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Use the **academic address** when writing about **salt control**—see the panel on page 4.

## Diabetes—bad luck or wrong food?

When food writer Peter Howard was told he had diabetes he thought it was the end of his career as a gourmet and author of popular books on food and wine (see the article about him in the Weekend Australian for 1–2 July).

But he noticed he could still enjoy great flavours, replacing sugar, salt and fat with spices—‘and spicing is the secret’, he discovered. He decided to turn his life around.

His weight dropped from 105 kg to 90 kg in 19 months, blood pressure from 195/90 to 127/70, triglycerides from 4.6 to 2.1 and total cholesterol was halved. ‘Now I feel brilliant’ he says, so presumably his blood sugar is normal as well.

**Most people blame bad luck** if they get diabetes and have to abandon what they call normal food.

It is a pity so few have heard of the ADGs (Australian Dietary Guidelines) published by the National Health & Medical Research Council.

The ADGs protect people from the preventable epidemic health problems of industrial societies such as obesity, hypertension and diabetes.

If people with diabetes had controlled their sugar, salt and fat earlier and brought their energy input and output into balance with regular exercise, they could have had a normal weight, normal blood pressure and normal blood sugar (no diabetes)

for the rest of their lives—just by following the ADGs while they were healthy as closely as they follow them now that they are sick.

### **One diet and lifestyle fits all**

Eight national organisations in the US made a joint declaration in 1999 that one diet and lifestyle fits all. The list included the American Heart Association and National Institutes of Health (part of the US government). They made precise numerical recommendations, such as saturated fat to provide no more than 10% of total kilojoules, but for advice that the general public could use they had to fall back on the US Dietary Guidelines of that date [1]:

- eat a variety of foods
- balance the food you eat with physical activity—maintain or improve your weight
- choose a diet with plenty of grain products, vegetables and fruits
- choose a diet low in fat, saturated fat and cholesterol . . . moderate in sugars and . . . moderate in salt and sodium
- if you drink alcoholic beverages do so in moderation.

Except for the Australian salt guideline, national dietary guidelines are too vague (everybody has to guess what ‘moderation’ means) and they are too inaccessible. The UK proposal on page 2 would solve both of these problems.

## More precise Dietary Guidelines

Salt Skip News 139 (February 2006) reported briefly that in 2005 the UK Food Standards Agency (FSA) had looked at several ways for food labels to show the shopper how well a product met the UK Dietary Guidelines.

One idea was to indicate three levels of compliance with the guidelines for each main nutrient—total fat, saturated fat, sugar and salt—using green, yellow and red spots. The FSA suggested the criteria for the boundaries (see box).

