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Administrative Information

Project commissioned by: Contractor:

The Food Standards Agency The Anaphylaxis Campaign

Aviation House PO Box 275
125 Kingsway Farnborough
London WC2B 6NH GU14 6SX

Tel: 01252 542029

Project Officer: Dionne Davey www.anaphylaxis.org.uk

Chemical Safety and Toxicology Division

www.food.gov.uk Sub-contractor:

Hazel Gowland Allergy Action

23 Charmouth Road

St Albans AL1 4RS

Tel: 01727 855294

hazel@allergyaction.org

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Summary

Consumers who are allergic to nuts and peanuts need to avoid them as ingredients. They also need to avoid other foods which may carry a risk of trace contamination because they have not been segregated from these allergens during manufacture. Anecdotal indications suggest that such consumers take longer to shop, find it difficult to locate, read and believe nut trace contamination information, may have to pay more for their food and have a restricted choice. This shopping basket comparison was carried out to find out whether such anecdotal indications were supported by evidence from buying and examining pre-packed food products in supermarkets.

The study aimed to:

Focus on nut trace contamination (NTC) labelling

Nuts and peanuts are recognised as the most likely food allergens to trigger serious allergic symptoms. UK manufacturers and retailers who know this may indicate their presence on the packet.

Determine the prevalence of such labelling

In a basket of everyday food items (selected because they do not normally contain nuts as ingredients), 56% indicated a risk of nut trace contamination (71/127 items). The study indicated that nut allergic* consumers are unable to buy a match or substitute for 18% of the items listed. In addition, in many cases, they are forced to accept a substitute or poorer quality product (9%). They take 39% longer to shop and pay 11% more on average.

Examine the variety and style of such labelling

On products examined, ingredient information was allocated an average of 2.6% of the packaging area. Additional allergen information covered an average of 0.53%. Long-established industry guidelines to make labelling clear are often ignored. 37% of all products examined (95/254) had key information in poor colour combinations. There is little consistency in labelling style between different retailers or manufacturers. These and other factors make it very difficult for allergic consumers to find and read essential information.

Report on current practice

Biscuits, cereals and confectionery are most commonly cited by nut allergic consumers as those products that are hard to find without nut trace contamination information. Packaging examined often displayed nut trace contamination information which was not always noticed by the shoppers or sorters. Similar allergen warnings on a variety of products may reflect very different degrees of risk to the allergic consumer.

^{*}For the purposes of this report any reference to nut allergic includes peanut (groundnut) as well as the tree nuts (hazelnuts, brazil, walnuts etc)

There is confusion among consumers over the status of sesame and coconut as nuts for labelling purposes.

Comment on the allergen risk assessment, management, and communication of different manufacturers and retailers

Some manufacturers and retailers are identifying the risk of nut trace contamination for the first time, and beginning to use warning labels. Others have recognised the problems for allergic consumers and are keen to find 'nut free' suppliers and remove NTC labels.

Make recommendations

Key recommendations include improved labelling of all ingredients on all foods, clearer allergen information, and support for manufacturers who are determined to remove nuts from their production. In addition it is important to undertake regular reviews of the quality and legibility of all essential information on pre-packed foods. It is important that this work is linked into parallel Food Standards Agency activities.



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Introduction

Background

It has been calculated that the prevalence of adverse reactions to food and food ingredients is 1.4-1.8%. Most adverse reactions to foodstuffs are to natural foods rather than to synthetic additives and contaminants, the prevalence of which is about 0.3%. The prevalence of allergy to food and ingredients is estimated to be up to 8% in infants and young children. Anecdotal evidence suggests that the largest number of people at risk of severe allergic reactions react to peanuts and tree nuts; therefore this work is focused primarily on nut and peanut trace contamination.

The Food Standards Agency

The Anaphylaxis Campaign is a UK-wide registered charity set up to support those at risk from potentially fatal food allergies. It now has nearly 7000 members. Since its foundation in 1994, there has been an enormous increase in awareness of such allergies, and significant Campaign initiatives have been undertaken to improve food information and to support those at risk. These have included work with Ministry of Agriculture, Fisheries and Food (MAFF), the Department of Health, and now with the Food Standards Agency. Additional independent projects with individual food manufacturers, retailers and catering businesses, work with professional bodies to draw up industry codes of practice and guidelines, on-site training and risk assessment, and other initiatives have also aimed to assess, manage and communicate allergen risks and improve the food choices for allergic people.

Food allergic consumers who have consumed or even had contact with the tiniest trace of an allergen to which they have been sensitised may experience unpredictable symptoms which could lead to life-threatening asthma or anaphylaxis. In the absence of any appropriate preventative therapy, those who are aware that they are at risk are required to carry out vigilant allergen avoidance. There are over 170 recorded trigger allergens but the most common include peanuts, tree nuts, sesame, cows' milk, eggs, fish, shellfish, wheat and soya. Over 90% of the Anaphylaxis Campaign's members have an allergy to peanuts and/or tree nuts.

It is likely that one child in 100 may suffer allergic symptoms to peanuts which could become potentially life-threatening⁽¹⁾. In most cases the allergy will last into adulthood, and the person would be advised to avoid all contact with tree nuts (hazelnuts, brazils, walnuts etc). Most families with a nut allergic child will avoid nuts and peanuts, both as ingredients and as trace contaminants. Other people with whom they share food will also be encouraged to avoid them. This may well include

school meals, packed lunches, eating out, group outings and holidays, sport and leisure activities. In practice, this means that thousands of people caring for children are trying to buy everyday foods that are suitable for nut allergic people. The Anaphylaxis Campaign has heard of families which do not have a nut or peanut allergic child, but in which all contact with nuts and peanuts is avoided 'just in case'. In addition, many families have to avoid other allergens which trigger symptoms in their children such as egg, cows' milk, soya and sesame. Finding foods without allergens to which their child is allergic is frequently described as a nightmare.

The Government has long recognised many of the issues relating to trace contamination by allergens. In the past both MAFF and the Department of Health, and now the Food Standards Agency have worked closely with the Anaphylaxis Campaign. All are increasingly aware of many of the issues facing allergic consumers.

In recent years, food manufacturers and retailers have responded to the wider identification of this risk and its increased prevalence by assessing, managing and communicating it on a wide range of pre-packed and other products. This has led to the use of allergen labelling eg "May contain traces of nuts." In the early days, such labelling was considered responsible and helpful to allergic consumers, but as the range and number of products labelled in this way increased, consumers began to question whether the food suppliers were using it defensively "to cover their backs." The use of NTC information on apparently unrelated products such as pre-packed salads, boiled sweets, tomato sauces and many other items, has led to the devaluation of its message. If the majority of an ordinary product range on supermarket shelves (eg biscuits, cereals, confectionery) carries such warnings, it is easy to understand why people disbelieve them.

The Anaphylaxis Campaign recognises the particular risks for allergic teenagers and young adults and supports them through specialist workshops. These offer the opportunity to discuss their consumer behaviour and allergen avoidance strategies. Many openly declare that they disregard allergen trace contamination information on products. They cannot believe that such a huge proportion of food products on sale may put their lives at risk, and many are cynical about the reasons behind their use. In addition, they point out that if a risk were serious, it would have to take up more space on the packet and be much easier to find and read.

The legibility of allergen warnings has been compared with that of cigarette health warnings which, by law, have to take up a significant proportion of the pack surface. The UK is about to introduce new requirements for health warnings on tobacco products. A new EU Labelling Directive (Directive 2001/37/EC) lays down new specifications for the size, layout, positioning and text of health warnings. This will come into effect on September 30th 2002. Under the new Directive all

cigarette packets will have to carry a warning saying either 'Smoking kills' or 'Smoking seriously harms you and others around you'. This must cover 30% of the front panel. On the back of the pack there will be an additional warning which can be selected from a list of 14 options. This warning must cover 40% of the back panel. The purpose of these warnings is to prevent ill-health and, in the longer term, death unlike allergen information which may prevent death within minutes. Thousands of people need accurate and clear information about food ingredients every day, to prevent symptoms which are often unpleasant, and in some cases very dangerous, and yet the information available to them is often hard to find and hard to read.

The Food Standards Agency and the Anaphylaxis Campaign have both received complaints and reports of the perceived increase in the use and quality of allergen labelling, particularly with reference to nuts and peanuts. Consumers wonder whether manufacturers and retailers are using them **before** undertaking a careful risk assessment.

The Anaphylaxis Campaign is now considered a UK-wide authority on managing allergen risk and receives a constant flow of enquiries from allergic consumers, and food professionals representing all points of an increasingly complex food supply chain.

