.3

Table 14. Choices Daily Menu 2 "Codfish/soup" – Men.

Choices Daily Menu 2 "Codfish/soup" - Men	Choices product group	Food products	Portion (g)	Energy (kcal)	Protein (g)	Total HC disponíveis (g)	Total fat (g)	Dietary fibre (g)	Alcohol (g)	Total sugar (g)	Ca (mg)	SAFA (g)	TFA (g)	Sodium (mg)
EPI/Porto DP guide				2300	105	270	70	26	32	90	750			3600
Breakfast														
	Milk (-products)	Leite Vaca UHT meio gordo	244	114.3	8.1	12.0	3.9	0.0	0.0	12.0	273.3	2.2	0.1	97.6
	Breakfast cereal products	Flocos de trigo	40	144.1	5.6	27.6	1.0	3.7	0.0	2.7	4.4	0.2	0.0	4.4
	Water (plain), tea, coffee	Não Alcoólicas, Café Infusão - valor médio (bica 60% e café de cafeteira 40%)	45	1.5	0.1	0.1	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.9
	All other products	Açúcar branco	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
total breakfast				259.9	13.8	39.7	4.9	3.7	0.0	14.7	279.0	2.4	0.1	102.9
In between 1														
	Confectionaries and baked snacks, pastries	Pudim instantâneo preparado com leite meio gordo	125	140.1	3.9	22.9	3.8	0.3	0.0	17.4	125.0	2.9	0.1	205.0
	Fresh or fresh frozen fruits, vegetables and legumes	Maçã com casca	143	81.3	0.3	19.2	0.7	3.0	0.0	19.2	8.6	0.1	0.0	8.6
total in between 1				221.4	4.2	42.0	4.5	3.3	0.0	36.5	133.6	3.0	0.1	213.6
Lunch														
	Fresh or fresh frozen fruits, vegetables and legumes	Couve lombarda crua	76	14.7	1.8	1.6	0.2	2.4	0.0	1.5	38.8	0.0	0.0	6.8
	Fresh or fresh frozen fruits, vegetables and legumes	Cenoura crua	42	8.1	0.3	1.8	0.0	1.1	0.0	1.7	17.2	0.0	0.0	24.4
	Potatoes (unprocessed)	Batata crua	174	155.1	4.4	33.4	0.0	2.8	0.0	2.1	15.7	0.0	0.0	15.7
	Fresh or fresh frozen fruits, vegetables and legumes	Nabo (raiz) cru	20	3.3	0.1	0.6	0.1	0.4	0.0	0.6	2.4	0.0	0.0	4.0
	Fresh or fresh frozen fruits, vegetables and legumes	Cebola crua	36	6.3	0.3	1.1	0.1	0.5	0.0	0.8	11.2	0.0	0.0	3.6
	Meat, poultry, eggs (unprocessed)	Frango, Perna sem pele crua	160	178.2	35.2	0.0	4.2	0.0	0.0	0.0	28.8	1.0	0.0	144.0
	Fresh or fresh frozen fruits, vegetables and legumes	Cebola crua	60	10.5	0.5	1.9	0.1	0.8	0.0	1.3	18.6	0.0	0.0	6.0
	Potatoes (processed), pasta & noodles	Massa miúda crua	30	106.2	3.7	21.0	0.5	1.5	0.0	0.7	7.5	0.1	0.0	1.5
	Bread	Pão de trigo integral com sementes de sésamo	40	97.7	3.1	17.3	1.6	3.3	0.0	0.9	36.8	0.4	0.0	22.0
total lunch				580.1	49.4	78.7	6.7	12.7	0.0	9.6	176.9	1.4	0.0	228.0
In between 2														
	Confectionaries and baked snacks, pastries	Pudim instantâneo preparado com leite meio gordo	125	140.1	3.9	22.9	3.8	0.3	0.0	17.4	125.0	2.9	0.1	205.0
	Water (plain), tea, coffee	Não Alcoólicas, Café Infusão - valor médio (bica 60% e café de cafeteira 40%)	45	1.5	0.1	0.1	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.9
	All other products	Açúcar branco	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
total in between 2				141.6	4.0	23.0	3.8	0.3	0.0	17.4	126.4	2.9	0.1	205.9
Dinner														
	Fresh or fresh frozen fruits, vegetables and legumes	Couve lombarda crua	76	14.7	1.8	1.6	0.2	2.4	0.0	1.5	38.8	0.0	0.0	6.8
	Fresh or fresh frozen fruits, vegetables and legumes	Cenoura crua	42	8.1	0.3	1.8	0.0	1.1	0.0	1.7	17.2	0.0	0.0	24.4
	Potatoes (unprocessed)	Batata crua	174	155.1	4.4	33.4	0.0	2.8	0.0	2.1	15.7	0.0	0.0	15.7
	Fresh or fresh frozen fruits, vegetables and legumes	Nabo (raiz) cru	20	3.3	0.1	0.6	0.1	0.4	0.0	0.6	2.4	0.0	0.0	4.0
	Fresh or fresh frozen fruits, vegetables and legumes	Cebola crua	36	6.3	0.3	1.1	0.1	0.5	0.0	0.8	11.2	0.0	0.0	3.6
		Bacalhau Seco e salgado, demolhado cru	100	75.8	17.8	0.0	0.5	0.0	0.0	0.0	15.0	0.1	0.0	65.0
	Fresh or fresh frozen fruits, vegetables and legumes	Cebola crua	10	1.7	0.1	0.3	0.0	0.1	0.0	0.2	3.1	0.0	0.0	1.0
	Rice	Arroz comum cru	30	105.7	2.0	23.4	0.1	0.6	0.0	0.0	3.9	0.0	0.0	1.8
	Fresh or fresh frozen fruits, vegetables and legumes	Couve roxa crua	40	9.1	0.8	1.6	0.0	1.3	0.0	1.3	24.0	0.0	0.0	4.4
	N.A.	Alcoólicas Fermentadas - Vinho maduro tinto	375	245.5	0.4	0.8	0.0	0.0	34.5	0.8	56.3	0.0	0.0	33.8
total dinner				625.4	27.9	64.6	0.9	9.2	34.5	9.0	187.5	0.1	0.0	160.4
	ADDITION	Azeite (4 marcas)	42	378.0	0.0	0.0	42.0	0.0	0.0	0.0	6.0	0.0	0.0	0.0
		Sal	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	800.0
TOTAL Choices Daily Menu 2 "Codfish/soup" - Men				2206.5	99.3	248.1	62.8	29.1	34.5	87.2	903.3	15.9	0.3	1710.8
Weighted average		9.2		202.1	9.1	22.7	5.8	2.7	3.2	8.0	82.7	1.5	0.0	156.7

