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## Title: Consumer consumption of vitamin and mineral food supplements

Client



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## 1 Executive Summary

### 1.1 Introduction and Methods

The overall aim of this research was to provide a more complete picture of the consumption of vitamin and mineral supplements in the UK and provide an insight into the key drivers behind what motivates people to take vitamin and mineral supplements.

The survey was conducted on GfK NOP's Random Location Omnibus Survey, which is UK representative. The fieldwork was carried out between the 14<sup>th</sup> and 19<sup>th</sup> February 2008.

#### Definitions

Whilst the focus of this report is on vitamin and mineral supplements as defined in the EC Food Supplements Directive (2002), it should be noted that consumers may have interpreted the questions as including other food supplements and included products such as cod liver oil which would be excluded from the current EU discussions on setting of maximum and minimum levels for vitamin and mineral substances.

It should be noted that the definition of a high strength vitamin and mineral supplement is not straight forward and that consumers may not know if the supplements they take are high strength. High strength supplement takers are defined in this report as those who have claimed that they take a high strength supplement, which may include those that do not contain vitamins and minerals.

It should also be noted that in chapter 4.12 and under heading general food and health issues and attitudes. The attitudes of those who are currently taking supplements are compared to those who are not currently taking supplements. Three categories were identified and their definitions are set out below.

- Current high strength supplement takers – this group indicated that they are currently taking a vitamin and/or mineral supplement and agreed that some of the vitamin and mineral food supplements that they take were high strength
- Current standard strength supplement takers – this group indicated that they are currently taking a vitamin and mineral supplement and disagreed when asked “Do you know whether any of the vitamin and mineral supplements that you take are high strength”



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- Current non supplement takers – this group includes everyone who is not taking a vitamin or mineral supplement at the time of the survey. This group includes those who are not currently taking a supplement but have done so in the past 12 months.

In all other chapters high strength supplement takers include those who are currently taking a supplement and those who are not currently taking a supplement but have done so in the past 12 months.

## 1.2 Summary of Results

### Vitamin and Mineral Food Supplement Consumption

- A third (31%) claimed they were currently taking vitamin and mineral supplements and a further 9% that they had done so in the last 12 months. More than two fifths (43%) claimed never to have taken a supplement. Those who had never taken any supplements were more likely to be male (51%) and be in social class C2DE (49%).
- The majority (69%) of those who were either currently taking a supplement or had taken a supplement in the last 12 months claimed to take one daily or most days or more than once a day (16%).
- We can extrapolate that nearly three in ten (29%) of the population are currently taking a supplement at least on most days.
- The top 3 supplements consumed by those who had taken supplements in the past 12 months were multivitamins (36%), cod liver oil (35%) and vitamin C (24%). Age differences were evident in type of supplements taken. For example, half of those aged 55 plus who took supplements were taking cod liver oil compared with a quarter of those under 55 years.
- The main reason given for taking supplements was for general health/well being (57%).
- Consumers of vitamins in the past 12 months were more likely to buy organic food (65%) than those who have never taken a supplement (48%).

### High Strength Supplements

- Two fifths (38%) of those who had taken supplements in the past 12 months claimed to have taken a high strength supplement. From this we can extrapolate that approximately 15% of the population as a whole believe they have taken a high dose supplement in the last 12 months



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- More than a half (55%) of those who had taken supplements in the past 12 months indicated that a high strength label would make no difference to whether they bought it or not. One in six (16%) indicated it encouraged them to buy it and a similar number (18%) that it would put them off.
- Nearly a quarter (22%) of high strength supplement takers said there was no particular reason for taking it. Just over one in ten reported they took them when feeling run down (12%) or when they think they are about to get a cold or flu etc (12%). A further 12% reported it made them feel better.
- Of high strength supplement takers, slightly less than a half (45%) said they would look for an alternative high street product if the high strength supplement they take were no longer available. However, more than two in ten (22%) would take the standard strength product and 15% would take a higher dose of the standard strength product.
- A half of those who had taken supplements in the past 12 months were fully aware that taking a number of vitamin and mineral supplements could result in unintentional consumption of high levels which could have a bad or adverse side effect. Nearly a third (31%) were partially aware whilst 15% were not aware of this at all.

## Advice, information and labeling

- Nearly a half (47%) have never received advice or looked up information about what supplements they should/should not take. Two in ten (21%) had received advice from their GP.
- The top three places to purchase vitamin and mineral supplements were a supermarket (49%), high street chemist (45%) and a health food shop - high street brand (29%). Those who took high strength supplements were more likely to buy them from a health food shop – high street brand (34%), health food shop – local independent (13%), by mail order (13%) and from an online website (3%) than those who do not take a high strength supplement.
- Nearly a third (31%) of vitamin and mineral supplement consumers claimed never to look at the information on the label of the vitamin and mineral food supplements. The youngest and the oldest age groups were the most likely not to have looked at the information.
- Around two in ten of those who have taken supplements in the past 12 months looked at the dosage information (22%), full list of ingredients (20%) and the Recommended Daily Allowance (17%).
- Of those who have taken supplements in the past 12 months a quarter (24%) have never looked at the recommended daily allowances on the supplements that they take.
- Nearly a half (49%) correctly understood the term Recommended Daily Allowance.



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- Generally people seem to be aware that some supplements can lead to adverse effects with seven in ten (71%) disagreeing that “It’s not dangerous to exceed the stated daily dose” and more than eight in ten (83%) disagreeing that “it is safe to take as many vitamin or mineral food supplements as I like”.
- Knowledge of what they are taking and the potential effects appears to be fairly low. A half of those taking supplements agreed “I don’t know enough about safe or unsafe levels of vitamins or minerals”, whilst two fifths (41%) disagreed that “I would notice if the amount of vitamin and/or mineral ingredient in a food supplement I was taking changed”.
- More than three quarters (78%) recognised that not all vitamin and mineral supplements sold on the internet are safe. Whilst just over a half (54%) indicated that not all vitamin and mineral supplements sold in this country are safe for everyone to take.
- Two fifths (39%) of those who have taken supplements in the last 12 months have seen an advisory statement on a vitamin or mineral supplement before. Six in ten (60%) indicated that seeing an advisory statement that did not apply to them would not put them off buying the product however a quarter (25%) reported it would put them off purchasing it.

## Children and Supplements

- Just over a half (52%) of households with children under 16 claimed to currently give them vitamin and mineral supplements. The majority (76%) claimed to give them the child supplements but nearly one fifth gave their child the adult version.

## General Food and Health Issues and Attitudes to Supplements

- Current high strength supplement takers (48%) were more likely than standard strength supplement takers (35%) and those who are currently not taking supplements (28%) to disagree that “I eat what I like and do not consider the health implications”
- Nearly four in ten (37%) of current high strength supplement takers and a third of current standard strength supplement takers actively look for information about how to stay healthy compared to just 16% of current non supplement takers.
- Only 8% of current non supplement takers strongly agreed that “Vitamin and mineral food supplements are essential to ensure they stay healthy” compared to 25% of current standard strength supplement takers and 33% of current high strength supplement takers.
- A half (51%) of current non supplement takers strongly disagreed that “I need a vitamin and mineral supplement to feel healthy” compared to 13% of current supplement takers.



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- Current non supplement takers were the most likely to never buy organic food (42%) compared to 29% of current high strength supplement takers and 35% of current standard strength supplement takers.
- Over a half of current supplement takers buy wholemeal/unrefined foods all the time compared to under two fifths (37%) of non current supplements takers.
- Current high strength supplement takers were more likely to never buy fortified food than current standard strength supplement takers and current non takers of supplements (35%).
- Current non supplement takers were much more likely to buy foods with a health benefit than either current standard strength supplement takers (28%) or current high strength supplement takers (20%).



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## Profile Of Supplement Takers

Vitamin and mineral supplement takers are more likely to be female and in social class AB. They tend to be older i.e. more likely to be over 55 years old however this is true of both male and female supplement takers. Supplement takers are also more likely to have poor health.

Their attitudes show them to be health conscious and they are likely to take positive action to stay healthy. Supplement takers, particularly those on a high strength supplement were likely to hold the following views:

- consider the health implications of what they eat
- actively look for information about how to stay healthy
- believe that they need vitamin and mineral supplements to stay healthy
- believe they need a vitamin and mineral supplement to feel healthy

Supplement takers are more likely to buy organic food and wholemeal and unrefined foods than those who do not take food supplements.

## Key Driver Analysis

In order to determine which factors best segment the sample into those who do and do not take vitamin and mineral supplements a number of iterations were considered. The criterion for this analysis was "those who take vitamins and/or supplements", this was defined as anyone who had taken a vitamin and/or mineral supplement in the past 12 months. Predictors are listed in numeric order of importance.

### *Iteration A: Demographics, attitudes to health and supplements and buying behaviour*

In this scenario the main predictors of taking supplements were:

1. Needing a supplement to feel healthy
2. Buys organic food at least sometimes
3. Over 25

### *Iteration B: Demographics and attitudes to health and supplements*

In this scenario the main predictors of taking supplements were:

1. needing supplements to feel healthy



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2. those indicating that eating healthily is important
3. Social class AB

*Iteration C: Demographics and buying behaviour*

In this scenario the main predictors of taking supplements were:

1. being female
2. buying organic food all the time



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## 2 Introduction

The EC Food Supplements Directive came into force in July 2002 in order to introduce a harmonised safety-based approach to food supplements and to promote free trade across Member States. The European Commission has indicated that a draft proposal on the setting of maximum and minimum levels for vitamins and minerals in food supplements will be put forward for consideration early in 2009. The FSA has been collating information from UK stakeholders on the potential impact of any proposals put forward, to inform the discussion process with the Commission and Member States.

The FSA have conducted two pieces of omnibus research in the area of vitamins and minerals supplements:

- In March 2006, two questions were put on an omnibus survey to try to ascertain consumption of high strength vitamin and mineral supplements. These established that almost half the population had taken supplements over the last 12 months. Only 2% had taken high-dose supplements.
- In November 2006, questions were placed on an omnibus survey to explore consumer consumption of vitamin A, vitamin and mineral supplements more generally and fortified foods. Again just under half said they had taken supplements, while just over half said they ate or drank fortified food.

Further work was required to inform the FSA's understanding of consumer consumption of vitamin and mineral supplements to inform future negotiations with the EC. The FSA and COI commissioned GfK NOP to undertake this work.

The overall aim of this research was to provide a more complete picture of the consumption of vitamin and mineral supplements and provide an insight into the key drivers behind what motivates people to take vitamin and mineral supplements.



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### 3 Method

The survey was conducted on GfK NOPs Random Location Omnibus (RLO) Survey. The RLO is conducted face to face across the UK. The Random Location Omnibus employs a quota sample of individuals with randomly selected sampling points. The sample design is essentially a 3-stage design, sampling first parliamentary constituencies, then output areas within those selected constituencies and finally respondents within the output areas. The sample is based on 175 sampling points. Full details of the sampling process can be found in the appendix. Quotas were set in each of the selected sampling points by age and by gender within working status.

The questionnaire was developed by the Food Standards Agency in conjunction with COI and GfK NOP. The questionnaire can be seen in appendix A. In total 1977 interviews were completed between the 14th and 19th February 2008.

The final sample was weighted in order to ensure that it was representative in terms of known population data on age, sex, social class, number of adults in household working status and region. The weights applied can be seen in table A1 in the appendix.



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## Respondent Profile

This survey used a quota survey methodology and weights were applied to ensure that the sample was representative of the UK. The table below shows the unweighted and weighted profile of the sample on some key demographic questions.

**Table 1: Sample Profile**

	Unweighted	Weighted
	%	%
<b>Gender</b>		
Male	47	49
Female	53	51
<b>Age</b>		
16-24	12	15
25-34	18	16
35-44	19	19
45-54	16	16
55-64	13	14
65+	21	20
<b>Class</b>		
ABC1	45	49
C2DE	55	51
<b>Working status</b>		
Full time	18	19
Part time	16	17
Not working	47	40
<b>Children under 16</b>		
With	35	34
Without	65	66



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### 3.1 Notes on reading this report

The following points explain the way in which the results have been commented upon in this report.

- All of the differences which have been commented upon with this report are statistically significant.
- The significance tests which have been used are two tailed and are based on a 95% confidence interval. This means that we are 95% certain of detecting a difference where one exists in the population.
- Sub-groups which have a sample size which is less than 30 are too small for statistical significance testing to be carried out and so no comments on these groups will be made in this report.
- Throughout this report ‘\*’ indicates a proportion of less than 0.5% but greater than 0. ‘-’ indicates a 0 proportion.
- Significant differences are shown on tables by lettering. Each column has been assigned a letter and where a finding is significantly different to another then the letters of the columns it is different to have been written underneath.
- Significant differences are shown in some charts. A circle indicates that the sub-group was significantly more likely than average to give that response. Please note that significant differences are shown on a small number of charts where appropriate this does not mean that significant differences do not exist on the other charts it was just not possible to show them in this manner.
- In chapter 4.12 the attitudes of those who are currently taking supplements are compared to those who are not currently taking supplements. Three categories were identified and their definitions are set out below.
  - Current high strength supplement takers – this group indicated that they are currently taking a vitamin and/or mineral supplement and agreed that some of the vitamin and mineral food supplements that they take were high strength
  - Current standard strength supplement takers – this group indicated that they are currently taking a vitamin and mineral supplement and disagreed when asked “Do you know whether any of the vitamin and mineral supplements that you take are high strength”



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- Current non supplement takers – this group includes everyone who is not taking a vitamin or mineral supplement at the time of the survey. This group includes those who are not currently taking a supplement but have done so in the past 12 months.

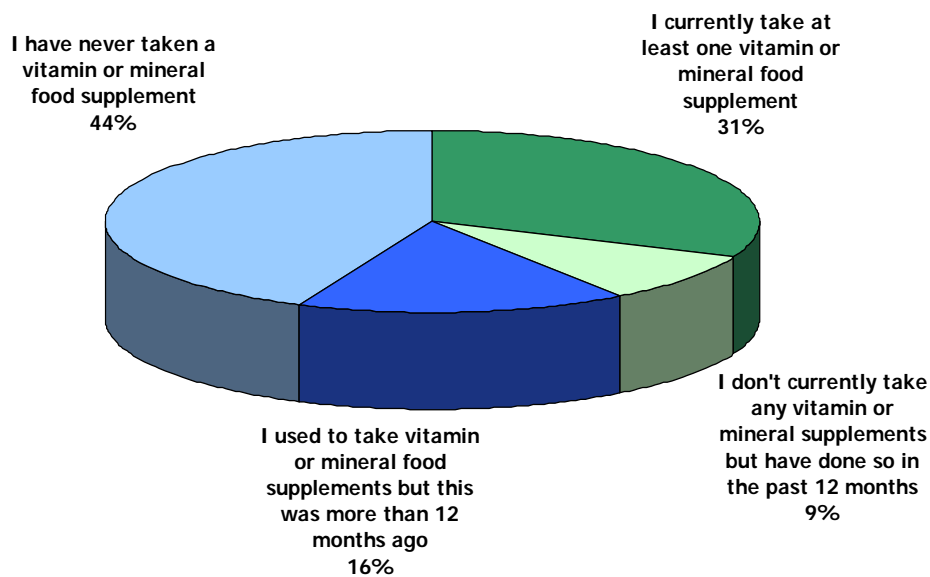
In all other chapters high strength supplement takers include those who are currently taking a supplement and those who are not currently taking a supplement but have done so in the past 12 months.

## 4 Survey Results

### 4.1 Vitamin and Mineral Food Supplement Consumption

Nearly a third (31%) are currently taking at least one vitamin or mineral supplement with a further 9% not currently taking but having done so in the last 12 months. One in six (16%) had taken a supplement more than 12 months ago but more than four in ten (43%) had never taken a vitamin or mineral food supplement.