This initiative was devised to give an immediate overview of the current use of NTC information on pre-packed foods. Its main purpose was to examine the choice of foods and information available to the nut allergic consumer.

The Food Standards Agency's brief was to:

- Focus on nut trace contamination labelling
- Determine the prevalence of such labelling
- Examine the variety and style of such labelling
- Report on current practice
- Comment on the allergen risk assessment, management, and communication of different manufacturers and retailers
- Make recommendations

Initial research was carried out through the following activities:

- Activity A: Parallel Shopping Baskets
- Activity B: Labelling Assessment
- Activity C: Labelling Audit

The report includes the following sections:

- D: Review of recent Anaphylaxis Campaign NTC labelling enquiries
- E: Review of current allergen labelling practice on pre-packed foods

Conclusions

Recommendations

Activity A: Parallel shopping baskets

Objective:

The purpose of this activity was to compare the available consumer choice, time and cost of a shopping basket of everyday items for a nut allergic consumer with one for a non-nut allergic consumer.

A:1 Buying the food products

Methodology

Shoppers were commissioned to visit 8 retailers to purchase a defined list of items. Shoppers made two consecutive trips per store, the first to purchase goods for a non-nut allergic consumer (control). On the second shopping trip, the shoppers were asked to buy the same items for a nut allergic person, only making an alternative choice if they considered the original items unsuitable for a nut allergic consumer.

The shoppers were asked to buy 16 pre-packed own brand items from a set list. The items were selected on the basis of being everyday items for an average consumer, none of which usually contain nuts or peanuts as ingredients. Shoppers were given suggested acceptable alternatives and asked only to buy a branded item when an own brand item was not available. The time, cost and selection of items were recorded for each of the visits to the store. The shoppers were encouraged to use all information resources available in the store including labelling, shelf edge notices, signage and asking staff if necessary.

The retailers visited in this survey were ASDA, the Co-op, Iceland, Marks and Spencer, Safeway, Sainsbury's, Tesco and Waitrose. All the branches visited were in mid-Hertfordshire. Some were on major out of town sites, whilst others were in the town centre, or on local estates.

At the end of the research period, an additional brand label shopping trip was undertaken. This enabled a labelling comparison between brand leaders and own brand items produced for individual retailers. Some were chosen according to the Grocer Magazine Annual Review (Class of 2001)⁽²⁾.

The Shopping Trips

The shopping trips took place during the day on a weekday when stores were more likely to be properly stocked but not too busy. The shoppers were chosen because they do not usually shop for an allergic person, and

were unfamiliar with the store. For practical convenience, it was decided that the same shopper should make both the first and second trips to one store. This had the disadvantage that they were more familiar with the store during the second trip and they may have taken less time. The advantage to this was that their shopping choices in the control and 'suitable for a nut allergic person' baskets were more consistent. This enabled a closer comparison of consumer choices (control and nut allergic) for later activities. The time taken to select the items was recorded. This did not include time spent at check-out, queuing or paying for the goods.

Instructions to shoppers:

Shopping Survey

- 1. Please select the following articles in the store
- 2. Please buy the store's own brand when you can
- 3. Please use any information available, on the shelf, on the label, from signs or from staff in the store
- 4. The time taken to select the goods is important
- 5. If the first choice is not available, please select the second choice. If that is not available, use your discretion and buy what you would choose for a friend.

Choosing the items for the Shopping List

The items on the list were chosen for the following reasons:

- They do not conventionally contain nuts or peanuts
- They are everyday items
- Many are regularly eaten by children
- They are commonly consumed and widely available even in local or smaller stores. (In fact only one of the control baskets from the first shopping trips had an item missing. This was a sandwich.)
- Anaphylaxis Campaign members frequently complain of difficulty in finding these items without NTC labelling
- There is also the perception that many of these items have NTC warning labelling which is used inconsistently

- They include chilled, frozen and canned items, and are sold in a wide range of packaging materials
- Some of them reflect the trend towards ready meals and convenience foods

Many allergic consumers report difficulty finding bread and other bakery products without a nut contamination risk. The Anaphylaxis Campaign and many retailers have recognised that the risk of cross-contamination in in-store and local bakeries is quite high, and nut and sesame allergic consumers are advised to avoid them. This restricts their choice to factory-packed bakery items. These do not usually carry NTC information and have not been included in this work. Pre-packed currant buns were included as representative factory-baked items.

The Shopping List:

Please buy the store's own brand

- 1. Tin Chicken Curry (plainest available) c400g
- 2. Smallest available pack of rice crisp cereal (2nd choice cornflakes)
- 3. Smallest available pack of Bran flakes
- 4. Packet of cream crackers
- 5. Bar of milk chocolate c200g
- 6. Box of 6 apple pies (2nd choice other fruit pies)
- 7. Small pot of coleslaw plain version
- 8. Bag of fruit jelly sweets (2nd choice fruit pastilles or similar)
- 9. Smallest available pack of bourbon (chocolate sandwich) biscuits
- 10. Jar of pasta sauce (plainest tomato version)
- 11. Fresh cheese and tomato quiche (6-7 inch) (2nd choice Quiche Lorraine or vegetable)
- 12. Frozen Chinese meal for one (sweet and sour chicken or pork) (2nd choice chop suey)
- 13. Fresh plainest egg sandwich (2nd choice fresh plainest cheese sandwich)
- 14. Pre-packed packet of currant buns (2nd choice fruit teacakes)
- 15. Box of frozen milk choc ices (2nd choice plain or white choc)
- 16. Smallest available pack of chocolate covered wrapped biscuits eg sandwich or wafer (Store's own 'penguins' or similar)

A:2 Recording the food products

Once the items were purchased, they were coded, labelled and stored. Packaging was removed from perishable items. All purchases were recorded on a master log. Each item was decided to be a **match** as described on the shopping list or a **substitute**. Items which were not available were recorded as **no shows**. There was 1/128 items missing from the control basket selection, and 23/128 missing from the nut allergic consumer's basket. This was because the shoppers were unable to find a match or a substitute. Prices were recorded from receipts, and weights / quantities noted.

TABLE 1: CONSUMER CHOICES Differences between control and nut allergic consumer's shop		
	Control basket	Nut allergic consumer's basket
Matches	119	93
Substitutes	8	12
No shows	1	23
Total items bought	127/128	105/128
(Set list of 16 items/8	3 shops)	

The items most frequently substituted included bourbons which were replaced by chocolate digestives, cereals (by other cereal types), curries and Chinese meals with different meats from those specified, or in some cases no meat content at all, and other types of quiche. This is exactly what happens when allergic consumers shop. In many cases, the switch to a substitute (without NTC labelling) takes place automatically; the shopper is reluctantly resigned to the restricted choices available.

The items most frequently recorded as 'no shows' were the egg sandwich, the coleslaw and the tin of curry. In Marks and Spencer where all items are 'own brand', there were three substitutes and six items missing from the basket for the nut allergic person. In other stores, the shoppers had to buy branded items. In the smallest store (Co-op) there were two substitutes and six items missing. It is likely that restricted shelf space in local stores limits the available mix of branded and own brand items.

TABLE 2: TIME Differences between control shop and nut allergic consumer's shop			
	Control basket	Nut allergic consumer's basket	
Total time	145 minutes	167 minutes	
Total number of item purchased	ns 127	105	
For 16 items			
Maximum visit time	25 minutes	40 minutes	
Minimum visit time	11 minutes	18 minutes	
Average time per visi	t 18 minutes	25 minutes	

TABLE 3: COST Differences between control shop and nut allergic consumer's shop			
	Control Shop	Nut Allergic Consumer's Shop	
ITEM	AVERAGE PRICE £	AVERAGE PRICE £	
1. Tin Curry	1.57	1.46	
2. Rice cereal	1.15	1.24	
3. Bran Flakes	1.23	1.47	
4. Cream Crackers	0.40	0.46	
5. Milk Chocolate	0.75	0.74	
6. Apple pies	0.85	0.67	
7. Coleslaw	0.52	0.65	
8. Fruit jelly sweets	0.75	0.87	
9. Bourbon biscuits	0.53	0.64	
10. Pasta sauce	0.92	1.15	
11. Quiche	1.87	2.00	
12. Chinese meal	2.00	1.63	
13. Sandwich	1.19	1.48	
14. Currant buns	0.69	0.82	
15. Choc ices	0.99	1.95	
16. Chocolate biscui	ts 0.74	0.73	
Total price	£16.15	£17.96	

The shoppers reported that they obtained allergen information on allergen information from the packaging. However on occasions they did have to check with in-store staff whether bakery items in particular were pre-packed (ie made in a factory) or made in store.

