

# Food Labelling Law and Policy Review

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### *Executive Summary*

A major public health failure in the world's industrial societies in the 21st century is their universal inability to control epidemic preventable diseases—especially obesity, type 2 diabetes, hypertension and its complications (heart disease, stroke and kidney failure).

Obesity and type 2 diabetes are rapidly becoming *commoner*. Effective action is mandatory and has never been more urgent.

The most promising proposal is a greatly simplified food label on the front of the pack. The strongest candidate is the traffic light food label. Although this is supported by the best evidence [1, 2], it has a potentially fatal problem—the food industry adamantly rejects the red light.

The UK's introduction of voluntary traffic light food labels in 2005 suddenly threatened a multinational breakfast cereal manufacturer with two draconian penalties if traffic light labels became mandatory:

- a red light for salt would severely damage the image of corn flakes—the world's first manufactured breakfast cereal, and still one of the most popular—which had been advertised for over a century as “healthy”;
- almost all of the company's advertising would be blocked by a proposal that foods carrying red lights might no longer be advertised to children on prime-time TV.

The company responded by rapidly inventing an elaborate substitute front-of-pack label with no red lights, and the food industry has vigorously promoted it in Europe and Australia.

The traffic light revolt has reached Australia, and the industry is asking the government to settle a win-lose contest between the two main candidates for an FOP (Front-of-Pack) label:

- the evidence-based traffic light label;
- the food industry's substitute, known in Australia as the %DI (Percentage Daily Intake).

A win-lose contest was worth risking because this huge industry is a major employer of voters, a massive contributor to the national economy, and would be making the attractive offer of a front-of pack label already in wide use and available at no cost to the government.

#### *The political dilemma:*

- there is room for drastic improvement in the composition of modern processed foods;
- drastic improvements will need the willing collaboration of the food industry for decades;
- losing traffic lights would rob us of the best evidence-based FOP label;
- but lasting resentment over the early introduction of red traffic lights would severely damage relations with an industry from which we will need decades of cooperation;
- reformulation of products to avoid red lights is expensive, time-consuming and risky;
- the industry needs time to produce marketable foods that would avoid red traffic lights;
- so mandatory red traffic lights at present would admittedly be premature.

#### *A win-win compromise*

- we could advance public health immediately with mandatory amber and green lights—even an amber light is broadly equivalent to the Heart Foundation “Tick”, and foods with green lights for salt can be medically prescribed with measurable clinical results [3-5];
- voluntary red lights for the first 10 years should be long enough to see a substantial reformulation of foods that would at present have received red lights on account of excess fat, saturated fat, sugar and/or salt.
- the first 10 years could be spent building a close, collaborative partnership between the public and private sectors, with a mutual commitment to removing the contribution that industrial food processing makes to the huge and needlessly expensive burden of preventable disease;
- to its credit the food industry has had a long history of cooperation, and an official infrastructure for a collaborative partnership would simply build on that.

## 1. Tackling the burden of chronic disease

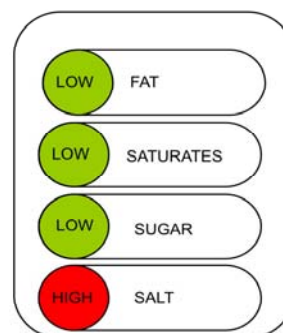
### Industrial food processing

- industrial food processing is blamed for the modern epidemics of preventable disease, especially obesity, type 2 diabetes, hypertension, heart disease, stroke and kidney failure;
- the evidence from four decades of research mainly implicates one or more of four nutrients (excess fat, saturated fat, sugar and/or salt) [6, 7];
- health professionals can make full use of the NIP (Nutrition Information Panel);
- but shoppers find it too complicated;
- they need Front-of-Pack (FOP) labels;
- food labels have to be simple, and the ideal FOP label would show at a glance which foods are low, medium or high in fat, saturated fat, sugar or salt;
- the UK invented traffic light food labels, where an expert panel uses the numerical data from the NIP to set boundaries for low, medium or high and the FOP label colour-codes them (green, amber or red);
- every shopper knows what the colours mean, and never needs to check numerical data;
- the strengths and remediable weaknesses of traffic light labels can be discussed in depth after a later call for more comprehensive submissions.

