



A benefit cost analysis



Prepared for

Food Standards Australia and New Zealand



FINAL REPORT



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#### Canberra

Centre for International Economics Ground Floor, 11 Lancaster Place Majura Park Canberra ACT 2609

GPO Box 2203

Canberra ACT Australia 2601

Telephone +61 2 6245 7800 Facsimile +61 2 6245 7888 Email cie@TheCIE.com.au Website www.TheCIE.com.au

#### Sydney

Centre for International Economics Suite 1, Level 16, 1 York Street Sydney NSW 2000

GPO Box 397

Sydney NSW Australia 2001

Telephone +61 2 9250 0800 Facsimile +61 2 9250 0888

Email ciesyd@TheCIE.com.au Website www.TheCIE.com.au

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## Background

FSANZ has been asked to assess the possibility of imposing regulatory restrictions on the use of 'fat-free' and '%fat-free' claims on food labels. The FSANZ investigations are a response to public concerns that consumers could be misled by such claims. A consumer may think that a product carrying such a claim is a 'healthy' option, not realising that the product may be high in sugar and so provide higher energy intake than intended. There is also concern that 'fat-free' and '%fatfree' claims are being misappropriated by food categories that are not historically high in fat.

Possible changes could impose a range of costs relating to a need to change labels, remarket a product or reformulate it. For some manufacturers the changes may create new opportunities in terms of new products or new marketing opportunities for existing products. FSANZ is seeking a formal benefit:cost analysis of the potential impacts.

The Centre for International Economics (TheCIE) previously (2008) conducted FSANZ's benefit cost study on health, nutrition and related claims (P293). This involved consulting widely with industry to assess the possible market impacts of changes to claims. FSANZ has now asked TheCIE to use the same approach to assess the benefits and cost of possible regulation on fat-free and %fat-free claims. See http://www.foodstandards.gov.au/\_srcfiles/P293%20Health%20Claims% 20FAR%20Attach%2011\_1.pdf#search=%22health%20claims%20benefit%20cost%22 for the approach used previously.

The information required for this additional analysis relates to the incidence of market impacts were various regulatory options pursued. Essentially, the information needed relates to:

- how many and what types of products currently carry fat-free claims?
- what market impact might occur were various restrictions placed on use of the claims for these products?

Such information can be used with previously developed market impact models to assess benefits and cost Australasia-wide. However, to provide a contemporary analysis, the previous benefit cost analysis of P293 requires updating. This is needed to provide a contemporary baseline.

### Previous work

As part of the 2008 report TheCIE conducted on health, nutrition and related claims seven possible market outcomes were identified:

- 1. new products developed to make use of previously banned claims;
- 2. existing products re-marketed to make use of a previously banned claim;
- 3. existing products not affected by the changes (no change);
- 4. existing products require small label changes to ensure compliance with the changed criteria;
- 5. existing products require changes to their existing marketing strategies due to changed criteria;
- 6. changes to the formulation of existing products, either small or large; and
- 7. existing products removed from the market as they are no longer viable under the proposed changes.

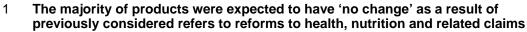
The seven potential market outcomes will create benefits and costs for food suppliers and consumers. Food suppliers may profit from new opportunities but incur costs due to lost opportunities or increased costs of compliance. Consumers might gain from the supply of new and better products, but lose if products are removed or their price is increased due to rising costs. Improved consumer satisfaction from new and better products is known as an improvement in consumer welfare.

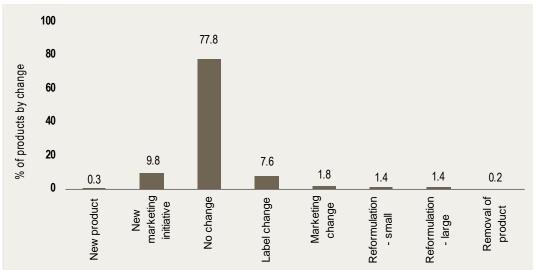
As a result of changes to health, nutrition and related claims, in some cases firms may need to change manufacturing processes, management procedures, the management and development of product packaging and labels, as well as placing additional requirements on the sourcing of primary ingredients. Such costs would apply to varying degrees across different parts of a firm and a firm's product range.

The CIE developed generalised business (cost/sales) models for each of the seven outcomes identified. These models represented the impact the changes would have at the stock keeping unit (SKU)/product level. Because costs and benefits tend to vary by size of SKU (value of annual sales), impact models for SKUs at three annual sales values: \$0m to \$5m, >\$5m to <\$50m and >\$50m were developed.

#### Incidence of change

Our previous work found that about 22 per cent of all products would be affected by changes to health, nutrition and the related claims (77.8 per cent unaffected) with market impacts distributed as shown in chart 1.