Conclusion

Consumer Choices

When shopping for a nut allergic consumer, the choice of everyday items was restricted. Only 73% (93/128) of items were available to a nut allergic person, compared with 93% (119/128) for the control consumers. In addition, the nut allergic consumer missed out on 18% (23/128) of items from the list when a match or substitute were not available. It is worth remembering that the items listed do not usually contain nuts as ingredients and that many are often consumed by families with children.

Time

The shoppers made two consecutive visits to each store. The shopper may have become more familiar with the store layout during the second visit which would reduce shopping time. However, the amount of time taken to buy items for the nut allergic consumer was greater. Allowing an average of the time taken to buy each item, the control shop took 18 minutes, whilst the nut allergic consumer's shop took over 25 minutes (39% longer).

Cost

The average cost of the control basket was £16.15, whilst the basket for the nut allergic consumer cost £17.96 (11% more). It is worth noting that items were sometimes cheaper in the nut allergic consumer's basket. This was because the shoppers chose items such as apple pies or currant buns from economy lines which carried no NTC labelling. This may have been because a factory risk assessment had indicated no need to use NTC labelling. Sometimes economy lines are less likely to have come into contact with relatively expensive ingredients such as nuts. In these cases, the cost to the allergic consumer is not in money but in choice and quality.

Activity B: Labelling Assessment

Objectives

The objective was to assess how much of the packaging area was used for total ingredients and for allergen information. The labelling was also assessed against recognised criteria for assessing legibility and providing consumer information.

B:1 Measuring the packaging area and the percentage used for ingredient and allergen information

Methodology

This activity involved a detailed analysis of each item purchased in the survey (254 items including the additional brand label products). The proportion of the packaging area available for labelling and used to declare ingredients were measured and recorded. Any additional area dedicated to allergen declarations (both as ingredients and as NTC information) was also measured and calculated as a percentage of the total package area. Advice for consumers with food intolerances and coeliac disease was counted as allergen information.

TABLE 4: Table to show the proportion of the packaging dedicated to ingredient and allergen (including NTC labelling) as a percentage of the total surface area available			
Packaging area available for	Average	Maximum	Minimum
	%	%	%
Ingredients (254)	2.60	12.50	0.25
Allergens (140)	0.53	4.08	0.02

The space dedicated to ingredients is a critical starting point for all consumer allergen risk assessment decisions. Ingredients information is allocated on average 2.6% of the packaging area, and additional allergen information 0.53%. On a smaller packet, this is hard to read, and on a larger packet, it is hard to find. In a number of cases, the area dedicated to both ingredients and/or allergens listing was very small. On larger packets in particular, it often represented a relatively small fraction of

the available surface (eg 0.04% on a packet of bran flakes). It is often very difficult to find the ingredients on a larger packet, and manufacturers and retailers rarely make good use of the space available to make ingredients or allergen information more easy to find or legible. It is not therefore surprising that people take 39% longer to shop for nut allergic consumers.

Although some products did not have NTC or allergen labelling, information about individual ingredients was hard to find and difficult to read. It must be remembered that shoppers who are trying to find out whether a product is 'safe' for an allergic consumer still have to work through all the ingredients on all products.

B:2 Devising an assessment scheme and recording the labelling attributes for all items

Methodology

The next activity was to make an objective assessment of the attributes of labelling on all 254 items.

The Assessment Scheme

The assessment scheme was devised using a number of key sources including the Institute of Food Science and Technology Good Manufacturing Practice (GMP) guidelines for food manufacturers dealing with allergens⁽³⁾, guidance from the Royal National Institute for the Blind to support customers with sight problems⁽⁴⁾, Voluntary Labelling Guidelines from the Institute of Grocery Distribution⁽⁵⁾, papers by Dr Sue Hefle and Dr Steve Taylor in the Leatherhead Food Allergy and Intolerance Journal⁽⁶⁾ and the Food Standards Agency's Clear Labelling Task Force recommendations⁽⁷⁾.

"Food-allergic consumers should and do use the information on the package label as their primary source of information..."

"First and foremost, the ingredients statement should ideally contain all information that would be beneficial to allergic consumers."

Dr Steve Taylor and Dr Sue Hefle 2001

"The presence or potential presence of a major serious allergen should be separately stated, in a prominent and easily legible way, where it will clearly be seen by a potential purchaser under normal conditions of display."

> Institute of Food Science and Technology Good Manufacturing Practice 1998

Food Standards Agency Clear Labelling Task Force Recommendations on Ideal Label Formats 2002 (Guidelines for the industry)

"Do not hide, obscure or interrupt product information with any other written or pictorial matter. Make sure that all product information is easily visible and clearly legible."

"Ideally use a font size of 10 point for the essential information." (eg ingredients)

"Metallic and shiny surfaces make reading difficult. Try to use a matt-finish printing surface."

"Simple icons can help direct consumers to information." ("signposting".)

"Avoid 'reversing-out'. In any event, only use it for white type on a black background."

"Only use italics for isolated words – Do not use them for large blocks of text, or for small font sizes."

"Adopt a consistent format when presenting information on a range of products to make it easier for consumers to identify and locate."

"Do not use all upper-case letters or underlining for emphasis."

The Institute of Grocery Distribution recommends communication:

"To emphasise the need for a thorough HACCP-based evaluation of the possible unintentional presence of traces of peanuts or tree nuts, and the need for operating a system of GMP to minimise, and ideally to eliminate, the unintentional presence of these foods."

And offers the following recommendation:

Advisory (allergen) labelling should, wherever possible, appear as a separate line immediately below the list of ingredients and in the same field of vision. It should be at least the same print size as that used for ingredients.

Voluntary Labelling Guidelines 2000

The RNIB guidelines include the following recommendations:

- "The size of the type significantly affects its legibility
- A minimum of 12 point should be used
- The choice of typeface is less important than size and contrast
- Avoid italic typefaces
- People with sight problems often prefer bold (type weights)
- The spacing between one line and the next (known as leading) is important
- The contrast between the background and the type is also extremely important. Contrast will be affected by the size and weight of the type
- Avoid glossy paper because glare makes it difficult to read
- When folding paper, avoid creases which obscure the text."

The RNIB also point out that there are 1.7 million blind and partially-sighted people in the UK. It is likely that some of them are consumers who need allergen and other ingredients information.

TABLE 5: Labelling attributes by percentage			
PRODUCTS IN CONTROL BASKET (127/254)	Number 127	%	
Product in control basket has NTC information	71	56	
Use of symbol for NTC	6	5	
PRODUCTS WITH ALLERGEN INFORMATION (140/254)	Number 140		
Allergen Information in same line of vision as ingredients	124	89	
Allergen Information in allergen box	65	46	
Allergen information in 12 point font or more	7	5	
Allergens in Bold in ingredients list	3	2	
Use of consistent style for allergens eg Warning exclamation mark	or 77	55	
Allergen information upper case	77	55	
ALL PRODUCTS (254)	Number 254		
Ingredients in mixed upper and lower case	201	79	
Ingredients in 12 point font or more	6	2	
Use of black / dark on white / pale	149	59	
Ingredients upper case	53	21	
Paper shiny / creasable	103	41	
Ingredients or NTC information under flap	9	4	
Light blue on white text	18	7	
Other hard to read colour combination	77	30	
Typeface italic	31	12	
Reversed text eg white on colour	48	19	
Multilingual	25	10	

- More than half of the products purchased carried some kind of allergen information or advice (140/254).
- Over half (56%) of the control basket items had NTC labelling (71/127).
- 5% had a special symbol to indicate the NTC information.
- 11% of the products carrying allergen information displayed it in a separate field of vision from the ingredients list. This makes it very difficult to find and contravenes the industry guidelines above.
- Only 2% of allergens were picked out in bold text in the ingredients list

Information was often presented in upper-case fonts, which is particularly hard to read when used in a continuous multilingual line in a tiny font on such items as ice creams and confectionery, particularly in dark brown on a mid-brown background. Although the majority of products used dark on white/pale, mixed upper and lower case lettering for ingredients and allergen information in the same field of vision as ingredients, ingredients font sizes were often tiny and hard to read. Over a third of products (95/254) had ingredients information in poor colour combinations. 41% of products were presented in packaging which was shiny or creasable. This can be very hard to read in normal supermarket lighting.

