

2005

Australian consumers are sceptical about but influenced by claims about fat on food labels

C. Chan

University of Wollongong

C. Patch

University of Wollongong, cpatch@uow.edu.au

P. G. Williams

University of Wollongong, peter_williams@uow.edu.au

Publication Details

This article was originally published as Chan, C, Patch, C and Williams, P, Australian consumers are sceptical about but influenced by claims about fat on food labels, *European Journal of Clinical Nutrition*, 59, 2005, 148-151. Copyright Nature Publishing Group 2006. Original journal available [here](#).

Australian consumers are sceptical about but influenced by claims about fat on food labels

Abstract

Objectives: To explore the beliefs and attitudes of Australian consumers to claims about fat made on the labels of packaged food.

Design: Content analysis of transcripts from focus group discussions.

Subjects: 26 females and 10 males aged 20-80y, recruited by advertisement into six focus groups, stratified by age, sex and health status.

Results: Awareness of claims about fat was high in this sample of Australians and participants admitted that they influenced their purchase decisions. The most preferred form of claim was “X% fat free”. Claims were considered most useful on foods that were high in fat. There was considerable scepticism about all nutrient claims, and consumers preferred to check claims about fat against the values in the nutrition information panel. Many claims were seen as advertising that could be misleading, deceptive or confusing. While claims about fat might prompt product trial, factors such as price, taste, naturalness, as well as other nutritional factors, also influenced purchase decisions. Some consumers believe low fat claims encourage over consumption of foods.

Conclusions: Changes to regulations governing nutrition claims on food labels should be made to enhance their credibility and support their role in assisting consumers to make healthier food choices

Keywords

nutrition, fats, consumer satisfaction, food labelling

Disciplines

Arts and Humanities | Life Sciences | Medicine and Health Sciences | Social and Behavioral Sciences

Publication Details

This article was originally published as Chan, C, Patch, C and Williams, P, Australian consumers are sceptical about but influenced by claims about fat on food labels, *European Journal of Clinical Nutrition*, 59, 2005, 148-151. Copyright Nature Publishing Group 2006. Original journal available [here](#).

1 **Manuscript:** 2003EJCN0285R

2

3 **Title:** Australian consumers are sceptical about but
4 influenced by claims about fat on food labels

5

6 **Authors:** Chung Chan

7 Masters Student

8 Craig Patch

9 PhD Student

10 Peter Williams

11 Senior Lecturer

12

13 **Guarantor and**

14 **Correspondence to:** Dr Peter Williams

15 *Smart Foods Centre*

16 *Department of Biomedical Science*

17 *University of Wollongong*

18 *Wollongong NSW Australia 2522*

19 **Tel:** 61 2 4221 4085

20 **FAX:** 61 2 4221 4096

21 **e-mail:** peter_williams@uow.edu.au

22

23 **Running Title:** Fat Claims

24 **Key Words:** Nutrition; fats; consumer satisfaction; food labelling

25 **Word Count:** 1340

26 **Version:** FCShort-V3

27

28 **Contributions**

29 CC was responsible for data analysis and critical discussions of the analysis and
30 manuscript. CP was responsible for data collection including organisation and leading
31 the focus groups, and critical discussions of the analysis and manuscript. PW was
32 responsible for design of the study, critical discussions of the analysis and preparation
33 of the manuscript.

34

1 **Abstract**

2 **Objectives:** To explore the beliefs and attitudes of Australian consumers to claims about
3 fat made on the labels of packaged food.

4

5 **Design:** Content analysis of transcripts from focus group discussions.

6

7 **Subjects:** 26 females and 10 males aged 20-80y, recruited by advertisement into six focus
8 groups, stratified by age, sex and health status.

9

10 **Results:** Awareness of claims about fat was high in this sample of Australians and
11 participants admitted that they influenced their purchase decisions. The most preferred
12 form of claim was “X% fat free”. Claims were considered most useful on foods that were
13 high in fat. There was considerable scepticism about all nutrient claims, and consumers
14 preferred to check claims about fat against the values in the nutrition information panel.
15 Many claims were seen as advertising that could be misleading, deceptive or confusing.
16 While claims about fat might prompt product trial, factors such as price, taste, naturalness,
17 as well as other nutritional factors, also influenced purchase decisions. Some consumers
18 believe low fat claims encourage over consumption of foods.

19

20 **Conclusions:** Changes to regulations governing nutrition claims on food labels should be
21 made to enhance their credibility and support their role in assisting consumers to make
22 healthier food choices

23

24 **Sponsorship:** This research was supported by the Smart Foods Centre, funded by the
25 Australian Research Council.