Table 15. Choices Daily Menu 3 "Milk/sugars" – Men.

Choices Daily Menu 3 "Milk/sugars" - Men	Choices product group	Food products	Portion (g)	Energy (kcal)	Protein (g)	Total HC disponíveis (g)	Total fat (g)	Dietary fibre (g)	Alcohol (g)	Total sugar (g)	Ca (mg)	SAFA (g)	TFA (g)	Sodium (mg)
EPIPorto DP guide				2700	120	340	85	28	27	135	1100			3600
Breakfast														
	Milk (products)	Leite Vaca UHT meio gordo	244	114.3	8.1	12.0	3.9	0.0	0.0	12.0	273.3	2.2	0.1	97.6
	Breakfast cereal products	Flocos de trigo	40	144.1	5.6	27.6	1.0	3.7	0.0	2.7	4.4	0.2	0.0	4.4
	Water (plain), tea, coffee	Não Alcoólicas, Café Infusão - valor médio (bica 60% e café de cafeteira 40%)	45	1.5	0.1	0.1	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.9
	All other products	Açúcar branco	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
total breakfast				256.9	13.8	39.7	4.9	3.7	0.0	14.7	279.0	2.4	0.1	102.9
in between 1														
	Bread	Pão de trigo integral com sementes de sésamo	40	97.7	3.1	17.3	1.6	3.3	0.0	0.9	36.8	0.4	0.0	22.0
	Cheese (-products)	Queijo "Quark" natural magro	30	17.9	3.1	1.2	0.1	0.0	0.0	1.2	36.0	0.1	0.0	12.3
	Water (plain), tea, coffee	Não Alcoólicas, Café Infusão - valor médio (bica 60% e café de cafeteira 40%)	45	1.5	0.1	0.1	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.9
	All other products	Açúcar branco	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
total in between 1				117.1	6.3	18.6	1.7	3.3	0.0	2.1	74.2	0.4	0.0	35.2
Lunch														
	Fresh or fresh frozen fruits, vegetables and legumes	Couve lombarda crua	38	7.4	0.9	0.8	0.1	1.2	0.0	0.8	19.4	0.0	0.0	3.4
	Fresh or fresh frozen fruits, vegetables and legumes	Cenoura crua	21	4.1	0.1	0.9	0.0	0.5	0.0	0.9	8.8	0.0	0.0	12.2
	Potatoes (unprocessed)	Batata crua	67	77.5	2.2	16.7	1.4	0.0	1.0	7.8	0.0	0.0	0.0	7.8
	Fresh or fresh frozen fruits, vegetables and legumes	Nabo (raiz) cru	10	1.6	0.0	0.3	0.0	0.2	0.0	0.3	1.2	0.0	0.0	2.0
	Fresh or fresh frozen fruits, vegetables and legumes	Cebola crua	18	3.1	0.2	0.6	0.0	0.2	0.0	0.4	5.8	0.0	0.0	1.8
	Meat, poultry, eggs (unprocessed)	Frango, Perna sem pele crua	200	222.7	44.0	0.0	5.2	0.0	0.0	0.0	36.0	1.2	0.0	180.0
	Fresh or fresh frozen fruits, vegetables and legumes	Cebola crua	60	10.5	0.5	1.9	0.1	0.8	0.0	1.3	18.6	0.0	0.0	6.0
	Potatoes (processed), pasta & noodles	Massa miúda crua	50	177.1	6.2	35.0	0.9	2.6	0.0	1.1	12.5	0.2	0.0	2.5