Conclusion

Whilst the own brand products demonstrated some consistency of ingredient and allergen information within each supermarket chain, the information was often hard to find and harder to read. Although the Food Standards Agency Clear Labelling Task Force recommendations were not published in time to have had an impact on the items examined, other long-standing sources of guidance have clearly been ignored. The Institute of Food Science and Technology principle that the presence or potential presence of an allergen should be stated "in a prominent and easily legible way" is not always implemented in practice. It is also apparent that implementing the Task Force recommendations, will make an enormous difference in supporting the informed food choices of all those who need to avoid allergens and other ingredients for health reasons and personal choice.

Activity C: Labelling Audit

Objective

The purpose of this activity was to find out how easy it is for consumers to identify products for a nut allergic person. A control basket from each retailer was examined by an independent consumer after selection.

Methodology

The control basket from each retailer was included in this assessment. The labels for all 127 items were carefully examined and a note made of whether they carried NTC information eg "May contain nut traces" or "Produced in a factory where nuts are used." Other allergens such as sesame, and coconut (which rarely trigger allergic symptoms in nut allergic people) were not counted as nuts. The products were recorded accordingly.

Ten sorters carried out this exercise. They were not the same people as the shoppers. 1/10 was used to shopping for a nut allergic person and 1/10 was used to looking for information about cows' milk.

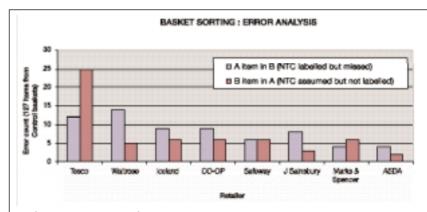
All eight control selections were used for this activity. The sorters were asked to divide the goods from each retailer's basket in turn into two boxes, which were labelled as "Not suitable for a nut allergic person" or "Suitable for a nut allergic person". The time taken was recorded, as were the different choices of each sorter.

The sorters' choices were matched against the actual pre-assessed NTC status. This enabled a precise assessment of whether they had noticed NTC information on each product.

Results

A number of sorters placed a suitable item into the box labelled "Not suitable for a nut allergic person". It is possible that they considered the product likely to have some NTC risk, even if it was undeclared. They may have misread an ingredient or counted sesame or coconut as a nut. (If they asked, they were advised not to count them as nuts.)

This decision would reduce the choice to nut allergic consumers, but would not put them at risk. On the other hand, sorters also missed NTC labelling and put unsuitable items in the suitable box. Such decisions would put nut allergic consumers at risk.



Basket Sorting: Error Analysis Notes

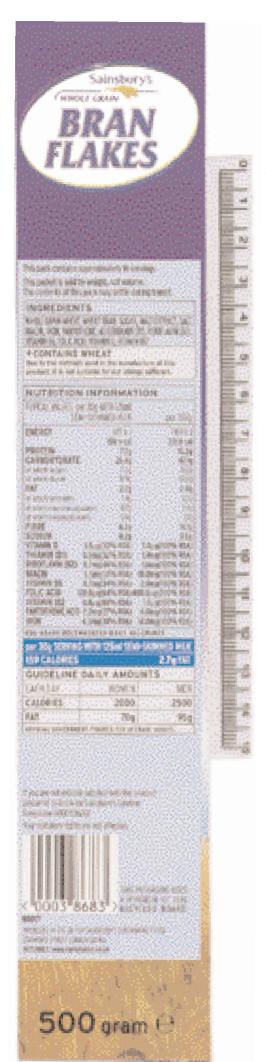
66 selections put an 'A' item (NTC labelled) into the 'B' box (Suitable for a person with a nut allergy)

59 selections put a $^\prime\!B^\prime$ item (not NTC labelled) into the $^\prime\!A^\prime$ box (Not suitable for a person with a nut allergy)

10 people sorting items from 8 baskets (control selections from each of 8 retailers) containing 16 items (except there were only 15 items in the Iceland selection) = $127 \times 10 = 1270$ selections.

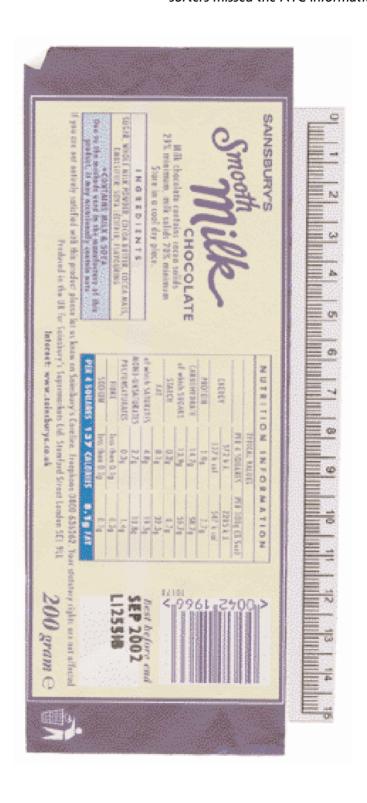
Labelling examples

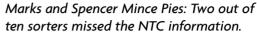
Samples of NTC labels for each retailer most frequently missed by sorters in Activity C are included on the following pages. It must be remembered that the sorters had to examine the whole item and find the ingredients and allergen information. All of the sorters made some errors, and all retailers had products on which NTC labelling was missed. The products most likely to have NTC labelling which were missed included the packets of wrapped chocolate biscuits, the own brand bran cereals and the chocolate bars. Additional examples of branded labelling have also been included for comparison.

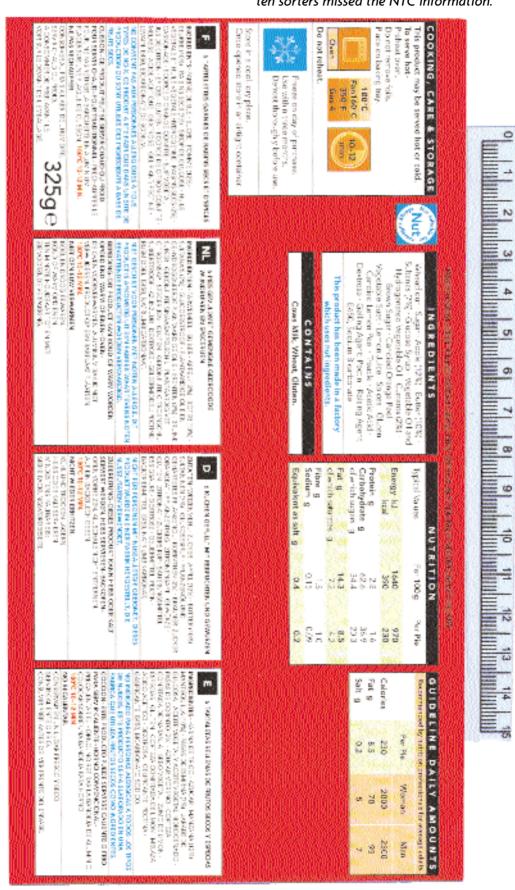


Sainsbury's Bran Flakes: Three out of ten sorters missed the NTC information.

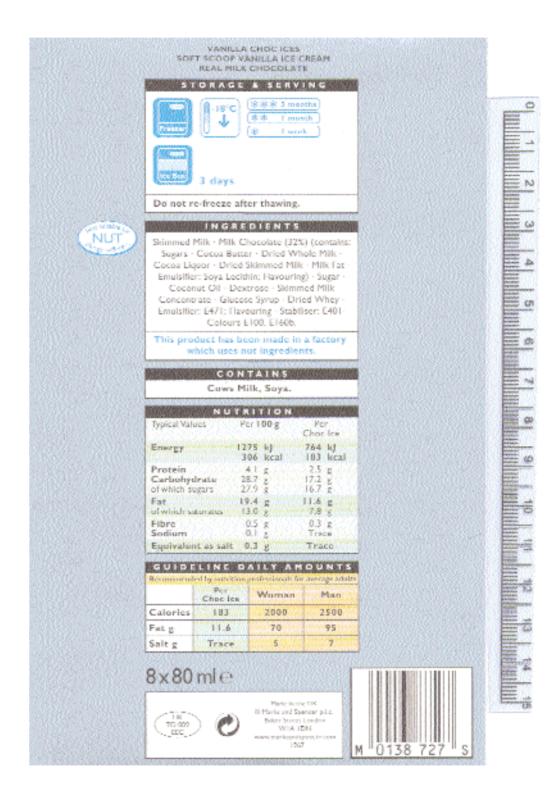


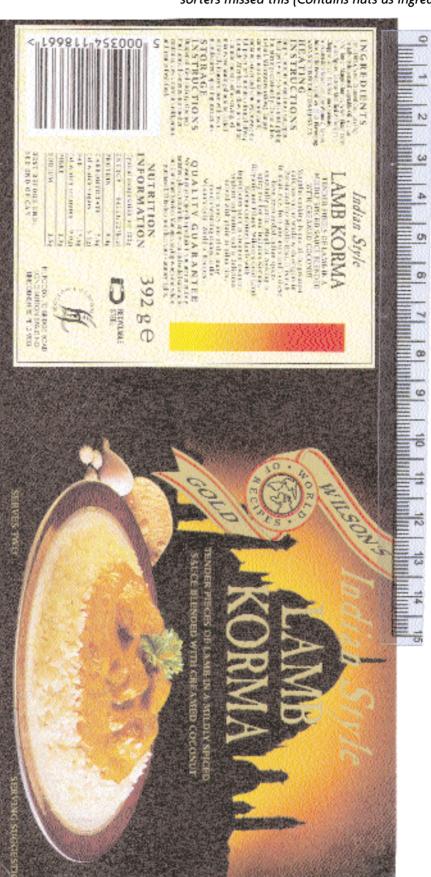






Marks and Spencer Choc Ices: One out of ten sorters missed the NTC information.