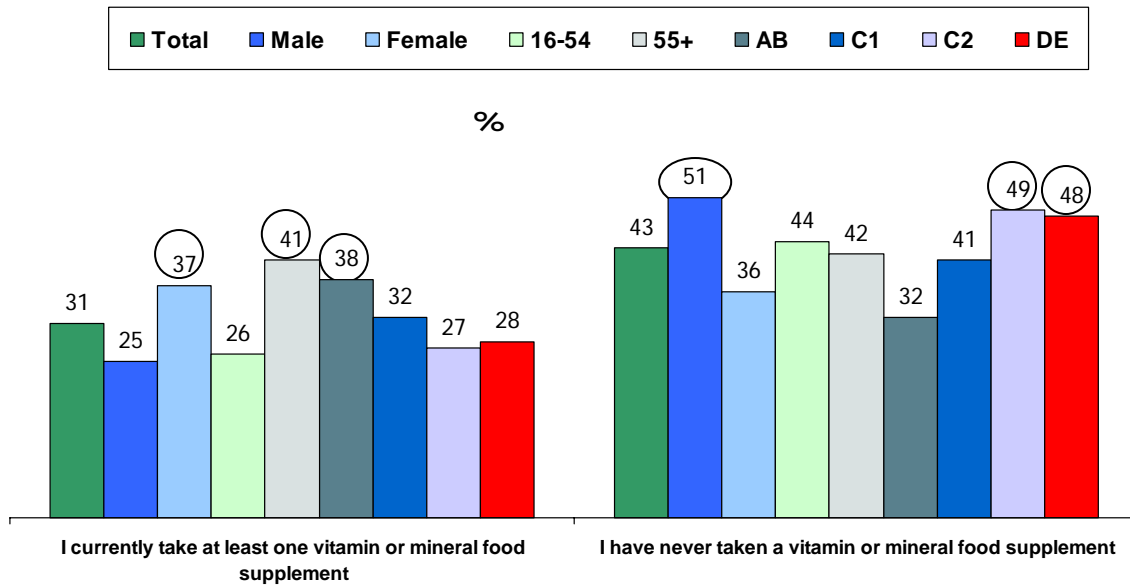
**Chart 1: Now thinking about vitamin and mineral food supplements, which of the following statements best applies to you?**



Base: All adults aged 16+ (1977)

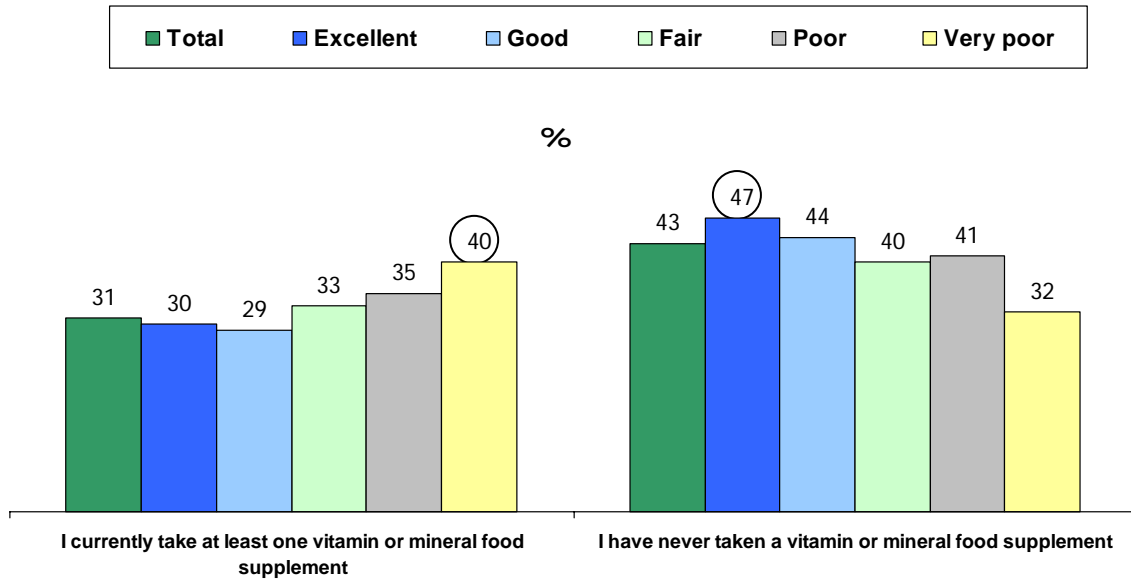
Vitamin and mineral food supplement consumption varied by demographic profile. Women (37%), those aged 55+ (41%), those in social class AB (38%) and those in very poor health (40%) were the most likely to be taking a vitamin and/or mineral food supplement. In contrast men (51%), those in social grades C2DE (49%) and those in excellent health (47%) were the most likely never to have taken a vitamin and mineral food supplement.

**Chart 2: Now thinking about vitamin and mineral food supplements, which of the following statements best applies to you? By Gender, age and social class**



(Unweighted base sizes for sub groups – male 926, female 1051 - 16-54 1303, 55+ 674 - AB 357, C1 528, C2 414, DE 678)

**Chart 3: Now thinking about vitamin and mineral food supplements, which of the following statements best applies to you? By health status**



Base: All adults aged 16+ (1977)

(Unweighted base sizes for sub groups – Excellent 444, Good 887, Fair 409, Poor 185, Very Poor 48)

The vast majority of those who are currently taking supplements, say they take them either daily/ on most days (72%) or more than once a day (20%).

Overall we can therefore assume that just under three in ten (29%) of the total population will be currently taking a vitamin or mineral supplement at least once a day.



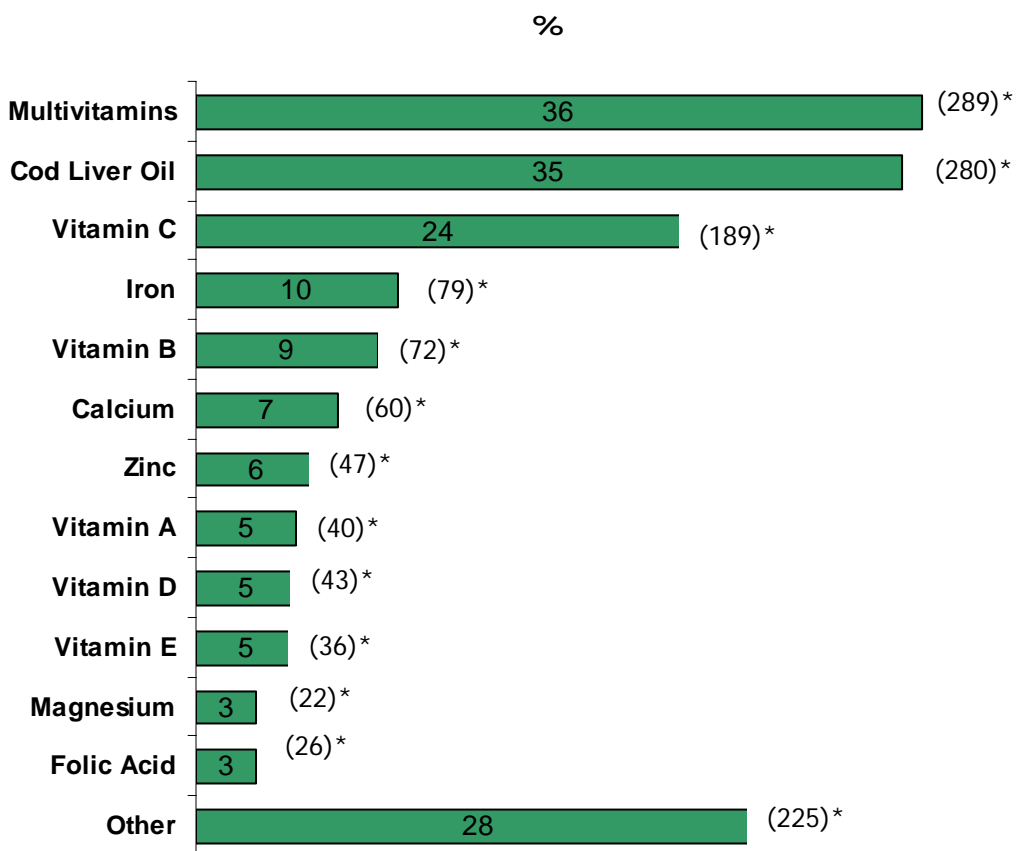
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## 4.2 Types of vitamin and supplements taken

Respondents were asked what vitamins and/or mineral food supplements they were currently taking, or had taken in the last 12 months, and the top three supplements were multivitamins (36%), cod liver oil (35%) and vitamin C (24%). A full breakdown of usage can be seen in Chart 4 below.

**Chart 4: Vitamin and mineral food supplements taken in the past 12 months**



Base: All adults aged 16+ who have taken supplements in the past 12 months (unweighted base 801)

\* Please note the numbers in brackets equal the actual number of people included in each category

The other category included:

- Devil's Claw
- Echinacea
- Evening Primrose oil
- Garlic



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- Glucosamine
- Ginkgo Biloba
- Ginseng
- Hair and skin vitamins
- Kelp
- Milk Thistle
- Omega 3/Fish oils
- Probiotics
- Selenium
- Saint John's Wort
- Star Flower Oil
- Q10
- Well man

It should be noted that not all supplements mentioned by consumers in this survey will be included in the EC proposals for maximum and minimum levels of vitamins and minerals supplements, including cod liver oil, Devil's Claw, Echinacea, Evening Primrose oil, Garlic, Glucosamine, Ginkgo Biloba, Ginseng, Kelp, Milk Thistle, Omega 3/Fish oils, Probiotics, Saint John's Wort and Star Flower Oil, as they are not vitamin or mineral substances.

Age was an important factor in determining the vitamin or mineral supplement taken. For example vitamin C was much more likely to be taken by supplement takers aged 16-24 (42%) compared with those aged 25-64 (24%) and those aged 65 plus (10%). Similarly a greater proportion of supplement takers aged 16-34 were taking vitamin A (11%) and Iron (16%) compared with those aged 35 plus (3% and 6% respectively).

Cod liver oil was a predominantly older age group supplement with a half of those aged 55 plus taking this supplement compared with a quarter (26%) of those aged 16-54. Conversely multivitamins were taken by a greater number of 16-54 year old supplement takers (46%) than those aged 65 plus (18%).

### 4.3 Multiple taking of vitamin and mineral supplements

Overall just over two fifths (43%) of those who have taken vitamin and mineral supplements in the past 12 months have taken more than one type of vitamin or mineral supplement during this period. High strength vitamin and mineral takers were more likely than the supplement taking population as a



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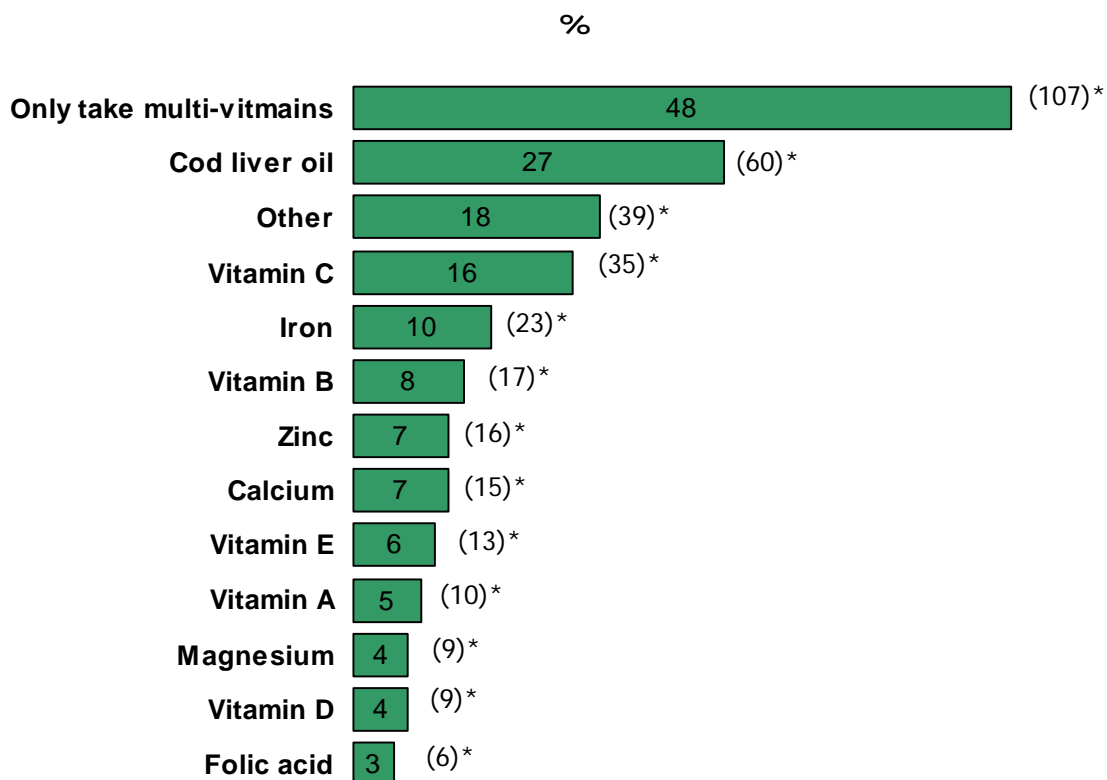
whole to have taken more than one product in the past 12 months, with more than a half (52%) indicating they had done so. It is worth noting that we do not know whether these vitamin and mineral supplements were being taken concurrently or at separate times during the year.

If we consider current takers of supplements, 2% have taken both vitamin A and cod liver oil in the past 12 months. Of these 13 people who are current takers of supplements and have taken both vitamin A and cod liver oil, 4 were also high strength supplement takers.

If we now look solely at those people who are currently taking a supplement and have taken multi-vitamins in the past 12 months, a half have taken multi-vitamins and other supplements in the past 12 months.

Chart 5 shows, for example, that just over a quarter of those taking multi-vitamins have also taken a multivitamin and cod liver oil in the past 12 months. 5% have taken a multivitamin and vitamin A in the past 12 months.

**Chart 5: Which other vitamin and/or mineral food supplements do those who take multi-vitamins either currently take or have taken in the past 12 months?**



Base: All adults aged 16+ who are currently taking multi-vitamins (unweighted base 227)

\* Please note the numbers in brackets equal the actual number of people included in each category



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#### 4.4 Reasons for taking a vitamin and mineral food supplement

Respondents who had taken a vitamin or mineral food supplement in the past 12 months were asked why they had taken them. Nearly six in ten (57%) reported that they had taken it for their general well being/to stay healthy.

Other mentions given by more than 10% of the respondents were:

- For a specific benefit - for example, shiny hair, strong nails, supple joints etc (19%)
- My doctor/health professional advised me to take them (13%)
- To ward off colds (10%)

Reasons given varied across sub groups, most notably by age. Those aged 45 years plus (26%) were much more likely to be taking vitamin and mineral supplements for a specific health benefit compared with those under 45 years (11%). Nearly one in ten of takers of supplements in the past 12 months aged under 65 reported taking supplements because they did not have a balanced diet, while only 1% of those 65 plus indicated this. Working status was also linked with whether people took supplements because they did not think they were getting a balanced diet. Those working full time (11%) were more likely to report they take vitamins and minerals because they do not think they get a balanced diet compared with 4% of those working part time and 5% of those not working.

Only one gender difference was evident in the reasons given with nearly two in ten (17%) women citing their doctor or health professional advised them to take them compared with just 6% of men.

#### 4.5 High Strength Vitamin and Mineral Supplements

The definition of a high strength vitamin and mineral supplements is not straight forward, what is considered high strength for one vitamin or mineral may be considered standard strength for another. In an attempt to determine the proportion of the population who would knowingly take a high strength supplement a series of questions were asked. We have defined high strength supplement takers throughout this report as those who have claimed that they take a high strength supplement.

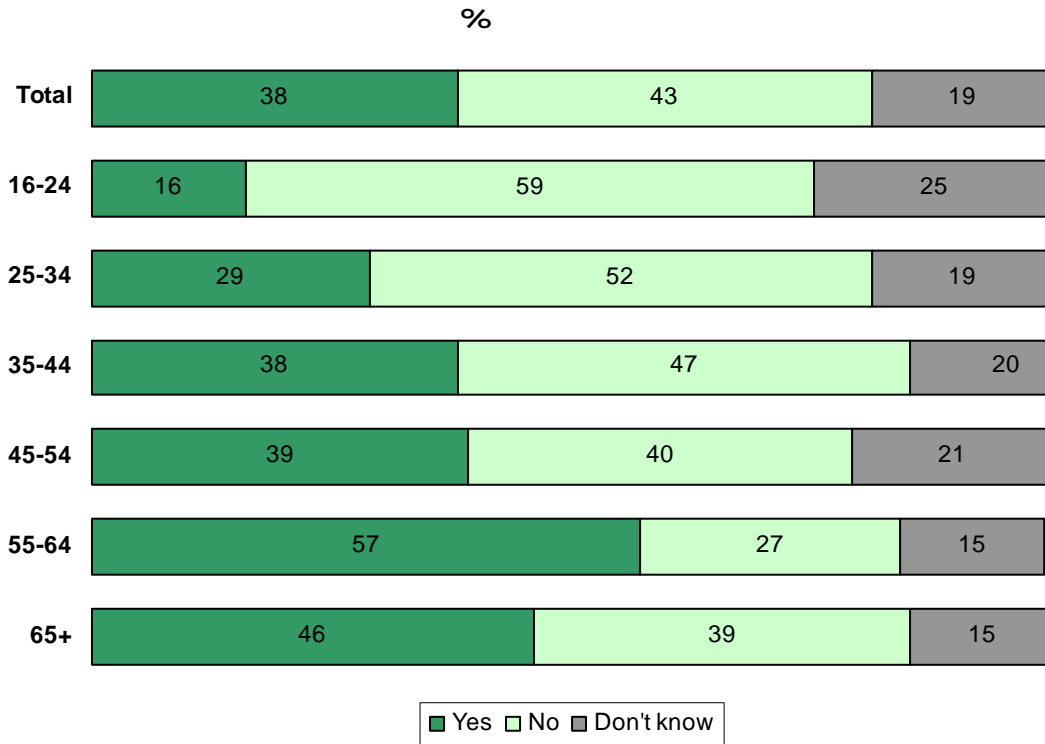
Nearly two in five (38%) of those who had taken supplements in the past 12 months claimed to have taken high strength vitamin or mineral supplements. Takers of high strength supplements tend to be older. A half of those aged 55 plus were taking high strength supplements compared with a third of those aged 25 to 54 years and 16% of those aged 16-24 years.