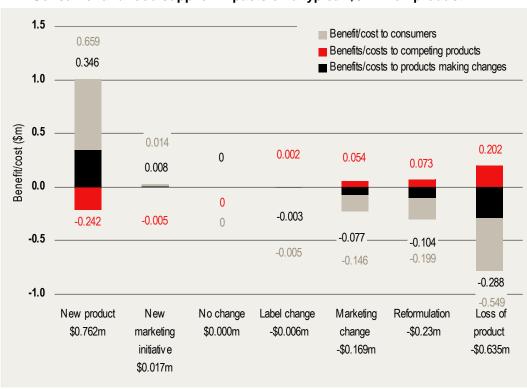
Data source: CIE calculations.

### Generic benefits and cost of market outcome/impacts

The seven potential market outcomes will create benefits and costs for food suppliers and consumers. Food suppliers may profit from new opportunities but incur costs due to lost opportunities or increased costs of compliance. Consumers might gain from the supply of new and better products, but lose if products are removed or their price is increased due to rising costs. In economic parlance, improved consumer satisfaction from new and better products is known as an improvement in consumer welfare.

The CIE previously estimated benefits and costs to food suppliers and consumers are presented in chart 2 for each of the seven potential market outcomes for a generic product with \$5 million in wholesale sales per year. These have been estimated using:

- a detailed activity/financial model of a representative food manufacturing firm to estimate direct benefits and costs to food suppliers:
  - the model is based on data collected from industry consultations;
  - the incidence of market impacts is estimated from a comprehensive survey conducted of industry which obtained about 55 per cent coverage of total Australian food sales;



#### 2 Consumer and food supplier impacts on a typical \$5 million product

Data source: CIE calculations.

- distribution of benefits and costs is highly skewed with new products providing large relative benefits, and withdrawal of products providing corresponding large costs;
- an economic model of changes in consumer preferences due to health and nutrition claims in an important Australian food market segment, to estimate consumer and indirect food supplier benefits and costs:
  - if new products or information are introduced, consumers stand to gain value over and above what they actually pay for the product, however when they substitute away from an alternative, old, product:
    - ··· the same consumers will lose some value, so it is the net increase in value that needs to be estimated by the model;
    - ··· food suppliers whose product is abandoned indirectly lose profits, so this is a cost that needs to be accounted for in addition to direct food supplier benefits (or costs) estimated using the activity/financial model;
  - if an existing product is withdrawn from the market as a result of a change in the regulation of health and nutrition claims, the opposite impact to the introduction of a new product occurs and these can be determined from the model.

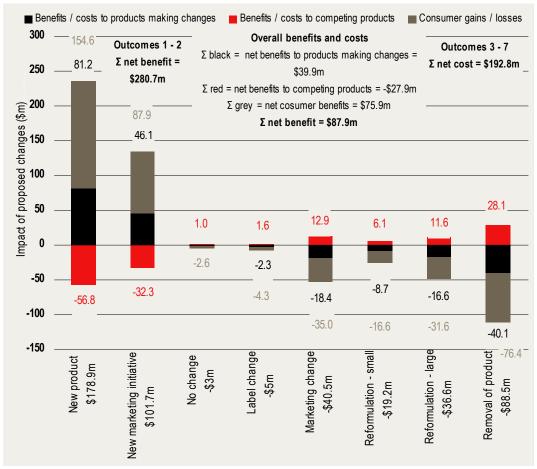
The seven potential market outcomes will create benefits and costs for food suppliers and consumers. Food suppliers may profit from new opportunities but incur costs due to lost opportunities or increased costs of compliance. Consumers might gain

from the supply of new and better products, but lose if products are removed or their price is increased due to rising costs. In economic parlance, improved consumer satisfaction from new and better products is known as an improvement in consumer welfare.

#### Overall economic impact for Australia and New Zealand

Multiplying the incidence of impacts to industry (chart 1) by the benefits and costs to industry and consumers per market outcome calculates the financial impact on Australian food suppliers and consumers from the FSANZ proposal (chart 3).

#### 3 Total net present value benefits by market outcome (\$m)



Data source: CIE calculations

The present value benefits from high level and general level health claims which promotes new products and new marketing initiatives (outcomes 1 and 2) are large, at \$280.7 million in aggregate. This is comprised of:

- direct benefits to consumers of \$242.5 million (154.6 + 87.9);
- direct benefits to food suppliers of \$127.3 million (81.2 + 46.1); and

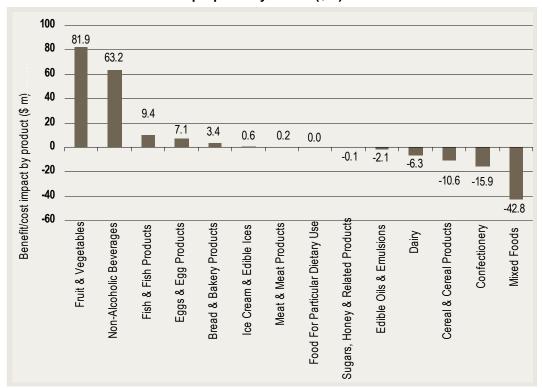


indirect losses to competing food suppliers of \$89.1 million (-56.8 + -32.3).

