

Allergies

Omnibus Research Report Prepared for the Food Standards Agency by COI April 2007

Background and methodology

It is not known exactly how many people have adverse reactions to food and food ingredients. As many as 20-30% of the UK population believe they are intolerant or allergic to one or more foods, although previous information suggested that only 5-8% of children and 1-2% of adults are actually affected.

The number of foods sold as 'free from' certain ingredients is increasing; these foods are aimed at people with special dietary needs, especially those with food allergies and intolerances. However, the term 'free from' is not legally defined and there is the potential for manufacturers to work to differing standards when producing such foods, which could be misleading for consumers. The Food Standards Agency wanted to gain a better idea of how many people are now buying foods which are marketed as being 'free from' a particular ingredient in order to inform Government policy in this area and what they understand such descriptions to mean.

Questions were placed on the all adults' UK-wide omnibus survey run by RSGB Omnibus and are detailed in Appendix 1. The Omnibus interviews were conducted face-to-face utilising multimedia CAPI (Computer Assisted Personal Interviewing). A sample of 2008 adults aged 16+ in the UK was interviewed between the 23rd and 27th March 2007. Each interviewer was provided with quotas set on gender, age and working status in order to achieve a representative sample within each sampled area. The data was weighted at the analysis stage to ensure that the final sample was demographically representative across the UK (in terms of gender, age, and working status). Appendix 2 has the full sample profile (weighted), including demographic and regional breakdowns.

A selection of questions were only asked of those who had an allergy / intolerance to certain types of food (12%). The sample size for these questions is 261.

The social grade definitions referred to throughout this report are based on the Chief Income Earner in the household of the respondent. Brief explanations of the social grade definitions are shown in the table below:

Social Grade	Definition
A	Higher managerial, administrative or professional
B	Intermediate managerial, administrative or professional
C1	Supervisory or clerical, and junior managerial, administrative or professional
C2	Skilled manual workers
D	Semi and unskilled workers
E	State pensioners or widows (no other earner), casual or low grade workers

The map shown below illustrates the nine government regions across England that are referred to in this report. Respondents from Scotland, Wales and Northern Ireland were also included in this research.



Key findings

Prevalence and types of food allergies / intolerances

- Just over one in ten adults (12%) said they were avoiding certain foods because of an allergy and/or intolerance, with 5% doing so due to an allergy and 8% due to intolerance.
- Amongst those who were avoiding certain foods, dairy products were being avoided most commonly (17%), followed by nuts (14%) and wheat / gluten (13%). Around one in ten people with an allergy and/or intolerance were avoiding certain fruits (11%), caffeine (9%) and sugar (9%). Other products being avoided included fish (including shellfish) (8%), eggs (7%) and spicy foods (5%).
- Over half (57%) of those who were avoiding certain foods had had their condition medically diagnosed, while a third (32%) had self diagnosed it.

Purchase and understanding of products labelled as 'free-from'

- The majority of respondents (85%) rarely or never bought any products labelled as 'free-from', although this fell to around half (54%) of those who were avoiding certain foods due to an allergy / intolerance.
- Those with an allergy / intolerance to gluten / wheat were most likely (91%) to buy 'free-from' products at least sometimes, even though the most common allergy / intolerance was dairy (71% of those suffering from this allergy / intolerance bought 'free-from' products at least sometimes).
- Amongst those who bought any 'free-from' products, wheat / gluten products were the most commonly purchased (26%), whilst dairy-free products were bought by 15%.
- Clearly, respondents did not solely relate 'free-from' products to allergies and/or intolerances, as respondents also mentioned buying fat-free (15%) and preservative / additive-free products (7%), which were not commonly mentioned as types of allergies / intolerances respondents suffered from.
- Around half (52%) said the statement 'guaranteed not to contain any of the particular food' best described their understanding of 'free-from' food products, while three in ten (31%) said the statement 'not included as an ingredient' described their understanding of the term better.

1. Prevalence and types of food allergies / intolerances

This chapter looks at the prevalence of food allergies and/or intolerance, as well as investigating the most common types of food people avoid because of allergies / intolerances and how they came to be diagnosed.