Wilson's Lamb Korma Curry: Two out of ten sorters missed this (Contains nuts as ingredients)



Waitrose Chocolate Biscuits: Two out of ten sorters missed the NTC information.

Waitrose Fruit Jellies: Sorters were unsure whether coconut traces counted as nuts.



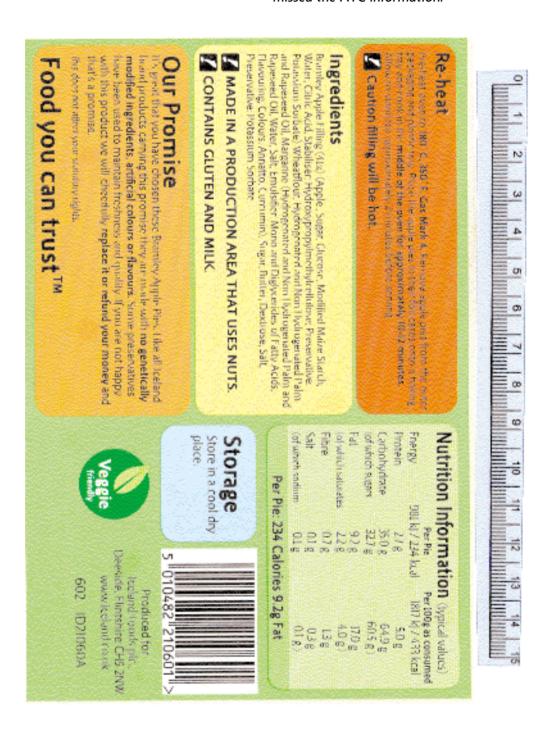






Iceland Wholewheat Bisk Cereal: Two out of ten sorters missed the NTC information.

Iceland Apple Pies: One out of ten sorters missed the NTC information.



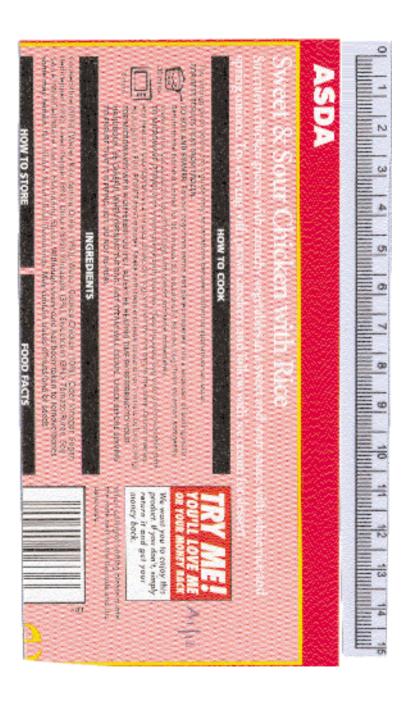


Safeway Cream Crackers: Three out of ten sorters missed the NTC information.

Safeway Chinese meal: One out of ten sorters missed the NTC information.

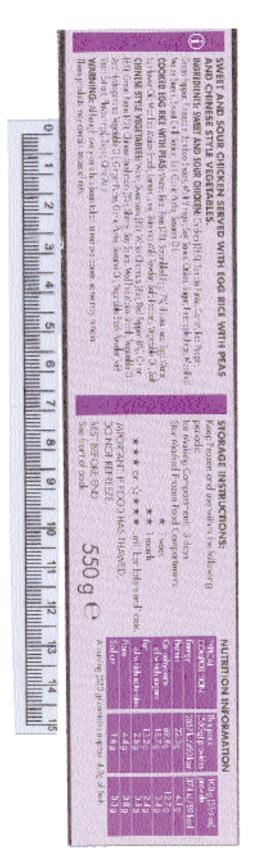


ASDA Chinese Meal: Two out of ten sorters missed the NTC information.



ASDA Bourbon Creams: One out of ten sorters missed the NTC information.



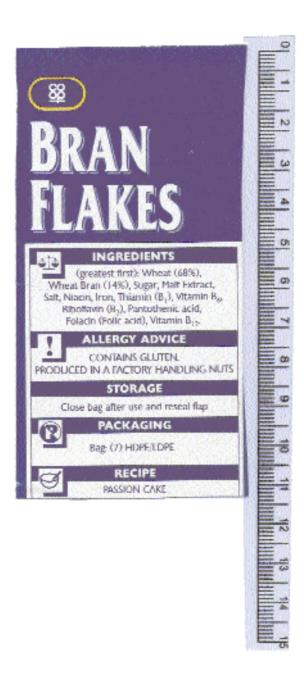


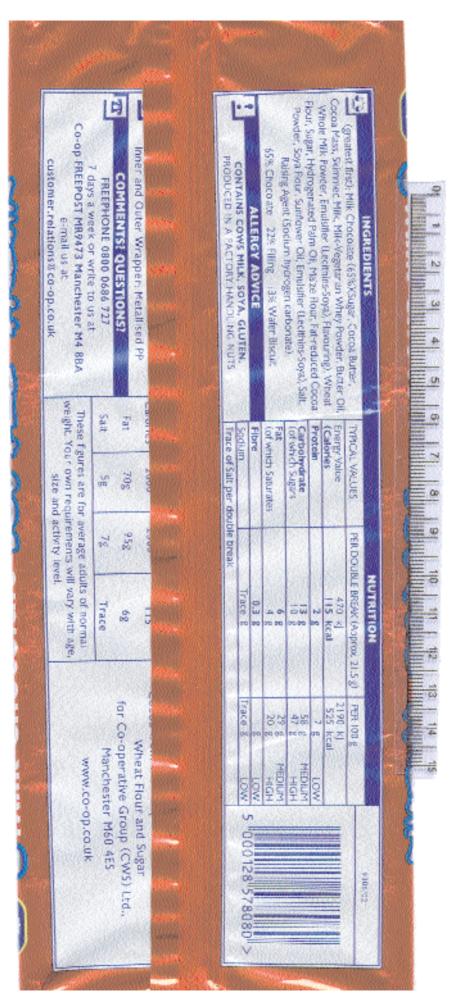
Tesco Chinese meal for one: Three out of ten sorters missed the NTC information.

Tesco Milk Chocolate: One out of ten sorters missed the NTC information.



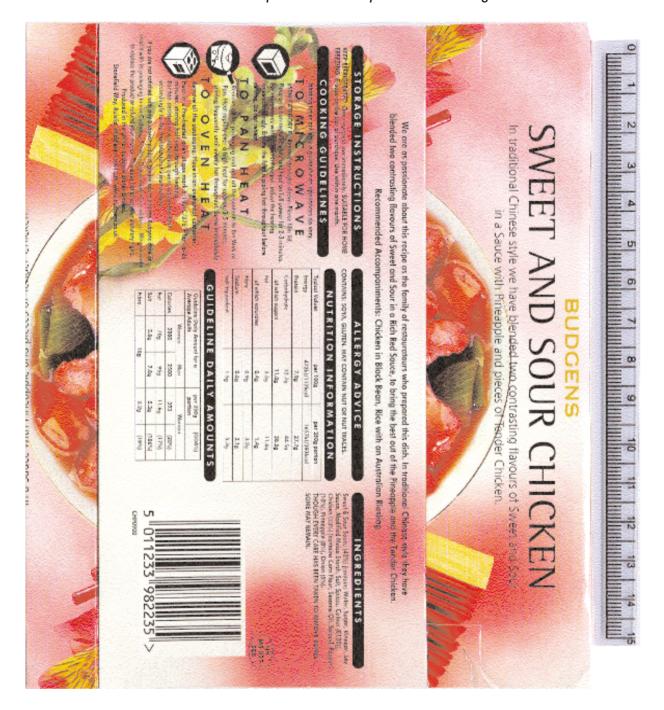
Co-op Bran Flakes: Two out of ten sorters missed the NTC information.