	Fresh or fresh frozen fruits, vegetables and legumes	Tomate cru	78	14.9	0.6	2.7	0.2	1.0	0.0	2.7	8.8	0.0	0.0	10.1
	Fresh or fresh frozen fruits, vegetables and legumes	Maçã com casca	143	81.3	0.3	19.2	0.7	3.0	0.0	19.2	8.6	0.1	0.0	8.6
	Confectionaries and baked snacks, pastries	Pudim instantâneo preparado com leite meio gordo	125	140.1	3.9	22.9	3.8	0.3	0.0	17.4	125.0	2.9	0.1	205.0
total lunch				740.4	58.9	100.9	11.1	11.1	0.0	45.0	251.9	4.4	0.1	439.5
in between 2														
	Confectionaries and baked snacks, pastries	Pudim instantâneo preparado com leite meio gordo	125	140.1	3.9	22.9	3.8	0.3	0.0	17.4	125.0	2.9	0.1	205.0
	Water (plain), tea, coffee	Não Alcoólicas, Café Infusão - valor médio (bica 60% e café de cafeteira 40%)	45	1.5	0.1	0.1	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.9
	All other products	Açúcar branco	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
total in between 2				141.6	4.0	23.0	3.8	0.3	0.0	17.4	128.4	2.9	0.1	205.9
Dinner														
		Bacalhau Seco e salgado, demelhado cru	30	22.7	5.3	0.0	0.2	0.0	0.0	0.0	4.5	0.0	0.0	19.5
	Fresh or fresh frozen fruits, vegetables and legumes	Cebola crua	10	1.7	0.1	0.3	0.0	0.1	0.0	0.2	3.1	0.0	0.0	1.0
	Rice	Arroz comum cru	30	105.7	2.0	23.4	0.1	0.6	0.0	0.0	3.9	0.0	0.0	1.8
	Processed beans & legumes	Ervilhas grão, congeladas cruas	35	19.0	1.9	2.5	0.2	2.5	0.0	0.5	11.2	0.0	0.0	3.9
	Fresh or fresh frozen fruits, vegetables and legumes	Cenoura crua	72	13.9	0.4	3.2	0.0	1.9	0.0	3.0	29.5	0.0	0.0	41.8
	Fresh or fresh frozen fruits, vegetables and legumes	Couve roxa crua	67	15.2	1.3	2.6	0.0	2.2	0.0	2.2	40.2	0.0	0.0	7.4
	Bread	Pão de trigo integral com sementes de sésamo	80	195.4	6.2	34.6	3.2	6.6	0.0	1.8	73.6	0.7	0.0	44.0
	Cheese (-products)	Queijo "Quark" natural magro	30	17.9	3.1	1.2	0.1	0.0	0.0	1.2	36.0	0.1	0.0	12.3
	N.A.	Alcoólicas Fermentadas - Cerveja branca	660	194.0	2.6	3.3	0.0	0.0	24.4	3.3	59.4	0.0	0.0	72.6
total dinner				585.6	23.0	71.0	3.8	13.9	24.4	12.2	261.4	0.9	0.0	204.2
	ADDITION	Azeite (4 marcas)	28	252.0	0.0	0.0	26.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0
		Sal	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1600.0
TOTAL Choices Daily Menu 3 "Milk/sugars" - Men				2096.6	106.0	253.3	53.3	32.3	24.4	91.4	992.8	15.1	0.3	2587.6
Weighted average				7.4	155.6	7.9	18.8	4.0	2.4	1.8	6.8	1.1	0.0	192.0

Table 16. Choices Daily Menu 4 "Low consume"- Men.

