Labels on foods have long been a source of confusion for consumers. Food labelling is regulated by legislation which requires all pre-packaged food to be labelled with the name of the product, the weight, a list of the ingredients, use by or best before dates, the name of the manufacturer and a batch number. However, what has been the subject of more recent debate is nutrition labelling, which should be distinguished from food labelling. All nutrition labelling in the UK is voluntary unless a nutritional claim is made. For example, if a product claims to be “low in fat”, the corresponding nutritional information (eg, amount of fat per 100g) must be provided to justify the claim.

Consumer surveys show that people would like to understand better what their food contains. Moreover, with the increase in the number of people who are overweight or obese and the health risks of high intakes of fat, saturated fat, sugar and salt, it is important that people have easily applicable information to balance their diets appropriately. Processed food makes up a considerable proportion of the UK diet and food labels are an obvious source of health promoting information and education. Some products, for example, make consumers more aware that they should be eating five portions of fruit and vegetables each day by claiming they contribute to a “five a day diet”.

In 2004, the Government announced its commitment to developing a new nutrition labelling scheme for the front of food packaging, known as a signposting scheme. Front of pack signposting is an additional voluntary scheme aimed to make it easier for people to choose a healthy diet by providing at-a-glance information about the fat, saturated fat, sugar and salt in food.

This seemed to be a good idea and two schemes, the multiple traffic light scheme and the guideline daily amounts (GDA) scheme, were developed and are now running in parallel.

Multiple traffic lights

The traffic light scheme has been developed by the Food Standards Agency (FSA), an independent Government department established to protect public health and consumer interests in relation to food. Under this system, food is deemed red, amber or green for four ingredients: fat, saturated fat, sugars and salt (see Figure 1). Criteria for determining whether a product is high, medium or low in each of these nutrients have been established by the FSA (see Panel 1), based on EU legislation and advice from the Committee on Medical Aspects (COMA) of Food Policy and the Scientific Advisory Committee on Nutrition (SACN).

In developing this scheme, the FSA proposed that it should initially be used on a limited range of processed foods. These are foods with which, according to research, consumers have particular difficulty in assessing the nutritional content and which tend to be eaten frequently or in large quantities. Such foods include “ready meals”, pizzas, sandwiches, breakfast cereals, burgers, pies, sausages and food products in breadcrumbs, such as chicken nuggets and fish fingers. However, there is strong interest in extending traffic light signposting to other processed foods whose intake should be limited and those eaten as “treats” (eg, cakes, confectionery, crisps, desserts).

The traffic light scheme has been adopted by various food retailers (eg, Asda, Budgens, the Co-op, Marks & Spencer, Sainsbury and Waitrose), and several food companies (eg, Avondale, Bombay Halwa, Britannia, McCain, Moy Park, New Covent Garden and S&B Herba). It is also supported by the British Dietetic Association, the British Heart Foundation, Diabetes UK, the National Consumer Council, the National Heart Forum and the Royal College of Physicians.

Guideline daily amounts

The GDA approach has been developed by the Food and Drink Federation, a body that represents the UK food and drink manufacturing industry. The system gives details of calories, fat, saturated fat, sugars and salt in an adult portion of a product, in terms of total amounts and as a percentage of the GDA (see Figure 2, p464). The GDA values were developed by the Institute of Grocery Distribution (IGD) and are based on recommendations made by COMA and SACN (see Panel 2, p464).

Each of the five components can be presented differently, depending on the manufac-

![Figure 1: Traffic light labelling describes food as green, amber or red](image-url)
The traffic light scheme is the easiest to understand of the two schemes running at once, according to the research, because people in low income groups tend to have poorer diets and, in particular, note is the fact that people in low income groups are more likely to be confused by multiple traffic light schemes. Indeed, independent research conducted before the availability of products with signposting labelling suggested that consumers would find it confusing if different front of pack labelling schemes were used. Consumer research by the Food Standards Agency and Which? has explored people's understanding of, and preferences for, a range of signposting formats. It indicated that colour coding is key for consumers — all colour coded systems work well, including the traffic light scheme and a colour coded version of the GDA labelling system. Overall, consumers said they preferred set colours linked to low, medium and high levels of nutrients. Of particular note is the fact that people in low income groups tend to have poorer diets and, according to the research, these people found the traffic light scheme the easiest to understand.

