

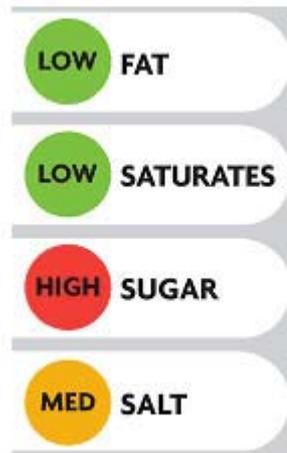
So what are Guideline Daily Amounts (GDAs)?

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Drawing up the battle lines

If you work in the food industry you could not have missed the debates going on about food labelling, and more specifically about whether a nutrition labelling scheme on the front of pack should be in the form of 'traffic lights', GDAs or a combination of the two. It is reaching a crescendo now because the debate is being hotly debated in the EU with a final decision having to be made soon. Whatever is finally decided will end-up being European law and we will all have to abide by it-even the pompous UK!

The UK Government wants some sort of colour coding of nutrients and is trying to push this hard in Europe as a Member State (through the Food Standards Agency). Retailers seem divided, while most of the food manufacturing industry backs GDAs. Consumer groups and other NGOs claim to be on the side of the Angels of course, and so back traffic lights. Increasingly the latter are claiming that GDAs are an industry-developed scheme with no science to back it. So as someone who was involved in the technical development of GDAs, I just want to put the record straight!



Traffic light labelling intended for front of pack

Background

Guideline Daily Amounts (GDAs) started life in 1996 as Daily Guideline Intakes for use by MAFF (the UK Ministry of Agriculture Fisheries and Food), which has now been replaced by the Food Standards Agency (FSA). Initially they were set for fat, saturated fat, sodium, sugar and fibre in grams per day for men and women¹. Then in 1998 a set of GDAs for labelling purposes were developed, based on the same principles. They were set for calories, fat and saturated fat for men and women². This work was a collaborative work between UK government, consumer organisations and the food industry and overseen by the Institute of Grocery

¹ Williams C, Rayner M, Myatt M, Boaz A. Use your Label: Making Sense of Nutritional Information. Foodsense leaflet. MAFF 1996

² Institute of Grocery Distribution (1998) *Voluntary nutrition labelling guidelines to benefit the consumer* (01.02): IGD <http://www.igd.com/CIR.asp?menuid=36&cirid=78>

Distribution (IGD). It resulted in most of the major retailers labelling back of packs with GDAs but few, if any, food manufacturers used them then.

In the summer of 2004, it was decided to re-look at GDAs so that they could be updated and used in a consistent way across industry, government and other organisations in the UK. It was intended that GDAs should be the translation of science into consumer friendly information; providing guidelines to help consumers put the nutrition information they read on a food label into the context of their overall diet. A technical group was established, again, under the auspices of IGD, comprising industry technical experts and academics, and the first meeting took place in September 2004.

GDAs were also developed in order to fulfil a food industry commitment to: “Provide clear nutrition information on the back of food packaging, so that consumers are provided with information to help them understand what is in the food they are eating and to help them manage their diet.”

	Calories	Sugars	Fat	Saturates	Salt
Women	2000	90g	70g	20g	6g
Men	2500	120g	95g	30g	6g
Children 5-10	1800	85g	70g	20g	4g

Coming up with the numbers

The GDA technical working group developed a range of GDA nutritional values for males, females, and children covering a range of ages³. Most of the values were based on the recommendations of the UK Committee on Medical Aspects of Food Policy (COMA) report on Dietary Reference Values⁴. The exceptions were the fibre figures, where data from the US was used, and salt figures, where the more recent UK SACN figures were used⁵.

It should be noted that to date in the UK, this COMA report has not been superseded and still stands as the basis for dietary recommendations in the UK.

In developing GDAs, the process undertaken by the IGD Working Group included reviewing national and international scientific evidence on current dietary recommendations, with a focus on UK requirements. The Working group included academic members and where necessary it sought the counsel of experts in the nutrients of concern.

Energy GDA: This is based on the COMA report on dietary reference values and the values were not changed from those set in 1998. An academic expert in energy metabolism was also consulted and agreed with the figures set in 1998. This expert also agreed that for a one figure adult only GDA, the value of 2000 kcals was appropriate.

³ Working Group Report. Report of the IGD/PIC Industry Nutrition Strategy Group Technical Working Group on Guideline Daily Amounts (GDAs) Watford, UK. IGD. 2005

⁴ Department of Health. Report on Health and Social Subjects No 41. Dietary Reference Values for Food Energy and Nutrients for the United Kingdom. London: HMSO 1991.

⁵ SACN (2003) *Salt and Health*. London: TSO. Published for the Food Standards Agency and Department of Health.

Fat GDA: This is based on the COMA report on dietary reference values and the values were not changed from those set in 1998

Saturated fat GDA: This is based on the UK COMA report on dietary reference values and the values were not changed from those set in 1998

Carbohydrate GDA: This is based on the UK COMA report on dietary reference value.

Total sugars GDA: For labelling purposes it was agreed that a GDA for total sugars would be developed. For setting the GDAs for total sugar, the calculations used were as described by Rayner et al 2003⁶. It is therefore based upon, and is consistent, with the latest published scientific data on dietary requirements and recommendations and developed in consultation with recognised experts in nutrition. The GDA calculated in this way it is found to be consistent with dietary recommendations for consuming 5 a day, three portions of dairy products and limiting added sugar intake to 10% of energy.

Protein GDA: The UK GDA for protein is based on the Reference Nutrient Intake (RNI) for protein which is documented in the COMA recommendations for adults.