Choices Daily Menu 4 "Low consume"- Men	Choices product group	Food products	Portion (g)	Energy (kcal)	Protein (g)	Total HC disponiveis (g)	Total fat (g)	Dietary fibre (g)	Alcoholi (g)	Total sugar (g)	Ca (mg)	SAFA (g)	TFA (g)	Sodium (mg)
EPIPorto DP guide				2000	85	230	60	21	24	85	700			3600
Breakfast														
	Milk (-products)	Leite Vaca UHT meio gordo	244	114.3	6.1	12.0	3.9	0.0	0.0	12.0	273.3	2.2	0.1	97.6
	Breakfast cereal products	Flocos de trigo	40	144.1	5.6	27.6	1.0	3.7	0.0	2.7	4.4	0.2	0.0	4.4
	All other products	Açúcar branco	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Water (plain), tea, coffee	Não Alcoólicas, Café Infusão - valor médio (bica 60% e café de cafeteira 40%)	45	1.5	0.1	0.1	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.9
total breakfast				259.9	13.8	39.7	4.9	3.7	0.0	14.7	279.0	2.4	0.1	102.9
In between 1														
	Bread	Tosta de trigo integral	50	182.1	7.7	31.3	2.6	3.7	0.0	1.8	38.0	0.5	0.0	216.0
	Milk (-products)	logurie Natural sólido meio gordo	125	67.5	5.3	6.3	2.3	0.0	0.0	6.3	147.5	1.3	0.1	77.5
total in between 1				249.6	13.0	37.6	4.8	3.7	0.0	8.0	185.5	1.8	0.1	293.5
Lunch														
	Fresh or fresh frozen fruits, vegetables and legumes	Couve lombarda crua	38	7.4	0.9	0.8	0.1	1.2	0.0	0.8	19.4	0.0	0.0	3.4
	Fresh or fresh frozen fruits, vegetables and legumes	Cenoura crua	21	4.1	0.1	0.9	0.0	0.5	0.0	0.9	8.6	0.0	0.0	12.2
	Potatoes (unprocessed)	Balata crua	87	77.5	2.2	16.7	0.0	1.4	0.0	1.0	7.8	0.0	0.0	7.8
	Fresh or fresh frozen fruits, vegetables and legumes	Nabo (raiz) cru	10	1.6	0.0	0.3	0.0	0.2	0.0	0.3	1.2	0.0	0.0	2.0
	Fresh or fresh frozen fruits, vegetables and legumes	Cebola crua	18	3.1	0.2	0.6	0.0	0.2	0.0	0.4	5.6	0.0	0.0	1.8
	Fresh or fresh frozen fish, shellfish and crustaceans	Robalo cru	100	145.1	18.5	0.0	7.9	0.0	0.0	0.0	52.0	1.8	0.0	95.0
	Potatoes (unprocessed)	Balata crua	100	89.1	2.5	19.2	0.0	1.6	0.0	1.2	9.0	0.0	0.0	9.0
	Fresh or fresh frozen fruits, vegetables and legumes	Tomate cru	78	14.9	0.6	2.7	0.2	1.0	0.0	2.7	8.6	0.0	0.0	10.1
total lunch				342.9	25.0	41.2	8.3	6.2	0.0	7.3	112.2	1.8	0.0	141.4
In between 2														
	Bread	Tosta de trigo integral	50	182.1	7.7	31.3	2.6	3.7	0.0	1.8	38.0	0.5	0.0	216.0
	N.A.	Alcoólicas Fermentadas - Vinho maduro tinto	125	81.8	0.1	0.3	0.0	0.0	11.5	0.3	18.8	0.0	0.0	11.3
total in between 2				81.8	0.1	0.3	0.0	0.0	11.5	0.3	18.8	0.0	0.0	11.3
Dinner														
	Fresh or fresh frozen fruits, vegetables and legumes	Atum fresco cru	130	182.0	31.3	0.0	6.4	0.0	0.0	0.0	5.2	2.2	0.0	58.5
	Fresh or fresh frozen fruits, vegetables and legumes	Bírcolos crus	83	22.2	2.8	1.2	0.7	2.2	0.0	1.0	55.6	0.1	0.0	6.6
	Rice	Aroz comum cru	30	105.7	2.0	23.4	0.1	0.6	0.0	0.0	3.9	0.0	0.0	1.8
	Fresh or fresh frozen fruits, vegetables and legumes	Cenoura crua	72	13.9	0.4	3.2	0.0	1.9	0.0	3.0	29.5	0.0	0.0	41.8
	Fresh or fresh frozen fruits, vegetables and legumes	Couve roxa crua	67	15.2	1.3	2.6	0.0	2.2	0.0	2.2	40.2	0.0	0.0	7.4
	Bread	Pão de trigo integral com sementes de sésamo	80	195.4	6.2	34.6	3.2	6.6	0.0	1.8	73.6	0.7	0.0	44.0
	Fresh or fresh frozen fruits, vegetables and legumes	Pêra (5 variedades)	143	58.1	0.4	13.4	0.6	3.1	0.0	13.4	12.9	0.0	0.0	11.4
	N.A.	Alcoólicas Fermentadas - Cerveja branca	330	97.0	1.3	1.7	0.0	0.0	12.2	1.7	29.7	0.0	0.0	36.3
total dinner				689.6	45.8	80.1	10.9	16.6	12.2	23.1	250.6	3.0	0.0	207.8
	ADITION	Azeite (4 marcas)	7	63.0	0.0	0.0	7.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
		Sal	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1600.0
TOTAL Choices Daily Menu 4 "Low consume"- Men				1686.8	97.8	198.8	36.0	30.2	23.7	53.3	846.1	10.0	0.2	2356.8
Weighted average		13.3		223.9	13.0	26.4	4.8	4.0	3.1	7.1	112.3	1.3	0.0	312.8
AVERAGE TOTAL 8 MENUS -Choices Daily Menus				1870.0	96.7	227.7	50.8	27.6	16.2	82.4	1002.3	14.1	0.4	2460.0
%				100.0	20.7	48.7	24.4		5.7	17.6		6.8	0.2	