Chart 1 Whether avoiding any foods due to an allergy and/or intolerance (%)



As Chart 1 illustrates, just over one in ten (12%) adults said they were avoiding certain foods due to an allergy and/or intolerance, with one in twenty (5%) saying it was due to an allergy and 8% due to being intolerant of certain foods. Just nine respondents (>1%) said they avoided certain foods because they had an allergy and intolerance.

Women were twice as likely (16%) as men (8%) to be avoiding certain foods because of an allergy or intolerance.

Table 1 Whether avoiding certain foods due to allergy and/or intolerance by age group (%)

	All	16-25	26-35	36-45	46-55	56-65	66+
Base	2008	317	301	323	289	302	476
Allergy	5	6	6	5	4	4	7
Intolerance	8	1	3	6	11	10	12
Either	12	7	9	11	15	14	18
Neither	88	93	90	88	85	86	82

Significant differences between the groups are highlighted on the table.

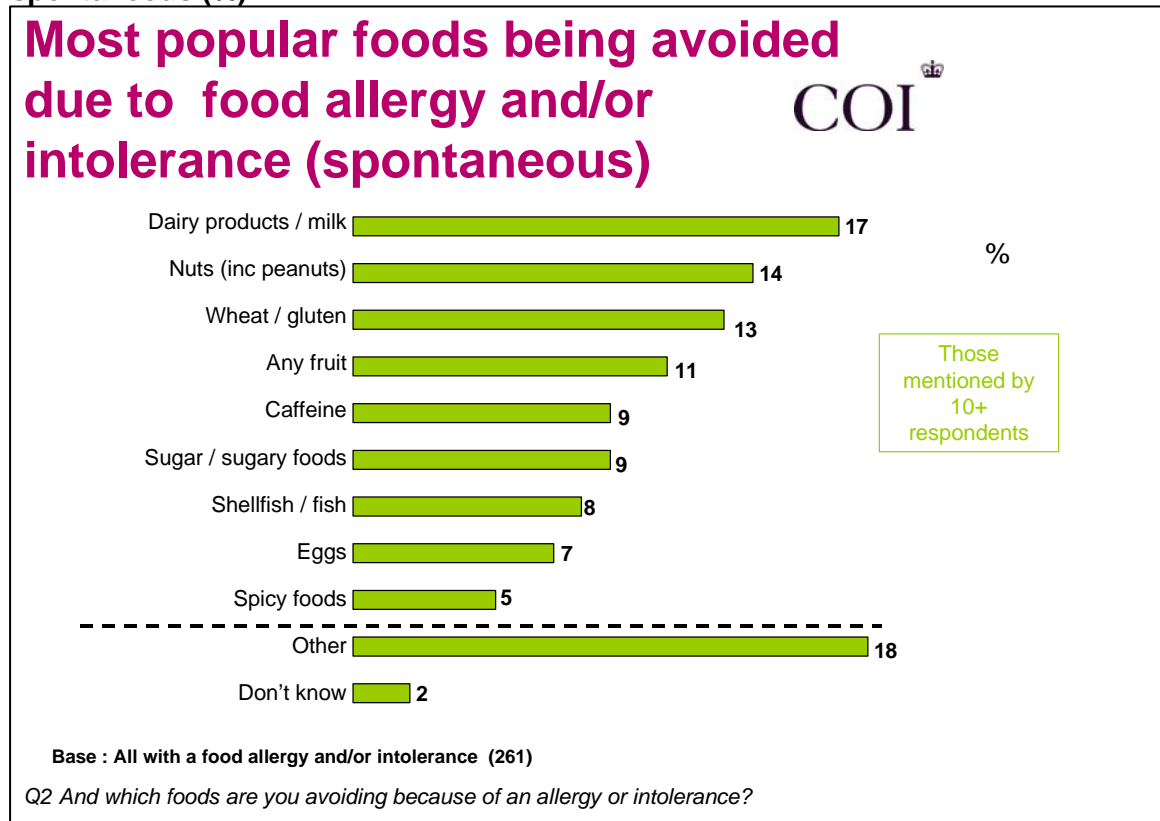
As Table 1 shows, age was also a factor in respondents' propensity to be avoiding particular foods, with those aged 46 and over being more likely (16%) than those aged 16 to 45 (9%) to be avoiding foods due to an allergy or intolerance. This difference amongst the age groups was mostly driven by intolerances to food, as all groups were as likely as one another to be avoiding foods due to an allergy.