### Proposed lower and upper boundaries of 'MODERATE' or 'MEDIUM' (UK FSA)

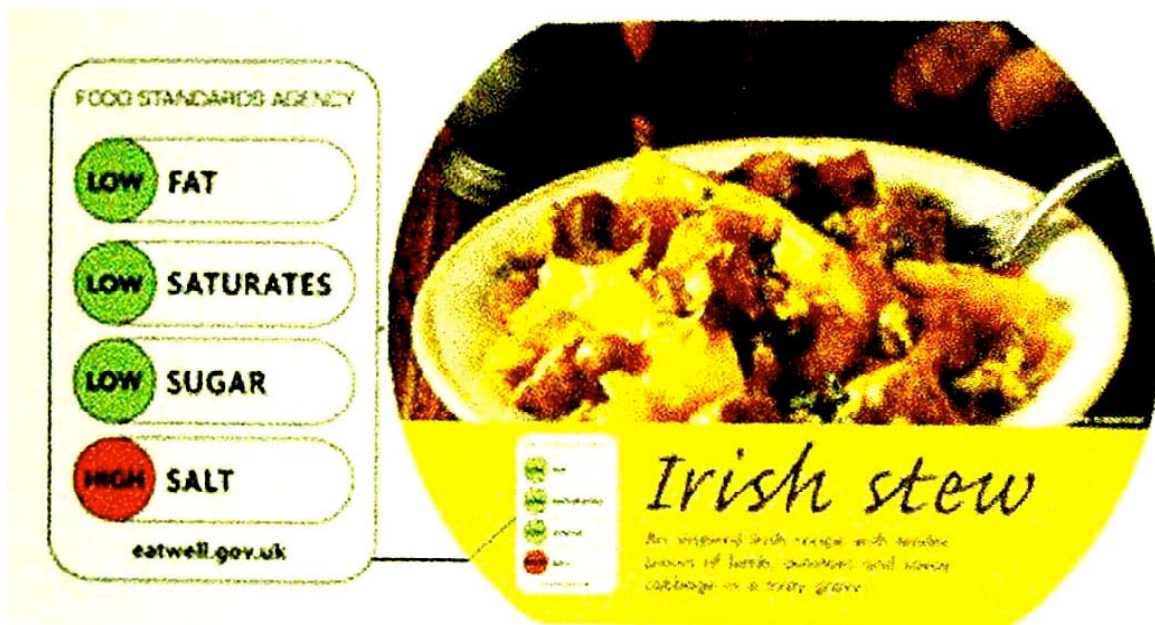
FAT—3% to 20%

SATURATED FAT—1.5% TO 5%

SUGARS—5% to 22.5%

SALT—0.3% to 1.25%, equivalent to sodium—118 to 491 mg/100g

(rounded to 120–500 mg/100g, note that this agrees with the Australian—and international—upper boundary for low salt foods).



Spots with boundaries (box at top right) are a double breakthrough:

1. they define 'moderation';
2. they do it in the shop—right there at the point of sale—in front of your eyes on the very label you are looking at.

They are designed for healthy people.

**HEALTHY PEOPLE** using the guidelines for **prevention** can choose between:

1. **Yellow** spots for 'moderation';
2. **Green** spots for the best outcome in health and longevity.

**PATIENTS** can use these spots to **treat diet-related illness** with medical agreement—see Appendix 1 in *Salt Matters* (on Skipping Salt Safely). They can select green spots very exclusively for salt in Meniere's Disorder to prevent vertigo, and watch the fats, sugar, and salt for other diet-related illness such as diabetes, hypertension or prehypertension.

Black, grey and white spots (labelled HIGH, MOD or LOW) might be used for recipe books and menus for restaurants, institutions and meals on wheels.

# Finding foods with four green spots

## PROCESSED VEGETABLES

The traffic light system makes vegetables look better with less added sugar and salt. These Coles NAS Baked Beans (temporarily unavailable) would get four green spots in spite of a little added sugar. Heinz NAS Baked Beans declare sugars at 5.7%, which would need to come below 5% to get a green spot for sugar.

Most vegetables could have four green spots when canned with low added salt and sugar, with rare exceptions such as the beet family—beetroot, sugar beet and silver beet (Swiss chard)—that absorb salt if grown in salty soils or with saline bore water.

NUTRITION INFORMATION		
Servings per package: Approx. 2		
Serving size: 130g		
	Ave. Quantity Ave. Per serving 130g	Quantity Per 100g
ENERGY	451kJ (108Cal)	347kJ (83Cal)
PROTEIN	6.0g	4.6g
FAT, total	LESS THAN 1g	LESS THAN 1g
- saturated	LESS THAN 1g	LESS THAN 1g
CARBOHYDRATE	23.0g	17.7g
- sugars	5.7g	4.4g
DIETARY FIBRE, total	6.5g	5.0g
SODIUM	13mg	10mg
POTASSIUM	389mg	299mg

Nutrition Information		
Servings Per Package:		36
Serving Size:		30g
	Per Serving	Per 100g
Energy	480kJ	1600kJ
Protein	3.2g	10.5g
Fat - Total	2.6g	8.5g
- Saturated	Less Than 1g	1.5g
- Trans	0.0g	0.0g
- Polyunsaturated	1.1g	3.7g
- Monounsaturated	1.0g	3.3g
Carbohydrate	18.3g	61.0g
- Sugars	0.0g	0.0g
Sodium	1mg	3mg

## PROCESSED CEREALS

The rolled oats that carry this label would get one yellow spot for fat, but a standard recipe for making porridge with water dilutes the 8.5% total fat to 2.8%, so the **porridge** that you eat qualifies for four green spots.