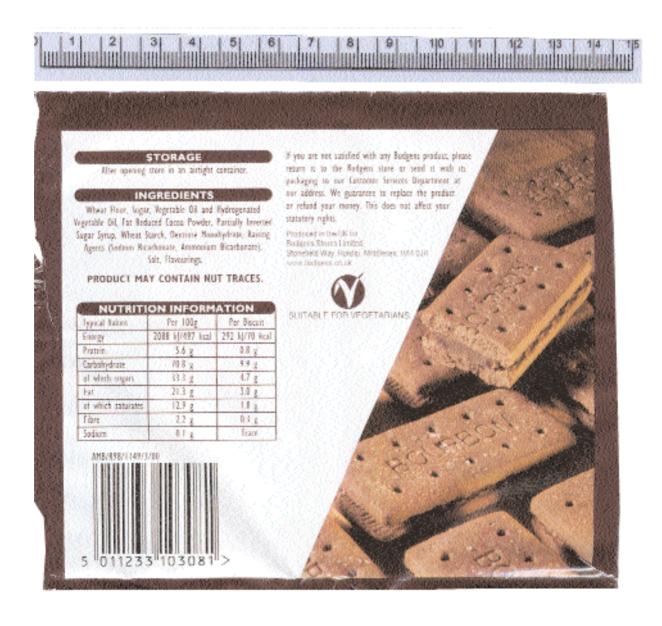


Co-op Chocolate Biscuits: All the sorters found this NTC labelling. This prepared meal from Budgen has NTC information. (Budgen was not one of the supermarkets visited in Activity A.)

This provides an example of NTC labelling.



Bourbon biscuits from Budgen.



Basket Sorting: Individual Details

Three out of ten sorters missed the NTC information on the Sainsbury's Bran Flakes. The allergen box under the ingredients is clear and conforms to industry guidelines. However, whilst some consumers will take more notice of NTC information if it describes the risk (ie "Due to methods used in the manufacture of this product, it is not suitable for nut allergy sufferers"), the font is so small that it may be missed. Similar labelling on the Sainsbury's milk chocolate was also missed by two out of ten sorters.

The Marks and Spencer Mince Pies display the latest square version of the blue on white logo to indicate NTC risk of nut ingredients. Two out of ten sorters missed this altogether. Those who shop for nut allergic consumers have to learn the different styles of each retailer they visit, before they can take full advantage of all the information provided. The previous oval Marks and Spencer NTC/nut ingredient logo is displayed on the Choc Ices. One person out of ten missed this warning.

The Wilson's Indian Style Lamb Korma (Waitrose) actually has walnuts as an ingredient which were missed by two out of ten sorters. It was a branded product selected by our shopper in the first basket. Two sorters out of ten missed the NTC labelling on the Waitrose Chocolate covered biscuits. Reversing the text and placing the NTC information under the Nutrition box away from the ingredients and on shiny paper does not help the consumer. Another Waitrose product which caused confusion amongst the sorters was the bag of jelly sweets which had a warning about coconut trace contamination. Four people out of ten counted coconut as 'not suitable for a nut allergic person'. It is actually a palm and not a tree nut. A tiny minority of allergic people may experience symptoms to coconut, but the majority of nut allergic consumers can eat it. The problem arises because it contains the word 'nut'.

The Iceland red box allergen warning on their Wholewheat Bisk cereal was missed by two out of ten sorters. The new style labelling on Iceland Apple Pies was commended by three sorters as the clearest NTC information on any item. However, one sorter missed it altogether.

The NTC information on **Safeway Cream Crackers** was missed by three out of ten sorters. It covers 0.70% (0.31cm²) of the label. The **Sweet and Sour Chicken** warning was missed by one person. The NTC information is in another column from the ingredients in a small font and under the heading "Dietary Information".

The NTC information on the ASDA Chicken with Rice was missed by two out of ten sorters. The Bourbon Creams NTC label was missed by one sorter. The paper is very shiny and the NTC text is in italics.

The **Tesco Chinese meal for one** NTC label was found by one shopper in the store who chose it as an alternative for Basket Two. However, three out of ten of the sorters missed this warning which is tiny and takes about 0.32% (4.25cm²) of the surface of the box. **The Tesco chocolate bar** NTC labelling was missed by one person out of ten. It is in reversed text, two columns away from the ingredients information on a very dark background.

Two out of ten sorters missed the NTC information on the **Co-op Bran Flakes**. All the sorters found the NTC information on the **Co-op chocolate covered biscuits** even though it was printed on very shiny packaging.

Quotes from the basket sorters

Whilst the sorters were making their selections, some of their comments were noted:

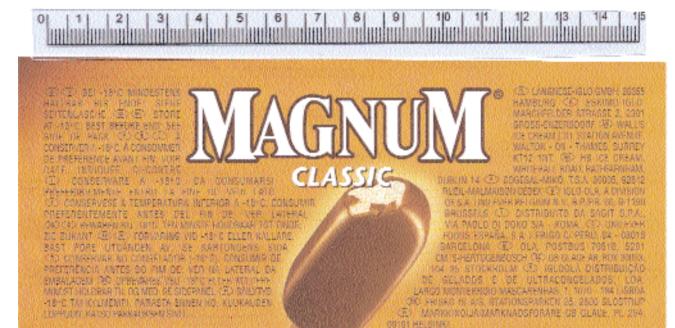
- "I don't believe it. You can't buy anything without these warnings."
- "I'm shocked at how little is appropriate (for allergic people)."
- "If an item is properly labelled and I can read it, then I trust it (the warning) more."
- "You have to trust that the manufacturers understand all the issues."

Additional sample labels

Samples were taken from all the shopping baskets including the brand label shopping selection.

A number of shoppers chose Walls Magnum Classic ice creams in Basket Two because they appeared to be 'nut free'. We were unable to find any nut trace contamination information on them. The ingredients are listed in many languages, in capitals and in dark text which is continuous, on a dark background and hard to find and read. Consumers searching for information which may be life-saving find such products very frustrating.

This Magnum Classic has no NTC labelling, but the ingredients are hard to read.



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AS AN VANILLEDISCREME MIT 9% FETT UND MILCHSCHONGLADE. ZUTATEN ENGESIGKTE ENTRAHMIE MILDA AND ORGENSPILADE 120 PLACED SENTENDED TO STATE OF THE STATE OF TH CHOCH AT WILDIT OWN SHORE BOLINGE CONCOUTS SINOP OF BLUCOSE LACTUSE ET PROTEINES DE LAIT ENVILEMENT (9471) KYAHI MAINT TOUTO ENOT, GOUSSES DE MANULE BROYEES, AROME, CONCORANT, ELEGEL TO BELATO ALLA MANIGNA PRODPERTO DI CIOCCOLATO AL LATTE DENOTED DE LOTE CONTRONANT DATE, RECENSANTE DES COMPTIONS DE COLLE DE VANIGLA ARENO COLORATE ESTOS DE MELADO CREMA VANIGLA Y CHOCOLATE CON LECHE INCREDIONES LECHE CANADADA CONSENIANA CHOCA MA CON LECAT (RECENTE DE LA CONTROLA MANTE DE LA CONTROLA DEL CONTROLA DE LA CONTROLA DEL CONTROLA DE LA CONTROLA DE LA CONTROLA DE LA CONTROLA DE LA

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Particular issues with brand label items

Some manufacturers proudly claim that they do not make own brand items for retailers. This means that these manufacturers are not subjected to unexpected audits, checks and HACCP (Hazard Analysis Critical Control Points) protocols imposed by retailers. Some supermarkets have very effective procedures for assessing, managing and communicating allergen risks, and have endorsed segregated production, staff training and a wide range of other measures to protect products from allergen contamination.

The Patak's Chicken Tikka Masala (page 45) carries NTC information with an exclamation mark symbol. Many producers of ready meals, particularly Indian and Chinese recipe dishes have started to carry NTC information. Sometimes they use nuts in recipes on the same line. However, there is also a dilemma when using spices and other flavourings which are sourced from around the world, which are often dry, and which share production and packing facilities with hundreds of other foods, some of which may be allergens. This issue is the subject of continuing dialogue between the Anaphylaxis Campaign and the Spices and Seasonings Association.

