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Making sense of Guideline Daily Amounts

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You may have noticed the term Guideline Daily Amounts or GDAs mentioned on food labels, but what does it mean? Guideline Daily Amounts are a guide to the total amount of energy and nutrients that a typical healthy adult should be eating in a day.

These values are provided on a voluntary basis by the food and beverage and retail industries, to give context to the energy and nutrient content of foods and beverages. By providing consumers with this information, it is hoped that they will have a better understanding of how individual products contribute to achieving an overall balanced diet.

The food and beverage and retail industries derive their GDA values from international, EU and government guidelines that are based on the latest published scientific data on dietary requirements and recommendations. However, differences have been observed between the various systems used, due to the origin of the scientific data reference and minor differences in calculation techniques. Consumers in the UK are already familiar with the concept of GDAs, following the introduction of this on pack information by many manufacturers and retailers in 1998. In continental Europe, GDAs are gradually gaining acceptance. Recently, the Confederation of the Food and Drink Industries of the EU (CIAA) proposed a harmonised industry approach to nutrition labelling across the EU, including the use of standardised GDA values. This would help to eliminate the differences between GDA values that have currently been observed.

GDAs for energy and nutrients

In general, GDAs are available for energy (calories) and the four most important nutrients that may increase the risk of developing some diet-related diseases: fat, saturated fat, sugars and sodium (or salt). GDAs for carbohydrates, protein and fibre may also be given at the manufacturer's discretion. Guidelines for adults are based on typical requirements for healthy men and women over 18 years of age, of normal weight and/or for weight maintenance. The energy GDA values are derived from

estimated average population requirements (EAR) for energy and take account of the current activity levels and lifestyle of an average citizen, which tends to be fairly sedentary. The energy is commonly measured in "kilocalories" (kcal), also referred to as "Calories": both expressions are equivalent and commonly used on food labels. For an average woman the energy GDA is 2000 kcal and 2500 kcal for an average man: these values are used as a reference to calculate the guideline daily amounts for nutrients. Where it is impractical to provide separate guidelines for men and women, 'adult' GDA values are based on GDA values for women, to discourage over-consumption. Guidelines for children have also been developed for both boys and girls. Reference GDAs for children are generally only found on labels or literature associated with products intended specifically for children.

TABLE 1: ADULT GDAS BASED ON A DAILY INTAKE OF 2000 KCAL (CALORIES)				
	GDAs for adults			
Energy	2000 kcal (Calories)			
Total Fat	Not more than 70g			
Saturated Fat	Not more than 20g			
Carbohydrates	270g			
Total Sugars	Not more than 90g			
Protein	50g			
Fibre	At least 25g			
Sodium (Salt)	Not more than 2.4g (6g)			

Table 1, provides an example of adult GDAs that you may see on different products in Europe, based on a daily intake of 2000 kcal and derived from EURODIET recommendations (refer to reference 5; for Total sugars, refer to references 6, 7).

Guidelines, not individual targets

For any individual, energy and nutrient requirements may be higher or lower than the published GDAs, based on their gender, age, weight, level of physical activity and other factors. Furthermore, it is unlikely that an individual will achieve their GDA for every nutrient on any one day. For these reasons, GDAs should not be regarded as strict individual targets. Rather, consumers should consider them a benchmark for assessing the potential contribution of a particular product to their daily requirement for individual nutrients.

Vitamins & minerals, the RDAs

Where vitamin or mineral content is declared on the label, this is given as a percentage of the recommended dietary allowance (RDA) rather than GDA, and is regulated by EU food law. Vitamins and minerals need to be consumed in specific amounts for the good functioning of essential metabolic reactions in the body and the preservation of physical health. For this reason, their recommended levels of intake are set higher than the average population requirement (which was the case of GDAs), in order to eliminate any cases of deficiency. The RDA is the average daily intake that will meet the nutrient requirement of nearly all healthy adult people. As with GDAs, this does not mean that those

amounts should be taken every day. They represent the average intake over a period of time (Table 2).

TABLE 2: EU REFERENCE VALUES FOR RECOMMENDED DAILY ALLOWANCES FOR VITAMINS & MINERALS						
	Unit	RDA				
Vitamin A	μg	800				
Vitamin D	μg	5				
Vitamin E	mg	10				
Vitamin C	mg	60				
Thiamin	mg	1,4				
Riboflavin	mg	1,6				
Niacin	mg	18				
Vitamin B6	mg	2				
Folic Acid	μg	200				
Vitamin B12	μg	1				
Biotin	mg	0,15				
Pantothenic acid	mg	6				
Calcium	mg	800				
Phosphorus	mg	800				
Iron	mg	14				
Magneslum	mg	300				
Zinc	mg	15				
lodine	μg	150				

Source: Council Directive 90/496/EEC of 24 September 1990 on nutrition labelling for foodstuffs

Visual examples explained

Figure 1 below is an example of a nutrition signpost that you may find on a product pack. To exemplify how this information can be useful to the consumer, a detailed explanation of the energy GDA has been provided: the same principles of interpretation are required to gain a full understanding of the sugar, fat, saturated fat and salt content of this product, allowing the consumer to determine how this product fits in his overall diet.

Figure 1. Example and explanation of a signpost



Figure 2 provides an example of nutritional tables that consumers may see on the back of product packaging. The figure compares two similar kinds of breakfast cereal. In this case, type 2 cereal would benefit people who have a low consumption of dietary fibre.

Figure 2: Comparison of the nutrition information of two back of packs of breakfast cereals

	Type 1				
		Per serving (30g)	% of guideline daily amount	Guideline daily amount	
I	Calories	115	6%	2000kcal	
I	Sugar	0,5g	6%	90g	
	Fat	0,2g	1%	70g	
I	Saturated fat	5g	1%	20g	
ľ	Fibre	0,8g	3%	25g	
I	Sodium	0,24g	11%	2,4g	

Back of Pack Nutrition Information on Breakfast Cereal **Type 1**

Back of Pack Nutrition Information on Breakfast Cereal Type 2

	Per serving (30g)	% of GDAs	GDAs for adults
Energy	112	6%	2000kcal
Sugar	7g	8%	90g
Fat	1,5g	2%	70g
Of which saturated fat	0,3g	1%	20g
Fibre	5g	20%	25g
Salt	0,6g	10%	6g
Of which sodium	0,24g	10%	2,4g

The type 2 breakfast cereal is about 6 times higher in fibre than type 1 (5.0g compared with 0.8g). One serving of type 2 cereals covers a significant part of the daily requirement for fibre: it contains around one fifth (20%, compared with 3% for Type 1) of the quantity a typical adult should be eating in a day.

Putting theory into practice

In a shopping or a cooking context, GDAs are designed for guiding consumers' choices: for people concerned by the amount of salt they consume, these values can assist with the identification of the lowest source between two products.

GDAs can help in promoting a better understanding of how different foods contribute to a well balanced diet by indicating which foods should be consumed now and again, and those that could be consumed more frequently.

It is however important to note that there is still very little known about how such labelling systems are actually used on a day-to-day basis and further research is required to understand how consumers use this information in practice.

References

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