There were also some differences across the regions, and these are detailed in full in Table A in Appendix 3. Those living in London and Yorkshire & Humberside were most likely (8% and 9% respectively) of all regions to be avoiding foods due to food allergies, whilst those in the South West and the East of England were most likely (14% and 11%) of all regions to be avoiding foods due to intolerances.

There were no differences by social grade.

Respondents who said they were avoiding certain foods due to an allergy and/or intolerance (n=261) were asked which foods they were avoiding. A wide range of answers was given and Chart 2 shows the food types that were mentioned by 10 or more respondents.

Chart 2 Food types being avoided due to allergies and/or intolerances – spontaneous (%)



The most commonly mentioned food that respondents were avoiding was dairy products and/or milk (17%), followed closely by nuts (14%), wheat and/or gluten (13%) and certain fruits (11%). Around one in ten of those with an allergy or intolerance were avoiding caffeine (9%) and sugar (9%), with 8% avoiding fish, 7% eggs and 5% spicy foods.

Most respondents (72%) were avoiding just one type of food product, with 20% avoiding two types and 4% avoiding three or more food products.

Those aged 16 to 25 were more likely (33%) than average (14%) to be avoiding nuts, but there were no other significant differences by age or by sex. There were some slight differences in the foods people from different social grades were avoiding, as shown in Table 2 (overleaf), with DEs more likely (25%) than ABs (5%) to be avoiding dairy products.

Table 2 Foods being avoided due to allergy / intolerance by social grade (%)

	All	AB	C1	C2	DE
Base	246	39*	53*	48*	121
Dairy	17	5	15	15	25
Nuts (inc peanuts)	14	7	14	19	14
Wheat/gluten	13	17	14	18	8
Fruit	11	8	9	8	16
Caffeine	9	11	16	6	5
Sugar	9	11	2	13	9
Fish (inc shellfish)	8	4	12	10	7

Significant differences between the groups are highlighted on the table.

** indicates a low base.*

There were also some differences amongst those who were avoiding foods because of an allergy and those who were doing so because of intolerance. Table 3 shows this in more detail.

Table 3 Foods being avoided by allergy / intolerance (%)