26

1 **Introduction and Methods**

2

3 Nutrition labelling is a valuable way to help guide people to healthier food choices ¹. Label
4 use is significantly associated with lower fat consumption and higher intakes of fruits and
5 vegetables ² as well as better diet quality overall ^{3,4}. Consumers who hold a strong belief
6 that what is consumed can help reduce the risk of disease are more likely to use nutritional
7 information related to fat on foods ⁵⁻⁷. Men, younger consumers and those with lower levels
8 of education are less likely to use food labels ⁵⁻⁸. Consumers can have difficulty
9 differentiating between similar claims - for example reduced fat and low fat claims ⁹ - and a
10 product may be thought low in fat if there is a claim of low cholesterol ¹⁰. To help inform
11 the development of regulations about nutrient claims, this study was undertaken to explore
12 the beliefs and attitudes of consumers to claims about fat made on food labels.

13

14 For this qualitative study, participants were recruited through newspaper advertisements in
15 the Illawarra region, south of Sydney, and allocated to six groups: 6 women aged 20-35
16 (mean age 29); 6 women aged above 35 (mean age 55); 4 male adults (mean age 46); 3
17 adult couples (mean age 53); overweight adults (3 males and 5 females; mean age 42); 6
18 adults with high blood cholesterol levels (mean age 57). This stratification was designed to
19 explore the views of participants of different gender, age, and health status including those
20 most likely to be interested in claims about fat.

21

22 Focus groups were conducted by the same moderator (CP), with conversations
23 audiotaped and transcribed verbatim. A semi-structured discussion process was used,
24 with the following questions: What are the most important aspects of a healthy diet?
25 What does the “eat less fat” message mean to you? How would you achieve the
26 healthy eating guidelines relating to fat when you are shopping? Ten products were
27 provided for consideration, carrying different types of fat claims: Fat Free, No Fat,
28 Low Fat, Low in Fat, Lite, Extra Light, 97% Fat Free, 92% Fat Free, 50% Less Fat,
29 and the Heart Foundation Tick (which indicates foods that meet specific nutritional
30 criteria for cardiovascular health ¹¹). Participants were asked: What do you think of
31 these? Which parts of the label do you look at specifically? What does the claim
32 mean? Do you believe the claims? Do you think you can eat more of these products
33 than the regular equivalent? How often do you look at these claims when shopping?

1 Are there any foods that you would not buy the variety with a ‘low fat’ claim on the
2 label and why? Subjects were asked to indicate on which foods from a list of 36 they
3 believed it would be useful to have claims about low or reduced fat or cholesterol.
4 They were also asked to consider four brands of margarine and one butter, choose the
5 healthiest spread, and explain the reasons for their choice.

6

7 Transcripts were examined for emerging themes, using a combination of content and
8 thematic analyses ¹². All quotes were allocated to theme categories by one author with
9 the allocation checked by the other two. Exemplar quotes have been selected to
10 illustrate key findings. Percentages of responses have generally not been presented
11 because the relatively small and non-representative nature of the sample make
12 quantitative extrapolation inappropriate. Where there was clear consensus (>50%
13 participant comments) this has been reported as “most participants”.

14

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34

Results and Discussion

Table 1 sets out the main thematic categories. Four main beliefs related to fat and a healthy diet were identified: “Good fat and bad fat” (32 comments); “Reduce saturated fat” (22); “Reduce total fat” (16) and “Fat should not be excluded” (14). However there were a number of notable contradictions in the beliefs held by the participants.

Belief in the need for “good” fats vs fat avoidance

While acknowledging that there were “good” fats that were needed in the diet, many participants agreed that low fat claims influenced their purchasing. Some participants mentioned that they would generally try low fat products and, if other product characteristics met their specifications, they would continue to purchase them.

Scepticism vs use of claims about fat

Most participants did not believe that fat claims are always truthful. Despite this, participants still reported using such claims, although they liked to check their accuracy against values in the nutrition information panel (NIP). However, when shopping time was limited, some participants admitted that fat claims alone were relied upon.

Some claims about fat were seen as misleading even when legally permitted. For example participants regarded “Fat Free” as often being a false claim, because of small amounts of fat declared in the NIP. This finding is consistent with results from a 1995 survey of Australian consumers that reported 32% of shoppers looked at nutrition claims when purchasing a product for the first time but 30% overall were unsure whether they could trust them¹³. Such scepticism can reduce the use of nutrient claims¹⁴ and consumer testing of alternative claims such as “Negligible Fat” would be useful.

1 Knowledge about saturated fat vs butter preference

2 Participants identified vegetable oils, fish oils and unsaturated fats as good fats, and
3 saturated and animal fats as bad fats. However, when choosing a spread, just over one
4 third preferred the more “natural” butter blend. The main reason given was concern
5 about the artificiality of margarine. The use of food additives and the safety of
6 processed foods are among the most important consumer concerns about the food
7 supply^{15, 16}.

