

PROGRAMME OF MINI SURVEYS: SOUP SURVEY

Summary

The Food Standards Agency has carried out a survey to look at the levels of a limited range of nutrients, including sodium (salt), fat and sugar, in a variety of canned, dried and fresh soup products. During Autumn 2004 seventy-seven samples of soup products were purchased and the nutrient content as declared on product labels was recorded. 69 percent of products in the survey provided a quarter or more of an adult's maximum recommended daily salt intake of 6g per day. Six percent (n=4) of soups surveyed provided 40 percent or more of the 6g recommended maximum daily intake of salt per serving.

The average salt content of a portion of fresh soup was 1.6g, contributing 27 percent of the recommended maximum daily salt intake for an adult. For both canned and dried soups the average salt content was 1.7g, contributing 28 percent of the recommended maximum daily salt intake for an adult. There was a lot of variation in salt content within these categories.

Four soups (6%) contained 0.5g or more sodium per 100g; this is the threshold for 'a lot' of sodium in a food.

"Healthy eating" soups on average contained less sugar, fat and salt than equivalent standard and economy products.

The results of this survey show that soups generally remain a low fat and low sugar product. 69 percent (n=53) of the products surveyed were low in fat, that is they had less than 3g fat per 100g.

Soups are also a low sugar product, with 52 percent (37 out of 71 products) containing less than 2g of sugar per 100g. 2g is the threshold for "a little" sugar in a food.

Only one company did not declare sodium content on product labels. In order to allow consumers to make an informed choice, the Agency recommends that full nutrition information be provided on all pre-packaged foods and encourages the declaration of salt content as part of the nutrition label.

Background

The objective of the programme of mini surveys is to provide up-to-date information on the levels of sodium (salt), fat, sugar and a limited range of other nutrients, in processed foods. This includes those foods that are major contributors to salt, fat and sugar in the diets of both adults and children. The data obtained will be used to raise consumer awareness of related food and diet issues and also to inform discussions with the food industry, and other bodies, aimed at encouraging reductions in the salt content of processed foods. This will, in turn, help consumers to be better able to choose a healthy diet and achieve nutrient intake guidelines.

The National Diet and Nutrition Survey (NDNS) of adults aged 19 to 64 years¹ showed that, on average, adults consumed 176g of soup over a 7-day reporting period, or almost one portion (200g). Soup contributed 3.3 percent to overall sodium intake, which excluded any contribution made by salt added in cooking or at the table, 0.6 percent to fat intake and 1.0 percent to non milk extrinsic sugar intake.

The Agency is currently working with industry to reduce salt in processed foods. Soup is a contributor to salt intake and therefore salt has been the focus of this survey.

Salt intakes are currently around 9.5 grams per person per day,² which is considerably higher than the recommended maximum daily intake of 6 grams per person per day, originally made by the Committee on Medical Aspects of Food Policy in 1994. This recommendation was endorsed by the Scientific Advisory Committee on Nutrition (SACN) in its recent report on Salt and Health.³

A habitually high intake of sodium has been linked to a higher than average blood pressure, which may lead to an increased risk of suffering heart disease or a stroke. The main source of sodium in the diet is salt.

Healthy eating guidelines also recommend reducing the amount of fat and sugar that we eat and increasing our consumption of starchy foods and fruit and vegetables. Guideline Daily Amounts (GDAs) for adults are nutrient intake levels that individuals can use as a target to achieve population nutrient goals and are sometimes used on food labels to inform consumers. The GDA for fat is 83g for the average adult (an average of 95g (men) and 70g (women)) and the GDA for sugar is 60g for the average adult (an average of 70g (men) and 50g (women)).

The Food Standards Agency has published figures to help the consumer identify products with a high or low salt, fat or sugar content. These are defined as:

Sodium:

- 'a lot' 0.5g or more of sodium per 100g
- 'a little' 0.1g or less of sodium per 100g

Fat:

- 'a lot' 20g or more of fat per 100g
- 'a little' 3g or less of fat per 100g

Sugar

- 'a lot' 10g or more of sugar per 100g
- 'a little' 2g or less of sugar per 100g

Methodology

Sampling

The survey was undertaken in Autumn 2004 and included seventy-seven samples of soup products, purchased from retailers in London and the South East.