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**Chart 6: Do you know whether any of the vitamin and mineral food supplements you take are high strength?**



Base: All adults aged 16+ who have taken supplements in the past 12 months (unweighted base 801)

(Unweighted base size for sub groups – 16-24 93, 25-34 147, 35-44 132, 45-54 120, 55-64 127, 65+ 182)

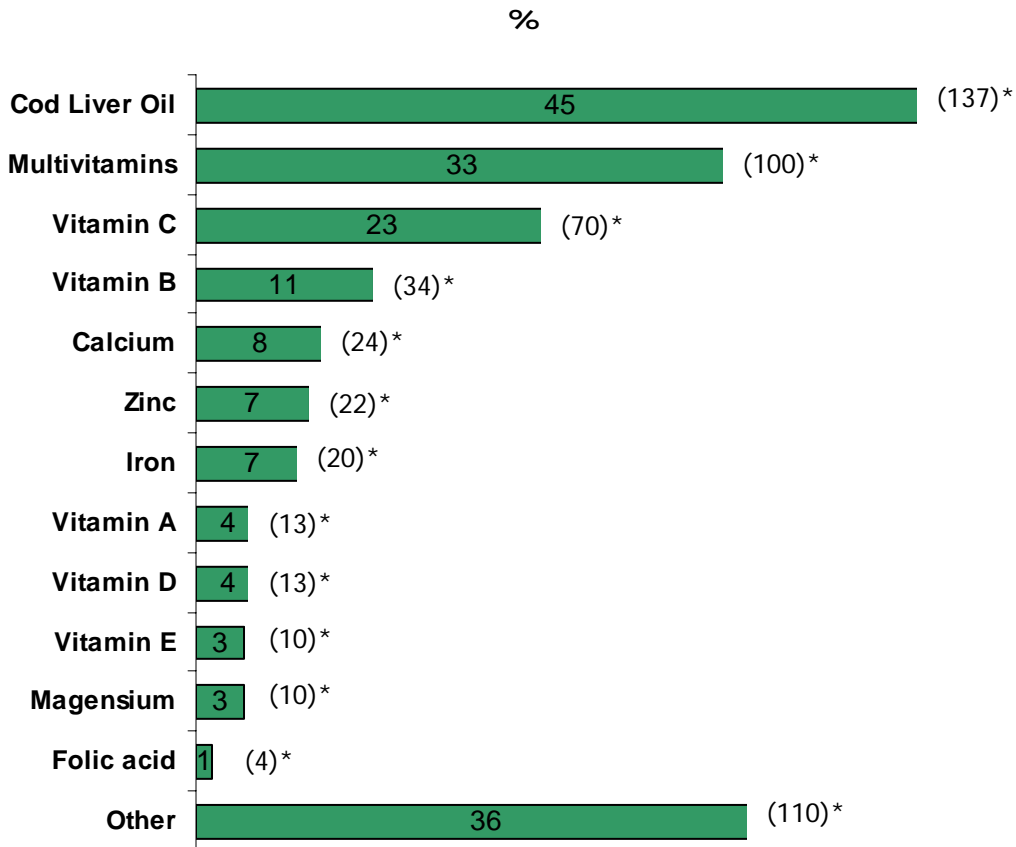
By extrapolating this figure to the population we can estimate that one in seven (15%) think they have taken a high strength supplement in the last 12 months. Chart 7 below shows the vitamins and minerals taken by those who have taken a vitamin and mineral supplement in the past 12 months and have also taken a high strength supplement.



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**Chart 7: Which vitamin and/or mineral supplements are you currently taking or have you taken in the past 12 months? By high strength supplement takers**



Base: All who have taken a supplement in the last 12 months and have taken a high strength supplement (unweighted base 294)

\* Please note the numbers in brackets equal the actual number of people included in each category

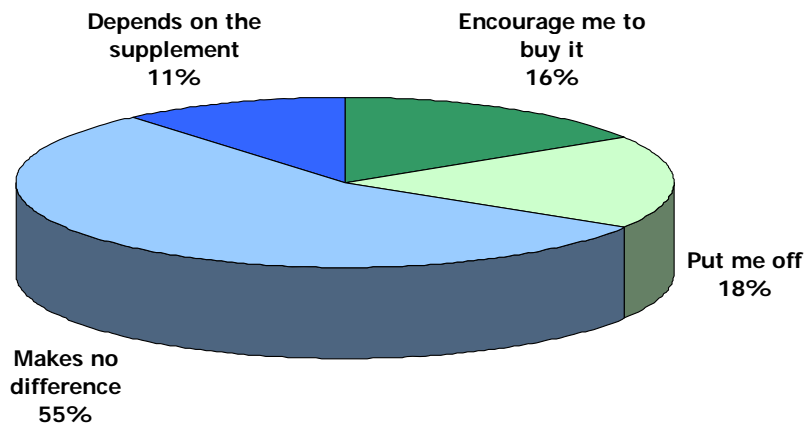


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For more than a half (55%) of those who have taken supplements in the past 12 months, a supplement being labelled as high strength would make no difference to them buying it, whilst a further one in six (16%) indicated it would encourage them to buy it. Nearly one fifth (18%) reported the high strength label would put them off buying it. One in ten (11%) thought that the effect of the label would depend on the type of supplement it was and this was particularly the case for women (13% compared with 7% of men).

**Chart 8: If a vitamin or mineral food supplement was labelled as high strength, would this encourage you to buy it, put you off or would it make no difference to your decision on whether to buy it or not?**



Base: All adults aged 16+ who have taken supplements in the past 12 months (unweighted base 801)

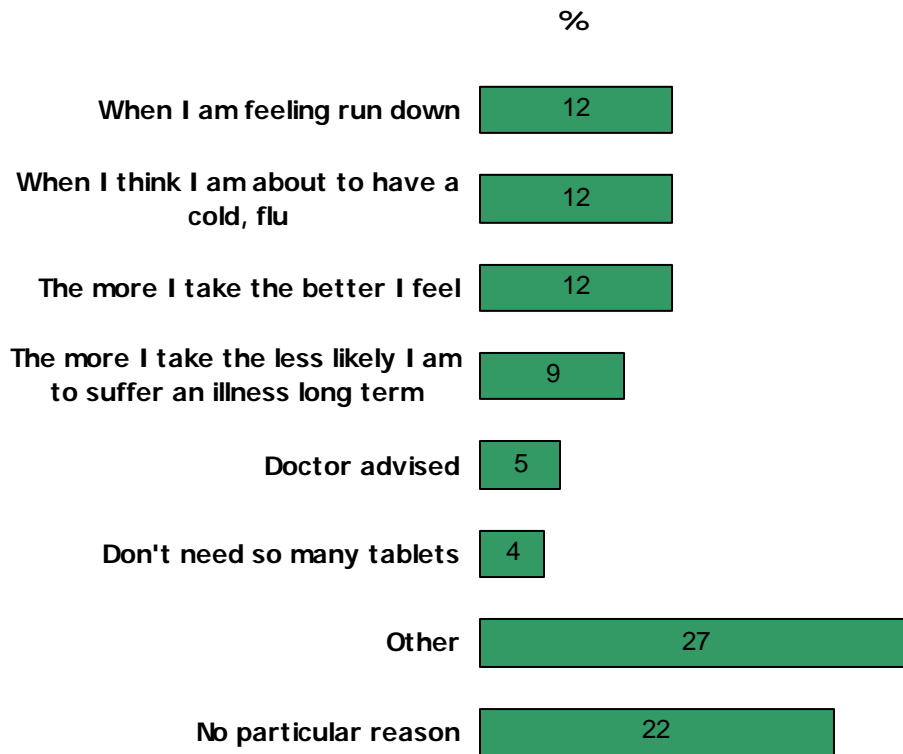
Reasons for taking a high strength vitamin and/or mineral supplement were diverse, with one fifth (22%) reporting there was no particular reason. A high proportion gave an "other" answer with many of these being related to actual ailments. Chart 9 shows the main reasons provided for taking high strength supplements.



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Chart 9: Why do you take high strength vitamin and/or mineral food supplements?



Base: all adults aged 16+ who have taken high strength supplements (unweighted base 294)

The other reasons given for why high strength vitamin and/or mineral food supplements were taken are listed below. It is important to realise that some of these reasons may have only been given by 1 person.

- Arthritis
- Osteoporosis
- Joint problems or flexibility
- Bone strength
- Anti aging to keep brain in condition
- Anaemia
- Pain relief
- Illness



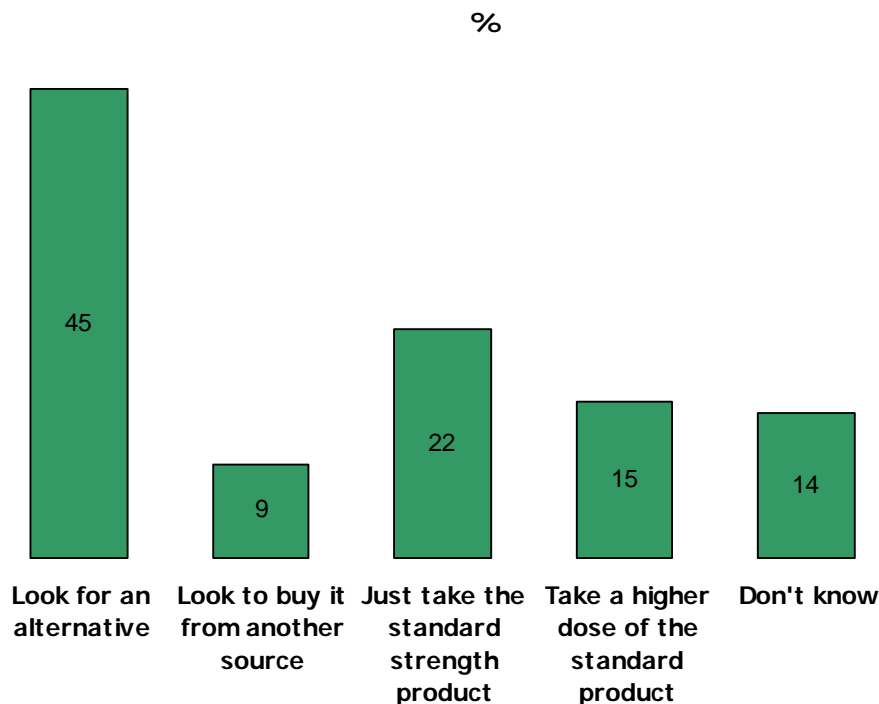
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- Vegetarian and history of anaemia
- Don't get enough fruit and vegetables
- Body mass index and size
- Age
- Bad diet
- To keep stress down and energy levels up
- More effective
- Recommended (by unspecified person)

Respondents who claimed to take high strength supplements were asked what they would do if the high strength supplement they were taking was no longer available. More than two in five (45%) indicated they would look for an alternative high strength product, whilst a further 15% would take a higher dose of the standard product. However, more than a fifth (22%) indicated they would take the standard supplement.

**Chart 10: What would you do if the high strength vitamin/mineral food supplement you take were no longer available?**



Base: all adults aged 16+ who have taken high strength supplements (unweighted base 294)



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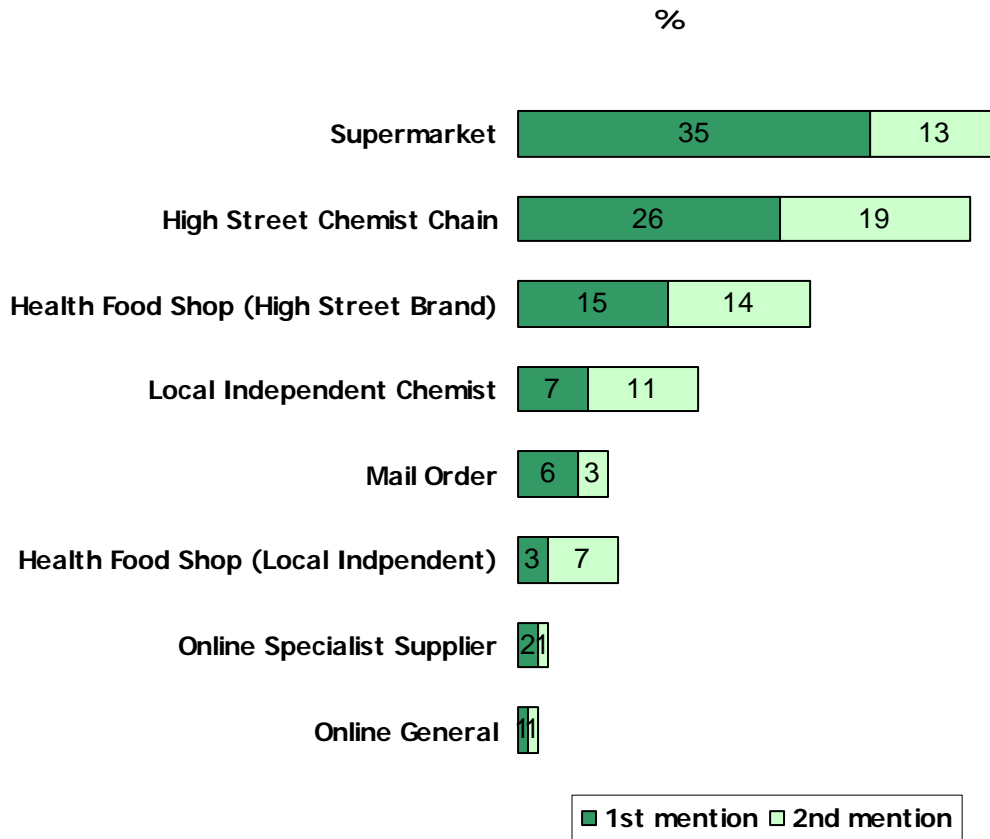


### 4.6 Source of Purchase

All who had taken vitamin and mineral supplements in the past 12 months were asked where they mainly bought them from. The first place mentioned was recorded separately and then all subsequent mentions were recorded.

Chart 11 below shows the number of mentions recorded for each place. The top two places for buying vitamin and mineral supplements were the supermarket (49%) and a High Street Chemist Chain (45%).

**Chart 11: Where do/did you buy your vitamin and food supplements from?**



Base: All adults aged 16+ who have taken supplements in the past 12 months (unweighted base 801)

Buying behaviour was influenced by demographic profile. Women (49%) were more likely to buy their supplements in a High Street Chemist Chain than men (38%). Those aged 65 plus (32%) were less likely than those aged under 65 (53%) to buy their supplements from a supermarket but were more likely to purchase them by mail order (22% compared with 5% respectively).

Taking high strength vitamin and mineral food supplements also influenced where respondents chose to buy their supplements. Those who took high strength supplements were more likely than those



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who just took the standard dosage levels to buy their supplements from a health food shop – high street chain (34% and 25% respectively) health food shop – local independent (13% and 6% respectively), by mail order (13% and 6% respectively) and from online-general website (3% and 1% respectively).

**Table 2: Where do/did you buy your vitamin and food supplements from?**

All adults aged 16+ who have taken supplements in the past 12 months	Total	High strength vitamin & minerals	
		Yes A	No B
Unweighted base	801	294	361
Weighted base	769	303	345
	%	%	%
Supermarket	49	45	52
High Street Chemist Chain	45	39 B	49
Health Food Shop (High Street Brand)	29	34 B	25
Local Independent Chemist	18	17	20
Health Food Shop (Local Independent)	10	13 B	6
Mail Order	9	13	6
Online Specialist Supplier	3	4 B	3
Online – General	2	3 B	1
Gym	1	2	*

Please note letters denote which columns are significantly different from each other



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## 4.7 Advice, information and labelling

Nearly a half (47%) of those who have taken a supplement in the past 12 months reported that they have never received advice or looked for information about the vitamin and food supplements they should be taking. Gender and health status influenced whether advice had been sought. Men (53%) and those in good health (53%) were more likely than women (43%) and those in poor health (24%) to have not received/sought advice.

The professional most likely to have given advice on which vitamin or mineral supplement should or should not be taken was the GP (21%). A small number of respondents had received advice from other professionals which are outlined below:

- Dietician/nutritionist (3%)
- Nurse (2%)
- Pharmacist (2%)
- Nutritional therapist (1%)
- Alternative health practitioner (1%)

Other informal sources used included:

- Magazine article (9%)
- Relative/friend (7%)
- Website (6%)
- Books (5%)
- Newspaper article (5%)
- Health food shop (4%)
- Gym instructor (1%)

### 4.7.1 Label Information

All of those who had taken supplements in the past 12 months were asked how often, if at all, they looked at the information on the label of their vitamin and mineral food supplements. Just over three in ten (31%) indicated they never looked at the information on the label. The youngest (16-24) and the oldest (65 plus) age groups were the most likely not to have looked at the information (38%) compared with a quarter (24%) of those aged 25-54 years old.