For outcomes 3 to 7, the proposed Standard will result in net present value costs of \$192.8 million. Food suppliers that need to change products or marketing initiatives face costs of \$87.5 million. This has flow-on impacts to consumers of \$166.5 million, while competing food suppliers gain by \$61.2 million. For the 80 per cent of products not affected by the proposed Standard it still carries a \$3 million cost due to firms having to inspect all products to ensure compliance with the changes.

Overall, the proposed Standard provides net present value benefits of \$87.9 million. However, these benefits are not evenly distributed by food type (chart 4). Based on consultations with industry, the largest benefits of the proposed changes were expected to be for fresh produce including fruit and vegetables. Implicitly, this is based on the perceived healthy aspects of these foods. Under the proposed changes, suppliers of these foods will now be able to further emphasise and market their produce using general level and high level claims. This result also reflects the large proportion of food expenditure dedicated to fruit and vegetables.

#### 4 Total net benefits of the proposal by sector (\$m)



Data source: CIE calculations.

With New Zealand food consumption is equal to about 14.5 per cent of Australian food consumption, when the net benefits are scaled up to include New Zealand the net benefit increases from \$88 million a year to \$101 million. After allowing for enforcement costs, the combined Australian and New Zealand net present value

benefit of the proposed Standard is estimated at \$94.7 million. On this basis, it appears that the proposed Standard may provide a benefit-cost ratio of 1.4:1.

# Regulatory restrictions to fat-free and % fat-free claims

FSANZ wishes to assess the benefits and costs of three broad approaches: status quo, voluntary action and regulation. The updated benefit cost analysis provides an assessment of the status quo. This is taken to be what will happen as P293 is introduced.

Among the regulatory approaches, essentially two regulatory approaches are being considered.

- The first is based on disclosing the sugar content where sugar content exceeds a specified threshold level and a fat-free or %fat-free claim is made. Several disclosure statements could be used. Examples provided by FSANZ include: 'see nutrition information panel'; 'see nutrition panel for sugar content'; 'this food is high in sugar'; and 'this food contains x% sugar'. TheCIE has assessed this option based on a sugar threshold of 30 per cent and tagged it option 1.
- The second relates to prohibiting the use of claims subject to various criteria, either:
  - based on sugar content thresholds which TheCIE has assessed also under a 30 per cent sugar threshold and tagged it option 2;
  - meeting the nutrient profiling scoring criterion (NPSC)<sup>1</sup> which is assessed under the tag option 3; or
  - predetermined product categories (option 4).

## Our approach

To assess the market benefits and costs of various options we conducted a survey of industry stakeholders to collect a sample of the incidence of claims and the likely responses to the major regulatory options. The sample was aggregated to represent the Australian industry. Aggregated data on the incidence of claims and potential

NPSC was developed by FSANZ to restrict the use of health claims on products considered to be of low nutritional quality. It is based on the risk-reducing and risk-increasing components of the food. Points are scored for risk-increasing components and are lost for risk-reducing components. A food that scores lower is considered to be healthier than one that scores higher.



responses to regulatory changes were applied to the update cost/profit models, reviewed in the paper titled 'Nutrition, health and related claims: update' (2012), to assess benefits and cost for the Australian industry. Results were then further aggregated to include New Zealand. Interpolations, extrapolations and sensitivity test of the results were then applied to assess potential impacts of other regulatory and non-regulatory options. An overview of our approach is set out in chart 5.

#### Scope of analysis

Assessing whether there are any positive health externalities likely to occur as a result of mandatory nutrition and health claims is problematic. They may be a necessary but not sufficient condition to achieve any positive outcome. Much will depend on the success of other health programs which in turn will depend on many uncertain scientific, social and economic variables (see for instance Golan 2001<sup>2</sup>). Labelling alone (as a tool of health policy) can not be rigorously linked to better diets and improved health outcomes.

Such uncertainties and the indirect connections to public health outcomes make it difficult to quantify these effects, or even to hypothesis about the magnitude of their potential benefits or costs. It cannot be assumed that they are only positive. If they add to consumer confusion, or are not read due to too much information, a negative outcome is a possibility. Given these unknowns, we have not considered these impacts in the analysis. Accordingly, in this study we limit our analysis to measuring direct benefits relating to increases in consumer welfare arising from consumers being able to better align their purchasing patterns with their consumption preferences. Some of these benefits may be captured by food suppliers in the form of increased profits.