The samples in the survey represent a snap shot of the soup market. It covers the main types on sale, including a selection of the top selling products, informed by market share data from Taylor Nelson Sofres and ensuring coverage of all the major retailers. The absence of a particular brand means only that the brand has not been included in the survey. No further meaning should be read into its absence from the report.

The sample was grouped into categories: ambient (mainly canned), dried (individual cup sachets) and fresh/chilled products in vegetable, mushroom, tomato and chicken varieties. Canned beef/oxtail soups were also included. The ambient category consisted of primarily

canned products, with one soup packaged in a pouch and one in a carton. All ambient soups have been categorised as 'canned' for the purpose of this report.

A full list of the seventy-seven products sampled is given in Tables 1 and 3. The majority of the products included in the survey were standard products, although a limited number of healthy eating and economy products were also sampled.

Data compilation

The nutrient content as declared on product labels was recorded. No laboratory analyses were carried out.

Results

Table 1 shows the sugar, fat, sodium and salt data for each individual product per 100g, as collected from the nutritional information on the labels. Where salt was not provided on the label this has been calculated by multiplying sodium by 2.5. It should be noted that for certain dried soups nutritional information was not provided on the label per 100g as served, but was provided per manufacturer's suggested serving size. For these soups nutritional information per 100g as served was calculated from the information given on the label for the manufacturer's suggested serving size.

Table 2 shows the average fat, sugar, sodium and salt data for each product category, per portion

To make comparisons between products easier, a standard portion size was assumed and applied to all soups in the survey ('portion' is used in this report interchangeably with 'serving'). A portion of canned and fresh soup was taken to be 200g of soup, as sold (approximately half a standard retail can of soup). A portion of dried soup was taken to be 200g of the soup, as made up according to the manufacturer's instructions. All per portion comparisons made in this report are based on these standardised portions. Table 2 therefore allows comparisons to be made between soup categories on a standardised basis.

It should be noted, however, that the serving sizes suggested by manufacturers varied across the survey and the actual portion size for these products will also vary depending

on consumer practices. For example, the amount of water added to dried soups may vary depending on the size of mug or bowl in which it is being made up.

Table 3 shows the percentage contribution made by a portion of each individual soup to the recommended maximum daily intake of salt. Portions were calculated using nutritional information and, for dried soups, manufacturer's suggested serving sizes, as given on the label. This table allows comparisons to be made between the salt content of soups on a standardised basis.

Labelling

Most of the products were labelled with the 'big four plus little four' nutrients (energy, protein, total carbohydrate, total fat, sugars, saturated fat, fibre and sodium). However, six Campbells products were only labelled with the 'big four' nutrients (energy, protein, total carbohydrate and total fat). Therefore sugar and sodium values were not available for these products. Only 52 percent (n=40) of the products sampled labelled salt as well as sodium. In order to allow consumers to make an informed choice, the Agency recommends that information on salt content be provided on all packaged foods.

The following comments for salt and sugar are based on the 71 products that labelled the 'big four plus little four' nutrients, which included sodium and sugar. The comments for fat are based on all 77 products that labelled the big four nutrients, which included fat.

Salt

- Based on the figures published by the Food Standards Agency to help consumers identify products with a high or low salt content, four soups were classified as containing 'a lot' of sodium per 100g as served (0.5g of sodium or more per 100g). No soups contained 'a little' sodium (0.1g or less of sodium per 100g).
- 69 percent (n=49) of the labelled soups in the survey (n=71) provided 25% or more of the 6g recommended maximum daily intake of salt per serving.
- Fresh soups had an average salt content per serving of 1.6g salt, whilst canned and dried soups had an average salt content of 1.7g per serving (27 percent and 28 percent of the recommended maximum daily intake of salt, respectively). There was a lot of variation in each of these categories. There was also overlap in the range of the salt contents for each category.

