



Portion Sizes Rationale

Last update: September 2016

Introduction

Since 2008, CEEREAL has provided guidance on realistic portion sizes for breakfast cereals. These are used by all member companies across the EU 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 and dietary recommendations.

Why portion sizes are helpful

The published portion sizes are a guideline based on what normal people usually consume at one sitting, and help consumers to judge how much energy and nutritional value is provided in their serving of cereal. The values are based on what an average adult might consume, so young children need less. In practice men usually eat more than women and adolescents consume about the same amount as adults.

How portion sizes have been derived

CEEREAL Portion sizes are based on consumption data from dietary studies and take account of product density. This is because most people decide their serving size from the volume in the bowl, rather than by weight. A cup of muesli or granola weighs more than a cup of flakes or puffed cereal, and so CEEREAL portion sizes take account of this by suggesting different portion sizes according to 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 and/or extruded flakes	Toasted and/or extruded flakes with inclusions*	Muesli (all type)	Big biscuit type cereals
Toasted and/or extruded flakes with inclusions*	Extruded cereals (including pillows) and puffed cereals with inclusions*	Filled shredded cereals	
Extruded cereals (including pillows) and puffed cereals with inclusions*	Rolled oats and steamed cooked flakes from rye, barley and wheat	Granola	
Extruded cereals (including 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 40 gram 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.

Please note: 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.

A number of sources were used to provide these estimates. For the latest update we used data for 9 countries with reliable dietary surveys of individuals: Belgium, Denmark, France, Germany, UK, Ireland, Italy, Netherlands and Sweden. Together these are broadly representative of dietary habits across Europe. All studies used valid and recognised methods and provided coverage of different sociodemographic groups. This same information is used by EFSA to assess food consumption in Europe and forms part of the EFSA Comprehensive European Food Consumption Database (1), which is downloadable from the EFSA website. Database files provide 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.

For ready-to-eat cereals (i.e. 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 is inevitably variation between products, countries and age groups, CEEREAL retains the existing portion sizes as a useful guideline for consumers and industry.

References

1. EFSA EFSA (2011) Comprehensive European Food Consumption Database. In <http://www.efsa.europa.eu/en/food-consumption/comprehensive-database>.

More information

Table 1 shows average consumption of breakfast cereals by adult consumers in 9 European states.

A note on data interpretation

The median, or the middle value for consumers, is the best measure to represent average portion sizes; half of all consumers eating more and half eating less than this. The mean is influenced by high consumers and tends to give higher values than the median.

Amounts vary between countries as well as between 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. The weighed data for Ireland tend to give values that are slightly higher than for other countries. On the other hand, values for Denmark, Sweden and Italy tend to be lower than average. This may be partly due to method, or habit, for example if cereal is used to sprinkle on yogurt, rather than as the main item.

Table 1: Breakfast cereal consumption by type on consuming days (adults)

Country	Dietary survey		Number of consuming days	Percentage of consuming days	Mean g/d	Median g/d
Belgium	Diet National 2004	Cereal flakes	216	8.2%	49	40
Belgium	Diet National 2004	Muesli	64	2.4%	44	40
Belgium	Diet National 2004	Popped cereals	40	1.5%	46	40
Denmark	The Danish National Dietary survey 2005-2008	Cereal flakes	4,496	37.1%	31	25
Denmark	The Danish National Dietary survey 2005-2008	Muesli	881	7.3%	26	18
France	INCA2 2007	Breakfast cereals	42	0.3%	56	45
France	INCA2 2007	Cereal flakes	698	4.4%	51	45
France	INCA2 2007	Muesli	433	2.8%	67	50
France	INCA2 2007	Popped cereals	126	0.8%	47	45
Germany	National Nutrition Survey II 2007	Grits	26	0.1%	63	60
Germany	National Nutrition Survey II 2007	Cereal flakes	969	4.7%	44	40
Germany	National Nutrition Survey II 2007	Muesli	1516	7.3%	53	50
Germany	National Nutrition Survey II 2007	Popped cereals	104	0.5%	46	40
Ireland	National Adult Nutrition Survey 2008-2010	Cereal flakes	1,343	26.4%	53	44
Ireland	National Adult Nutrition Survey 2008-2010	Mixed breakfast cereals	318	6.2%	53	47
Ireland	National Adult Nutrition Survey 2008-2010	Muesli	305	6.0%	83	76
Ireland	National Adult Nutrition Survey 2008-2010	Popped cereals	259	5.1%	47	43
Italy	INRAN-SCAI 2005-06	Cereal bars	56	0.8%	32	22
Italy	INRAN-SCAI 2005-06	Cereal flakes	345	5.0%	22	23
Italy	INRAN-SCAI 2005-06	Mixed breakfast cereals	17	0.2%	19	21
Italy	INRAN-SCAI 2005-06	Muesli	33	0.5%	22	20
Italy	INRAN-SCAI 2005-06	Popped cereals	50	0.7%	25	23
Netherlands	DNFCS 2007 - 2010	Cereal flakes	111	2.7%	40	40
Netherlands	DNFCS 2007 - 2010	Mixed breakfast cereals	49	1.2%	35	30
Netherlands	DNFCS 2007 - 2010	Muesli	353	8.6%	47	40
Netherlands	DNFCS 2007 - 2010	Popped cereals	17	0.4%	46	50
Sweden	Riksmaten adults 2010-11	Breakfast cereals	11	0.2%	27	26
Sweden	Riksmaten adults 2010-11	Cereal flakes	804	14.2%	23	18
Sweden	Riksmaten adults 2010-11	Mixed breakfast cereals	52	0.9%	17	11
Sweden	Riksmaten adults 2010-11	Muesli	1020	18.0%	50	40
Sweden	Riksmaten adults 2010-11	Popped cereals	7	0.1%	22	17
United Kingdom	National Diet and Nutrition Survey - Years 1-3 (2008-2011)	Cereal flakes	1,227	24.3%	43	40
United Kingdom	National Diet and Nutrition Survey - Years 1-3 (2008-2011)	Mixed breakfast cereals	337	6.7%	36	30
United Kingdom	National Diet and Nutrition Survey - Years 1-3 (2008-2011)	Muesli	257	5.1%	44	40
United Kingdom	National Diet and Nutrition Survey - Years 1-3 (2008-2011)	Popped cereals	137	2.7%	35	30