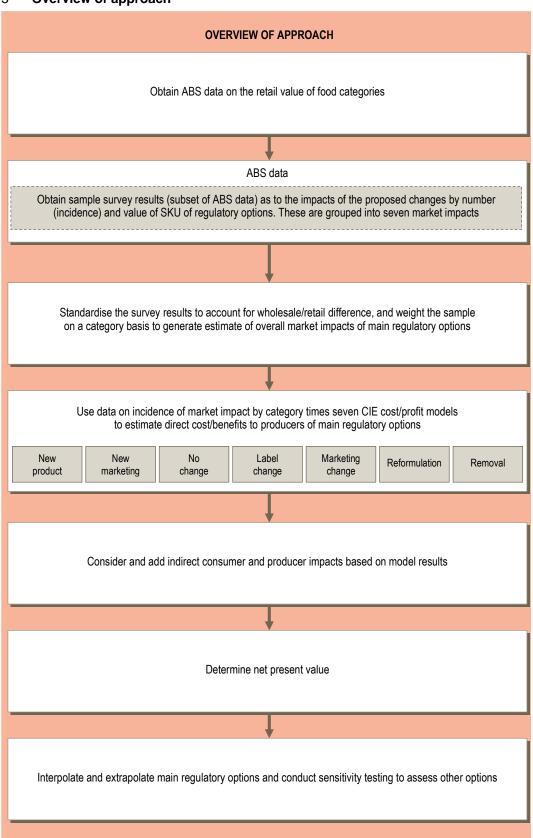
#### Consultation and data collection

Industry representative were asked to provide information of the sort set out in table 6. Essentially, the information requested relates to:

- how many and what types of products currently carry fat-free claims?
- what market impact might occur were various restrictions placed on use of the claims for these products?

<sup>&</sup>lt;sup>2</sup> Golan, E., Kuchler, F. and Mitchell, L. with contributions by Greene, C. and Jessup, A. 2001, 'Economics of Food Labeling', Journal of Consumer Policy, Vol. 24, pp. 117-184, Kluwer Academic Publishers, Netherlands.

#### 5 Overview of approach



Source: TheCIE.



#### Fat-free and %fat-free claims

Product (sector)	_?	
Total number of SKUs of company (sector) and approximate annual sales valu	e?: (number of SKUs);	(annual value of sales)

#### Details of impacts by SKUs

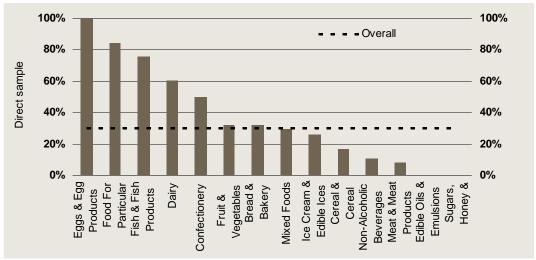
Market impacts Current			Regulatory options										
		f SKUs affe & %fat-free		Sugar threshold disclosure				Sugar threshold prohibition			Prohibition NPSC		
Approx \$m annual sales/SKU	\$0-\$5m	>\$5<\$50m	>\$50m	\$0-\$5m	>\$5<\$50m	>\$50m	Ш	\$0-\$5m	>\$5<\$50m	>\$50m	\$0-\$5m	>\$5<\$50m	>\$50m
Unit	No. SKU	No. SKU	No. SKU	No. SKU	No. SKU	No. SKU	Ц	No. SKU	No. SKU	No. SKU	No. SKU	No. SKU	No. SKU
1. New product	n/a	n/a	n/a										
2. New marketing	n/a	n/a	n/a										
3. No change													
4. Label change	n/a	n/a	n/a										
5. Marketing change	n/a	n/a	n/a										
6a. Small reformulation	n/a	n/a	n/a										
6b. Large reformulation	n/a	n/a	n/a										
7. Removal of product	n/a	n/a	n/a										

NUTRITION, HEALTH AND RELATED CLAIMS: FAT-FREE AND %FAT-FREE CLAIMS

Overall, we contacted nearly 50 stakeholders involved directly and indirectly in the manufacture, delivery, marketing and sales of Australian food. We conducted interviews and received data from 20 stakeholders. Only one of these was in New Zealand although many of the Australian based companies operated in New Zealand. Among the group of stakeholders were manufacturers and retailers responsible directly for the supply of over 30 per cent of Australia's food by value. Data collected from them was either verified through subsequent discussions or suppliers agreed to directly fill out data tables as presented in table 6. In some case we were given full product lists and were able to make our own estimates. This data gave us a direct sample of over 30 per cent of the food by value. The distribution of the sample by product category is as set out in chart 7.

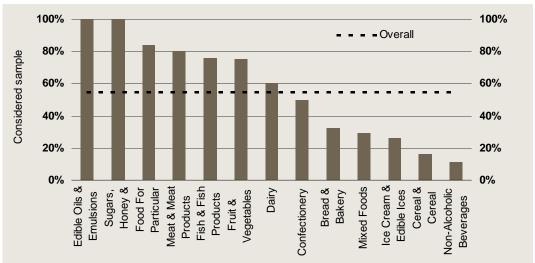
In addition to manufacturers and retailers we also spoke with industry associations involved in delivering Australia's food. This information allowed us to inflate our coverage to over 55 per cent, with coverage as set out in chart 8. In many cases this helped confirm that no claims were being made. For mixed foods, confectionery and processed meats we conducted reality checks by measuring shelf space for these products in a major supermarket. Our reality checks were roughly consistent with the survey results.