**Annex F. Food products used for the Typical Daily Menu, and the
replacements of Choices non-compliant food products with Choices-
compliant ones**

Table 1. Food products used for the Typical Daily Menu, and the replacements of Choices non-compliant food products with Choices-compliant ones.

Foods used on the Typical Daily Menus (compliant and non-compliant)	Foods Choices-compliant, used to replace the non-compliant food
Flocos de cereais e frutos secos tipo "Muesli"	Flocos de trigo
logurte Aromatizado açucarado sólido meio gordo	
Uva branca (5 variedades)	
Leite Vaca UHT meio gordo	
Não Alcoólicas, Café Infusão - valor médio (bica 60% e café de cafeteira 40%)	
Couve lombarda crua	
Cenoura crua	
Batata crua	
Nabo (raiz) cru	
Cebola crua	
Bacalhau Seco e salgado, demolido cru	Bacalhau Fresco cru
Brócolos crus	
Alface crua	
Tomate cru	
Maçã com casca	
Tosta de trigo integral	
Queijo Flamengo 30% gordura	Queijo "Quark" natural magro
Atum fresco cru	
Arroz comum cru	
Pêra (5 variedades)	
Pastel de nata	Pudim instantâneo preparado com leite meio gordo
Alcoólicas Fermentadas - Vinho verde tinto*	
Azeite (4 marcas)	
Sal	
Açúcar branco	Artificial sweetener
Pão de trigo	Pão de trigo integral com sementes de sésamo
Manteiga com sal	Creme vegetal para barrar 35% gordura, com fitosteróis
Frango, Perna sem pele crua	
Espinafres crus	
Peru Peito com pele cru	
Alcoólicas Destiladas, Licor de ginja*	
logurte Açucarado batido gordo com cereais e fruta	logurte Natural sólido meio gordo
Óleo alimentar	
Não Alcoólicas, Bebida Refrigerante cola	Não Alcoólicas, Bebida Refrigerante cola light
Bola de Berlim sem creme	Pudim instantâneo preparado com leite meio gordo
Coelho cru	
Margarina vegetal culinária, 80% gordura, com sal	Creme vegetal para barrar 35% gordura, com fitosteróis
Ervilhas grão, congeladas cruas	
Couve roxa crua	
Alcoólicas Fermentadas - Cerveja branca*	
Vaca para Cozer ou Estufar meio gorda crua	Vaca Lombo magro cru
Alcoólicas Fermentadas - Vinho maduro palhete*	
Não Alcoólicas, Chá, infusão, preto	
Flocos de milho tipo "Com Flakes"	Flocos de trigo
Pudim instantâneo preparado com leite meio gordo	
Alcoólicas Fermentadas - Vinho maduro tinto*	
Esparquete cru	Massa miúda crua
Pão de leite (trigo)	Pão de trigo integral com sementes de sésamo
Queijo "Emmental"	Queijo Serra fresco
Bolacha Maria	Tosta de trigo integral
logurte Açucarado batido meio gordo	logurte Natural sólido meio gordo
Robalo cru	
Salmão cru	Atum fresco cru