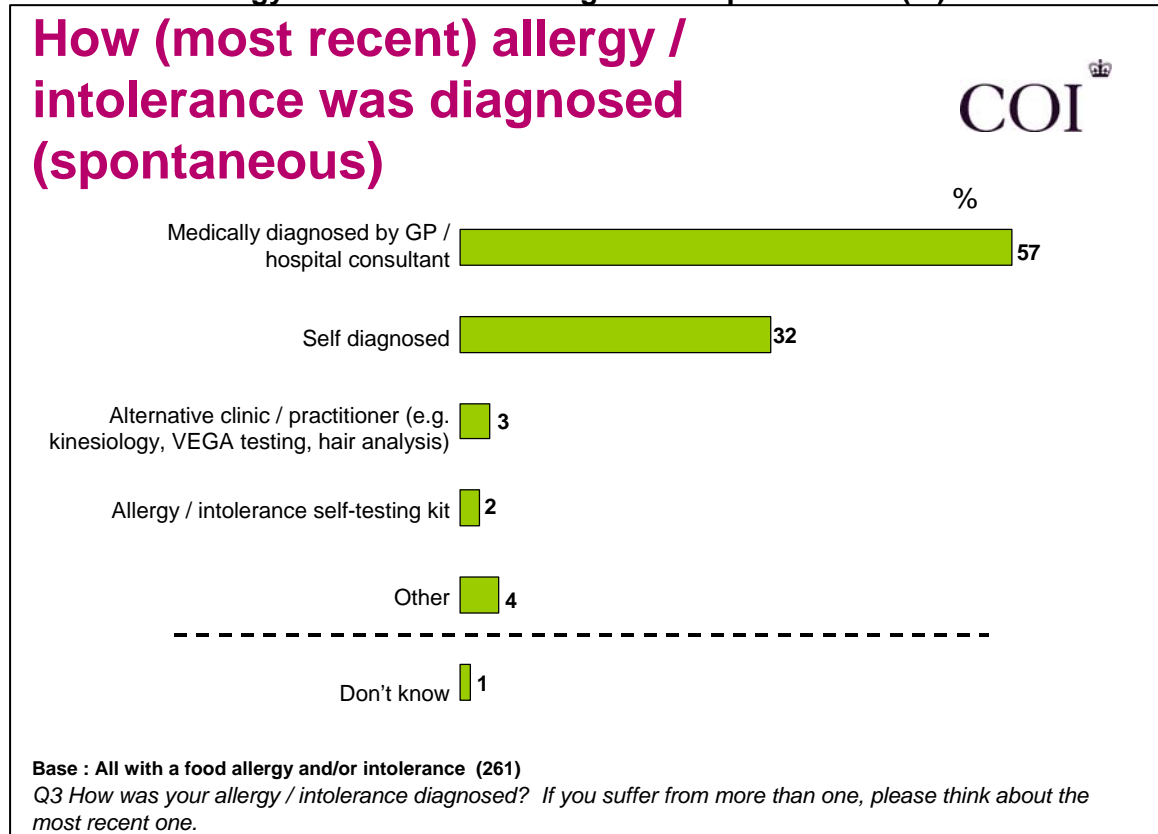
	All	Allergy	Intolerance
Base	246	113	160
Dairy	17	14	19
Nuts (inc peanuts)	14	27	5
Wheat/gluten	13	8	19
Fruit	11	16	9
Caffeine	9	6	10
Sugar	9	1	14
Fish (inc shellfish)	8	11	7
Eggs	7	8	7
Spicy foods	5	2	6

Significant differences between the groups are highlighted

Those who were avoiding foods with wheat and/or gluten were twice as likely to have a food intolerance (19%) as a food allergy (8%), and those who were avoiding sugar almost exclusively suffered from intolerance (14%) rather than an allergy (1%). On the other hand, those who were avoiding nuts were mostly those with an allergy (27%) rather than intolerance (5%).

Respondents who were avoiding certain foods were then asked how their allergy / intolerance was diagnosed, with those who had more than one such condition being asked to think about the one that was diagnosed most recently. Chart 3 shows the results.

Chart 3 How allergy / intolerance was diagnosed - spontaneous (%)



Just over half of those (57%) who were avoiding certain foods had had their allergy / intolerance medically diagnosed by their GP or a hospital consultant, while a third (32%) had self diagnosed their condition. Just 3% were doing so on the advice of an alternative clinic / practitioner and 2% were doing so as a result of a self-testing kit.

Whilst there were no significant differences by age or sex, ABs were more likely (47%) than C1C2s (27%) and DEs (30%) to have self diagnosed their allergy / intolerance to certain foods.

There was also no difference in the method of diagnosis by whether the respondent was avoiding certain foods because of an allergy or intolerance, as shown in Table 4.

Table 4 How allergy / intolerance was diagnosed for those who reported having an allergy in comparison to those who reported having an intolerance (%)

	All with allergy	All with intolerance
Base	113	160
Medically diagnosed by GP	63	54
Self diagnosed	29	34
Alternative clinic	2	5
Self testing kit	2	2

2. Purchase and understanding of products labelled as 'free-from'

All respondents (whether they said they had an allergy / intolerance or not) were next asked how frequently they bought products labelled as 'free-from' particular foods, such as dairy or gluten. Chart 4 shows the results amongst the entire survey population (n=2008) and Chart 5 shows the results amongst those who said they had an allergy/intolerance (n=261) and those who said they did not (n=1747).

Chart 4 Frequency of buying products labelled as 'free-from' particular foods (%)



The majority of respondents (85%) rarely (2%) or never (83%) bought any products labelled as 'free-from', with just 13% doing so at least sometimes. Women were more likely (15%) than men (10%) buy 'free-from' products at least sometimes, while those aged 36 and over were more likely (16%) than those aged 35 and under (10%) to buy such products at least sometimes.