#### 7 Distribution of direct sample by product category based on market value



Data source: CIE calculations.

#### 8 Distribution of direct sample by product category based on market value

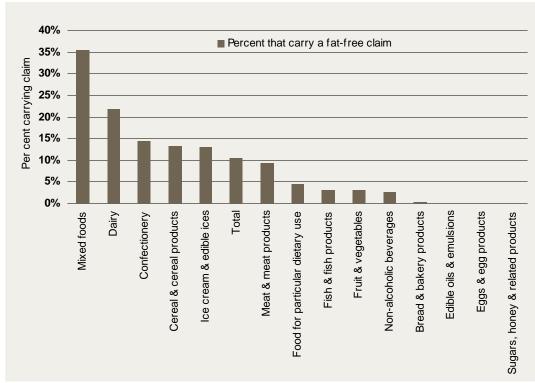


Data source: CIE calculations.

#### Incidence of fat-free and % fat-free claims

Collated results suggest that as many as 10 per cent of foods by value may carrying fat-free claims, although this varies widely from zero in the case of edible oils to 35 per cent in the case of mixed foods (chart 9).

#### 9 Percentage of products carrying fat-free claims based on market value



Data source: CIE calculations.



#### Incidence of impact of regulatory restrictions on fat-free claims

Tables 10, 11 and 12 set out how foods carrying fat-free claims might be affected by the first three regulatory options. Options 1 and 2, based on a sugar threshold of 30 per cent, appear to affect only 1.2 per cent of all foods by value. Mostly these are confectionery, ice creams and fruit and vegetables: namely jams and spreads and dried fruit. In response to regulatory restrictions, all stakeholders indicated that they would respond with label changes.

During consultations we were informed by several confectioners that the large producers were soon to implement a voluntary code to no longer use fat-free claims. If so this would reduce incidence considerably.

#### 10 Incidence of market impacts: option 1 (30% sugar threshold requiring disclosure)

Sugar threshold -	New	New	No	Label	Mktg	Small reform-	Large reform-	Removal of	
disclosure	product	mktg	change	change	change	ulation	ulation	product	Total
Confectionery	0.0	0.0	85.7	14.3	0.0	0.0	0.0	0.0	100.0
Fruit & vegetables	0.0	0.0	98.8	1.2	0.0	0.0	0.0	0.0	100.0
Ice cream & edible									
ices	0.0	0.0	99.7	0.3	0.0	0.0	0.0	0.0	100.0
Mixed foods	0.0	0.0	99.8	0.2	0.0	0.0	0.0	0.0	100.0
Dairy	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0
Edible oils & emulsions	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0
Cereal & cereal products	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0
Bread & bakery									
products	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0
Meat & meat products	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0
Fish & fish products	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0
Eggs & egg products	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0
Sugars, honey & related products	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0
Food for particular									
dietary use	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0
Non-alcoholic									
beverages	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0
Total	0.0	0.0	98.8	1.2	0.0	0.0	0.0	0.0	100.0

Source: CIE calculations.

Option 3 impacts on many more products: 4.7 per cent by value (table 13). Moreover, the number of stock keeping units (SKU) is high because typically these are small SKUs. This translates into high costs of label and other changes as there are more SKUs to change. The largest change indicated would be for a label change, but other changes were also indicated.

#### 11 Incidence of market impacts: option 1 (30% sugar threshold requiring prohibition)

						Small	Large	Removal	
Sugar threshold - prohibition	New product	New mktg	No change	Label change	Mktg change	reform- ulation	reform- ulation	of product	Total
Confectionery	0.0	0.0	85.7	14.3	0.0	0.0	0.0	0.0	100.0
Fruit & vegetables	0.0	0.0	98.8	1.2	0.0	0.0	0.0	0.0	100.0
Ice cream & edible ices	0.0	0.0	99.7	0.3	0.0	0.0	0.0	0.0	100.0
Mixed foods	0.0	0.0	99.8	0.2	0.0	0.0	0.0	0.0	100.0
Dairy	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0
Edible oils & emulsions	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0
Cereal & cereal products	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0
Bread & bakery products	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0
Meat & meat products	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0
Fish & fish products	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0
Eggs & egg products	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0
Sugars, honey & related products	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0
Food for particular dietary use	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0
Non-alcoholic beverages	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0
Total	0.0	0.0	98.8	1.2	0.0	0.0	0.0	0.0	100.0

Source: CIE calculations.

