

## Impact assessment of the Belgian Convention for a Balanced Diet

Report on the evolution of calories sold in Belgian retail  
between 2012 and 2016

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### Abstract

Fevia (Belgian Food & Drink Federation), COMEOS (Belgian federation for retailers, restaurant franchises and collective kitchens) and the Belgian Government co-signed the Convention for a balanced diet. With this convention, the Belgian food sector took a commitment to contribute to a reduction of the energy-intake of the Belgian consumer and/or improve the nutritional composition of food products. This study assesses the change in caloric intake of the Belgian population between 2012 – 2016 (first period of the Convention), and its possible relationship with the convention taken by the Belgian food sector. To this end, energy levels of branded and private label food products sold on the Belgian market were considered, based on data extracted from Euromonitor International's Passport Nutrition, Edition 2017. Results show that the average economic consumption of calories from packaged food and soft drinks categories (from retail alone) decreased by 28 kcal/capita/day between 2012-2016, which can be related to the efforts taken by the food sector. This reduction of 28 kcal per day should be considered as a small though important step taken by the food sector to help Belgian consumers improving the nutritional balance of their diet.

## 1. Introduction

Between 2014 and 2015 the second national food consumption survey in Belgium took place. This study was conducted at the request of the Minister of Social Affairs and Public Health and co-funded by the Federal Public Service - Public Health, Food Chain Safety and Environment, the European Food Safety Authority (EFSA) and the Scientific Institute of Public Health. Around three thousand people gave information about their food intake, food habits and physical activity. Also several anthropometric indicators were gathered (Body Mass Index, waist circumference and waist circumference & length ratio). Results showed that around 50% of the Belgian population has a weight and/or waist circumference above normal values (e.g. 29% of the Belgian population between 3 and 64 years old have a problem with overweight, 16% is obese)<sup>1</sup>. An in-balance between energy-intake (caused by bad eating habits) and energy expenditure (physical active) has been identified as the main cause of the problem<sup>2</sup>.

Fevia (Belgian Food & Drink Federation), COMEOS (Belgian federation for retailers, restaurant franchises and collective kitchens) and the Belgian Government co-signed the Convention for a Balanced Diet (annex 1). With this convention, the Belgian food sector took a commitment to work on the nutritional composition of several food products and to contribute to a reduction of the energy-intake of the Belgian consumer. These objectives are equally important. By changing the nutritional composition of food products (e.g. using less saturated fats and more fibres, see overview of commitments in **Table 1**), the food sector wants to contribute to a positive change in nutrient intake (carbohydrates, sugars, proteins, fats, fibres,...), bringing it more in line with the current nutritional recommendations of the Belgian Superior Health Council<sup>3</sup>.

**Table 1: Overview of the commitments on product composition for several food categories**

Food category	Goal
Soft drinks	-5% sugars
Chocolate products	-2.5% saturated fat
Biscuits and cakes	-3% saturated fat
Dairy	-3% added sugars
Plant based products	-4% sugars
Breakfast cereals	-4% sugars +5% fibres +8.5% whole grain

By working on nutritional composition of food products, portion size and communication, the food sector also wants to contribute to a positive change in calorie-intake, i.e. bringing more balance in the energy-intake vs. energy expenditure.

The aim of this report is to assess how the caloric intake of the Belgian population has changed between 2012 – 2016 (first period of the Convention). The change in nutritional composition on a product level has been assessed by the different subsectors of Fevia and COMEOS (self-reporting).

More information will become available online ([www.convenantevenwichtigevoeding.be/](http://www.convenantevenwichtigevoeding.be/) / [www.conventionalimentationequilibree.be](http://www.conventionalimentationequilibree.be)).

## 2. Methodology

To the best of our knowledge, limited information is available to determine the exact level of energy intake of Belgian consumers between the period 2012-2016. To obtain this, a detailed yearly survey of consumer’s food intake and its corresponding nutritional value should be assessed, which would be relatively high-cost and time-consuming. Nevertheless, representative estimations can be made by use of existing nutritional databases. For this report, the Euromonitor database was used. More specifically, Euromonitor International’s Passport Nutrition Tool (edition 2017).