Those living in London and the East of England were more likely (18% and 19% respectively) than average (13%) to purchase these products at least sometimes, which may be related to the finding that these regions were amongst the most likely regions in the UK for respondents to have an allergy and/or intolerance (for more detail refer to Chapter 1). Indeed, as Chart 5 shows (overleaf), those with an intolerance / allergy were more likely (44%) than average (13%) to buy 'free-from' products at least sometimes.

Chart 5 Frequency of buying products labelled as ‘free-from’ particular foods – amongst those who said they had an allergy / intolerance and those who said they did not (%)



Three in ten (31%) of those with an allergy and/or food intolerance said they bought ‘free-from’ products often, with a further 13% doing so sometimes. Around half (51%) of this group said they never bought ‘free-from’ products. By comparison, only 3% of those without an allergy / intolerance often bought ‘free-from’ products, whilst 87% said they never did.

Whilst there was no difference between those with food allergies and those with intolerances per se, the type of allergy / intolerance respondents suffered from did make a difference when it came to how often they purchased ‘free-from’ food products (Table 5).

Table 5 Foods being avoided by likelihood to buy free-from products (%)

	Base	Often	Sometimes	Rarely	Never
All with allergy/intolerance	246	31	13	3	51
Dairy	41*	54	17	-	29
Nuts (inc peanuts)	34*	32	18	6	35
Wheat/gluten	33*	79	12	-	12
Fruit	28*	25	7	4	64

Significant differences between the groups are highlighted

*indicates a low base size.

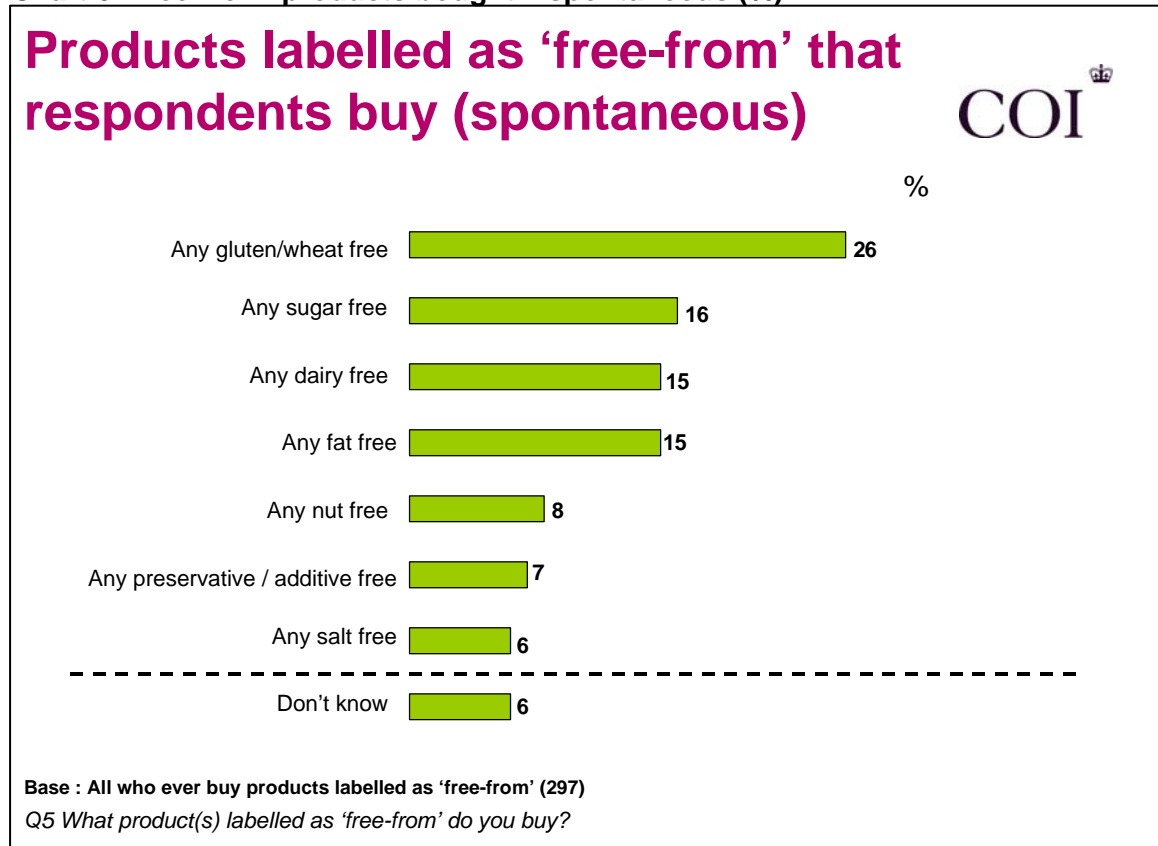
Those who were avoiding wheat / gluten were most likely (91%) to buy 'free from products' at least sometimes, followed by those who were avoiding dairy products (71%) and those who were avoiding nuts (50%).