#### 12 Incidence of market impacts: option 3 (NPSC trigger requiring prohibition)

NPSC - prohibition	New product	New mktg	No change	Label change	Mktg change	Small reform- ulation	Large reform- ulation	Removal of product	Total
Confectionery	0.0	0.0	85.7	14.3	0.0	0.0	0.0	0.0	100.0
Ice cream & edible ices	0.0	0.0	93.8	6.2	0.0	0.0	0.0	0.0	100.0
Meat & meat products	0.0	0.0	90.7	6.2	1.5	1.0	0.4	0.2	100.0
Mixed foods	0.0	0.0	86.4	4.4	6.1	2.1	0.9	0.2	100.0
Cereal & cereal products	0.0	0.0	96.2	3.8	0.0	0.0	0.0	0.0	100.0
Food for particular dietary use	0.0	0.0	97.3	2.7	0.0	0.0	0.0	0.0	100.0
Fruit & vegetables	0.0	0.0	98.8	1.2	0.0	0.0	0.0	0.0	100.0
Non-alcoholic beverages	0.0	0.0	98.4	1.0	0.6	0.0	0.0	0.0	100.0
Dairy	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0
Edible oils & emulsions	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0
Bread & bakery products	0.0	0.0	99.7	0.0	0.0	0.0	0.1	0.1	100.0
Fish & fish products	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0
Eggs & egg products	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0
Sugars, honey & related products	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0
Total	0.0	0.0	95.3	3.1	1.0	0.4	0.2	0.1	100.0

Source: CIE calculations

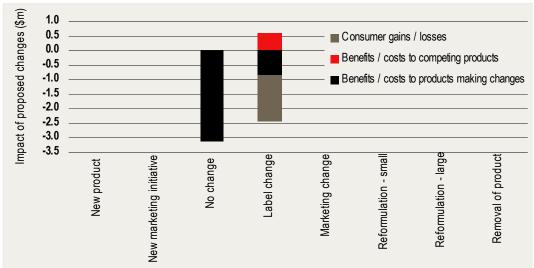


#### Costs of changes

Charts 13 and 14 set out the costs of changes (labels changes) for options 1 and 2. These are minimal at around \$5 million. The largest cost is to the 98.8 per cent of products not affected. This is a small cost per SKU but represents the costs to each company to methodically check their products for compliance purposes.

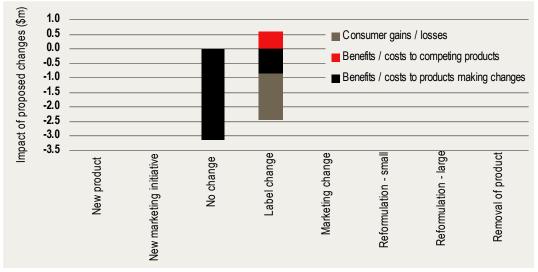
Chart 15 sets out the costs of various changes associated with option 3. These impose a net estimated cost of \$126 million. This is a costly result. It would wipe out the net benefit of the updated results for P293 of \$83.8 million. It is large because, although the percentage is not high, the number of SKUs is. The incidence of impact by food categories is set out in chart 16.

# 13 Total net present value benefits by market outcome by product category (\$m): option 1 (30% sugar threshold requiring disclosure)



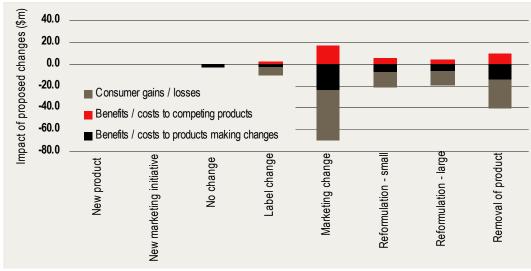
Data source: CIE calculations.

#### Total net present value benefits by market outcome by product category (\$m): option 2 1 (30% sugar threshold requiring prohibition)

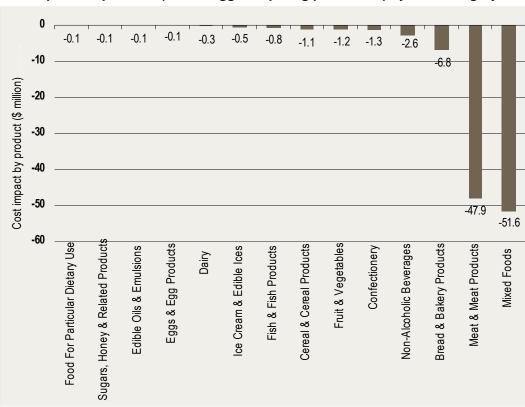


Data source: CIE calculations.

#### Total net present value benefits by market outcome by product category (\$m): option 3 1 (NPSC trigger requiring prohibition)



Data source: CIE calculations.



#### 16 Impact of option 3 1 (NPSC trigger requiring prohibition) by food category

Data source: CIE calculations.