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Just under four in ten (38%) looked at the label every time they purchased a new pack of their regular supplement, whilst a further quarter (26%) looked at the information if they changed the brand of supplement. Presence of children in the household was a correlate of whether the label was looked at every time a purchase was made. Nearly a half (46%) of those with children always looked at the information compared with a third (34%) of those households without children under 16. This may, however, be mainly a function of respondent age.

**Table 3: How often, if at all, do you look at the information on the label of your vitamin and mineral supplements?**

All adults aged 16+ who had taken supplements in the past 12 months	Total	Age				Children under 16	
		16-24	25-54	55-64	65+	Yes	No
		A	B	C	D	E	F
Unweighted base	801	93	399	127	182	259	542
Weighted base	796	109	375	139	172	244	552
	%	%	%	%	%	%	%
Every time I purchase a new pack of my regular food supplement	38	32	44 AC	33	30	46 F	34
If I change the brand of vitamin or mineral food supplement that I take	26	24	27	26	24	25	26
Something else	5	5	5	5	5	3	7
I don't ever look at the information	31	39	24 AC	35	38	26 F	33

Please note letters denote which columns are significantly different from each other

Respondents who looked at the information on the label were asked what information they looked at. By combining this question with the one above we can provide indicators of prevalence in the supplement taking population. The full list of mentions can be seen in Chart 12. The largest single group (31%) said they never look at the label information, and the only label features mentioned by more than 15% were:

- Dosage information - the number of tablets/capsules I should take a day (22% of all supplement takers)
- Full list of ingredients (20% of all supplement takers)

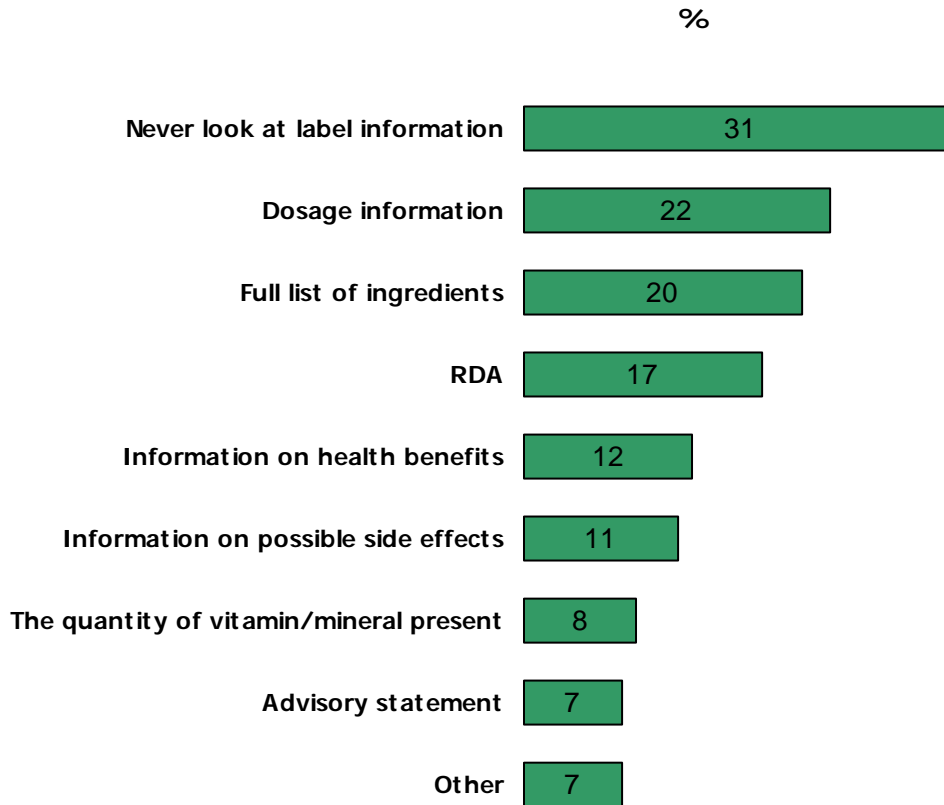


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- RDA – Recommended Daily Allowance (17% of all supplement takers)

Chart 12: What information do you look for on the label



Base: All adults aged 16+ who have taken food supplements in the past 12 months (unweighted base 801)

Again sub group differences were evident in the type of information that was looked at. Women and ABC1s were more likely than men and DEs to read the dosage information, whilst the under 55s and the ABC1s were more likely to have read the Recommended Daily Allowance than those over 65 and the DEs. In addition adults with children in the house were the most likely to have read the proportion of the RDA that the food supplement contains and the full list of ingredients.

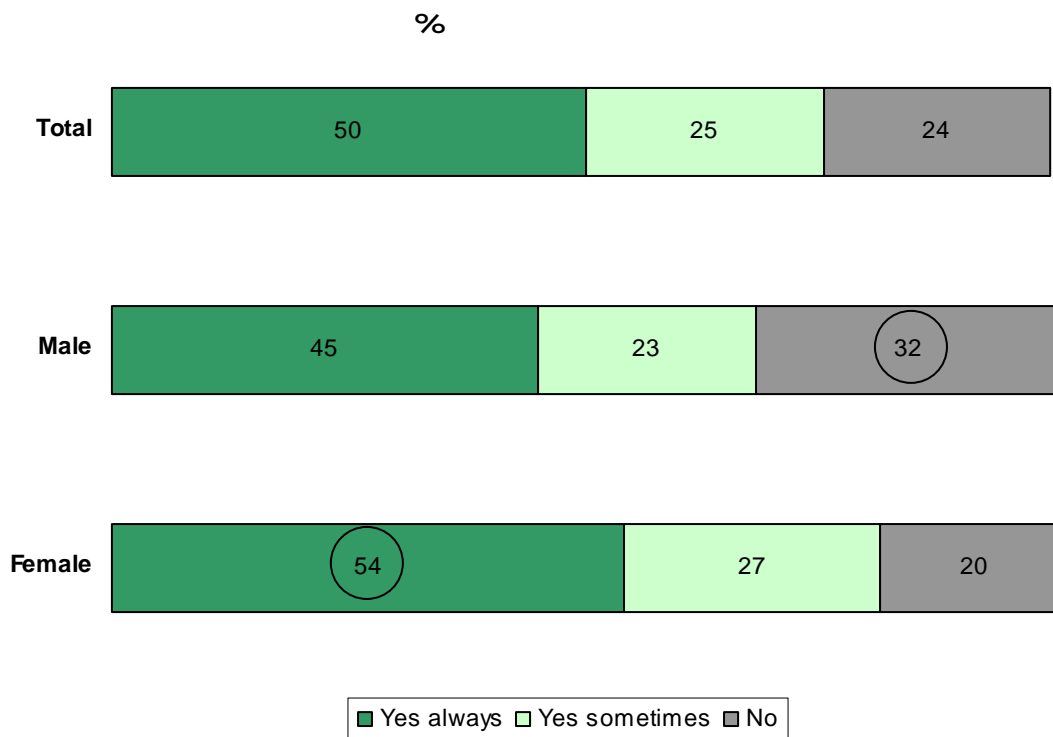
It is worth noting that those respondents who looked at the information label took on average significantly more vitamin and mineral supplements than those who did not look at the label (1.91 compared to 1.51). It is however worth noting that median for both groups is 1.

## 4.8 Recommended Daily Allowance

Those who have taken supplements in the past 12 months were asked if they ever looked at the recommended daily allowance on the vitamins and minerals that they take. A quarter (24%) said they did not, while half always look, with a further quarter looking at this information sometimes.

Again, men were the least likely to have looked at the information with nearly a third (32%) reporting they had never looked at the RDA on the vitamin and minerals that they take.

**Chart 13: Do you ever look at the recommended daily allowance (RDAs) on the vitamins and minerals that you take?**



Base: All adults aged 16+ who have taken supplements in the past 12 months (unweighted base 801)  
 (Unweighted base sizes for sub groups – Male 301, Female 500)



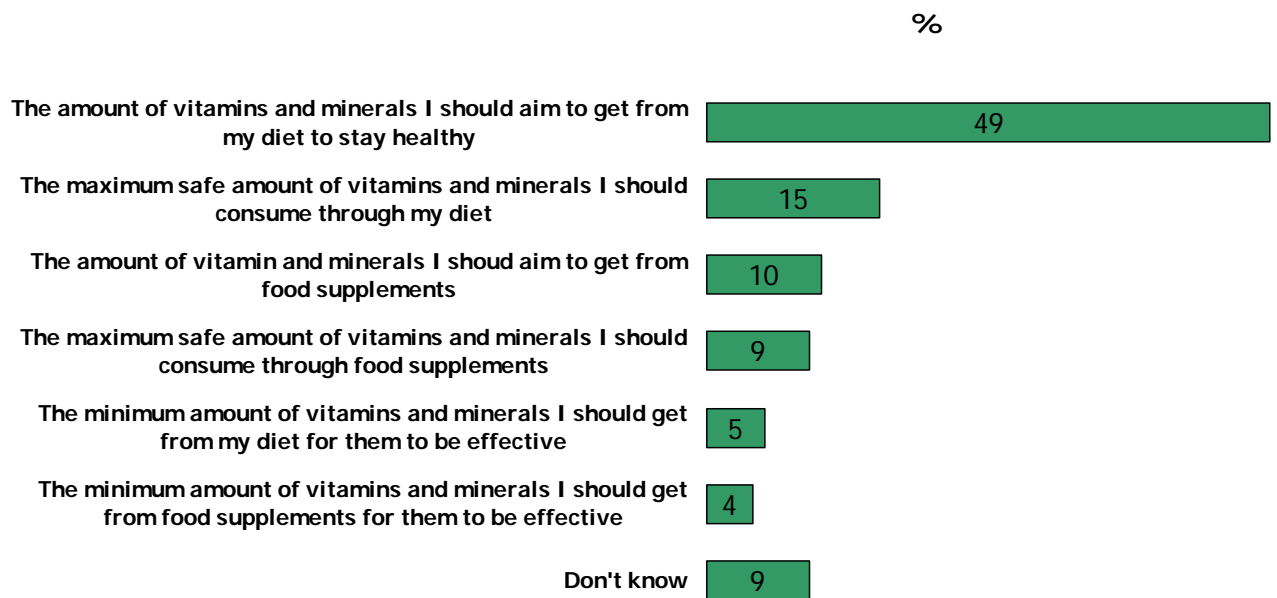
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#### 4.9 Knowledge of term “Recommended Daily Allowance”

Respondents were shown a number of possibilities as to the meaning of the term Recommended Daily Allowance. Nearly a half (49%) chose the correct definition, that it was the ‘amount of vitamins and minerals I should aim to get from my diet to stay healthy’. However, that does mean that 51% of those who have taken supplements in the past 12 months were unaware of the correct definition. Chart 14 below provides details of the other definitions selected by the respondents.

**Chart 14: What do you understand the term Recommended Daily Allowance (RDA) to mean?**



Base: All adults aged 16+ who have taken supplements in the past 12 months (unweighted base 801)

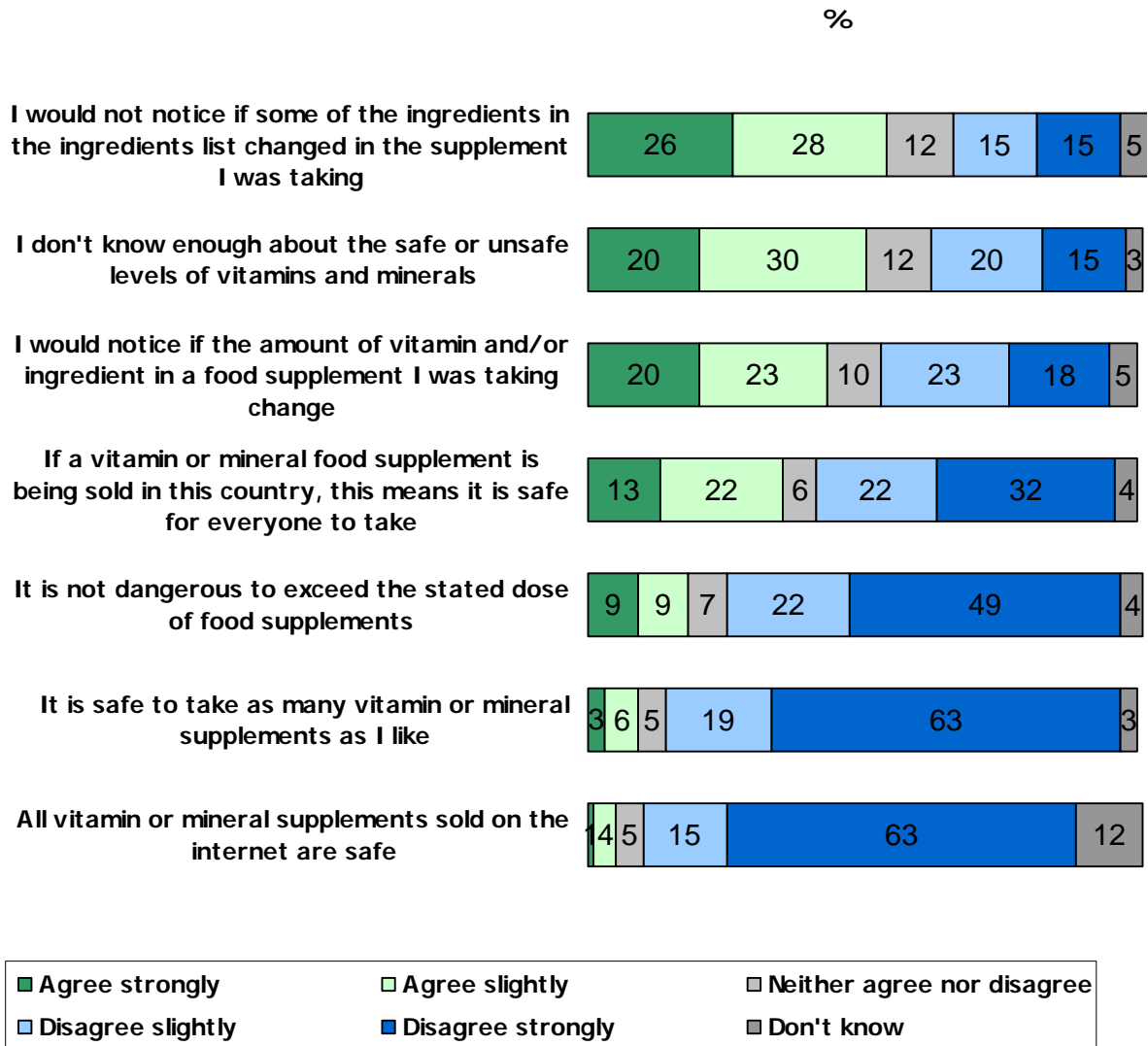


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### 4.10 Attitudes towards dosage

Chart 15: Attitude to Vitamin and Mineral Food Supplements



Base: All adults aged 16+ who have taken supplements in the past 12 months (unweighted base 801)



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Generally people seem to be aware that supplements can lead to health problems if taken in high levels. Seven in ten (71%) disagreed with the statement “It’s not dangerous to exceed the stated daily dose, for example the number of capsules or vitamin and mineral food supplements”. Similarly, more than eight in ten (83%) disagreed with the statement “It is safe to take as many vitamin or mineral food supplements as I like”. In both instances women were more likely than men to disagree strongly with these statements.

However, knowledge of what they are taking and the potential negative effects is low. A half agreed that “I don’t know enough about safe or unsafe levels of vitamin or minerals”. In addition over a half (54%) agreed that “I would not notice if some of the ingredients in the ingredients list changed in the vitamin and/or mineral food supplement that I was taking”. Similarly two fifths (41%) disagreed that “I would notice if the amount of vitamin and/or mineral ingredient in a food supplement I was taking changed”.

Recognition that not all supplements are suitable for everyone is reasonable, with just 35% agreeing that “If a vitamin or mineral food supplement is being sold in this country, this means it is safe for everyone to take”.

The majority of respondents do seem to be aware that they should be careful about where they are buying their vitamin and mineral supplements from. Three in four (78%) disagreed that “All vitamin or mineral food supplements sold on the internet are safe”. It is worth noting that those aged 65 plus were the most likely to respond they don’t know (25%).

#### **4.10.1 Side Effects**

A half of those who had taken supplements in the past 12 months were fully aware that taking a number of vitamin and mineral supplements may result in consumption of high levels of some vitamins or minerals which could cause side effects that are unpleasant or bad for you. Age and social class were indicators of awareness. More than a half (55%) of those aged 35 plus were fully aware of this, compared with just a third (36%) of those aged 16-24 years. Similarly, nearly six in ten (58%) of those in AB were fully aware compared with less than a half of those in C2 (45%) and DE (42%) social grading.