Those who had had their allergy / intolerance medically diagnosed were more likely (48%) to buy 'free-from' products at least sometimes than those who had self-diagnosed their allergy / intolerance (34%).

There was no difference in how often respondents bought 'free-from' products by social grade.

All who said they bought a 'free-from' product at least rarely (n=297) were also asked what 'free-from' products they bought. Chart 6 shows the main product types spontaneously mentioned by respondents.

Chart 6 'Free-from' products bought – spontaneous (%)



There was a strong correlation between the most commonly mentioned 'free-from' products purchased and the propensity of certain allergy/intolerance sufferers to buy 'free-from' products frequently (which was discussed earlier in this chapter). Those with wheat/gluten, dairy and nut allergies and/or intolerances said they purchased 'free-from' products most regularly, and these types of 'free-from' products were also among the top five products spontaneously mentioned by respondents.

Whilst gluten/wheat was the third most commonly cited food allergy / intolerance (behind dairy and nuts), gluten/wheat free products were by far the most commonly (26%) mentioned 'free-from' products that respondents bought. This reflects the finding that those who were avoiding wheat/gluten were twice as likely (91%) as those with any allergy/intolerance (average = 44%) to buy any 'free-from' product at least sometimes. This group were also more likely to have an intolerance rather than an allergy.

Around one in six of those who bought any 'free-from' product mentioned purchasing a sugar-free product (16%). Since sugar was an allergy / intolerance for just 9% of those with an allergy and/or intolerance, this suggests that perhaps some respondents were buying products that were 'free-from' sugar for reasons other than allergies/intolerances, such as general healthy eating. This can also be seen in the

number of respondents stating that they bought fat, additive, preservative or salt free products.

The third most commonly mentioned products were dairy-free (15%), with dairy being the most commonly reported food allergy / intolerance.

Almost one in ten (8%) of those who ever bought any 'free-from' products said they bought a nut-free product, with those suffering from a nut allergy / intolerance most likely to do so (50%).

Most respondents (63%) bought just one type of 'free-from' product, with those who bought wheat-free and nut-free products being least likely (15% and 22%) to buy any other 'free-from' products as well, and those who bought salt-free and fat-free products being most likely (82% and 48%) to buy other 'free-from' products as well.

Those in social grade AB were more likely (41%) than C1C2s (29%) and DEs (11%) to purchase wheat-free products, whilst DEs were more likely (22%) than ABs (6%) and C1C2s (15%) to say they bought dairy-free products.