### Sensitivity testing

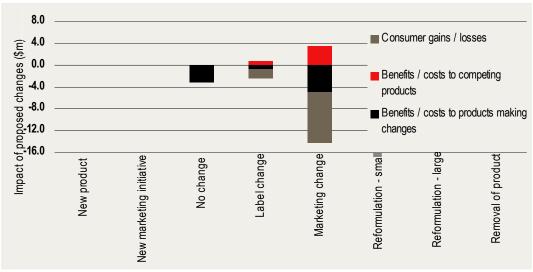
#### Option 2 plus some new marketing

The results for options 1 and 2 are shown to be the same. This is surprising given that what distinguishes the two options is that one requires a relatively light-handed response in terms of disclosure, while the other leads to a prohibition to make the claim. Moreover, prohibition caused under the NPSC trigger (option 3) was indicated to cause a wider range of responses including marketing changes, reformulations and removal of products. Where prohibition is required rather than just disclosure, the need to remarket the product, reformulate or remove it might be expected to be more prevalent responses. Stakeholders provided no specific data on this saying only that while it was more likely than under option 1, as a first response they might try a label change to 'low-fat' first.

Were we to assume that 25 per cent of the products captured by the threshold were to later go on to be remarketed, cost would increase from around \$5.5 million to \$15.9 million as shown in chart 17, Were the percentage of changes to rise to 50 per cent, the cost would climb to \$26.9 million. Were the pattern of responses to option 2 to

eventually lead to reformulations and removals of products similar to that reported for option 3, the cost would escalate to around \$52 million.

#### 17 A quarter of label changes go on to become marketing changes: option 2

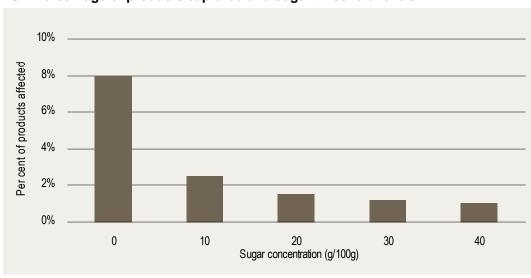


Data source: CIE calculations.

#### Sensitivity to sugar threshold

The relationship between the number of products carrying claims and sugar content threshold is set out in chart 18. At 30 per cent sugar, around 1.2 per cent of products are captured by the threshold. Were the threshold to drop to 10 per cent, around 2.5 per cent of products would be captured. This could roughly double the cost of options 1 and 2.

#### 18 Percentage of products captured and sugar threshold levels



Data source: CIE calculations.

#### 2.0 Consumer gains / losses 1.0 mpact of proposed changes (\$m) Benefits / costs to competing products 0.0 -1.0 ■ Benefits / costs to products making changes -2.0 -3.0 -4.0 -5.0 Label change Marketing change Reformulation - large Removal of product New marketing initiative No change Reformulation - smal New product

#### 19 Sugar threshold at 10 per cent: option 2

Data source: CIE calculations.

#### Voluntary removal of fat free labels on confectionery

Given the planned removal of fat-free claims from confectionery, the results presented in charts 13, 14 and 15 may be overstated. Were 75 per cent (representing the major producers who would comply with the voluntary code) of confectionery removed from the number of products affected, this would reduce the cost of options 1 and 2 from around \$5 million to around \$4 million. And option 3, the reduction would be from around \$126 million to \$125 million.

#### Option 4 plus additions of some new products and new marketing opportunities

Only one stakeholder consulted thought that the proposed changes might lead to opportunities for the development of new products or marketing opportunities, but specific data on an industry basis was not obtained. However, were new products and new marketing opportunities to arise in equal amount to products being removed; the costs of option 3 would fall. Were these evenly distributed between new products and new marketing opportunities the overall cost would fall from around \$125 million to \$104 million (see chart 20).

#### 40.0 20.0 Impact of proposed changes (\$m) 0.0 -20.0 Consumer gains / losses -40.0 Benefits / costs to competing products -60.0 Benefits / costs to products making changes -80.0 Marketing change Removal of product Label change Refomulation - large New marketing initiative Reformulation - smal No change New product

#### New products and new marketing initiatives match removals: option 3 20

Data source: CIE calculations.

#### Prohibition of select product categories

Another option being considered by FSANZ is to selectively prohibit particular product categories from using fat-free claims. Table 21 shows the cost associated with prohibiting each product category in turn. We have assumed the pattern of market responses reported for option 3. Were all products carrying claims to be prohibited, the total number of products prohibited would rise relative to option 3: from 4.7 per cent of products to 10 per cent. Relative to option 3 this would roughly double the cost from around \$126 million to \$242 million. The cost of prohibiting each select food category is set out on the right hand side of the table. The most expensive category to prohibit is mixed foods followed by dairy and then meat.