Passport Nutrition is a database that examines the total amount of nutrients purchased through packaged food and soft drink products in 54 markets, including Belgium. The database allows to examine how product categories contribute to the purchase of nutrients, on a per-capita, per-day basis. The database consists of 6 years of historical market size data, 230 food and soft drinks categories and more than 57,000 food and soft drink brands. The Packaged Food and Soft Drinks data is based on the products’ reported nutrition content (available on pack labels, one variant per brand), whilst for fresh food and alcoholic drinks, the nutrition data is based on generic nutrient information per 100 g. This nutrition information is then applied to individual retail volumes, which effectively gives the purchase of each nutrient. Finally, to obtain an estimation per capita, the combined figures of nutrition information and volumes are divided by the corresponding population sizes (see **Figure 1**). Intake/consumption of nutrients throughout this analysis refers to “economic consumption of nutrients”. In other words it refers to nutrients purchased on an individual level, and not eaten. Also waste is not taken into consideration.

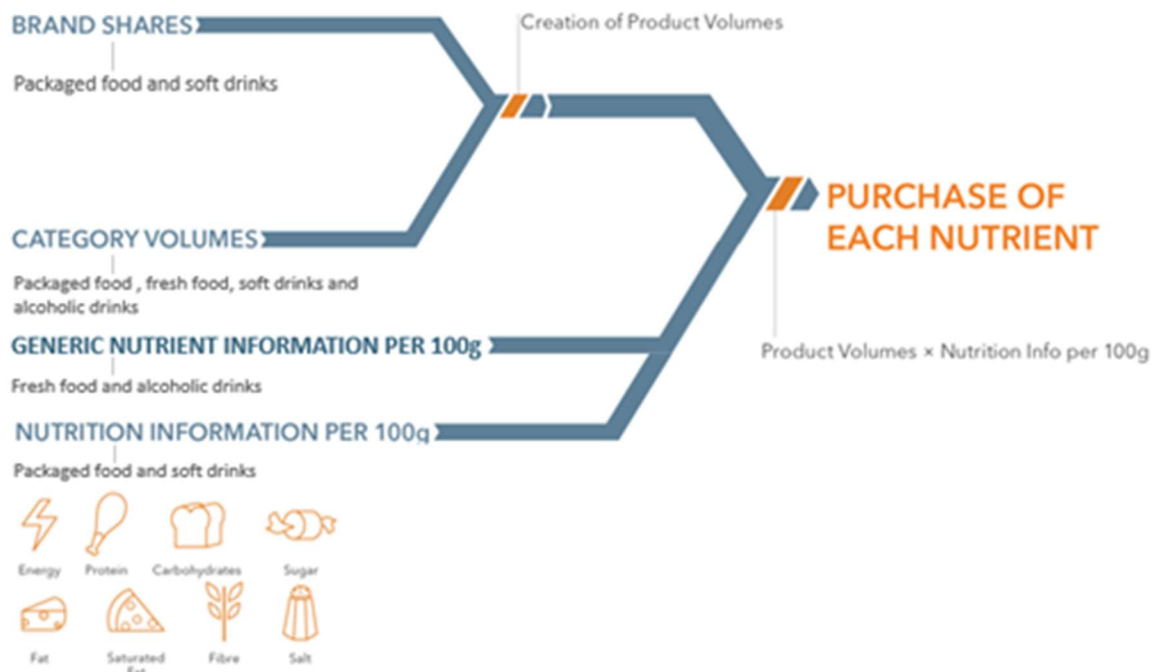


Figure 1: Euromonitor methodology for the estimation of purchase of nutrients

For this study, data was extracted from the Euromonitor database based on the entries shown in **Table 2** for the time period 2012 – 2016 considering energy levels (kcal) and the nutrients sugar and total fat. It is important to note that the Passport Nutrition Tool gathers nutritional information on a product brand level starting from 2014, and up to 2016, for the categories soft drinks and packaged food. Calculations for the purchase of nutrients for the years 2012 and 2013 are based on historic category volume sales from Euromonitor’s separate Packaged Food and Soft Drinks databases, and the 2014 back of pack nutrition information

**Table 2: Overview of food products that were included in the analyses**

Country	Categories	Topics
Belgium	Alcoholic drink	Beer, cider/perry, ready to drink/high-strength premixes, spirits, wine
	Fresh food	Eggs, fish and seafood, fruits, meat, nuts, pulses, starchy roots, sugar and sweeteners, vegetables
	Soft drinks	bottled water, juice, ready to drink tea, carbonates, ready to drink coffee, sports and energy drinks, concentrates
	Packaged food	Baby food, baked goods, breakfast cereals, confectionary, dairy, edible oils, ice cream and frozen desserts, processed fruit and vegetables, processed meat and seafood, ready meals, rice, pasta and noodles, sauces, dressings and condiments, soup, savoury snacks, spreads, sweet biscuits, snack bars and fruit snacks