8

9

10 Aim of low fat eating vs eating more of foods with low fat claims

11 Some participants interpreted a low fat claim as a licence to consume more of a
12 product and most agreed that fat claims might trigger consumers to think they could
13 eat more of low fat products than their normal counterparts. Most said that they would
14 not act the same way, but some admitted they had consumed more of a product
15 because of the presence of low or reduced fat claims.

16

17

18 Low fat preference vs barriers of price, taste and habit

19 Cost and taste were noted by all groups as potential barriers to purchase of low fat
20 products. One salient belief was that low fat products must be high in sugar in order to
21 preserve the taste. When considering claims about fat, “negative” ingredients such as sugar
22 and salt were mentioned as other important factors that were considered, whereas
23 “positive” nutrients such as dietary fibre were not - a finding that has been reported by
24 others¹⁷. This suggests some consumers take a risk avoidance approach to food selection
25 rather than considering the full nutritional profile of foods. Participants in all groups
26 mentioned that one major reason they chose higher fat products was out of habit. A few
27 participants explained that some food categories (like chocolate) were perceived as treats
28 and the fat content was irrelevant when making purchase decisions.

29

30 Of the fat claim formats, participants preferred “X% Fat Free” because its accuracy
31 could be checked easily against the NIP. Claims of “X% less fat” were least
32 understood and many participants were unsure about what the relevant reference
33 products were. Participants preferred fat claims to be carried only on foods that they
34 would normally expect to be high in fat, such as cheese, mayonnaise, milk and ice

1 cream (Table 2). Foods that were seen as least relevant to carry claims about fat were
2 naturally low fat products, and perhaps these should be labeled as such.

3

4 Caution is needed in interpreting the results from a qualitative study such as this. It is
5 probable that the self-selected participants were more interested in nutrition issues
6 than the general population. Nonetheless it is likely that these findings have wider
7 applicability than just in Australia. As food marketing becomes more global,
8 consumers in all developed markets face similar messages and food choices. It would
9 be desirable for the regulation of claims about fat to be better informed by more
10 consumer research to enhance the credibility of labelling and support its role in
11 assisting consumers to make healthier food choices.

12

1 **Table 1. Selected thematic categories used in coding focus group transcripts**
 2 **and exemplar quotations**
 3

Main categories	Major sub-categories	Quotes
Concept of a healthy diet	<ul style="list-style-type: none"> • Good and bad fats • Saturated fat • Reduce fat • Fat should not be excluded 	<ul style="list-style-type: none"> • Well I would like to make sure it was vegetable not animal. • Your saturated fats [are worse than others]. • If you want to lose weight, cut out all your fat. • You must have some fat. If you go for a complete non fat diet, well I don't think it's good
Understanding of terms in fat claims	<ul style="list-style-type: none"> • Wording of claims • Numerical claims 	<ul style="list-style-type: none"> • We used to always laugh at these when they say 50% less fat, you don't know where they are starting from • See, I look at the [Brand Name] when I see the 25% reduced fat cheddar, 25% of what? That doesn't mean a thing
Perception of food categories with claims	<ul style="list-style-type: none"> • Food carrying fat claims • Low-fat foods carrying claims 	<ul style="list-style-type: none"> • They have these fat free cakes or low fat cakes. Because you know then that they have the sugar in them to make them taste better • A lot of the no fat yoghurts are very high in sugar too • I think that's a marketing ploy, because most bread is fairly low in fat anyway
Credibility of claims	<ul style="list-style-type: none"> • Fat claims • Heart Foundation Tick 	<ul style="list-style-type: none"> • The total fat content is 0.1 (a Fat Free food). It's false advertising. • 97% of fat free of what? I honestly don't think they tell you the whole truth on these labels anyway • I spend a lot of time reading labels. But I find that labels are very confusing and very misleading a lot of the time • The Tick influences me a lot because I'm under the impression that it's of high integrity.
Barriers to purchase of low fat products	<ul style="list-style-type: none"> • Personal beliefs and preferences • Product attributes, including price 	<ul style="list-style-type: none"> • (No fat yoghurt) I would think it would be tasteless. • Coconut milk tastes horrible if it's light • 3 out of 4 of them [low fat foods] are [more expensive] • Generally, some of them are more expensive. Your cheeses not so much, but some of your claimed light ones are.
Influences on behaviour	<ul style="list-style-type: none"> • Influences on purchase 	<ul style="list-style-type: none"> • If you don't have much time to shop you are more likely to go for the labels, if you're looking for low fat, which say 97% less fat and not check and just throw it into the shopping trolley. • Time really is the issue when I go shopping...just to pick whatever it says on the front