### The two candidates for an FOP label

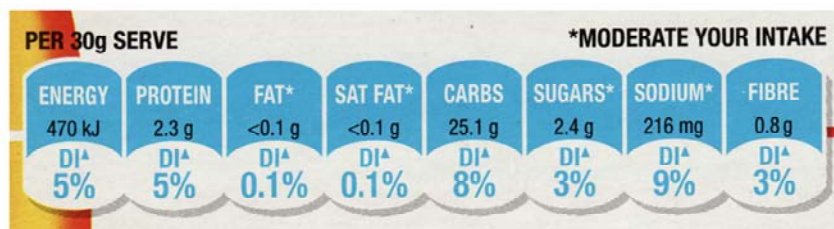
The NIP from a packet of Kellogg Corn Flakes reports sodium at 720 mg/100g, which shows health professionals it has six times too much salt for a low salt food:

Nutrition Information (AVERAGE)					
servings per package - 10 average serving size - 30g (1 metric cup)					
	quantity per serving	% daily intake per serving	per serve with 1/2 cup skim milk	quantity per 100g	
ENERGY	470 kJ	5%	670 kJ	1580 kJ	
PROTEIN	2.3 g	5%	7.0 g	7.8 g	
FAT, TOTAL	<0.1 g	0.1%	0.2 g	0.2 g	
- SATURATED	<0.1 g	0.1%	0.1 g	<0.1 g	
CARBOHYDRATE	25.1 g	8%	31.6 g	83.6 g	
- SUGARS	2.4 g	3%	8.8 g	7.9 g	
DIETARY FIBRE	0.8 g	3%	0.8 g	2.6 g	
SODIUM	216 mg	9%	273 mg	720 mg	
POTASSIUM	28 mg	-	234 mg	93 mg	



A traffic light label based on the data in the Kellogg NIP would be able to tell shoppers all they need to know by simply showing three green lights and a red light for salt.

Kellogg however uses the Australian food industry's substitute FOP label (the %DI), and the Australian Kellogg Corn Flakes packets display this strip of percentages, based on the same NIP:



Salt is not even mentioned. The %DI reveals nothing at glance and is more likely to be ignored. It discriminates especially against less educated and less motivated shoppers. Appendix 1 lists other serious weaknesses.

## 2. Reducing the regulatory burden

### *Kellogg (UK) 's sudden revolt*

An account of Kellogg's predicament, published in *The Guardian* newspaper in 2006, makes their revolt understandable in retrospect [8]. Kellogg Corn Flakes were the world's first manufactured breakfast cereal, with a "health" image dating from their invention by Dr W H Kellogg at his Michigan sanatorium in the late 19th century. Their composition was uncontroversial until the British government suddenly served a draconian double threat:

- the advent of traffic lights (at first voluntary) threatened to give Kellogg a mandatory red light for salt on a cereal widely advertised as "healthy";
- foods with red lights might later be denied access to prime time TV advertising to children (the main target for breakfast cereal promotion).

Kellogg (UK) recruited 21 other food companies in a campaign to ignore the government's voluntary traffic lights, and instead promote "a rival industry food labelling scheme", putting it "on a collision course" between industry and government [8]. The substitute label that Kellogg (UK) invented—the GDA (Guideline Daily Amount)—has been imported by Kellogg (Australia) and renamed the %DI label. The Australian Food & Grocery Council has adopted the %DI and wants it universally adopted as the Australian standard FOP label.

### *First suggested compromise with the food industry*

The Heart Foundation *Guide to management of hypertension 2008* is recommending doctors to prescribe low-salt and reduced-salt foods [9], and traffic lights would make them instantly recognisable with green and amber lights. Amber lights are broadly equivalent to the Heart Foundation "Tick", and should be equally acceptable to the food industry.

With the bonus of a "Double Tick" (green light) never previously available, companies selling the foods most strongly recommended by the Heart Foundation would get the free advertisement they have long deserved. Doctors would get the full benefits of traffic lights if green and amber were mandatory while the red lights that worry the food industry remained voluntary.

Doctors could prescribe precisely the right food for the Heart Foundation *Guide* in one sentence, "You can eat any fresh food if you add no salt, but don't touch processed foods unless they have a green or amber light for salt".

A decade of *voluntary red lights* should allow reformulation to save many foods permanently from red lights—especially the popular breakfast cereals. White (colourless) "lights" during the voluntary period would indicate "work in progress" for a large number of foods, bringing credit to companies making that claim.