Those who had taken a supplement in the last 12 months and who knew that they had taken a high strength supplements (64%) were more likely to be fully aware of this aspect than those not taking high strength supplements (47%).



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**Table 4: Awareness of risk of side-effects from unintentional high levels of consumption**

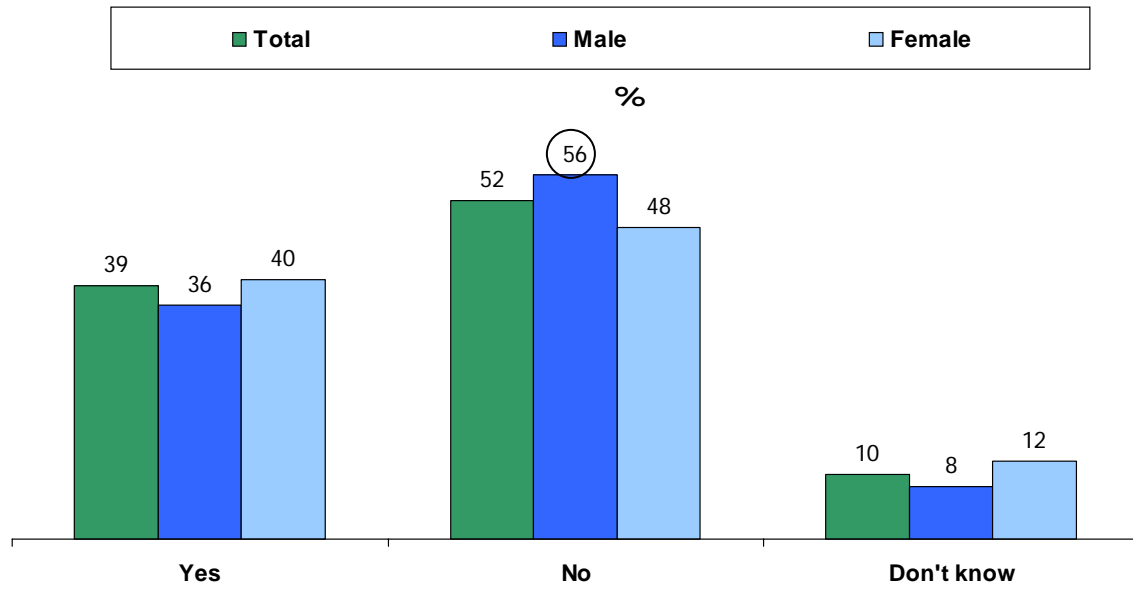
All adults aged 16+ who have taken supplements in the past 12 months	Total	Age			Social grade				High strength	
		16-24 A	25-34 B	35+ C	AB D	C1 E	C2 F	DE G	Yes H	No I
Unweighted base	801	93	147	561	178	227	149	247	294	361
Weighted base	796	109	127	559	190	239	149	218	303	345
	%	%	%	%	%	%	%	%	%	%
Fully aware	50	36	44	55 A	58 FG	54	45	42	64 I	47
Partially aware	31	42	38	28	30	30	35	30	27	33
Not aware	15	19	14	14	10	11	17	21 DE	7	17 H
Don't know	4	4	4	4	1	5 D	4	6 D	2	3

Please note letters denote which columns are significantly different from each other

#### 4.10.2 Advisory Statements

The majority of respondents who had taken supplements in the past 12 months had either not seen an advisory statement (52%) or did not know (10%) whether they had seen one. Four in ten (39%) had actually seen an advisory statement on a vitamin or mineral food supplement. Men (56%) were more likely than women (48%) not to have seen an advisory statement.

**Chart 16: Have you ever seen a vitamin and/or mineral food supplement with any advisory statement on the label?**

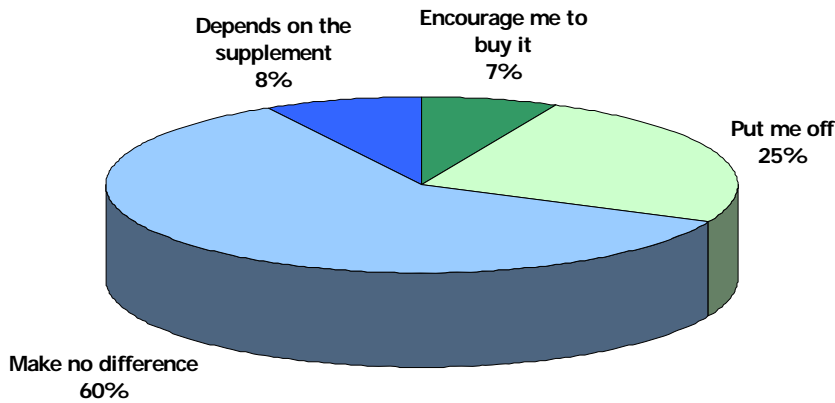


Base: All adults aged 16+ who have taken supplements in the past 12 months (unweighted base 801)  
 (Unweighted base sizes for sub groups – Male 301, Female 500)

A greater proportion of those taking high strength supplements in the past 12 months were uncertain as to whether they had seen an advisory statement, with 12% saying they did not know, compared with 6% of those who had not taken a high strength supplement in the past 12 months.

All those who had taken a supplement in the past 12 month were asked about the effect that seeing an advisory statement that did not apply to them would have on them. Six in ten said it would make no difference to their purchasing behaviour, but a quarter said that even though it did not apply to them it would put them off buying the product. A small number (8%) said that the effect of the statement would depend on the supplement type, while 7% felt that an advisory statement that did not apply to them would encourage them to buy it.

**Chart 17: If you were going to buy a food supplement and you saw that it had an advisory statement on it that did not apply to you, would this encourage you to buy it, put you off, or would it make no difference to your decision on whether to buy it or not?**

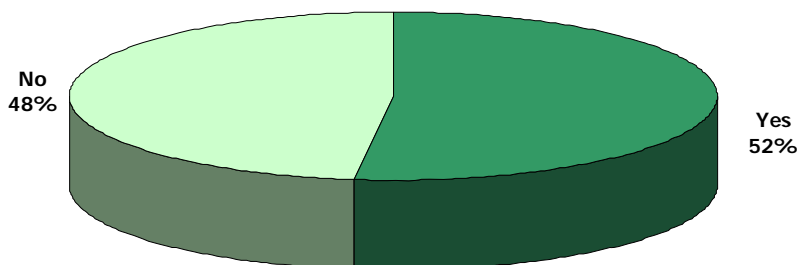


Base: All adults aged 16+ who have taken supplements in the past 12 months (unweighted base 801)

#### 4.11 Children and supplements

Respondents with children under 16 were asked whether they give their child supplements or encourage them to take a supplement. Respondents were almost equally split with just over a half (52%) indicating that they either gave or encouraged their children to take food supplements.

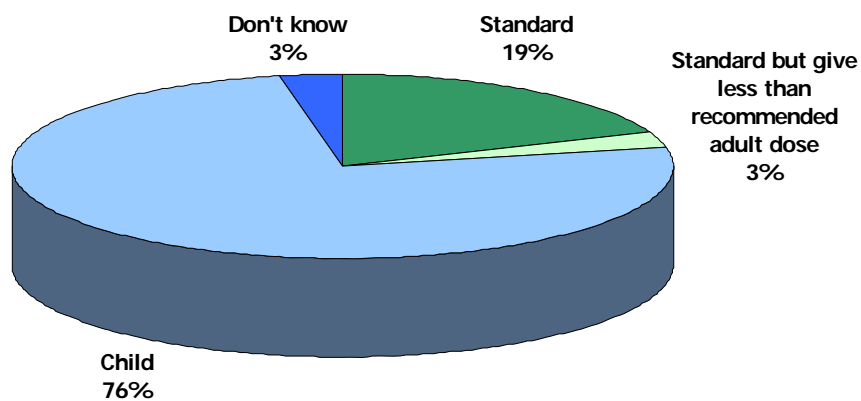
**Chart 18: Do you give your child/children vitamin and mineral food supplements or encourage them to take food supplements?**



Base: All adults aged 16+ who are parents of children under 16 (unweighted base 236)

The majority of parents whose children take supplements give their children the child version of the supplements. A further 3% give their children the adult version of the supplement but give them less than the adult recommended adult dose. However, one fifth gave their children the standard adult supplements at the adult dosage.

**Chart 19: Do you give them the standard version of the food supplement or food supplements specifically designed for children?**



Base: All adults aged 16+ whose children take supplements (unweighted base 126)

## 4.12 General Food and Health Issues

In this section the attitudes of those who are currently taking supplements are compared to those who are not currently taking supplements. Three categories were identified and their definitions are set out below.

1. Current high strength supplement takers – this group indicated that they are currently taking a vitamin and/or mineral supplement and agreed that some of the vitamin and mineral food supplements that they take were high strength
2. Current standard strength supplement takers – this group indicated that they are currently taking a vitamin and mineral supplement and disagreed when asked “Do you know whether any of the vitamin and mineral supplements that you take are high strength”
3. Current non supplement takers – this group includes everyone who is not taking a vitamin or mineral supplement at the time of the survey. This group includes those who are not currently taking a supplement but have done so in the past 12 months.

### 4.12.1 Attitudes to Health

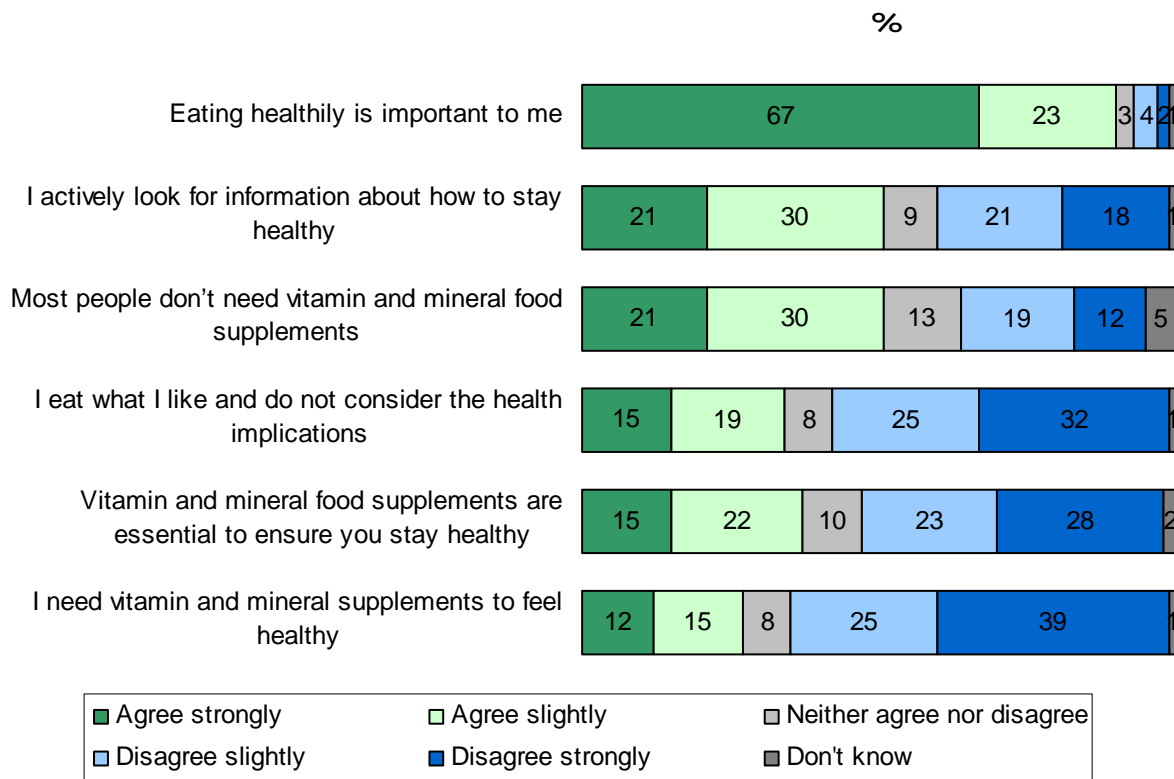


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A series of statements were read out and respondents were asked to what extent they agreed or disagreed with each statement. The overall responses to each statement can be seen in Chart 20. The statement that provoked the most unanimous response was "Eating healthily is important to me". Two thirds of respondents agreed strongly with this statement with a nearly a quarter (23%) agreeing slightly.

Chart 20: Attitudes to health and vitamin and mineral food supplements



Base: all adults aged 16+ (1977)

The percentage of respondents strongly agreeing with the statement "eating healthily is important to me". Strong sub group differences are evident with woman (72%), those aged over 25 years (70%) and those in social class AB (79%) and C1 (72%) being the most likely to rate this aspect as important to them.

Just under three fifths (57%) disagreed that "I eat what I like and do not consider the health implications. Again it was women (36%), those aged 25 years or more (34%) and those in social class AB (41%) and C1 (38%) who were the most health conscious and therefore the most likely to disagree strongly with this statement. Differences in attitudes were evident between supplement takers and those not taking supplements, as well as the strength of the vitamin and mineral supplements. Just under a half (48%) of current high strength vitamin and mineral supplement takers disagreed that "I



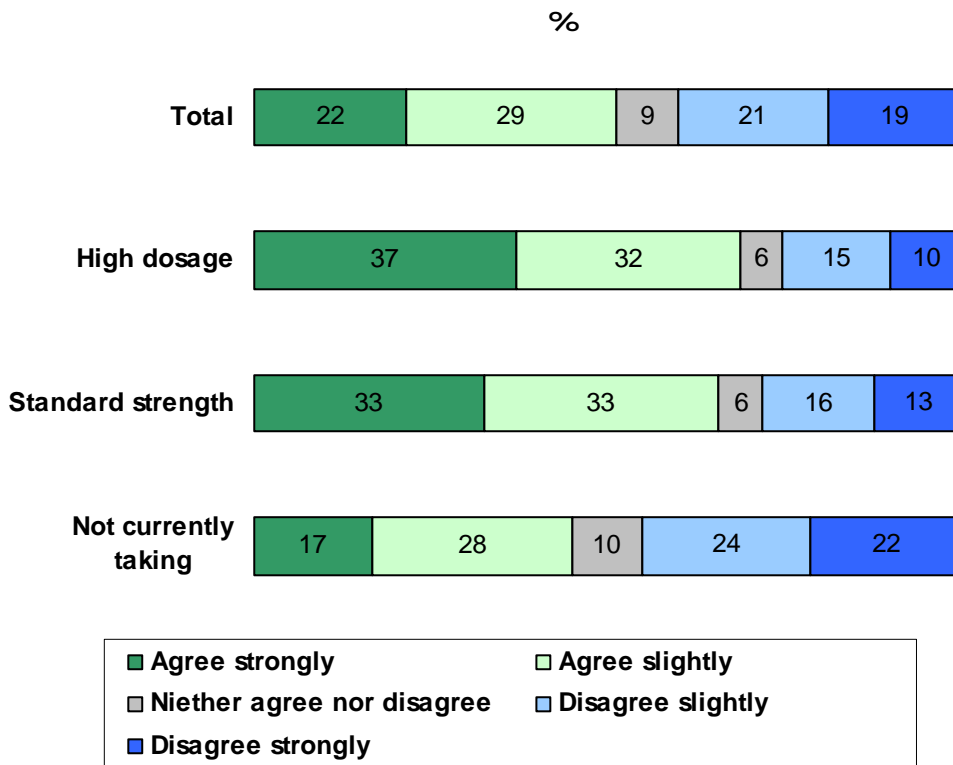
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eat what I like and do not consider the health implications” compared with just over a third (35%) of current standard strength supplement takers and more than a quarter (28%) of current non supplement takers.

The statement “I actively look for information about how to stay healthy” polarised views with a half (51%) agreeing with this statement and nearly four in ten (39%) disagreeing. Again, differences in attitudes were evident between supplement takers and those not taking supplements, as well as the strength of the vitamin and mineral supplements. Just over a third (35%) of those current high strength supplements takers strongly agreed with this statement compared with just over a quarter (27%) of current standard strength supplement takers and just 16% of current non supplement takers.