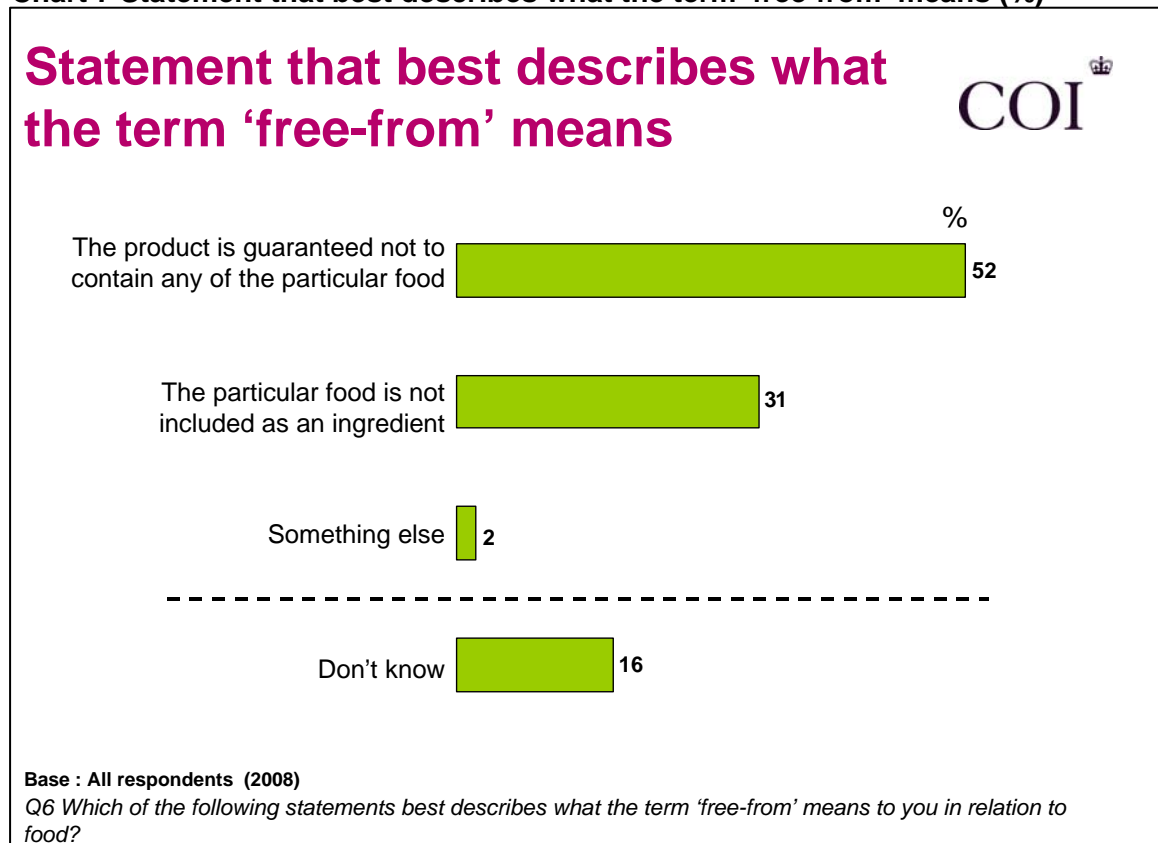
There were no significant differences by sex, age or region.

All respondents were finally asked whether either of the following two statements best described what the term ‘free-from’ means to them (in relation to food), or if they felt something else would describe it better:

- The particular food is not included as an ingredient
- The product is guaranteed not to contain any of the particular food

The two statements were randomised on-screen to remove any order effect.

Chart 7 Statement that best describes what the term ‘free-from’ means (%)



Around half (52%) of respondents said the statement ‘guaranteed not to contain any of the particular food’ best described their understanding of ‘free-from’ food products. Three in ten (31%) said the statement ‘not included as an ingredient’ best described what ‘free-from’ meant to them, whilst 2% said it meant something else. A significant minority (16%) did not know how best to describe what the term ‘free-from’ meant to them, with those aged 66 and over (26%) and DEs (19%) most likely to say this.

Younger respondents (aged 16 to 35) had a different interpretation of the term 'free-from' to those aged 36 to 65, with 16 to 35 year olds more likely to think 'free-from' meant that it was not included as an ingredient (as shown in Table 6).

Table 6 Statement that best describes what the term 'free-from' means by age group (%)

	All	16-25	26-35	36-45	46-55	56-65	66+
Base	2008	317	301	323	289	302	476
Is not included as an ingredient	31	37	35	27	31	27	30
Is guaranteed not to contain any of the particular food	52	48	51	59	54	57	42
Something else	2	#	2	1	3	3	2
Don't Know	16	14	13	13	12	13	26

Significant differences between the groups are highlighted on the table.

indicates a value of >1%

There were no other significant differences by key demographics, and those who had an allergy / intolerance also had a similar opinion on this matter to those without.

As Table 7 shows there were no significant differences in opinion amongst those who bought different 'free-from' products, although those who bought gluten / wheat free products were more likely (66%) than average (52%) to say that 'free-from' meant 'is guaranteed not to contain any of a particular food'.

