

CEEREAL Portion Sizes Rationale

Last update: May 2023

Introduction

Since 2008, CEEREAL has provided guidance on realistic portion sizes for breakfast cereals. These are used by all CEEREAL member companies across Europe (and beyond) in communicating with consumers about the role of breakfast cereals in a balanced diet. Portion sizes are reviewed periodically to ensure they reflect current consumption patterns and dietary recommendations. The last review was concluded in May 2023 and corroborated the portion size guidance used to date.

Why portion sizes are helpful

The published portion sizes are a guideline based on what normal people usually consume at one eating occasion and help consumers to judge how much energy and nutritional value is provided in their serving (portion) of cereal. The values are based on what an average adult might consume, which is the metric used to display Reference Intakes for nutrients on labels according to the EU Food Information to Consumers Regulation¹. Individual needs may differ based on age, gender, level of physical activity and other lifestyle factors.

How portion sizes have been derived

CEEREAL portion sizes are based on consumption data from the latest dietary intake surveys conducted in Europe. Most people decide their serving size from the volume in the bowl rather than by weight. For instance, a cup of muesli or granola weighs more than a cup of flakes or puffed cereal, and so the CEEREAL portion size guidance also takes into account these differences in product density by suggesting different portion sizes according to the type or category of cereal.

Heavier cereal products, such as muesli, granola, and cereal with “inclusions”, such as fruit and nuts, are allocated a larger portion size by weight (40g or 45g) while less dense products, such as flakes and popped cereals, are allocated the smaller portion size by weight (30g).

CEEREAL Portion Sizes

30g	40g	45g	2 biscuits
Toasted or extruded flakes	Toasted and/or extruded flakes with inclusions*	Muesli (all types)	Big biscuit type cereals
Toasted and/or extruded flakes with inclusions*	Extruded cereals (incl. pillows) and puffed cereals with inclusions*	Filled shredded cereals	
Extruded cereals (incl. pillows) and puffed cereals with inclusions*	Rolled oats and steamed cooked flakes from rye, barley and wheat	Granola	

¹ Regulation (EU) No 1169/2011 on the provision of food information to consumers. <https://eur-lex.europa.eu/eli/reg/2011/1169/2018-01-01>.

Extruded cereals (incl. pillows) and puffed cereals	Shredded cereals		
Filled extruded pillows, i.e., pillows with cream inside	Mini biscuits		
*Owing to density variations and different functional benefits of inclusions, products with inclusions may fall in the 30 or 40g portion sizes. Inclusions are defined as non-cereal pieces/ingredients such as but not limited to fruit, chocolate, nuts, seeds, etc. A cluster inclusion of cereal and soy or cereal and nuts is an inclusion while a cereal-only cluster is not.			
NB: owing to the high number of very diverse products in the sector, there may be a few niche products that are not covered by this table.			

The EFSA food consumption database² was used to retrieve the most recent dietary intake surveys conducted in the adult population in Europe. For the latest update in 2023, we used data for 15 countries with reliable dietary surveys of individuals: Belgium, Denmark, France, Germany, Ireland, Italy, Netherlands, Sweden, and the United Kingdom³. Newly included in 2023 were: Austria, Finland, Greece, Portugal, Romania, and Spain. All studies used valid and recognised methods and provided coverage of different sociodemographic groups.

The EFSA food consumption database provides information for different categories of foods at various levels of detail, with values for mean and median consumption for adults, children, and adolescents. We used the data on “acute” consumption by consumers on consuming days, which provides the best proxy for portion sizes.

Mean and median portion sizes for all breakfast cereals at exposure L3 and L4 were extracted as reported in the database and the mean and medians for all breakfast cereals were calculated, excluding porridge, rolled grains, and cereal bars.

For ready-to-eat cereals (i.e., cereals excluding porridge), median amounts for adults generally fall in the range of the CEEREAL standard sizes established in 2008 (i.e., 30-45g). Although there are inevitably variations between products, countries, and age groups, CEEREAL portion sizes remain a useful guideline for consumers and industry.

Table 1. Overview of dietary surveys consulted for the portion size guidance review.

Country	Dietary survey
Austria	EU Menu Austria (2014)
Belgium	Belgian National Food Consumption Survey (2014)
Denmark	The Danish National Dietary Survey (2005-2008)
Finland	FINDIET (2017)
France	The French national dietary survey (INCA3, 2014-2015)
Germany	National Nutrition Survey II (2007)
Greece	The EFSA-funded collection of dietary and related data in the general population (2014)
Ireland	National Adult Nutrition Survey (2008)
Italy	Italian national dietary survey on adult population (2018)

² European Food Safety Authority. (15 December 2022). Food Consumption Data. <https://www.efsa.europa.eu/en/data-report/food-consumption-data>.

³ For the United Kingdom, in 2016, the 2000 survey was used. However, in this review the data was updated with data from the survey year 2008 and the medians were corrected accordingly.

Netherlands	Dutch National Food Consumption Survey (DNFCS 2012-2016)
Portugal	National Food, Nutrition & Physical Activity Survey of the Portuguese general population (2015)
Romania	Romanian national food consumption survey (2019)
Spain	Spanish National dietary survey in adults, elderly & pregnant women (2013)
Sweden	Swedish National Dietary Survey - Riksmaten adults (2010-2011)
UK	National Diet and Nutrition Survey - Years 1-3 (2008)

A note on data interpretation

The median, or the middle value for consumers, represents average portion sizes. “Median” means that half of all consumers eat more, and half eat less than this value. Medians are more representative of the actual consumption and are less affected by extreme portion sizes than the mean estimates.

Amounts vary among countries as well as among types of products. Some of the apparent differences may be due to assessment methods: most studies use non-weighed measurements such as food pictures, or household measures. Although validated against weighed portions, this is not as accurate as weighing.