**Chart 21: I actively look for information about how to stay healthy**



Base: all adults aged 16 + whose dosage level could be ascertained and answered the question (1853)  
(Unweighted base for sub groups – high dosage 250, standard strength 253, not currently taking 1349)

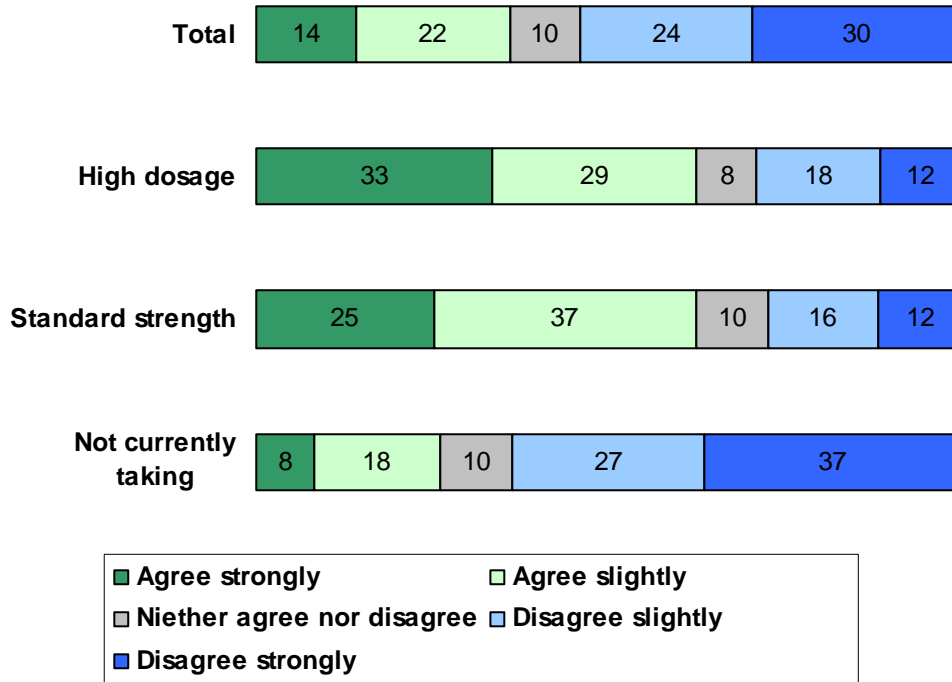
The battery of questions asked also included some statements relating to health and vitamin and mineral food supplements. Just over a half (51%) disagreed that “Vitamin and mineral food supplements are essential to ensure they stay healthy”, one in ten neither agreed nor disagreed whilst nearly four in ten (37%) agreed with this statement. Less than one in ten (8%) of current non supplement takers strongly agreed with this statement compared to a quarter (25%) of those current standard strength supplement takers and a third (33%) of current high strength supplement takers.

**Chart 22: Vitamin and mineral food supplements are essential to ensure you stay healthy**

%



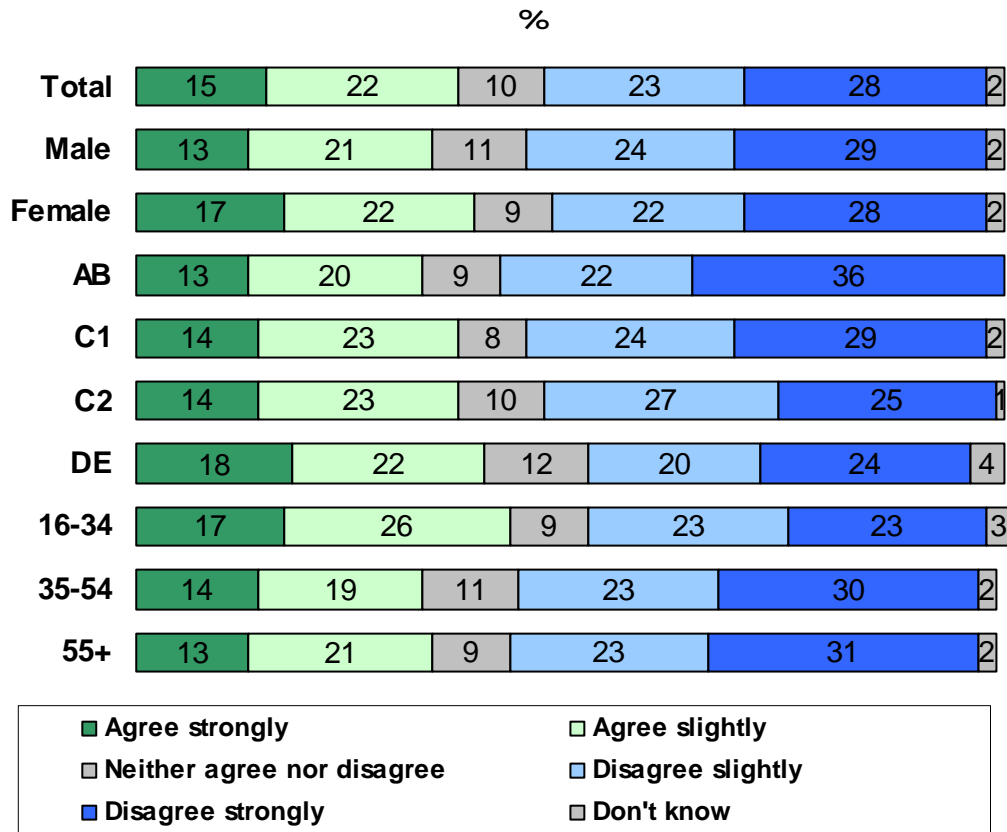
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Base: all adults aged 16 + whose dosage level could be ascertained and answered the question (1828)  
 (Unweighted base for sub groups – high dosage 247, standard strength 251, not currently taking 1329)

Other sub group differences included that women (17%) were significantly more likely to agree strongly with this statement than men (13%); whilst in contrast those in social grade AB (36%) and those aged over 55 years old (31%) were more inclined to disagree strongly with this statement.

Chart 23: Vitamin and mineral food supplements are essential to ensure you stay healthy



Base: all adults aged 16+ (1977)

(Unweighted base sizes for sub groups – Male 926, Female 1051 – AB 357, C1 528, C2 414, DE 678 – 16-34 609, 35-54 694, 55+ 674)

Similarly, a half (51%) agreed with the statement that “most people don’t need vitamin and mineral food supplements”, with a further three in ten (31%) disagreeing with this statement.



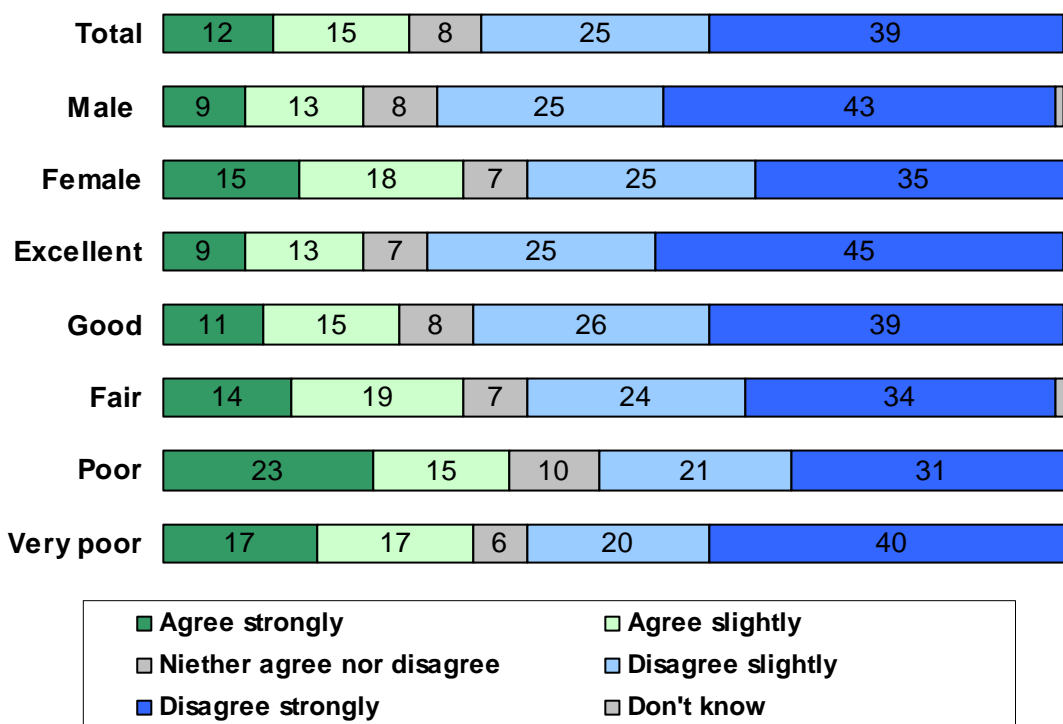
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Nearly two thirds (64%) disagreed that they “need a vitamin and mineral supplement to feel healthy” however more than a quarter (27%) agreed with this statement. Women (33%) and those in poor or very poor health (37%) were the most likely to indicate that they need a vitamin and mineral supplement to feel healthy compared to men (22%) and those in excellent or very good health (29%).

Chart 24: I need a vitamin and mineral supplement to feel healthy

%



Base: all adults aged 16+ (1977)

(Unweighted base sizes for sub groups – Male 926, Female 1051 – Excellent 444, Good 887, Fair 409, Poor 185, Very Poor 48)

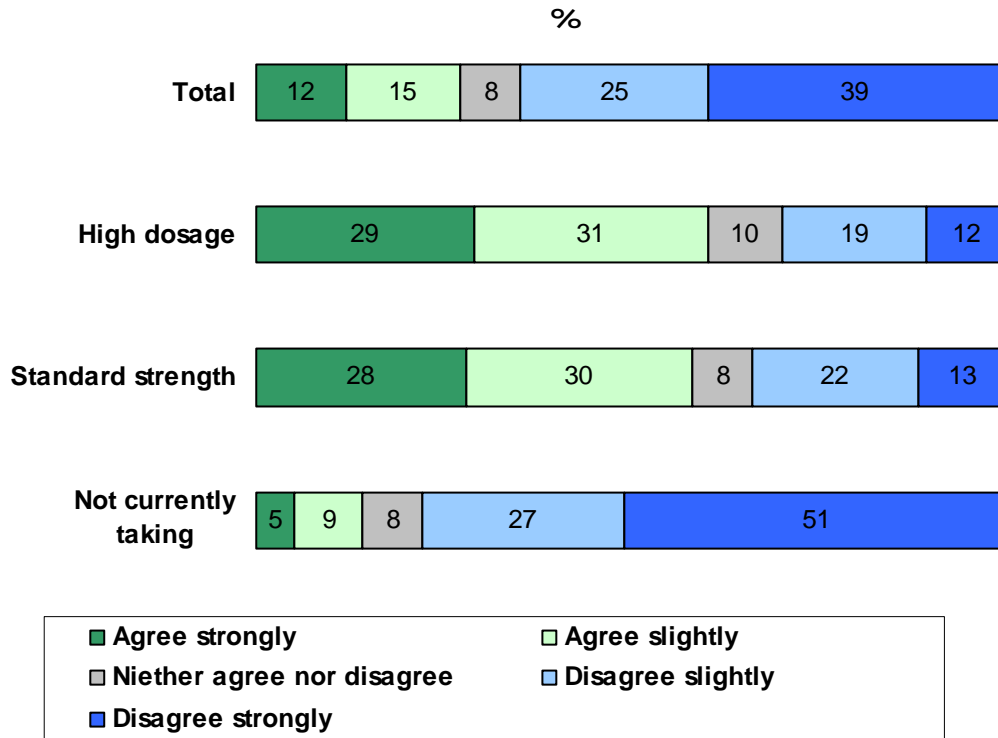
Agreement with the statement “I need a vitamin and mineral supplement to feel healthy” was linked to both use of vitamin and strength of the dosage. Over a half (51%) of current non supplement takers strongly disagreed with this statement compared to just 13% of current standard strength supplement takers and 12% of current high strength supplement takers.



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Chart 25: I need a vitamin and mineral supplement to feel healthy



Base: all adults aged 16 + whose dosage level could be ascertained and answered the question (1853)

(Unweighted base sizes for sub groups – high dosage 250, standard strength 253, not currently taking 1347)

#### 4.12.2 Food behaviour

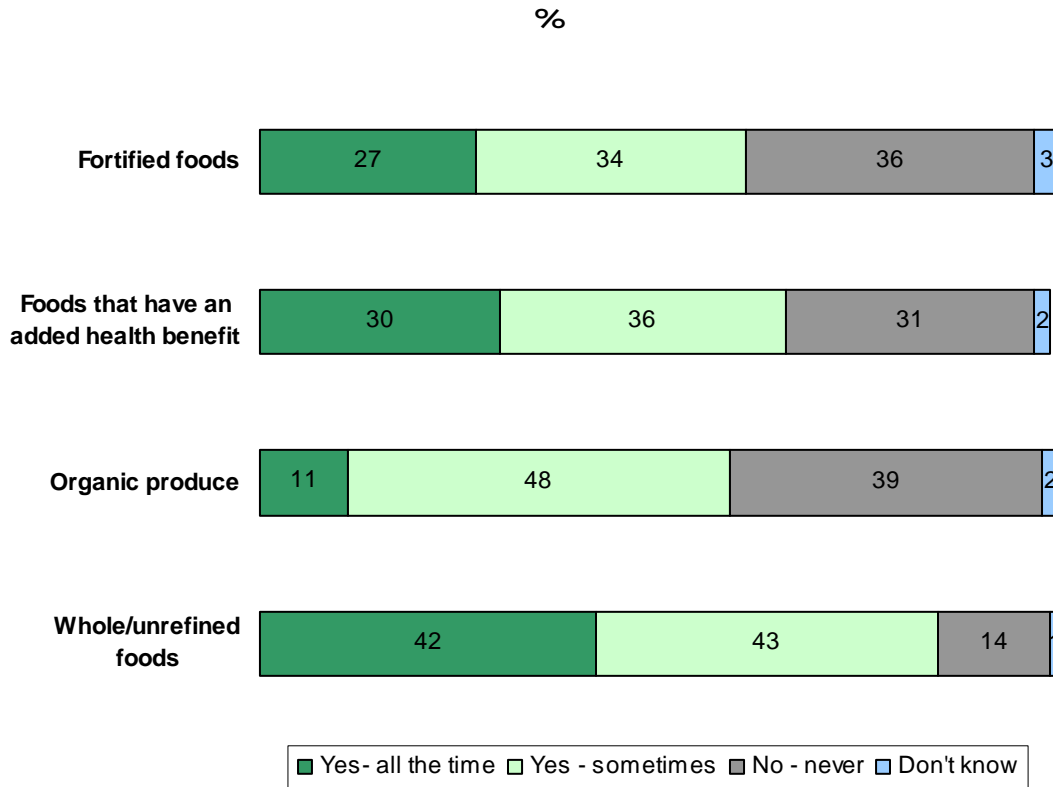
All respondents were asked whether their main food and grocery shopping contained a number of items in order to gain a fuller picture of dietary habits of vitamin and mineral supplement consumers. The majority (85%) indicated that they bought whole/unrefined foods at least sometimes, whilst two thirds bought at least sometimes foods that have an added health benefit e.g. margarines or yoghurts that help reduce cholesterol, were fortified (61%) or were organic (59%). However, it is worth noting that considerably fewer bought organic food all the time than the other items.



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Chart 26: Purchase of food types



Base: all adults aged 16+ (1977)

A small number of sub group differences were evident in the type of foods that were purchased. The purchase of fortified foods showed the most diversity within the sub groups. Women (29%), and those who had children (35%) were more likely to buy fortified foods all the time, compared with men (24%), and those without children (22%). Conversely those aged 55 plus (49%) were more likely to never buy fortified food than those aged under 55 years (29%). Current high strength supplement takers (44%) were also more likely to never buy fortified foods compared to those who current standard strength supplements takers (35%) or current non supplement takers (35%).

In contrast current non supplement takers (35%) were more likely to indicate they never buy foods with health benefits than current standard strength supplement takers (28%) or current high strength supplement takers (20%).

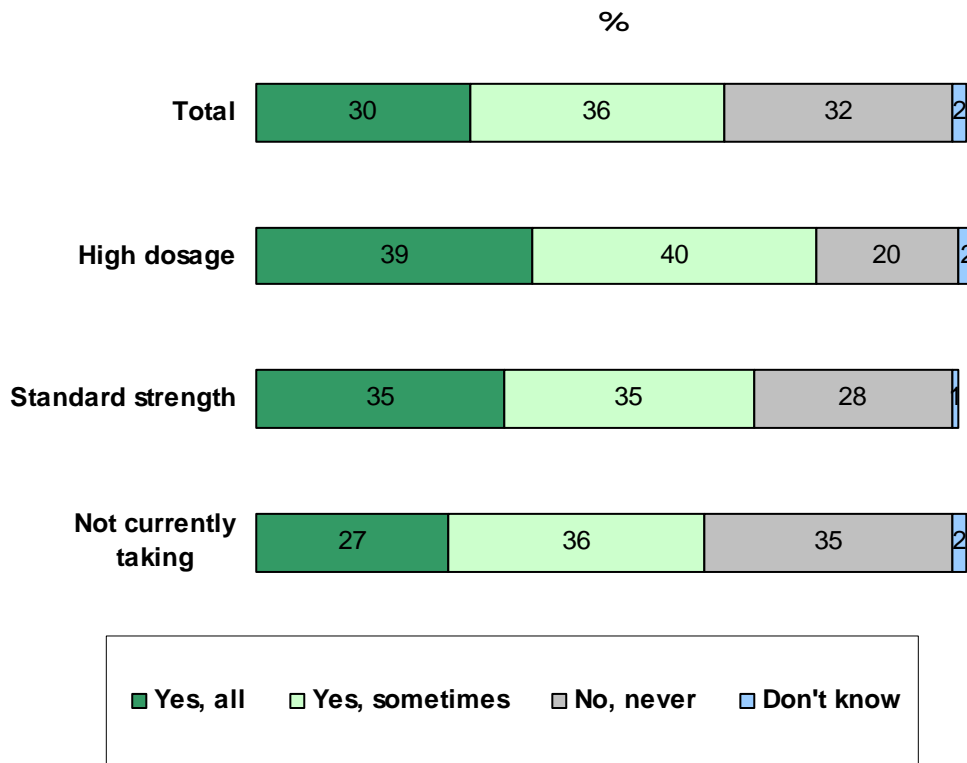


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Chart 27: Do you or whoever does the shopping in your household buy any of the following items in your main food and grocery shopping?