#### 21 Prohibition of select product categories

Category	% with claims	No change	Label change	Mktg change	Reform- ulation (small)	Reform- ulation (large)	Removal of product	Total
	%	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Dairy	22	-0.3	-3.3	-9.4	-3.3	-2.7	-29.4	-48.4
Edible oils & emulsions	0	-0.1	0.0	0.0	0.0	0.0	0.0	-0.1
Ice cream & edible ices	13	-0.1	-0.7	-1.8	-0.6	-0.5	-3.0	-6.8
Fruit & vegetables	3	-0.7	-1.3	-3.5	-1.2	-1.0	-8.3	-16.1
Confectionery	14	-0.4	-0.9	-2.8	-1.0	-0.8	-11.8	-17.6
Cereal & cereal products	13	-0.7	-1.8	-4.2	-1.5	-1.2	-5.8	-15.2
Bread & bakery products	0	-0.6	0.0	0.0	0.0	0.0	0.0	-0.6
Meat & meat products	9	-0.6	-4.1	-10.5	-3.7	-3.0	-19.8	-41.8
Fish & fish products	3	-0.8	-0.2	-0.4	-0.2	-0.1	-1.3	-3.0
Eggs & egg products	0	-0.2	0.0	0.0	0.0	0.0	0.0	-0.2
Sugars, honey & related products	0	-0.1	0.0	0.0	0.0	0.0	0.0	-0.1
Food for particular dietary use	4	-0.1	0.0	-0.1	0.0	0.0	-0.1	-0.4
Non-alcoholic beverages	3	-0.3	-0.4	-1.2	-0.4	-0.3	-3.7	-6.3
Mixed foods	35	-1.0	-7.3	-19.3	-6.9	-5.5	-45.4	-85.4
Total	10	-6.0	-20.2	-53.3	-18.9	-15.2	-128.5	-242.0

Source: CIE calculations.

### Conclusion

Table 22 summarises the results generated here and relates them to the six options FSANZ is considering.

Option 1 (status quo) is assumed to impose no additional cost relative to the cost of implementing P293. The net benefits of implementing P293 have previously been estimated and have been updated in this report. The updated net present value benefit is around \$84 million.

Option 2 (voluntary code of conduct) is based on what has been proposed for confectionery. Strictly speaking, this should be included in the status quo as it is already happening. Nonetheless, for illustrative purposes, we have assessed here the consequences of its introduction relative to other options. It was found to reduce the cost of other options by at least \$1 million in net present value terms for the cheaper options. Therefore the cost of introducing it separately would be \$1 million. But this is based on it leading only to label changes. Was it to also lead to new marketing initiative and removals of products the cost is more likely to be similar to the selective prohibition of the product range: \$18 million.

Option 3 (disclosure 30 per cent sugar) is based on a sugar threshold trigger of 30 per cent. This captures relatively few products: 1.2 per cent of the total of 10 per cent of SKUs carrying claims. Were this to lead to label changes only, which seems likely, the net present value cost is estimated at around \$5 million. However, were the sugar threshold to be reduced to 10 per cent, around 2.5 per cent of products would be captured and costs would rise to around \$11 million.

Option 4 (prohibition 30 per cent sugar) captures the same proportion of products as option 3, but the expectation is that the market responses are likely to be more dramatic. Although stakeholders did indicate they would have to undertake label changes and acknowledged that other responses would be likely, no specific (reliable) data were obtained on other market responses. However, considerable data were obtained on the pattern of market responses to prohibition under an NPSC trigger (option 6). Using this pattern and applying it to option 4 suggests cost could rise as high as \$52 million. Were label changes only to occur, the cost would be minimal at around \$5 million.

Option 5 (selective prohibition) would capture more SKUs per category selected than either a sugar threshold or NPSC trigger. Per category of food it is therefore the most

expensive option. The total cost would depend on how many product categories were selected. Were all selected, the cost could rise to \$242 million.

#### 22 Costs of FSANZ options

FSANZ options	Net costs of restricting fat-free							
	Minimum	As surveyed	Upside estimate					
	\$m	\$m	\$m					
Status quo	0	0	0					
Voluntary (confectionary only)	0	1	18					
Disclosure (threshold)	5	5	11					
Prohibition (threshold)	5	5	52					
Prohibition (select)	0	na	242					
Prohibition (NPSC)	104	126	na					

Source: CIE calculations.

Option 6 (NPSC trigger) captures a wider range of products than the sugar threshold trigger. It captures 4.7 per cent of products by value compared with only 1.2 per cent for the 30 per cent sugar threshold. Industry data indicated a wide range of market responses to the prohibition with a strong preference toward undertaking new marketing initiatives. But reformulations and removals of products are also likely. Based on the indicated pattern of market responses from food manufacturers, costs of \$126 million are possible. Only one stakeholder considered that restrictions on the use of the claims might create opportunities for others to use the claims to greater effect opening up opportunities for new products and marketing initiatives. Were these to occur to the equivalent incidence of products removals, net costs of the option would decline to around \$104 million.