Front of pack signposting should help consumers to make food choices and help them to eat healthier diets. However, it is difficult to design a simple system that defines a product as healthy or less healthy. Further examples of problems with these schemes are given in Panel 3.

In addition, the GDA scheme has been identified on the grounds that consumers may interpret GDAs as targets for nutrient intake to reach each day, rather than the ceilings for intake they are intended to be. In other words, some consumers might think that they need 70g of fat and 90g of sugar each day, rather than interpreting these as approximate maximum intakes. Another issue with multiple traffic light signposting is the comparison of a product with, for instance, two red codes for fat and sugar, an amber code for saturated fat and a green code for salt, with a product that has amber codes for all four nutrients. However, research suggests that people seem to extract the information they want. For example, a person can look for products with green fat codes if he or she is concerned about fat intake, and may be less concerned if the same product is labelled red for sugar.

The traffic light scheme defines nutrients per 100g while the GDA system defines them in a single portion. Defining nutrient content in 100g of food makes it easier to compare products, while defining nutrient content in a portion helps define the nutrient content of what is eaten, but only if the portion size is realistic. Anecdotally, consumers sometimes say that portion sizes are unrealistically small (eg, that a packet is actually suitable for only two people, rather than the four portions identified on the label).

Conclusion

It seems a good idea to encourage and make it easier for people to make informed choices about healthy eating. However, the fact that there are two schemes running can only add to consumer confusion. In addition, how much front of pack signposting will influence food choice and shopping habits is not yet known, but results of research by the Food Standards Agency should be available in 2008.

Panel 2: Guideline daily amounts for a typical adult

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>GDA Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy (kcal)</td>
<td>2,000</td>
</tr>
<tr>
<td>Fat (g)</td>
<td>70</td>
</tr>
<tr>
<td>Saturated fat (g)</td>
<td>20</td>
</tr>
<tr>
<td>Sugars (g)</td>
<td>90</td>
</tr>
<tr>
<td>Salt (g)</td>
<td>6</td>
</tr>
</tbody>
</table>

Panel 3: What the labelling system means in practice

In the traffic light system, two foods with exactly the same colour codes for each of the four nutrients could have very different nutrient profiles. For example, two different foods with 16g of sugar per 100g or 50g of sugar per 100g would both be categorised as red. Likewise two foods with a red light for fat could contain, say, 21g of fat per 100g or even 40g of fat per 100g. Yet if the food had 19g of fat per 100g and 15g of sugar per 100g, it would have an amber light for both nutrients. Clearly there is a bigger difference in the nutrient profile between the foods containing 16g and 50g of sugar per 100g (red) than between the two containing 15g and 16g of sugar per 100g (amber and red, respectively).

In the GDA system, the proportion the nutrient contributes to the GDA is identified numerically so if one food provides 9 per cent of the GDA for sugar and another 10 per cent of the GDA for sugar, this can be seen on the labels. Research shows that some consumers find the labelling of percentages of nutrients as a proportion of the GDA useful, while others find the information too complex. Confusion for consumers exists over whether the percentage shown in the GDA scheme represents the portion contributed by the nutrient in the food in general to the GDA or the proportion of a nutrient in that portion. A portion of food weighing 100g and labelled as containing 10 per cent of the GDA for fat contains 7g of fat (ie, 10 per cent of the GDA which is 70g for fat) in that portion, not 10g of fat.

Eventually, one of the two signposting systems may become the accepted method of food labelling. Whichever scheme is adopted, people will need educating on how to use it. This is an opportunity for pharmacists to help people interpret nutrition labels and to discuss healthy eating with their customers. In the meantime, pharmacists who want to discuss issues that are diet related, such as weight loss, diabetes and cardiovascular disease, need to be able to explain both signposting systems to those who ask. It is also important to emphasise general healthy eating advice.

Further information

- Information on traffic light labelling can be found at: www.eatwell.gov.uk/foodlabels/trafficlights
- Information on the guideline daily amount scheme can be found at: www.whatsinsideguide.com and www.igd.com