Dietary fibre GDA: The UK has developed a GDA for fibre based on the AOAC method of analysis of fibre, in line with FSA recommendation on fibre analysis⁷. This is also the methodology used for analysing fibre for labelling purposes throughout Europe. However, currently nutritionists in the UK use both Non-Starch Polysaccharide (NSP) and AOAC fibre values. The rationale specified by the Committee on Medical Aspects of Food Policy⁸ for the UK in 1991 for the recommended intake of dietary fibre was based on the intake needed to result in a healthy bowel habit (i.e. a daily faecal weight of at least 100g/day.) This requirement was set at 18g NSP per day. For a typical UK diet containing a variety of sources, the fibre content determined using AOAC values for foods is approximately one third higher than that obtained using Englyst NSP values⁹. In view of these considerations, it was recommended that a daily intake of 24g of fibre be used¹⁰. Hence this was agreed as the most suitable GDA for fibre, based on AOAC. The Male and Female GDA values are the same for fibre, since requirements are independent of energy requirements and there is no gender difference in what is considered a healthy faecal weight.

⁶ Rayner M, Scarborough P & Williams C (2003). Public Health Nutrition 7 (4) 549 – 556

⁷ MAFF/JFSSG (1999) Letter from Rosemary Hignett to Industry entitled 'Definition and determination of dietary fibre for nutrition labelling.'

⁸ Department of Health. Report on Health and Social Subjects No 41. Dietary Reference Values for Food Energy and Nutrients for the United Kingdom. London: HMSO, 1991

⁹ <http://www.food.gov.uk/multimedia/pdfs/nutlabel2.pdf> (page 18-20)

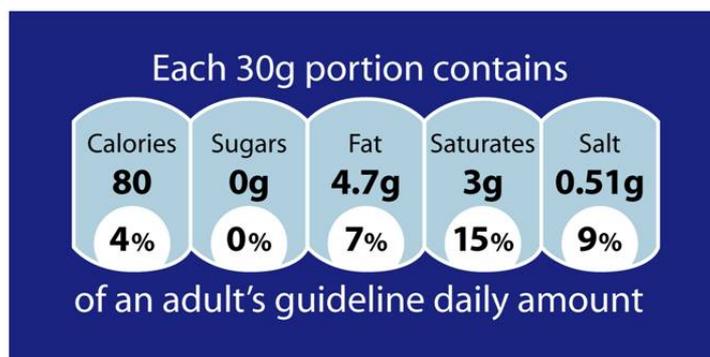
¹⁰ JFSSG (1999) Letter from Rosemary Hignett to Industry entitled 'Definition and determination of dietary fibre for nutrition labelling.'

Salt GDA: To establish a GDA for salt, the recommendations of the Scientific Committee on Nutrition (SACN)¹¹ were followed. It is therefore based upon, and consistent with, the latest published scientific data on dietary requirements and recommendations and developed in consultation with recognised experts in nutrition. The GDA set for salt is also consistent with the current public health advice from the UK FSA.

Sodium GDA: In setting a sodium GDA, the UK based it on the Reference Nutrient Intake (the recommended intake) for sodium and multiplied this by 1.5, in line with the rationale for the calculation of the SACN salt values

Translating the numbers to a Front of Pack scheme:

Once IGD released its GDA values, the GDAs for energy, fat, saturated fat, sugar and salt were used as a set of prominent icons on front of pack by the largest UK supermarket, Tesco. This was quickly followed by several food manufacturers and other retailers and now also some of the hospitality industry. The Food and Drink Federation (FDF) took over the co-ordination of this campaign for the food manufacturers in order to ensure consistency. They also developed a set of consistent messages on how the scheme, called the What's Inside Guide by FDF, could be used by consumers to better understand what they are eating and how to balance their diet.



What a front of pack GDA scheme looks like

Conclusions

Consumer research now consistently shows that the 'What's inside guide' is widely implemented in the UK and well received.

I have been helping the FDF run a campaign to educate consumers about GDAs, in particular lower socio-economic groups which we are told just would not get the percentages. Much of this has been done through magazine articles and advertorials. Healthcare professionals (HCP) have also been widely targeted with resources produced specifically for them and they have responded very positively to GDAs. Increasing number of Healthcare professionals have been feeding back to us on how they find using

¹¹ Scientific Advisory Committee on Nutrition Report. Salt and Health. London. The Stationery Office 2003. http://www.sacn.gov.uk/pdfs/sacn_salt_final.pdf

GDA is a useful tool in getting messages across to patients on how to eat a more balanced diet, and the role individual foods play in the whole diet.

The top-line findings from evaluation research on the use of GDAs and the 'what's inside guide' show consumers feel positively towards GDA signpost labelling and are able to use it in a constructive way to inform their food choices. Much of the research has been done with lower socio economic groups. Here are some findings:

- The majority know the 'what's inside guide' shows them how much of a certain nutrient is in a portion of the food and what proportion that is of their guideline daily amount.
- The majority of respondents state that having nutritional information on the front of packaging would make them think twice about the food they buy or change their purchasing decision
- Data from Tesco shows that, following the introduction of front of pack GDA icons, sales of lower fat/salt ready meals with the new GDA labels outsold higher fat/salt alternatives by more than 7% and 10% respectively,¹² indicating that clear, nutritional front of pack information can inform consumers' buying behaviour
- Evaluation research found that GDAs were used by consumers to choose, compare, check and count. This important information is now used to play back to help educate consumers:
 - **Check** their food and what it contains
 - **Compare** foods they buy with other similar foods
 - **Choose** the foods that best suit their families' needs
 - **Count** up calories etc. to roughly keep tabs on what eaten in a day

To date, there are 67 industry adopters of the GDA scheme

There is a designated website with lots of info for consumers and HCPs:

<http://www.whatsinsideguide.com/>

¹² Tesco sales data. Based on weekly sales eight weeks before the introduction of GDA labels, and eight weeks after