Everyone would win:

- **the food industry** would win five times:
  1. it would avoid red lights for a decade without gambling on a win-lose vote;
  2. most foods that would qualify for the Heart Foundation "Tick" would get the equivalent (three or four amber lights) free of charge;
  3. the healthiest processed foods would get a bonus never seen before—green lights, equivalent to double "Ticks" from the Heart Foundation;
  4. unlike a single "Tick" for the whole product (that may contain compromises) amber and green lights would be awarded predictably with precision for each of the four individual nutrients known to be dangerous in excess;
  5. red-light cereals that have been advertised as "healthy" could avoid red lights permanently, because the 10-year voluntary period would be long enough to allow them to be reformulated (and many foods that were never advertised as "healthy", including even delicatessen foods, could achieve amber lights).
- **the government** would win—it would have no political dilemma.

- **modern medicine** would win—patients with hypertension (30% of Australian adults) could usually reduce and often remove their need for drugs by *simply abandoning the diet that raised their blood pressure* [3, 10], thereby gaining enormous health and economic benefits, both for themselves and for the national health budget.
- **consumers** would win twice:
  1. food labels would give all shoppers—even schoolchildren—clear and unmistakable guidance, regardless of their age, education, income, literacy or eyesight;
  2. “healthy” foods would be more truthfully advertised.

### *Second suggested compromise*

The food industry could be allowed to keep the %DI, but it should be mandatory to add the colours amber and/or green to correspond with the concentrations reported in the NIP for fat, saturated fat, sugar and salt. The red colour again would be voluntary.

The NIP (which targets health professionals and well educated consumers) would report sodium as usual, but the %DI (an FOP label) caters for shoppers. It should therefore should be required to use the language of the target group and report *salt* (not sodium). This requirement would be problem-free because the Food Standards Code defines *low salt foods* by their sodium content.

### **3. Costs versus benefits**

Hard evidence about traffic light food labels will be collectable for a cost-benefit analysis when at least one country makes them mandatory and provides adequate research grants to competent academic applicants. Until then the two main imponderables are predicting:

- the speed and extent of public uptake
- the speed and extent of professional uptake

The public neglects prevention, attributes disease to bad luck and demands the best treatment, regardless of cost. By simply using traffic lights, GPs can rescue them from the industrial diet that made them ill. A measurable recovery is the very best health education these people could ever get.

The cost-benefit analysis has to wait until this starts happening. It would be a very serious setback to public health to make the %DI label mandatory and lose this opportunity to evaluate the net community benefit of green and amber traffic lights. Australia could be the first country in the world to give their great potential value a full-scale trial.

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## 4. Appendices

### Appendix 1

#### *Weaknesses of the %DI*

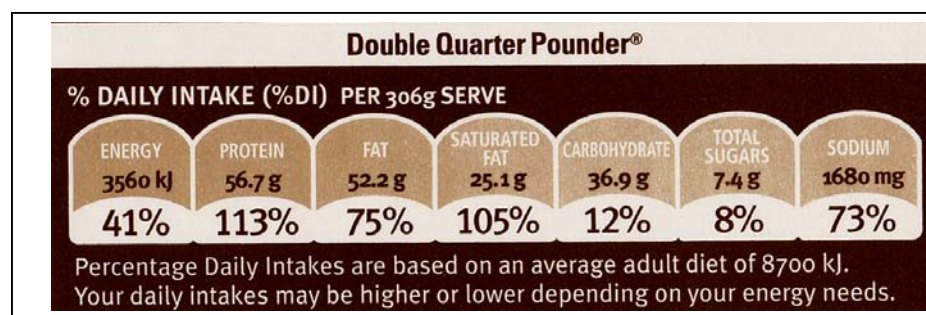
FOP labels using the word *sodium* instead of *salt* confuse many shoppers who don't even know what sodium is, or what connection it has with salt;