Only food products that are sold in retail are considered in this report. Retail sales is defined as sales through all legal establishments primarily engaged in the sale of fresh, packaged and prepared foods for home preparation and consumption<sup>4</sup>. Retail sales excludes sales to hotels, restaurant, cafés, duty free sales and institutional sales (canteens, prisons/jails, hospitals, army, etc). The retail definition also excludes the purchase of food products from foodservice outlets for consumption off-premises, e.g. grilled chicken/meat/fish bought from counters of cafés/bars.

The purchase of calories is an appropriate estimation of the net impact of the convention since purchase is linked to consumption. Also, because sales volumes are combined with nutritional composition, the reformulation efforts of the different food categories are weighted according to the consumption behavior of Belgian consumers. Reformulated products that became popular over time will have a much larger impact on the final results than reformulated product that are less appreciated by the consumer.

While every attempt has been made to ensure accuracy and reliability, Euromonitor International cannot be held responsible for omissions or errors of historic figures or analyses.

### 3. Results

**Table 3** shows the evolution of the level of kcal per capita per day sold in Belgium. A decreasing trend can clearly be observed between 2012-2016. In 2016, Belgian consumers bought on average 53 kcal less compared to 2012. All four top level food and drink categories contributed to this reduction with 9.3 kcal; 15.4 kcal; 19.9 kcal and 8.5 kcal per capita per day for alcoholic drinks, fresh food, packaged food and soft drinks respectively.

*Table 3: Evolution of kcal per capita per day sold in Belgium (retail volume) for alcoholic drinks, fresh food, packaged food and soft drinks*

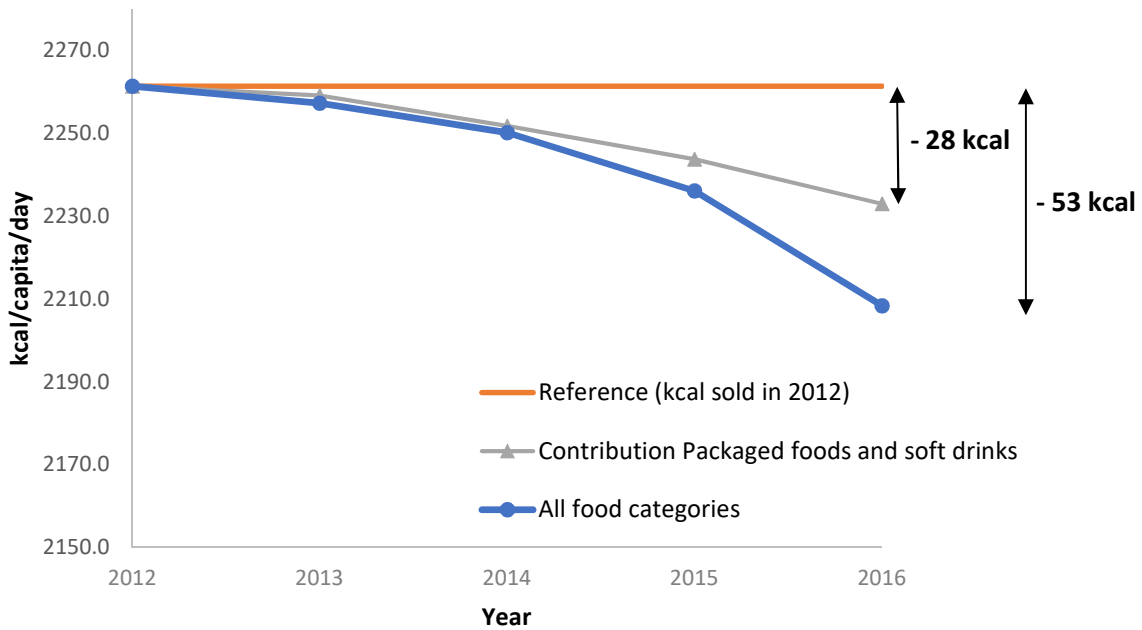
Category	2012	2013	2014	2015	2016
Alcoholic Drinks	125	124	123	122	116
Fresh Food	681	680	681	676	666
Packaged Food	1346	1344	1337	1340	1326
Soft Drinks	109	110	109	98	101

When considering the reduction in nutrients of all food categories (on a mass basis), one can estimate to which extent each single constituent contributed to the total reduction in kcal. Making the latter calculations, the reduction in kcal can be explained for 70% by a reduction in sugar or fat. Kcal coming from proteins have a much lower impact. Packaged food mainly contributed by a reduction in fat (29% of reduction in kcal), soft drinks in sugar (15% of reduction in kcal).