Table 7 Statement that best describes what the term 'free-from' means by type 'free-from' product respondents' purchased (%)

	All	Gluten/ wheat	Dairy	Nut
Base	2008	69*	51*	24*
Is not included as an ingredient	31	32	38	41
Is guaranteed not to contain any of the particular food	52	66	54	53

* indicates low base size; # indicates a value of >1%

Appendix 1 - Questionnaire

SHOW SCREEN – MULTI-CHOICE (codes 01+02 only)

Q.1 Are you avoiding any foods because of an allergy or intolerance?

01: Yes - due to an allergy

02: Yes - due to an intolerance

03: No

(DK)

(route: ask Q.2 if 01 or 02 coded at Q.1, others go to Q.4)

DO NOT SHOW SCREEN FOR NEXT QUESTION

MULTI CHOICE

Q.2 And which foods are you avoiding because of an allergy or intolerance?

01: Caffeine

02: Dairy products\milk

03: Eggs

04: Fruits

05: Nuts

06: Peanuts

07: Shellfish\fish

08: Soy

09: Wheat\gluten

10: Other (please specify)

(DK)

DO NOT SHOW SCREEN FOR NEXT QUESTION

Q.3 How was your allergy\intolerance diagnosed? If you suffer from more than one allergy/intolerance, please think about the most recent one.

01: Medically diagnosed by GP or hospital consultant

02: Self diagnosed

03: Alternative practitioner\ clinic (e.g. kinesiology, VEGA testing, hair analysis)

04: Allergy\intolerance self testing kit

05: Other (please specify)

(DK)

(ask all)

SHOW SCREEN (do not invert)

Q.4 Do you buy products labelled 'free-from' particular foods, for example 'free-from dairy', 'free-from wheat\gluten' and so on?

01: Yes - often

02: Yes - sometimes

03: Yes - rarely

04: No – never

(DK)

(route: ask Q.5 if 01-03 coded at Q.4, others go to Q.6)

Q.5 What product(s) labelled “free-from” do you buy?

PROBE FULLY

INTERVIEWER: GET AS MUCH DETAIL ON THE PRODUCT(S) MENTIONED AND ASK RESPONDENTS TO CLARIFY FULLY.

(open-ended)

(ask all)

SHOW SCREEN

Q.6 Which of the following statements BEST describes what the term ‘free-from’ means to you in relation to food?

(scripter: randomise codes 01+02)

01: The particular food is not included as an ingredient

02: The product is guaranteed not to contain any of the particular food

03: Something else (please specify)

(DK)

Appendix 2 – Sample Profile (weighted)

	All UK (2000) %
Sex:	
Male	49
Female	52
Age:	
16 - 25	14
26 - 35	18
36 - 49	18
50 - 65	15
66+	35
Social Grade:	
AB	19
C1	28
C2	20
DE	33
Working Status:	
Full-time (30+ hours per week)	38
Part-time (8 - 29 hrs. per wk.)	10
Part-time (under 8 hrs. per wk.)	1
Retired	25
Still at school	1
In full-time higher education	5
Unemployed (seeking work)	5
Not in paid employment (not seeking work)	15
Government Region:	
North East	5
North West	10
Yorkshire & Humber	9
East Midlands	8
West Midlands	8
East of England	10
London	13
South East	14
South West	7
Wales	4
Scotland	8
Northern Ireland	3

Appendix 3 – Differences in Government Regions

**Table A by Whether avoiding any foods due to an allergy and/or intolerance
Government region (%)**

	Base	Yes, due to allergy	Yes, due to intolerance	None
North East	108*	4	9	86
North West	199	4	9	87
Yorkshire & Humberside	189	9	5	86
East Midlands	154	4	7	89
West Midlands	158	5	3	92
East of England	205	5	11	85
London	266	8	6	86
South East	278	5	7	88
South West	142	4	14	83
England	1699	6	8	87
Wales	76*	3	8	89
Scotland	167	2	7	89
Northern Ireland	58*	2	7	92

**Small base size; Significant differences between the groups are highlighted on the table.*