The packet of Sea Salt (page 46) is an 'ad hoc' item from Holland and Barrett. Such products are sold in health food stores. Weighing out a wide range of foods in close succession in a warehouse probably justifies the NTC labelling "Packed in an environment where nuts and sesame seeds are present." However, this means that families wishing to buy simple ingredients in simple packaging, who care whether a product is organic, or who are interested in its ethical background may well encounter the risk of nut/sesame trace contamination.

The Haribo jelly sweets (page 47) do not carry NTC labelling, but are an example of hard to read ingredients labelling. Once again, shiny paper, multilingual ingredients, upper case lettering and a tiny font will ensure that the allergic customer needs to spend longer working out whether this product is 'safe'. Another issue on similar products is to establish whether they contain animal gelatine. This information is important for vegetarians and vegans.



Patak's Chicken Masala

NTC labelling on sea salt from a health food store.





Haribo Jelly sweets: These do not appear to have NTC labelling but the ingredients are hard to read.



Bertolli Pasta Sauce



Of the items missed by three out of ten sorters, one cereal packet has NTC information conveyed in 19 tiny words, and the allergen box also mentions wheat. All this information is only allocated 0.53% (3.92cm2) of the packaging surface. Although the labelling on this product adheres to current industry guidelines the allergen information was missed by three out of the ten shopping sorters. The allergen information was below the ingredients panel and in dark text on a light background.

One new ingredient which has triggered NTC information on an additional range of products is pesto. This is a paste which can be made from pine nuts and is used in pasta sauces. It may be the reason behind the NTC labelling on the Bertolli jar.

Some allergic consumers report that they tend to become creatures of habit, staying with one retailer with whose labelling they have become familiar. Shoppers who are new to reading allergen / NTC information, or who only do so occasionally for an allergic guest may miss warnings altogether. This study indicates that all of the retailers have examples of adequate and inadequate NTC labelling. The items on which NTC labelling was most often missed were cereals (where the ingredients and allergen information cover a tiny percentage of the packaging area), packets of biscuits (with multi-coloured information on shiny paper), and bars of chocolate where the allergen information was often separate from the ingredients.

(Examples of the NTC wording from each retailer are listed at the end of this report.)

D: Review of recent Anaphylaxis Campaign NTC labelling enquiries

The Food Standards Agency also asked the Anaphylaxis Campaign to provide additional information about current trends in allergen labelling, and to outline particular issues which have a significant impact on the lives of allergic consumers, reflect their concerns and merit further consideration.

Health Food Stores

In line with the information above, the Anaphylaxis Campaign would advise a nut allergic consumer to avoid the enormous range of simply presented ingredients on sale in health food stores and on market stalls. The packing activity may involve frequent change-overs and opportunities for cross-contamination. A recent case of concern to the Campaign was the customer who found ten yogurt-coated peanuts in a small packet of yogurt-coated raisins.

Small suppliers

The magazine "Inside-Story" has many subscribers with food intolerances, and advertises small independent suppliers of 'health foods', 'alternative' products and manufacturers of products which are 'free from' certain ingredients. Subscribers have recently been advised that these suppliers (many of which are very small-scale producers) may only be in a position to eliminate one allergen (eg cows' milk or wheat) from their products. A new initiative is underway to encourage these suppliers to assess their own risks and to inform their customers about trace contamination from other allergens.

Farmers' Markets

One Farmers' Market was visited in November in St Albans. Home-cooked items were examined and discussed with the stallholders. The Women's Institute stall had a wide range of bakery and other foods wrapped in cling film and plastic bags. There was a printed label on each product which had been completed by hand in black/blue. Products with nuts as ingredients had this written in red pen on the label. The dialogue with the lady on the stall was less clear. She was vague about the risk of trace contamination, and could not explain the Women's Institute (WI) nut labelling policy.

Some of the other stalls were held by small businesses preparing meats, making pies and other bakery items in farm kitchens. Three stallholders were able to demonstrate a greater competence in managing allergen

risk. They were far more aware of the issues of trace contamination, and it was very helpful to discuss the precise risk on an individual batch of bread or pies.

One stallkeeper was selling decorative children's biscuits which she had made. When asked whether any products had nuts in as ingredients, she replied that they didn't. However, about a third of the biscuits on sale were similar to macaroons. They actually contained almonds, but the stallholder hadn't realised that almonds count as nuts.

Biscuits, cereals and confectionery

The products most commonly mentioned by Anaphylaxis Campaign member families avoiding nuts and peanuts are cereals, biscuits and confectionery. A detailed analysis of the study data indicated that 69% of the cereals, 58% of the biscuits and 56% of the confectionery items in Activity A had NTC labelling. This compared with an overall figure of NTC labelling on 56% of all control basket items. None of these foods had nuts or peanuts as ingredients.

In a letter to The Lancet, Accident and Emergency doctors in Swansea described a research project in which they inspected 630 products (cereals, biscuits and confectionery) in four major supermarkets⁽⁸⁾. Of all the products, 15% had nuts as a declared ingredient, 25% appeared completely nut free and 60% carried some kind of nut contamination warning. (This correlates with our prevalence figure of 56%.) These figures might suggest that out of a sample of twenty UK cereals, biscuits and confectionery, three would contain nuts deliberately, five would appear free from nuts and twelve would have some nut contamination risk. From the nut allergic consumer's viewpoint, instead of a choice of seventeen products out of twenty (which did not have nuts as an ingredient), they could choose from only five.

The Anaphylaxis Campaign has also investigated this problem, and works closely with key manufacturers to pass on information about these products to its allergic members.

Cereals

In the UK, the cereal brand leader is Kellogg who can run its major production lines (Corn Flakes, Rice Crispies) without using them for nut products. Shoppers often selected Kellogg's Bran Flakes and Rice cereals in the baskets for a nut allergic person. The majority of own brand cereals for a large number of retailers are made by a small number of other manufacturers. They carry out relatively short production runs of a wide range of products, both with and without nuts, and have to implement frequent change-overs between products. Such products are therefore more likely to carry NTC information.

Biscuits

The Anaphylaxis Campaign has been involved in a number of enquiries about biscuits and savoury snacks. Manufacturers have suggested that the UK market for traditional biscuits is fairly stable, and reported that they are being encouraged to develop 'added value' or more up-market products for new market sectors. In some cases, this involves the use of more expensive ingredients such as nuts. Their introduction in a minority of products may then jeopardise the nut free biscuit range (custard creams, digestives etc) if made on the same production line.

Confectionery

Some manufacturers have made particular efforts to source sweets for children without a NTC risk. Most nut allergic adults are resigned to the fact that they cannot eat the majority of chocolate products, and have to examine labels on other sweets with care. The biggest problems are multi-lingual labelling on small packaging, and colour combinations which are hard to find and hard to read.

Sesame trace contamination

During the course of the research period, the Campaign was contacted by a nut allergic member with an enquiry about NTC labelling on a Chinese recipe sauce in a jar. Further investigation indicated that the product had no NTC risk, but contained toasted sesame. Not all nut allergic people are allergic to sesame, and the blanket use of NTC labelling for this purpose is not helpful to those who only need to avoid nuts and peanuts. This product also contained water chestnuts which are unrelated to chestnuts.

E: Review of current allergen labelling on pre-packed foods

Nut Trace Contamination (NTC) information is printed on a wide range of pre-packed foods. The wording, style, format and use of logos vary enormously from one retailer to another, and also from one product type to another.

The decision-making process used to decide whether to use such NTC labelling also varies. Some retailers and manufacturers have been using it for some time, and are committed to finding suppliers who are segregating their production lines, working to eliminate nuts and peanuts from their ingredients, and keen to reduce the number of products which need NTC warnings. Others have now recognised the risks associated with nut and other allergen trace contamination, and have re-assessed their risks. This has led to NTC labels on some products for the first time.

The general rule adopted by many manufacturers is to avoid using major serious allergens, and particularly nuts and peanuts unless their presence is critical to the character of the product⁽⁹⁾. This is in line with industry guidelines, and is also helpful in maintaining food safety 'due diligence'. In many circumstances, it would now be considered unethical to develop a new product containing nuts or peanuts to be targeted at children, and many manufacturers would consider carefully whether such a product for adults might not have serious contamination implications for the integrity of their other products.

One of the consequences of the increased awareness of potentially fatal food allergies has been that manufacturers and retailers have implemented practices to assess and manage the risk of trace contamination throughout their production and communicate it to their customers.

Major sources of industry guidance include the professional bodies mentioned above, together with other papers published in medical, technical and professional journals. The Anaphylaxis Campaign itself is considered an authoritative source of guidance across the food industry and works closely with a wide range of UK manufacturers, retailers, caterers and consumers to improve the communication of allergen risk the entire length of the food supply chain.