To gain insight to which extent food categories “packaged food” and “soft drinks” contributed to the overall reduction in energy intake, the evolution in energy intake (kcal/capita/day) for all food products was compared with the above mentioned food categories (**Figure 2**). It should be noted that the different subsectors involved in the Convention Balanced Diet (see **Table 1**) were well represented in these categories. Results from the packaged food and soft drinks categories show that in 2016, Belgian consumers bought on average 28 kcal per day less compared to 2012 (**Figure 2**).

## 4. Discussion

The evolution of the level of kcal per capita per day sold in Belgium for all food categories shows a decreasing trend. This can be at least partly explained by the efforts of the food sector made between 2012-2016. Because a reduction of the overconsumption of calories was one of the objectives of the convention, this trend can be seen as positive. Hence, it can be stated that by working on nutritional composition of food products, portion size and communication, the food sector has contributed to this change in kcal purchase and thus reduction in kcal intake.



**Figure 2: Evolution of kcal per capita per day sold in Belgium (retail volume) between 2012 and 2016**

Besides the efforts of the food sector, other factors should be taken into account to explain this reduction in energy intake. Health awareness campaigns, renewed nutritional recommendations, pricing (including taxation of certain food products), cross-border-shopping, e-commerce, influential food bloggers,... all can at a certain point in time influence the choice of the consumer and thus the purchase and intake of nutrients. For instance, when considering the fresh food category the reduction in kcal can be mainly explained by the reduced consumption of fresh meat products (-17 kcal per capita per day). Other food products within this food category such as fruits, nuts and vegetables show a slight increase in kcal sold. Different campaigns (whether or not made by the food sector) have been risen to promote the latter food products. Hence, this slight increase might indicate that these efforts resulted into a change in consumers' habits. Though, future monitoring is needed to confirm this hypothesis. For alcoholic drinks, the biggest drop in kcal coincides with a significant raise of excise taxes in 2016, leading to an increase in cross-border-shopping for alcoholic products, which is not taken into account in this study. In both food categories, the subsectors that took a commitment in the Convention for a Balanced Diet are less represented. Hence, it seems more relevant here to relate the impact of the convention by the observations made for the categories packaged food and soft drinks .

Between 2012 and 2016, the influence of renewed nutritional recommendations and e-commerce, is more than likely limited. New nutritional recommendations in Belgium were launched mid-2016 and 2017 and e-commerce for food products is something that got traction only recently. Between 2016 and 2018, a raise in excise taxes on soft drinks took place in Belgium. These taxes will influence cross-border-shopping in Belgium but the effect on the data 2012 - 2016 should be limited. In conclusion, results suggest that the efforts of the food sector between 2012 – 2016 for the food categories packaged food and soft drinks, resulted in a 28 kcal/capita/day reduction in energy intake.

The effect of a reduction of 28 kcal/capita/day on public health, more specifically on overweight and obesity prevalence in Belgium, is difficult to assess. The 28 kcal is a trend, calculated for the whole population, but there is no way in telling what this means at the individual level. Not all people in Belgium are overweight or have an unbalanced diet. According to the last Food Consumption Survey, people in Belgium with a normal weight have a daily calorie intake of 2128 kcal. People who are overweight or obese have a daily caloric intake of 2178 kcal and 2231 respectively<sup>5</sup>. This means that people who are overweight or obese have a surplus calorie-consumption per day of 50 kcal and 103 kcal respectively. This reduction of 28 kcal per day will not fundamentally solve overweight and obesity prevalence in Belgium, but must be seen as a valid step in the right direction.

## 5. Conclusion

As a conclusion, the results in this study indicate that the average calory intake of Belgian consumers decreased between the period of 2012-2016. This can be partly explained by the efforts of the food sector. Indeed, when considering food categories packaged food and soft drinks, a decreasing trend in energy can be clearly observed, going down to 28 kcal/capita/day. This decrease is a small but important step made by the Belgian food sector to contribute to a more balanced diet amongst consumers. However, further monitoring is needed to investigate to which extent these efforts will evolve in the future.

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