- The salt content of individual products varied within the categories of the survey. In particular, the highest salt content per serving was double (or more) that of the lowest in two categories:

vegetable dried soup (ranged from 1.2g to 2.9g) and mushroom canned soup (ranged from 1.0g to 2.0g).

- The canned soup products with the highest salt content of those surveyed were:

Sample Reference	Product Description	Salt (g) per 200g serving	Salt as a percentage of 6g target
3.1.13	Le Chef (Lidl) cream of tomato soup, canned	2.5	42
3.1.14	Somerfield cream of tomato soup, canned	2.5	42
3.1.10	Sainsbury's low price cream of tomato soup with sugar and sweetener, canned	2.1	35
4.1.11	Tesco cream of chicken soup, canned	2.1	35

- The canned soup products with the lowest salt content of those surveyed were:

Sample Reference	Product Description	Salt (g) per 200g serving	Salt as a percentage of 6g target
1.1.6	Marks and Spencer chunky winter vegetable soup, canned	1.2	20
1.1.2	Heinz big soup chunky vegetable soup, canned	1.2	20
2.1.9	Asda cream of mushroom soup, canned	1.0	17

- The dried soup products with the highest salt content of those surveyed were:

Sample Reference	Product Description	Salt (g) per 200g serving	Salt as a percentage of 6g target
1.2.1	Batchelors cup a soup, minestrone with croutons	2.9	49
3.2.1	Batchelors cup a soup, tomato	2.4	40
4.2.1	Batchelors cup a soup, chicken	2.0	33

- The dried soup products with the lowest salt content of those surveyed were:

Sample Reference	Product Description	Salt (g) per 200g serving	Salt as a percentage of 6g target
2.2.3	Tesco soup in a mug mushroom	1.3	22
2.2.2	Batchelors cup a soup, thick and rich woodland mushroom	1.3	21
1.2.4	Asda good for you, farmhouse vegetable cup soup	1.2	19

- The fresh/chilled soup products with the highest salt content of those surveyed were:

Sample Reference	Product Description	Salt (g) per 200g serving	Salt as a percentage of 6g target
1.3.2	Tesco fresh minestrone soup	2.0	33
1.3.4	New Covent Garden Food Company fresh carrot and coriander soup	2.0	33
3.3.2	Tesco fresh tomato and basil soup	2.0	33

- The fresh/chilled soup products with the lowest salt content of those surveyed were:

Sample Reference	Product Description	Salt (g) per 200g serving	Salt as a percentage of 6g target
3.3.1	Marks and Spencer tomato and fresh basil soup	1.4	23
2.3.3	Marks and Spencer's fresh mushroom soup	1.2	20
4.3.2	New Covent Garden Food Company fresh chicken soup	1.0	17

- Overall the three soup products with the highest salt content of those surveyed were:

Sample Reference	Product Description	Salt (g) per 200g serving	Salt as a percentage of 6g target
1.2.1	Batchelors cup a soup, minestrone with croutons	2.9	49
3.1.13	Le Chef (Lidl) cream of tomato soup, canned	2.5	42
3.1.14	Somerfield cream of tomato soup, canned	2.5	42

- Overall the two soup products with the lowest salt content of those surveyed were:

Sample Reference	Product Description	Salt (g) per 200g serving	Salt as a percentage of 6g target
2.1.9	Asda cream of mushroom soup, canned	1	17
4.3.2	New Covent Garden Food Company fresh chicken soup	1	17

- No brand had products that were consistently high or low in salt.