Foods that have a health benefit



Base: all adults aged 16+ whose dosage level could be ascertained (1868)

(Unweighted base sizes for sub groups – high dosage 243, standard strength 262, not currently taking 1363)

Organic food was bought all the time by a greater proportion of those classified as AB (18%), compared with 6% of C1C2DEs. In contrast, those classified in social group DE (19%) were more likely than those in ABC1C2 (11%) to never buy whole/unrefined foods.

Some differences were evident if current supplement usage is considered along with strength of the supplement. Just over four in ten (42%) of current non supplement takers never buy organic food compared to a third (35%) of current standard strength supplement takers and just under three in ten (29%) of current high dosage supplement takers.



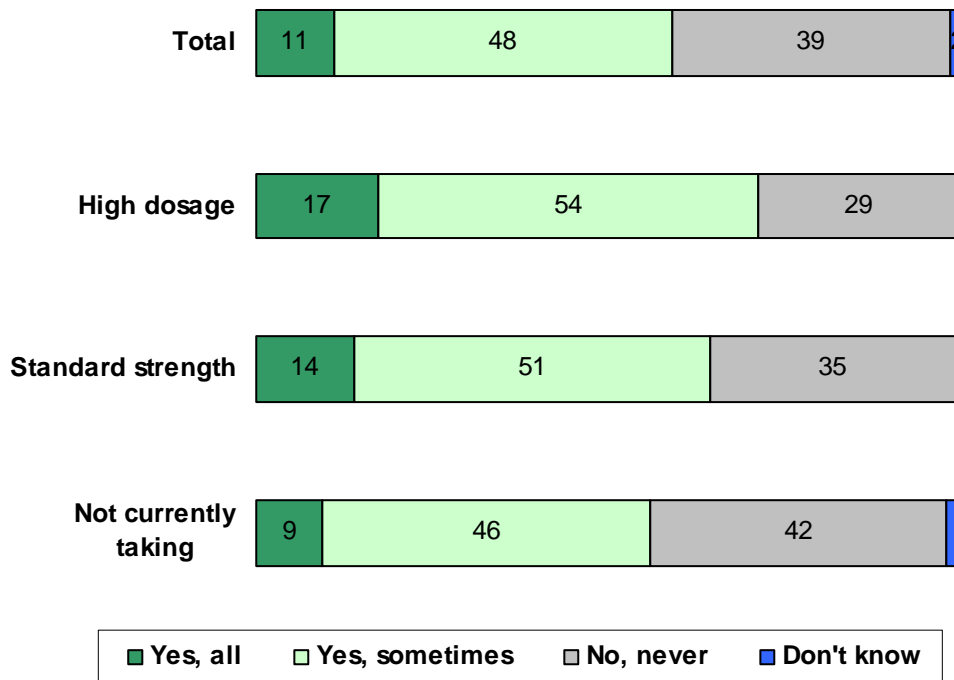
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Chart 28: Do you or whoever does the shopping in your household buy any of the following items in your main food and grocery shopping?

Organic Food

%



Base: all adults aged 16+ whose dosage level could be ascertained (1868)

(Unweighted base sizes for sub groups – high dosage 243, standard strength 262, not currently taking 1363)



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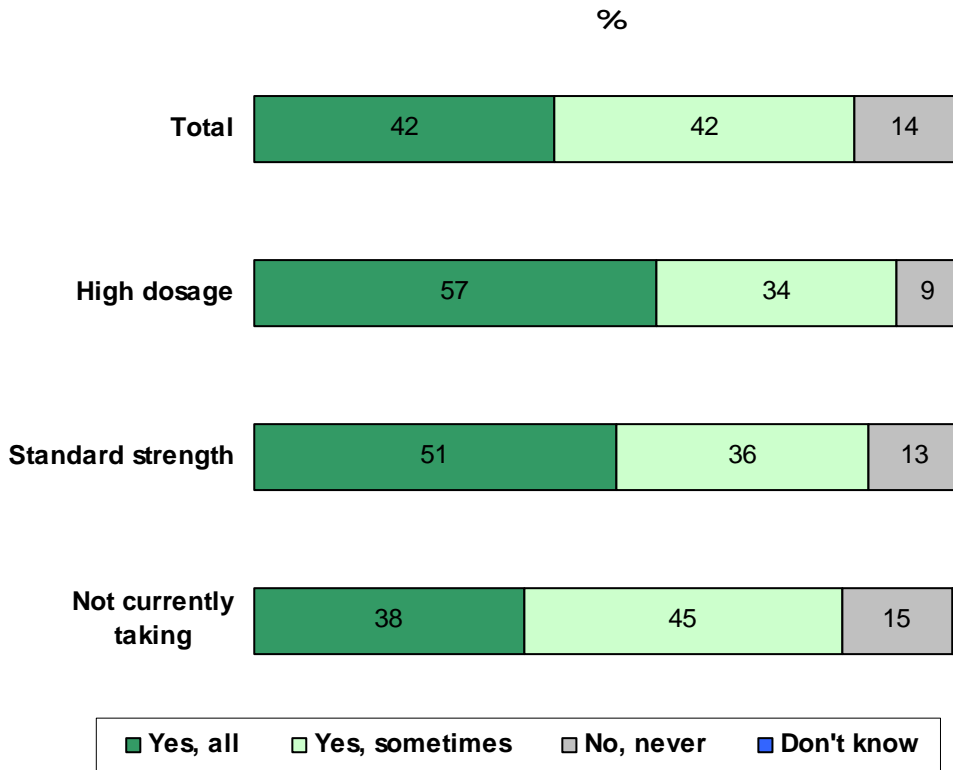


Half of current vitamin takers (51%) always buy unrefined/wholemeal products compared with fewer than four in ten (37%) of those who have never taken a vitamin or mineral food supplement.

Again if current supplement usage is considered along with strength of the supplement some further differences are evident. More than a half of current high dosage supplements (57%) or standard strength supplements (51%) buy wholemeal/unrefined foods all the time compared to just under two fifths (37%) of current non takers of supplements.

**Chart 29: Do you or whoever does the shopping in your household buy any of the following items in your main food and grocery shopping?**

**Wholemeal/Unrefined Foods**



Base: all adults aged 16+ whose dosage level could be ascertained (1868)

(Unweighted base sizes for sub groups – high dosage 243, standard strength 262, not currently taking 1363)



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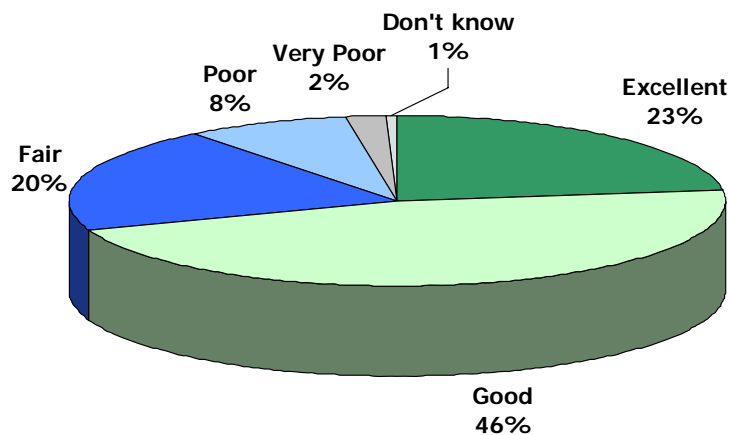
### 4.12.3 Health Rating

The majority of the public indicated that their health had been either excellent (23%) or good (46%) over the last year, with just 2% reporting it was very poor. Sub-group differences were evident within the health rating with, maybe not surprisingly, those aged 65+ more likely to rate their health as fair (31%) compared with those under 65 (18%).

Social grade also showed differences with those in the ABC1 categories reporting better health than those in the C2DE category.

Men (26%), those aged under 65 (25%), those in social grade ABC1 (30%) and those who were married (25%) were the most likely to report excellent health.

**Chart 30: Please think about how your health has been over the last year. Would you say your health has been ....?**



Base: all adults aged 16+ (1977)

It is worth noting that those who take a high strength supplement (6%) are less likely to report their health is excellent compared to those who are either taking a standard strength supplement or not taking any supplement (25%)



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#### 4.13 Key Drivers of Vitamin/Supplement Consumption

In addition to the cross-tabulations, key driver analysis was carried out to establish what factors best segmented the sample into those who do and do not take vitamins and supplements. CHAID Analysis (Chi-square Automatic Interactive Detection) is a tree-based segmentation technique which separates respondents into mutually exclusive subgroups with respect to a single criterion. This separation is based on the 'Chi-square statistic'. The criterion in this case was "those who take vitamins and/or supplements", this was defined as anyone who had taken a vitamin and/or mineral supplement in the past 12 months. CHAID selects a set of predictors (independent variables) and their interactions that optimally predict the criterion (dependent variable). The mutually exclusive subgroups that result from the CHAID are usually based on independent variables such as demographics, attitudes and behaviour.

To some extent, CHAID is simply a sophisticated way of presenting a combination of nested crosstabs. To produce a CHAID tree, there are several steps.

- Step 1: The researcher will identify a single criterion (outcome variable) and a number of predictor (independent) variables
- Step 2: CHAID then determines the predictor that is the most discriminatory with respect to the criterion using the Chi-Square test of independence
- Step 3: The criterion variable is then split by the predictor variable in step 2. Categories of the predictor variable will become 'nodes' or 'leaves' of the tree. (Note: this step can be obtained through simple cross tabs)
- Step 4: Repeat step 2. For each node, determine the predictor that is most discriminatory with respect to the criterion.
- Step 5: Continue step 4 for each node until stopping rules are met.

The process stops when sample sizes within the nodes get too small for meaningful analysis, or when a pre-defined number of steps has been reached, or if there are no more significant relationships.

It should be noted that, in the same way that the researcher influences factor or cluster analysis by choosing whether to have a three cluster solution, a four cluster solution, and so on, the researcher also influences CHAID by deciding which variable should be included as independent variables.

In the case of the FSA study, a number of CHAID variants were tested, and the results are summarised below.



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The first iteration involved the very question on self-assessed quality of health, plus the following demographics:

- Gender
- Age
- Class
- Working status
- Marital status
- Whether respondent has children under 16
- Standard Region

This variant showed that health status had no discriminatory power at all in comparison with the demographic variables, and gender, age and social class were the only variables to feature. Gender was the most important, with woman more likely to be users than men. Among women the next most important discriminator was class, with ABC1s most likely to buy, while among men it was age, with older men less likely to buy than younger ones.

	Predicts usage	Predicts non-usage
<b>Most strongly</b>	Women	Men
<b>Next</b>	ABC1s	Age – young

Because self-assessed health had no discriminatory power when tested against demographics, it was removed from all other CHAID runs.

To test the strength of the various attitudes to health and healthy eating at Q2, the next run included all these attitude variables plus the same demographics as in the first run.

This time the biggest single discriminator was the statement “I need vitamins and mineral supplements to feel healthy”. This split the sample into three groups. Those who disagreed strongly were least likely to be users, those who agreed or agreed strongly were most likely to be users, with those who neither agreed nor disagreed, or who just disagreed, were in the middle.

For those who disagreed strongly, and were least likely to be users, the next key discriminator was the statement “I eat what I like and do not consider the health implications”, with those who agreed being more likely to be non-users. For those who agreed that they needed vitamins to feel healthy, and who were most likely to be users, the second discriminator was the statement “Eating healthily is important to me”, with those who agreed most likely to be users. Following this group down one further level,



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social class was the final significant discriminator, with ABs most likely to be users. For the non-user end of the scale, the final discriminator was gender, with men least likely to be users.

We can summarise this tree as follows:

	Predicts usage	Predicts non-usage
<b>Most strongly</b>	needs supplements to feel healthy	doesn't need supplements to feel healthy
<b>Next</b>	eating healthily is important	eat what they like without considering health implications
<b>Next</b>	Social class AB	men

It was then decided to add a further set of variables into the mix, and these were the questions on shopping behaviour at Q23 – covering things such as organic foods, fortified foods and so on. These were first tested solely with the demographics, and finally with both the demographics and the Q2 attitude statements.

In the former case gender was again the number one discriminator. Men were the least likely users, and among men those who did not buy organic produce were least likely. Among men who do not buy organic produce it was those with children who were least likely to use vitamins and supplements. Women were the most likely users, and the best predictor of use among women was whether they bought organic produce all the time.

	Predicts usage	Predicts non-usage
<b>Most strongly</b>	women	men
<b>Next</b>	buy organic food all the time	not buying organic food
<b>Next</b>	-	children

The final CHAID variant included the demographics, the Q2 attitude statements, AND the Q23 purchasing questions. The purchasing questions had very little discriminatory power, with only one



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element of Q23 appearing anywhere in the tree, with those who buy organic produce at least occasionally being the heaviest users among those who agreed with the statement “I need vitamins and mineral supplements to feel healthy”. Other than in the middle group of moderate users, gender did not appear as a discriminator until the third level of this tree.

We can summarise this final tree as follows

	Predicts usage	Predicts non-usage
<b>Most strongly</b>	needs supplements to feel healthy	doesn't need supplements to feel healthy
<b>Next</b>	buys organic produce at least sometimes	eat what they like without considering health implications
<b>Next</b>	Over 25	men



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## APPENDIX

I am now going to ask you a series of questions about your health and lifestyle...

Q.1 Please think about how your health has been over the last year. Would you say that your health has been...?

**READ OUT.REVERSE. ROTATE**

Excellent	-----	01
Good	-----	02
Fair	-----	03
Poor	-----	04
Very Poor	-----	05
Don't know	-----	06

I am going to be asking you some questions that talk about vitamin and mineral food supplements, by this I mean tablets or capsules that contain vitamins and minerals found naturally in food.

Q.2 I am now going to read out a list of statements, please tell me the extent to which you agree, disagree or neither agree nor disagree with each statement. **PROBE FOR WHETHER STRONGLY OR SLIGHTLY AGREE/DISAGREE. READ OUT.ROTATE ORDER OF PRESENTATION**

- 01 Agree strongly**
- 02 Agree slightly**
- 03 Neither agree nor disagree**
- 04 Disagree slightly**
- 05 Disagree strongly**
- 06 Don't know**

Vitamin and mineral food supplements are essential to ensure you stay healthy ----- 01 ---- 02 ---- 03 ---- 04 ---- 05 ---- 06

Most people don't need vitamin and mineral food supplements----- 01 ---- 02 ---- 03 ---- 04 ---- 05 ---- 06

Eating healthily is important to me ----- 01 ---- 02 ---- 03 ---- 04 ---- 05 ---- 06

I need vitamin and mineral food supplements to feel healthy----- 01 ---- 02 ---- 03 ---- 04 ---- 05 ---- 06

I eat what I like and I do not consider the health implications----- 01 ---- 02 ---- 03 ---- 04 ---- 05 ---- 06

I actively look for information about how to stay healthy----- 01 ---- 02 ---- 03 ---- 04 ---- 05 ---- 06

Q.3. Now thinking about vitamin and mineral food supplements, which of the following statements best applies to you? **READ OUT. SINGLE CODE**

I currently take at least one vitamin or mineral food supplement	-----	01
I don't currently take any vitamin or mineral food supplements but have done so in the past 12 months	-----	02
I used to take a vitamin or mineral food supplement but this was more than 12 months ago	-----	03
I have never taken a vitamin or mineral food supplement	-----	04



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**ASK IF TAKEN SUPPLEMENTS IN PAST 12 MONTHS (Codes 01 OR 02 at Q3) OTHERS GO TO Q23**

Q.4 And how frequently do you (did you if taken in last 12 months) take vitamin/mineral food supplements? **READ OUT. SINGLE CODE**

- More than once a day ----- 01
- Daily/Most days ----- 02
- At least once a week ----- 03
- At least once a month ----- 04
- At least once every six months ----- 05
- Occasionally, when you feel the need----- 06

Q.5. Which vitamin and/or mineral food supplements are you currently taking or have you taken over the past 12 months? **DO NOT READ OUT. CODE TO PRECODES. CODE ALL THAT APPLY**

- Vitamin A ----- 01
- Vitamin B ----- 02
- Vitamin C ----- 03
- Vitamin D ----- 04
- Vitamin E ----- 05
- Zinc ----- 06
- Iron ----- 07
- Calcium ----- 08
- Magnesium ----- 09
- Cod Liver Oil ----- 10
- Multivitamins ----- 11
- Folic Acid ----- 12
- Other (please specify) ----- 13

Q.6. Why do you (did you if taken in last 12 months) take a vitamin and mineral food supplement? **MULTI-CODE. DO NOT READ OUT. PROMPT:**  
Anything else?

