

## Traffic-light food labels

Trevor C Beard, Caryl A Nowson and Malcolm D Riley

**TO THE EDITOR:** To control the modern epidemics of preventable disease, Australia's dietary guidelines recommend moderation in four nutritional areas — fat, saturated fat, sugar and salt. In spite of this, the obesity and diabetes epidemics seem unstoppable.<sup>1</sup> This is hardly surprising — these guidelines seldom reach the public, and they recommend “moderation” without defining it.

Zimmet and James recommend “traffic-light” food labels (red, amber, green) as a way of educating shoppers in the nutritional quality of foods.<sup>1</sup> Traffic-light food labels<sup>2</sup> promote the *moderation* message, with moderation indicated by an amber colour. Shoppers can see at a glance a food's profile of compliance with the guidelines for each of the four areas where they call for moderation.

Thus, salt content is moderate when the light for salt is amber, high when it is red and low when it is green. The same applies to fat, saturated fat and sugar. The colour coding is based on concentration in grams per 100 g or per 100 mL, with arbitrary boundaries (Box 1 and Box 2). The more green lights a food has, the healthier it is.

With the aid of these labels, health professionals can treat hyperlipidaemia by dietary restriction, giving patients advice to shop exclusively for foods with green lights for fat and saturated fat. They can treat prehypertension (blood pressure,  $\geq 120/80$  mmHg) and thereby prevent hypertension by advising patients to eat foods with green lights for salt and green or amber in every other area.<sup>3-5</sup> With the intention being to “guide the traffic”, the best approach would be flexible, holistic and specific for each food. For example, an amber light could recommend olive oil in moderation, even though it happens to be 100% fat. The natural sugar content of fresh fruits is high enough to give many fruits an amber rating, but moderation is hardly the right message for fruit. Australian traffic-light labels could avoid this, as the Australian dietary guidelines speak only of *added* sugar. Australia might add a traffic-light label for energy density

### 1 Lower and upper boundaries for the moderate (amber “traffic light”) category set in 2006 by the UK Food Standards Agency<sup>2</sup>

Food component	Boundaries
<b>Fat</b>	
Solids	3–20 g/100 g
Drinks	1.5–10 g/100 mL
Other liquids	3–20 g/100 mL
<b>Saturated fat</b>	
Solids	1.5–5 g/100 g
Liquids	0.75–2.5 g/100 mL
<b>Sugar</b>	
Solids	5–15 g/100 g
All liquids	2.5–7.5 g/100 mL
<b>Salt</b>	
Solids	0.3–1.5 g/100 g
All liquids	0.3–1.5 g/100 mL (equivalent to sodium 118–590 mg/100 g)

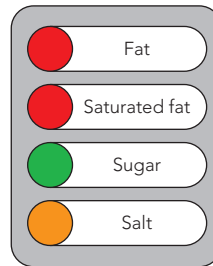
The UK traffic-light label boundaries shown above treat all sodium as sodium chloride. If 118 mg is rounded to 120 mg/100 g, the boundary between moderate- and low-salt foods agrees with the international definition of low-salt foods (sodium,  $\leq 120$  mg/100 g).

Front-of-pack traffic-light labels do not replace the technical Nutrition Information Panel. Beneficial nutrients are best promoted in this panel and, where permitted, in nutritional claims.

The website <<http://www.saltmatters.org>> carries a longer article on the basic issues (click on *Traffic Lights*). ♦

### 2 Example of traffic-light labelling

Food carrying this label would be high in fat and saturated fat, low in sugar and medium (moderate) in salt. Red lights flag nutrient excess which is associated with preventable health problems, including, in this example, obesity, heart disease, metabolic syndrome and diabetes. ♦



(showing the same three colours based on kJ/100g), and expand the saturated fat category to include trans fat, with very low thresholds triggering automatic red lights.

Many shoppers would be surprised to find several of Australia's best-selling breakfast cereals carrying two red lights (for added sugar and salt) and many processed meats with three or four red lights (for energy density, fat, saturated fat and/or salt).

The Council of Australian Governments has announced a national campaign to arrest the growing epidemic of childhood obesity. Traffic-light labels would enable parents to protect their families from obesity by shopping almost exclusively for foods with green and amber traffic-light labels for fat, saturated fat, and added sugar. Food choices to control obesity involve a radical change in shopping behaviour, and traffic-light labels are expressly designed to promote radical change. They need to be mandatory, and they need to replace industry-sponsored schemes, which we believe are less likely to alter a customer's buying patterns.

**Competing interests:** Malcolm Riley is the Nutrition Manager for Dairy Australia.

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1 Zimmet PZ, James WPT. The unstoppable obesity and diabetes juggernaut. *Med J Aust* 2006; 185: 187-188.

2 UK Food Standards Agency. Signposting. <http://www.food.gov.uk/foodlabelling/signposting/> (accessed Aug 2006).

3 Joint National Committee. The seventh report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure. *JAMA* 2003; 289: 2560-2572.

4 Sacks FM, Svetkey LP, Vollmer WM, et al. Effects on blood pressure of reduced dietary sodium and the Dietary Approaches to Stop Hypertension (DASH) diet. *N Engl J Med* 2001; 344: 3-10.

5 Riley MD, Beard TC. Choose foods low in salt. In: National Health and Medical Research Council. Dietary guidelines for Australian adults. Canberra: NHMRC, 2003: 133-150. [http://www.nhmrc.gov.au/publications/\\_files/n33.pdf](http://www.nhmrc.gov.au/publications/_files/n33.pdf) (accessed Nov 2006). □