- the label requires shoppers to evaluate each one of 8 different percentages separately;
- they must decide for themselves what 9% of the sodium means—they get no guidance;
- 9% is based on the *maximum allowable* intake (100 mmol or 6 grams of salt)—but 9% of 100 mmol is 14% of the Heart Foundation's *recommended* maximum (65 mmol or 4 grams of salt);
- traffic lights would tell shoppers clearly at a glance—even 9% means far too much salt to qualify for an amber or green light;
- evaluating a strip of percentages caters for educated consumers and discriminates against under-privileged and lower socioeconomic groups—the very groups that need the most help to improve their diet;
- traffic lights are meant to alter shopping behaviour, and we are naïve if the industry's heavy investment in a substitute label doesn't tell us something [11];
- a Danish website ([www.stopgda.eu](http://www.stopgda.eu)) attacks the %GDA (its European name). It is sponsored by a consortium consisting of the Danish Cancer Society, Danish Heart Foundation, Danish Diabetes Association, Federation of Retail Grocers of Denmark (*sic*), Danish Dairy Board, Danish Agricultural Council and Danish Consumer Council;
- The most fundamental flaw is that doctors cannot use the %DI for medical prescribing.

#### *Evidence of the food industry's own opinion of the %DI*

The Australian Food & Grocery Council (AFGC), representing the food industry, would not be expected to urge all its member companies to adopt the %DI and make it the food industry's standard FOP label unless it was confident that the %DI would have no important effect on shopping behaviour.

Willing compliance by McDonald's Family Restaurants provides further evidence that this company expects business as usual—and has a special interest in catering for children and educating their palates. Customers would surely be alarmed at what the FOP label on a Double Quarter-Pounder would tell them—if they could understand it.



The Double Quarter Pounder is a legacy of the past that may be difficult to reformulate. McDonald's have introduced salads and joined the Heart Foundation "Tick" Program, meanwhile the above %DI label gives health professionals alarming revelations:

- this label tells overweight people this single 306g serve of a meal they are about to eat will provide 41% of the energy, 75% of the fat and 105% of the saturated fat that they are supposed to eat in a whole day if their daily energy intake is 8700 kJ;
- it tells patients with heart disease or a cholesterol problem they will get 105% of the saturated fat they should eat in a whole day;
- it tells 3.7 million patients with hypertension that they are about to eat 73% of a whole day's ration of sodium (without admitting that sodium chloride is salt).

McDonald's and the AFGC are behaving as if they assume that three red traffic lights (for fat, saturated fat and salt) would be embarrassing and might start putting a few people off, whereas the %DI figures will usually be so meaningless to their regular customers that McDonald's can expect business as usual.

## *Appendix 2*

### *Kellogg (Australia) 's long history of cooperation*

In 1997 the sodium content of Corn Flakes made by Kellogg (Australia) was 1100 mg/100g (saltier than seawater). *With the sole aim of selling healthier products*, the company reduced the salt in its breakfast cereals across the board in 1998, and Corn Flakes came down to 1020 mg/100g, with further stepwise reductions for a decade to 900 mg/100g, 800mg/100g and 720 mg/100g (its present level), with no drop in sales turnover.

Kellogg (Australia) deserves great credit for this, but has not sought any credit. At this stage it may be safer to let the Australian public think they are eating “the same product you have always known and loved”, but public acceptance is changing. In the UK it is already safe for Sainsbury Supermarkets to announce a further reduction in the salt content of their home brand corn flakes.

No doubt Kellogg (Aust.)—if given more time—could continue to reformulate its own corn flakes far enough to gain amber (ultimately perhaps even green) traffic lights for salt. For example in July 2009 the sodium content of home brand corn flakes in two British supermarkets (Waitrose and Sainsbury) had come down to 290 mg/100g. Sainsbury is using voluntary traffic light food labels, and its salt-reduced home brand corn flakes show an amber light for salt.

An Australian company (Freedom Foods) makes *low salt* corn flakes that would have a green light for salt (sodium 77 mg/100g). They are highly palatable but more expensive due the present low demand, small turnover and massive difference in economies of scale.

Kellogg (Australia)'s most astonishing achievement was an 83% reduction in the sodium content of Just Right from 284 mg/100 to 49 mg/100g in one step—at a time when Just Right in the UK still had 600 mg/100g. This coincided with only a 7% reduction of sodium in Kellogg Corn Flakes (from 1100 to 1020 mg/100g). The corn flakes recipe may be difficult to reformulate.