	<ul style="list-style-type: none"> • Influences on consumption 	<ul style="list-style-type: none"> • When I read 50% less fat I didn't read any further • I must admit though if there's something there and it's got 98% fat free I'll go for it but I'm not sure I know what they mean • If you're going to pig out you might as well do it properly. • If I had the choice between those two and they had, they were the same price, I may try the light one and then if I like the flavour as well would continue to buy it • I bought her some light ones and she said you beauty I can have twice as many • You'd feel less guilty maybe if this isn't as bad for me
Preferred component and format of claims	<ul style="list-style-type: none"> • Fat claims on front • Ingredient list • Nutrition information panel 	<ul style="list-style-type: none"> • Well, the only thing I look for is Lights, in other words, any words for skinny and then I go to the back to see if it's true • [prefer 97% fat free] It puts a quantum on it • I look at [the claim] first and then go on to the rest of what it says. • You see low fat and then you read the label and see • When they've got the figures on them you're more inclined to [believe the claim], they have to be [correct]

1

2

1
2

Table 2. Foods identified by focus group participants as most and least suitable to carry claims about fat

Food Categories	Percentage agreeing (n=36)
Cheeses	92
Milks	89
Mayonnaises	89
Ice creams	86
Yoghurts	81
Margarines	81
Hamburgers	72
Salad dressings	72
Breads	25
Canned fish	25
Baked beans	17
Jams	14
Rice	11
Canned fruits	8
Fruit juices	6
Canned tomatoes	6
Frozen vegetables	6

3
4

1 **References**

2

- 3 1. Kristal A, Levy L, Patterson R, and Li S (1998): Trends in food label use with
4 new nutrition labeling regulations. *Am. J. Pub. Health.* **88**, 1212-1215.
- 5 2. Neuhouser M, Kristal A, and Patterson R (1999): Use of food labels is
6 associated with lower fat intakes. *J. Am. Diet. Assoc.* **99**, 45-50;53.
- 7 3. Perez-Escamilla R and Haldeman L (2002): Food label use modifies
8 association of income and dietary quality. *J. Nutr.* **132**, 768-772.
- 9 4. Kreuter M, Brennan L, Scharff D, and Lukwago S (1997): Do nutrition label
10 readers eat healthier diets? Behavioral correlates of adults' use of food labels.
11 *Am. J. Prev. Med.* **13**, 277-283.
- 12 5. Nayga R (1996): Determinants of consumers' use of nutritional information
13 on food packages. *J. Agric. Appl. Econ.* **28**, 303-312.
- 14 6. Kim S-Y, Nayga R, and Capps O (2001): Food label use, self-selectivity, and
15 diet quality. *J. Consum. Affairs.* **35**, 346-363.
- 16 7. Smith S, Taylor J, and Stephen A (2000): Use of food labels and beliefs about
17 diet-disease relationships among university students. *Pub. Health Nutr.* **3**, 175-
18 182.
- 19 8. Nayga R (2000): Nutrition knowledge, gender and food label use. *J. Consum.*
20 *Affairs.* **34**, 97-112.
- 21 9. Levy A and Fein S (1998): Consumers' ability to perform tasks using nutrition
22 labels. *J. Nutr. Ed.* **30**, 210-217.
- 23 10. Reid D and Hendricks S (1994): Consumer understanding and use of fat and
24 cholesterol information on food labels. *Can. J. Pub. Health.* **85**, 334-337.
- 25 11. Noakes M and Crawford D (1991): The National Heart Foundation's *Pick the*
26 *Tick* programme. Consumer awareness, attitudes and interpretation. *Food*
27 *Aust.* **43**, 262-266
- 28 12. Rice P and Ezzy D (1999): *Qualitative Research Methods*. South Melbourne:
29 Oxford University Press.
- 30 13. Australia New Zealand Food Authority (1996): *National consumer survey on*
31 *food labelling*. Canberra: ANZFA.
- 32 14. Szykman L, Bloom P, and Levy A (1997): A proposed model of the use of
33 package claims and nutrition labels. *J. Pub. Pol. Marketing.* **16**, 228-241.
- 34 15. Williams P, Sterling E, and Keynes N (2004): Food Fears: a national survey
35 on the attitudes of Australian adults about the safety and quality of food. *Asia*
36 *Pacific J. Clin. Nutr.* (in press).
- 37 16. Worsley A and Scott V (2000): Consumers' concerns about food and health in
38 Australia and New Zealand. *Asia Pacific J. Clin. Nutr.* **9**, 24-32.
- 39 17. Garretson J and Burton S (2000): Effects of nutrition facts panel values,
40 nutrition claims, and health claims on consumer attitudes, perceptions of
41 disease-related risks, and trust. *J. Pub. Pol. Marketing.* **19**, 213-227.

42