Fat

- Soups are generally a low fat product; 69 percent (n=53) of the products surveyed (n=77) had less than 3g fat per 100g. This is the threshold for “a little” fat in a food product. No products had more than 5.8g fat per 100g as served; the threshold for ‘a lot’ of fat in a food per 100g is 20g.
- The average fat content of all of the soups surveyed was 4.2g per serving or 5 percent of the 83g GDA of fat for an average adult.
- Dried soup had the lowest average fat content with 3.1g (range 0.9 to 5.7g) fat per serving, followed by canned soup with an average of 4.0g (range 0.4 to 10.4g) and fresh soups had the highest at 5.8g (range 2.2 to 14.8g), (3.7 percent, 4.8 percent and 7 percent of the 83g GDA of fat for an average adult).
- The fat content of all products across the survey varied, ranging from 0.4g per serving (0.5 percent of the GDA) in ‘Heinz Weight Watchers Country Vegetable Soup, canned’ and ‘Baxters Vegetarian Mediterranean Tomato Soup, canned’ to 11.6 g of fat per serving (14 percent of the GDA) in ‘Tesco finest basil and tomato soup’

Sugar

- Soups are a low sugar product; 52 percent (n=37) of the products that labelled sugar (n=71) had less than 2g of sugar per 100g, the threshold for “a little” sugar in a food. No products had more than 10g sugar per 100g; the threshold for ‘a lot’ of sugar in a food.
- The sugar content of all products across the survey varied, ranging from 0.2g per serving (0.3 percent of the GDA) in ‘Asda cream of mushroom soup, canned’ to 19.4g of sugar per serving (30 percent of the GDA) in ‘Soupreme (Aldi) cream of tomato soup, canned’.

Healthy Eating versus Standard versus Economy Products

- Healthy eating soups on average contained 43 percent less sugar (3.6g per serving), 74 percent less fat (1.2g per serving) and 22 percent less salt (1.4g per serving) than equivalent standard and economy products (average of standard and economy products: 6.3g sugar, 4.6g fat and 1.8g salt per serving).
- Healthy eating soups on average contained 24 percent of the recommended maximum daily intake of salt (1.4g per serving) compared with standard soups which provide an

average of 27 percent of the recommended intake (1.6g per serving) and economy soups which provide an average of 34 percent of the recommended intake (2.0g per serving).

- Overall economy products had higher levels of sugar than standard products, 7.5g per serving compared with 5.1g per serving, respectively, and slightly higher levels of fat (4.8g compared with 4.4g per serving, respectively) and salt (2.0g compared with 1.6g per serving, respectively).
- Economy tomato soups had slightly higher levels of sugar, fat and salt than standard tomato soups; economy products had 11.2g of sugar compared with 10.3g per serving in the standard products, 5.7g fat compared with 5.1g per serving and 2.1g salt compared with 1.8g per serving in the standard products.

Overview

69 percent of the soups surveyed provide a quarter or more of an adult's maximum recommended daily salt intake.

The Food Standards Agency is aware that work to reduce salt content through reformulation is currently ongoing in industry. Since this survey was intended to provide a snapshot of the market at a specific point in time it does not take into account products that may be in the process of reformulation at the time of the survey and thus should not be taken to represent future soup product nutrient levels.

The Food Standards Agency welcomes reductions in salt that have been made or are in the process of being made, but will continue to work with industry to secure further reductions in salt levels in soups and other processed foods.

References

1. Henderson, L., Gregory, J. and Swan, G. (2002). The National Diet and Nutrition Survey: adults aged 19 to 64 years. Volume 1: Types and quantities of foods consumed. London: TSO.
2. Henderson, L. et al (2003). The National Diet and Nutrition Survey: adults aged 19 to 64 years. Volume 3: Vitamin and mineral intake and urinary analytes. London: TSO.
3. Department of Health (1994). Nutritional Aspects of Cardiovascular Disease Report on Health and Social Subjects no 46. London: HMSO.
4. Scientific Advisory Committee on Nutrition (2003). Salt and Health. London: TSO.

Further Information

This survey report is held in the Dr Elsie Widdowson Library and Information Service at the Food Standards Agency headquarters in London. If you would like further copies (a small charge for photocopying will be made), please contact:

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