Food technologists tend to increase the sugar content when reducing the salt content. Just Right under its new name (Just Right Original) is still the only low salt cereal in Australia's Top 10 best-selling ready-to-eat breakfast cereals, and there are two reasons for thinking the company expects Just Right Original to have a red traffic light for sugar:

- the NIP shows this cereal is 30% total sugars;
- the company's own %DI label is based on the total sugar content (30%).

However the Australian dietary guidelines recommend everybody to eat more fruit, so they only limit *added* sugar, ignoring the natural sugar content. Traffic lights would be based on the dietary guidelines in Australia (as in the UK) and this would save Just Right Original—it is 17% sultanas with a relatively small amount of added sugar, needing only an amber light.

Traffic lights would make Just Right Original stand out on the busy cereal shelves as the only Australian ready-to-eat breakfast cereal with a green light for salt. Reformulation to convert the amber light for sugar to green might also be feasible in the longer term.

### *Suitable recognition for a remarkable record*

Kellogg Corn Flakes are in Australia's Top 10 best-selling breakfast cereals, and this company's outstanding record of successful reformulation surely entitles it to expect a voluntary period for red lights until corn flakes can qualify for an amber light for salt—broadly equivalent to the Heart Foundation “Tick”, which goes on bread with sodium at up to 400 mg/100g.

### *Appendix 3*

#### *Acceptability of the Heart Foundation “Tick” Program*

The food industry has collaborated not only with national governments, but also with voluntary organisations like the Heart Foundation, achieving progressive and significant changes with its “Tick” Program. McDonald’s Family Restaurants are supplying salads now, and collaborating with the Heart Foundation “Tick” Program. Only a few of McDonald’s foods qualify for the “Tick” so far, but the Heart Foundation is working with McDonald’s to enlarge the range.

The Heart Foundation approved this summary of some strengths and weaknesses of the “Tick” Program for publication in a handbook written for Hobart Cardiac Rehab Services:

Processed foods carrying the Heart Foundation “Tick” may not necessarily comply with all the Australian dietary guidelines. Bread can carry the “Tick” for example when it is over three times more salty than bread meeting the dietary guidelines. This is perfectly legitimate when you know why—it’s because the Heart Foundation is working at two entirely different levels:

- **GRADUAL PREVENTION**—the “Tick” with steady changes for better shopping
- **ACTIVE TREATMENT**—technical advice to health professionals for best results

#### **1. Gradual prevention**

The “Tick” Program has been accused of “tinkering at the edges” with minor changes that fall far short of the radical improvements we need. But what else can it do? Radical changes would never work. The “Tick” Program would end in failure if nobody bought the food—“Tick” foods must therefore resemble the foods they replace, with changes small enough to be universally accepted.

Regular minor changes in the right direction have a cumulative effect. Small changes by millions of people can prevent a lot of illness, and paradoxically have more effect on national health statistics than more radical changes made by a smaller number of sick people.

#### **2. Active treatment**

Many of today’s consumers are motivated people who want good treatment and good results with less reliance on drugs. They deserve the best we can give them—read on. The Heart Foundation recommends doctors to prescribe low salt foods for hypertension before—and after—they prescribe any medication [9, 10].

If they do need medication as well, staying on low salt foods will make the drugs work better at a lower dose, with fewer side effects. Low salt foods don’t fit the Australian dietary guidelines unless they comply with the legal definition of “low”.

Because the “Tick” only means “better”, the sodium content of bread that complies with the “Tick” is lower than most bread but not low enough for active treatment.

#### *The paradox of the Heart Foundation “Tick”*

Patients needing treatment for obesity, hypertension, heart disease or high blood cholesterol *must literally avoid many of the foods that carry the Heart Foundation “Tick”*. That is because foods with the “Tick” only need a *reduced* content of fat, saturated fat, sugar and salt. Sick patients who need *treatment* and would like to see *measurable results* must choose—exclusively—foods that are *low (not reduced)* in fat, saturated fat, sugar and salt.

The food industry may be accepting the Heart Foundation “Tick” for several reasons:

- it indicates approval, and a professional “health” endorsement is an advertisement;
- yet the “Tick” foods only need to be slightly healthier than ordinary foods;
- disapproved foods receive no crosses, only an absent “Tick”.

*Traffic lights corresponding to the “Tick”*

- amber lights would often qualify for a “Tick”;
- green lights would correspond to a “Double Tick”;
- red lights would correspond to a cross—a unique proposal never previously dreamt of.

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