Whilst there is no legislation which covers allergen risk specifically, the Food Safety Act of 1990 covers all food sold to the public. Manufacturers and retailers who are aware of any potential food safety risk in their product need to implement measures to prevent harm to their customers. This is known as 'due diligence' and means that food businesses whose products may cause harm need to be able to

demonstrate that they know about potential risks from their products and can prove that they have measures and protocols in place to control them. Expectations of awareness and levels of risk management are greater for larger food businesses.

Many allergic consumers find it impossible to accept that manufacturers continue to make nut free products in a nut contaminated environment. Some manufacturers claim that segregation is impractical and will be too expensive to implement. Others have managed such segregation. Both manufacturers and allergic consumers know that, in the circumstances where trace contamination can kill, the only solution is full segregation, not just by time or through cleaning down the production lines but through running a separate production line in another area and implementing measures to protect the allergen-free integrity of the products.

One frequently quoted problem for manufacturers is the ability to prove that the segregation measures in place are working. This depends on the availability of practical and reliable testing methods for the allergens which they are managing. In the UK, there are recognised commercially available test kits (ELISA — Enzyme-Linked Immunosorbent Assays) for a range of allergens including peanut and hazelnut. It is hoped that one will be available shortly for almond. The accuracy of such assays depends significantly on the characteristics of the food in which the allergen may be present. Until reliable test kits with appropriate detection limits are available for all nuts widely used in UK recipes, manufacturers cannot prove conclusively that their segregation and clean-downs are working.

Some trusted 'household name' products are manufactured by food businesses who have been aware of all these issues for at least 4-5 years, and who continue to make items without nuts as ingredients in a nut contaminated environment. This contradicts the principle that using NTC and other allergen warning labels should only be a short term measure following comprehensive and committed HACCP/risk assessment⁽⁹⁾. Allergic consumers feel let down, particularly if they learn that a product which they have enjoyed and trusted may now carry a nut trace contamination warning label.

One confectionery manufacturer (Kinnerton Gilchris) has pioneered the production of confectionery in a 'nut free' environment and uses a 'nut free' logo to indicate this on its branded products. When these products are sold under retailer brands, the 'free from' labelling is not used. This supports the principle that in the medium and long term, 'free from' labelling should be unnecessary. It should be normal practice for foods to be free from common allergens which are not ingredients. The Anaphylaxis Campaign is keen to ensure that its allergic members can enjoy as many everyday food choices as possible, and should not be restricted to a minority of products carrying 'free from' labels.

Some manufacturers and retailers have allergic customer databases which they use to send out 'free from lists' which are regularly updated. Some allergic families find these very helpful, particularly for seasonal items at Christmas and Easter. The databases also provide an immediate mailing list which can be used if required for a product alert or recall. Whilst it may be feasible to walk around a supermarket carrying the retailer's own list, it is usually impractical to carry lists for every manufacturer whose products people may wish to buy. In any case, the contract between the retailer and the consumer is based on the information available at the time of purchase. The Anaphylaxis Campaign spends much time investigating discrepancies between information on 'free from' lists and on packaging in-store and also between information on inner and outer wrappers of multi-packs.

There have been a number of recent cases where manufacturers were using up old packaging with NTC information on products which were made in strictly segregated 'nut free' conditions. It is exasperating for an allergic customer to have to be alert to such warnings, and then to be told elsewhere (eg by customer service personnel) that the product they have avoided is actually 'safe'.

Conclusion

Nut Trace Contamination is a problem affecting thousands of consumers and all those who share their food⁽¹⁾. Families with children who are nut allergic face daily problems finding, reading and believing nut trace contamination information. Recent research in Canada indicated that peanut-allergic children suffer significantly more disruption in their daily activities than children with a rheumatological condition⁽¹⁰⁾. The additional time required to shop, the extra cost and lack of choice of many everyday items all increase the disruption and stress on the whole family. Evidence from the Anaphylaxis Campaign's workshops indicates that teenagers and young adults (who are most likely to suffer lifethreatening allergic reactions) are least likely to take nut trace contamination information seriously.

Not all allergic consumers recognise the diverse manufacturing conditions in which foods are made. Although some manufacturers of pre-packed foods have implemented protocols using HACCP and recognised guidelines⁽³⁾ (5) to endorse the allergen-free status of their products, there are many who have not. This is also the case for foods sold loose or foods sold in catering situations. Allergic consumers who understand these relative degrees of risk are obliged to buy pre-packed foods from supermarkets and to avoid other food suppliers such as local bakeries, market stalls, craft food producers, health food stores and specialist organic and other producers who supply through the post. It is therefore even more important that ingredient information on supermarket pre-packed products is easy to find and easy to read. In many cases it is not.

Product labelling is one of a number of different communication activities in an ever-complex **food supply chain**. It is the main or sole source of information available at the point of sale, and for at least 1% of the UK population, it may have to communicate a potentially lifethreatening risk. Consumer decisions about whether to trust a product depend on how ingredients and allergen information are presented. Current labelling practices create difficulties for all customers, and particularly the elderly. 1.7 million people in the UK are blind or partially-sighted⁽⁴⁾ and many adults have poor literacy levels. In addition, many pre-packed products are used in smaller catering outlets where English may not be the first language, where food allergy is poorly understood and in situations where not all staff are literate.

Most major manufacturers and retailers in the UK use nut trace contamination information to communicate a life-threatening risk which may affect at least one person in a hundred. It is poorly communicated, inconsistent, misunderstood, missed and ignored. This is potentially dangerous.

Recommendations

- 1. Clear ingredient labelling is essential for all products, whether or not they carry allergen information.
 - The Recommendations of the Clear Labelling Task Force should be implemented. This will help all consumers, and will improve the ability of allergic consumers to carry out their own risk assessment and make informed food choices
 - The Food Standards Agency should consider additional ways to ensure that all ingredients and allergen labelling follows industry guidelines and is 'prominent and easily legible'.⁽³⁾
- 2. A high priority should be given to support manufacturers who seek to 'clean up' by removing allergens from their production. This will include:
 - The urgent development of reliable commercial assay test kits for other common allergens including different nuts
 - Science-based research to develop cleaning protocols which will support manufacturers, retailers and caterers seeking to eliminate particular allergens
 - A recognised food production standard covering the entire food supply chain to objectively assess and endorse measures to eliminate any named allergen. In line with other quality standards, it should be independently audited and maintained.
- 3. This work should be linked into the current Food Standards Agency initiative examining information available for Foods sold loose and Foods sold in catering establishments, and all other consumer food information initiatives.
- 4. The activities undertaken in this project should be repeated at regular intervals, (and possibly on a larger scale). The use of Nut Trace Contamination and other allergen information should be monitored by the Food Standards Agency.

Annex 1

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Annex 2

Nut Trace Contamination Labelling Examples:

ASDA

- May contain traces of nuts and/or seeds
- May contain traces of nuts

Budgen

May contain nut or nut traces

Co-op

• Allergy Advice: Produced in a factory handling nuts

Iceland

- This product has been made in a production area that uses nuts
- Made in a production area that uses nuts
- This product may contain traces of nuts

Marks and Spencer

- Logo: Not suitable for nut allergy sufferers
- Text: This product has been made in a factory which uses nut ingredients

Safeway

Not suitable for nut allergy sufferers

Sainsbury's

 Due to the methods used in the manufacture of this product, it may occasionally contain nuts

Tesco

• Warning: This product may contain traces of nuts

Waitrose

• This product may contain traces of nuts

Annex 3

Glossary of definitions

Anaphylaxis – A severe allergic reaction involving potentially life-threatening symptoms

Basket One – Goods selected in the control shopping trip

Basket Two – Goods selected suitable for nut allergic people

Brand label – A product sold under the manufacturer's brand name

BRC - The British Retail Consortium

Control shopping – Using an unrestricted choice of the goods available

ELISA – Enzyme-Linked Immunosorbent Assay

EU - European Union

FSA – The Food Standards Agency

GMP – Good Manufacturing Practice

HACCP - Hazard Analysis Critical Control Points

IGD – Institute of Grocery Distribution

IFST - Institute of Food Science and Technology

MAFF – Ministry of Agriculture, Fisheries and Food

NTC - Nut Trace Contamination

Nut – For purposes of this report any reference to nut includes peanut (groundnut) as well as the tree nuts (hazelnuts, brazils, walnuts etc)

Own brand – A product sold under the retailer's name

RNIB - Royal National Institute for the Blind

Trigger allergen – A food or other substance which causes allergic symptoms