Shoppers should bear this in mind—it is the meal itself that matters, when it is ready to eat.

Sanitarium Lite-Bix shows the 100-gram column in the middle of five columns. Beware the fourth and fifth columns—they only show sodium **per serving**. Note also that soy milk ('So Good') and whole milk have a yellow spot for fat.

The best advice to **treat** or **prevent** obesity and diabetes is to replace whole milk or soy milk with skim or low fat milk (up to 1% total fat), or a low fat soy milk such as So Good Lite, which has 0.9% fat.

NUTRITIONAL INFORMATION (AVERAGE)					
Servings per package: 18 Serving size: 30g (2 Biscuits).					
				30g with 1/2 cup (125ml)	
		Per Serve	Per 100g	So Good®	Whole Milk
ENERGY	(kJ)	444	1480	783	792
	(Cal)	106	354	187	189
PROTEIN	(g)	3.7	12.2	8.0	7.8
FAT					
- Total	(g)	0.4	1.4	4.7	5.2
- Saturated fat	(g)	0.1	0.3	0.6	3.2
CHOLESTEROL	(mg)	0.0	0.0	0.0	16.3
CARBOHYDRATE					
- Total	(g)	19.8	66.0	26.1	25.7
- Sugars	(g)	0.5	1.6	2.9	6.4
DIETARY FIBRE	(g)	3.7	12.2	3.7	3.7
SODIUM	(mg)	6	20	62	57

# Four green spots (continued)

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Salt Skip News will  
continue to be distributed  
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## PROCESSED MEAT, POULTRY and FISH

Wild rabbits, kangaroo, deer and game birds provide almost fat-free meat qualifying for four green spots before processing, but cattle confined to paddocks and overfed have meat that is high in saturated fat. Butcher's meat can be upgraded from red spot to green spot status by trimming off all visible fat, but nothing can be done to upgrade the red spot for marbled meat.

Most fresh fish with backbones would qualify for four green spots. The oily fish would have a yellow spot for total fat, but fish oil has health benefits that outweigh this, and sea fish are a good source of iodine.

Shellfish and crustaceans would get yellow spots for salt, with red spots for Australian oysters.

## PROCESSED FRUIT and NUTS

Even before processing, most fruit except strawberries, lemons, limes, mulberries and rhubarb would have yellow spots for sugar, and dried fruit would have red spots. When a dried fruit is stewed the added water restores it of course to yellow-spot status with a few exceptions such as dates and figs.

The international dietary guidelines stress the need to eat **more fruit** as well as more vegetables, recognising that the **healthy population** is well adapted by evolution to fruit sugar. It is true that patients with diabetes have a special problem with blood sugar and have to take more notice of dietary sugar and all carbohydrates with a high glycaemic index (GI), but in healthy people sugar is not seen as a risk factor for diabetes these days.

Nuts except water chestnuts get red spots for total fat, but they have nutritional advantages including a green spot for saturated fat.

## THE IMPORTANCE OF SALT IN DIABETES

Diabetes doubles the risk of hypertension, making salt control important both in prevention and in treatment, with medical agreement (when prevention is too late). Diabetic retinitis often recovers dramatically with strict salt control [2].

Page 7 of the current Shopping Guide published by Diabetes Australia has this note—*Where possible choose products with reduced or no added salt. A low salt food has less than 120 mg of sodium per 100g.*

Most patients with diabetes are still eating ordinary salted bread (red spot). They need a lot more help with selecting processed foods for low sodium content.

### References

1. Deckelbaum RJ, Fisher EA, Winston M, Kumanyika S, Lauer RM, Pi-Sunyer FX, et al. Summary of a scientific conference on preventive nutrition: pediatrics to geriatrics. *Circulation* 1999;100:450–56.
2. Harris WR. *Eat right—electrolyte: a nutritional guide to minerals in our daily diet.* New York: Prometheus Books; 2006.

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