- For my general well being/to stay healthy----- 01
- I am vegan/vegetarian ----- 02
- I have a food allergy/intolerance ----- 03
- For a specific benefit (for example, shiny hair, strong nails, supple joints etc) --- 04
- My doctor/health professional advised me to take them ----- 05
- A dietician/nutritionist advised me to take them----- 06
- I don't think that I get a balanced diet----- 07
- My relative or friends take them so I thought I should ----- 08
- To ward off colds ----- 09
- To stop me being affected by a serious illness----- 10
- My alternative health practitioner advised me to take them (e.g. homeopath, naturopathy, and herbalist)----- 11
- My gym instructor/trainer advised me to take them ----- 12
- Other (specify) ----- 13



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Q.7 Have you ever received advice or looked for information on what food supplements you should/ should not take, if so, what people or sources have you received information from? **DO NOT READ OUT. CODE TO PRECODES. CODE ALL THAT APPLY**

- GP/Doctor ----- 01
- Nurse ----- 02
- Pharmacist ----- 03
- Dietician/Nutritionist ----- 04
- Nutritional therapist ----- 05
- Health food shop ----- 06
- Relative/friend ----- 07
- Books ----- 08
- Website ----- 09
- Newspaper article ----- 10
- Magazine article ----- 11
- Alternative health practitioner ----- 12
- Gym instructor/trainer ----- 13
- Another source (specify) ----- 14
- No, never received or looked for information ----- 15

Q.8a Where do you (did you if taken in last 12 months) you mainly buy your vitamin and mineral food supplements? **DO NOT READ OUT. SINGLE CODE**

- High Street Chemist Chain ----- 01
- Local Independent Chemist ----- 02
- Health food shop (high street brand) ----- 03
- Health food shop (local independent) ----- 04
- Supermarket ----- 05
- Gym ----- 06
- Online – general ----- 07
- Online – specialist supplier ----- 08
- Mail order ----- 09
- Other (specify) ----- 10

Q.8b And where else, if anywhere, do you (did you if taken in last 12 months) you buy vitamin and mineral food supplements from? **CODE TO PRECODES. DO NOT READ OUT. MULTICODE OK. CAPI: REDUCE LIST BY CODE AT Q8a (codes 01-09)**

- High Street Chemist Chain ----- 01
- Local Independent Chemist ----- 02
- Health food shop (high street brand) ----- 03
- Health food shop (local independent) ----- 04
- Supermarket ----- 05
- Gym ----- 06
- Online – general ----- 07
- Online – specialist supplier ----- 08
- Mail order ----- 09
- Other (specify) ----- 10



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Q.9 How often, if at all do you look at the information on the label of your vitamin and mineral supplements?

**READ OUT. SINGLE CODE**

- Every time I purchase a new pack of my regular food supplement ----- 01
- If I change the brand of vitamin or mineral food supplement that I take-- 02
- Something else (specify) ----- 03
- I don't ever look at the information----- 04

**ASK IF EVER LOOK AT THE INFORMATION (Q9 codes 01-03) – OTHERS GO TO Q11**

Q.10 What information do you look for on the label?

**DO NOT READ OUT. CODE TO PRECODES**

- RDA (Recommended Daily Allowance) ----- 01
- The proportion of my RDA that the food supplement contains ----- 02
- Dosage information (the number of tablets/capsules I should take per day) ----- 03
- The actual quantity of the specific vitamin/mineral present (i.e. in mg) --- 04
- Full list of ingredients ----- 05
- Advisory statements ----- 06
- Information on any possible side effects ----- 07
- Information on the health benefits of taking the food supplement ----- 08
- Other (specify) ----- 09

**ASK ALL (WHO HAVE TAKEN SUPPLEMENTS IN LAST 12 MONTHS)**

Q.11 Do you ever look at the Recommended Daily Allowance (RDAs) on the vitamins and minerals that you take?

- Yes – always ----- 01
- Yes – sometimes ----- 02
- No ----- 03



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Q.12 **SHOWCARD VIT1** What do you understand the term Recommended Daily Allowance (RDAs) to mean? Where it says 'my diet' on the showcard we are including food AND FOOD SUPPLEMENTS.

**SINGLE CODE ONLY**

- The amount of vitamins and minerals I should aim to get from my diet to stay healthy----- 01
- The amount of vitamin and minerals I should aim to get from food supplements ----- 02
- The maximum safe amount of vitamins and minerals I should consume through my diet ----- 03
- The maximum safe amount of vitamins and minerals I should consume through food supplements----- 04
- The minimum amount of vitamins and minerals I should get from food supplements for them to be effective ----- 05
- The minimum amount of vitamins and minerals I should get from my diet for them to be effective ----- 06
- Don't know ----- 07

Q.13 I am now going to read out a list of statements, please tell me the extent to which you agree, disagree or neither agree nor disagree with each statement. **READ OUT. ROTATE ORDER. PROBE FOR WHETHER STRONGLY OR SLIGHTLY AGREE/DISAGREE**

- 01 Agree strongly**
- 02 Agree slightly**
- 03 Neither agree not disagree**
- 04 Disagree slightly**
- 05 Disagree strongly**
- 06 Don't know**

- I would not notice if some of the ingredients in the ingredients list changed in the vitamin and/ or mineral food supplement that I was taking----- 01 ----02 ----03---- 04---- 05 ----06
- It's not dangerous to exceed the stated daily dose, for example the number of capsules, of vitamin and mineral food supplements ----- 01-----02 ----03---- 04---- 05 ----06
- I don't know enough about safe or unsafe levels of vitamin or minerals -- 01---- 02 ----03 ----04---- 05---- 06
- I would notice if the amount of the vitamin and/or mineral ingredient in a food supplement I was taking changed----- 01---- 02 ----03 ----04---- 05---- 06
- If a vitamin or mineral food supplement is being sold in this country, this means it is safe for everyone to take----- 01---- 02 ----03 ----04---- 05---- 06
- It is safe to take as many vitamin or mineral food supplements as I like-- 01---- 02 ----03 ----04---- 05---- 06
- All vitamin or mineral food supplements sold on the Internet are safe ----- 01---- 02 ----03 ----04---- 05---- 06



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Q.14 Sometimes vitamin and mineral food supplements will have an advisory statement for example, 'amounts of Vitamin C over 1000mg may cause mild stomach upset in sensitive individuals.' Have you ever seen a vitamin and/or mineral food supplement with any advisory statement on the label?

- Yes 01
- No 02
- Don't know 03

Q.15 If you were going to buy a food supplement and you saw that it had an advisory statement on it that did not apply to you, would this encourage you to buy it, put you off, or would it make no difference to your decision on whether to buy it or not? **READ OUT. SINGLE CODE**

- Encourage me to buy it ----- 01
- Put me off ----- 02
- Make no difference ----- 03
- Depends on the supplement (DO NOT READ OUT) ----- 04

**ASK PARENTS OF CHILDREN UNDER 16 ONLY (PD respChild codes 01 or 03) – OTHERS go to Q.18**

Q.16 Do you give your child/children vitamin and mineral food supplements or encourage them to take food supplements?

- Yes 01
- No 02

**ASK ALL WHOSE CHILDREN TAKE SUPPLEMENTS (Q16 code 01) – others go to Q18**

Q.17 Do you give them the standard version of the food supplements or the food supplements specifically designed for children? **MULTI CODE**

- Standard ----- 01
- Standard but give less than the recommended adult dose ----- 02
- Child ----- 03
- Don't know ----- 04

**ASK ALL WHO (WHO HAVE TAKEN SUPPLEMENTS IN LAST 12 MONTHS)**

Q.18 Do you know whether any of the vitamin and mineral food supplements that you take are high strength?

- Yes 01
- No 02
- Don't know 03

Q.19 If a vitamin or mineral food supplement was labelled as high strength, would this encourage you to buy it, put you off, or would it make no difference to your decision on whether to buy it or not? **READ OUT. ROTATE SINGLE CODE**

- Encourage me to buy it ----- 01
- Put me off ----- 02
- Make no difference ----- 03
- Depends on the supplement (DO NOT READ OUT) ----- 04



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**ASK IF TAKING HIGH STRENGTH SUPPLEMENTS (code 01 AT Q18) – OTHERS GO TO Q.22**

Q.20 Why do you take a high strength vitamin and/or mineral food supplement?  
**MULTICODE. DO NOT READ OUT**

- I take a higher strength when I am feeling run down ----- 01
- I take a higher strength when I think I am about to have a cold, flu etc----- 02
- The more vitamins and/or minerals I take the less likely I am to suffer an illness long term ----- 03
- The more vitamins and minerals I take the better I feel ----- 04
- Other (specify) ----- 05
- No particular reason ----- 06

Q.21 What would you do if the high strength vitamin/mineral food supplement you take were no longer available?  
**DO NOT READ OUT. CODE TO PRECODES**

- Look for an alternative high strength product----- 01
- Look to buy it from another source (e.g. from Internet) ----- 02
- Just take a standard strength product ----- 03
- Take a higher dose of the standard product (e.g. take double the daily dose) --- 04
- Don't know ----- 05

**ASK ALL WHO (WHO HAVE TAKEN SUPPLEMENTS IN LAST 12 MONTHS)**

Q.22 Taking a number of vitamin and mineral food supplements may result in you unintentionally consuming high levels of vitamins and/or minerals which could cause side effects that are unpleasant or bad for you. How aware would you say you were of this? Would you say ... **READ OUT. SINGLE CODE.**

- Fully aware ----- 01
- Partially aware ----- 02
- Not aware ----- 03
- Don't know ----- 04

**ASK ALL**

Q.23 Do you or whoever does the shopping in your household buy any of the following items in your **MAIN FOOD AND GROCERY** shop? **READ OUT AND CODE EACH ONE, ROTATE ORDER**

- 01 Yes – all the time**
- 02 Yes- sometimes**
- 03 No – never**
- 04 Don't know**

- Fortified foods (e.g. breakfast cereals, milk with added omega)----- 01----- 02 ----03 ----04
- Foods that have an added health benefit for example margarine or yoghurts that help reduce cholesterol etc. ----- 01----- 02 ----03 ----04
- Organic produce ----- 01----- 02 ----03 ----04
- Whole/unrefined foods (e.g. wholemeal bread/pasta)----- 01----- 02 ----03 ----04

**SHOWCARD VIT2** You may like to look at information about nutrition essentials including vitamins or minerals on the Food Standards Agency Eatwell website at:[www.eatwell.gov.uk](http://www.eatwell.gov.uk)



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**Table A1: Weighting for omnibus survey**

<b>Age/Sex</b>	<b>%</b>	<b>Class</b>	<b>%</b>
16-24 Male	7.3	A	2.6
25-34 Male	8.2	B	16.7
35-44 Male	9.4	C1	29.6
45-54 Male	7.8	C2	21.2
55-59 Male	4.0	D	14.3
60-64 Male	3.1	E	15.6
65-70 Male	3.4		
71+ Male	5.4		
		<b>Working Status</b>	<b>%</b>
16-24 Female	7.1	Men working full time	29
25-34 Female	8.3	Men not working full time	20
35-44 Female	9.6	Women working	28
45-54 Female	8.0	Women not working	23
55-59 Female	4.1	<b>Number of adults in household</b>	
60-64 Female	3.2	One	24
65-70 Female	3.4	Two	50
71+ Female	8.0	Three +	26



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<b>Standard Region</b>	<b>%</b>	<b>TV Region</b>	<b>%</b>
North	5.1	London	19.2
Yorkshire & Humberside	8.4	Midlands	15.2
East Midlands	7.2	North West	11.4
East Anglia	3.8	Yorkshire	9.7
GLC	12.5	Central Scotland	6.1
South East exc. GLC	18.9	Wales & West	8.0
South West	8.5	South & South East	9.3
West Midlands	8.8	North East	4.6
North West	10.5	East	7.2
Wales	4.9	South West	3.0
Scotland	8.6	Border	1.1
N.Ireland	2.8		
		North Scotland	2.1
		Ulster	3.1



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## GfK NOP RANDOM LOCATION OMNIBUS SAMPLE DESIGN

The GfK NOP Random Location Omnibus employs a quota sample of individuals with randomly selected sampling points. The sample design is essentially a 3-stage design, sampling first parliamentary constituencies, then Output Areas (OAs) within those selected constituencies and finally respondents within the Output Areas. The sample is based on 175 sampling points.

### The selection of Parliamentary Constituencies

The first-stage sampling units for the survey are parliamentary constituencies, selected in the following way. The 641\* parliamentary constituencies of Great Britain are classified into the Register General's ten Standard Regions. In Scotland, a further classification was by the new Strathclyde Region and the rest of Scotland. In Wales, the South East was classified separately from the rest of Wales. Within each Standard Region, constituencies are classified into four urban/rural types as follows:

#### 1. **Metropolitan county**

Those constituencies which lie completely within the area of the eight Metropolitan Counties of Great Britain. It is appreciated that such areas now technically do not exist but they are still convenient building blocks for sample design.

In the case of the North West Standard Region, which contains two Metropolitan Counties, the constituencies of the Greater Manchester MC were classified and listed separately from those of the Merseyside MC. Similarly, for the Yorkshire and Humberside Standard Region, the constituencies of the South Yorkshire MC were listed separately from those of the West Yorkshire MC.

In Greater London, constituencies north of the river Thames were listed separately from those south of the river. These were further sub-divided into east and west for each side of the river.

\* For practical reasons, two constituencies (Orkney and Shetland, and Western Isles) are not included in the sampling frame from which constituencies are selected.



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2. **Other 100% Urban**

All urban constituencies, other than Metropolitan County constituencies, in which the population density was greater than 7 persons per hectare.

3. **Mixed Urban/Rural**

Constituencies, consisting of a mixture of urban and rural local authority areas, in which the population was greater than 1.5 and less than 7 persons per hectare.

4. **Rural**

Constituencies, consisting of a mixture of urban and rural local authority areas, in which the population density was less than 1.5 persons per hectare.

Within each of the resultant 46 cells, as a final stratification, constituencies are listed in order of the percentage of people resident in households whose head is in socio-economic Groups 1, 2, 3, 4 or 13 (approximates to Social Grades A&B).

When all the constituencies have been listed in the above way, the electorate of each constituency is entered on the list and a cumulative total of electors by constituency is formed. The selection is done in the following way. From the file of 639 constituencies, a sample of 175 must be drawn. To draw this sample, the following procedure is undertaken. The total number of cumulative electors (N) on the list is divided by 175 and a random number between 1 and N/175 is selected.

This random number identifies an elector, in the cumulative total of electors, and the constituency this elector is in becomes the first selected constituency in the sample. To obtain the other 174 constituencies, the sampling interval N/175 is added on 174 times to the initial random number. This produces 175 cells all containing N/175 electors. Within each cell a random number between 1 and N/175 is selected. This random number identifies an elector, in the cumulative total of electors for that cell, and the constituency this elector is in is selected. This procedure is repeated for all 175 cells. Thus a sample of 175 constituencies is produced.



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## The Selection of Output Areas

Within each selected constituency, an Output Area is selected for each wave of the Omnibus. These OAs are selected at random, but with some stratification control so that the sample of OAs drawn is representative of the sample of constituencies and therefore of Great Britain in demographic terms. The variables used for stratification are essentially age, sex, social class, and geodemographic profile (Mosaic classification). Once the OAs have been selected, the profile of the aggregated set of OAs is checked against the national profile to ensure that is representative. Each OA is a small area, containing in average around 120 households. Each OA is therefore homogenous, with the people living within it being fairly similar in social grade terms.

Therefore, when quotas are set for interviewing within each OA, the variables we control for are age and sex within working status. No quota is set for social grade, as the selection of OAs ensures that the sample is balanced in this respect.

This procedure is repeated for each wave of the Omnibus, producing a different sample of OAs for each week of fieldwork.

## The Selection of respondents

For each selected OA, a list of all residential addresses is produced. This listing is taken from the Postal Address File, which is a listing of all addresses within Great Britain, and is updated monthly. The interviewer uses this list to identify the households at which they can interview. Overleaf is an example of a typical OA address listing. 12 people are interviewed within each OA.

In addition to the address listing for an OA, the interviewer is also given a quota sheet, which determines what sort of people they must interview. Each interviewer must interview 12 people within an OA, and the quotas are different for each OA in order to reflect the demographic profile of that area. Overleaf is an example of a quota sheet.

The quotas are set in terms of age and sex within working status. No quota is set for social class, as the selection of OAs ensures that the sample is balanced in this respect.