

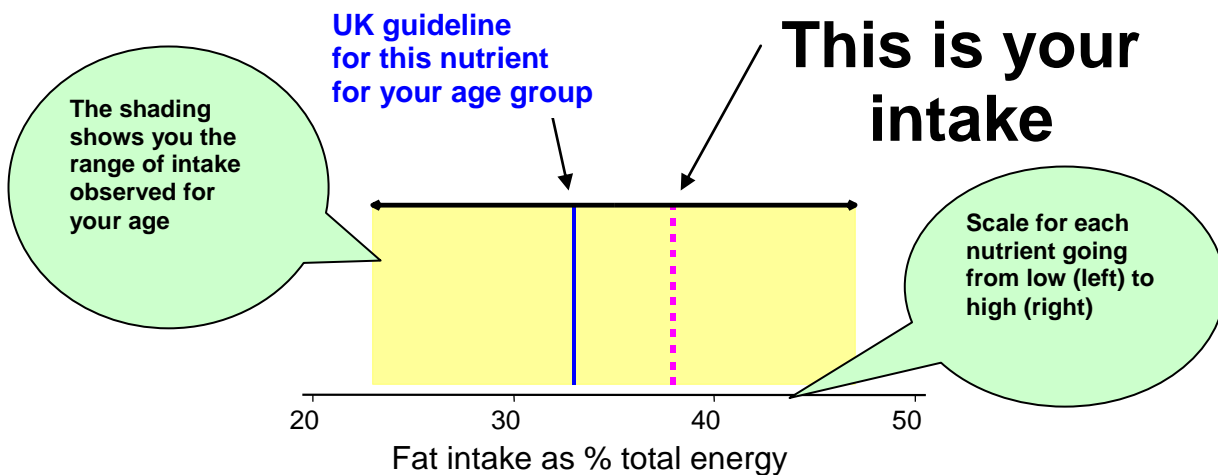
**Serial/Respondent No.:** 123456  
**Recording period:** 03/05/2007 to 06/05/2007

## NATIONAL DIET AND NUTRITION SURVEY Results from your diet record



As part of the comparison study prior to the main National Diet and Nutrition Survey, you very kindly completed a diet record. We have now analysed your diet record and have calculated your intake of energy (calories) and nutrients. You said you would like to receive feedback from this record. This document provides you with information about some of the nutrients in your diet. If your food intake during the recording period (03/05/2007 to 06/05/2007) was typical for you, the results will tell you how your intake of nutrients fits with UK guidelines for a healthy diet. **We have also provided some useful resources for finding out more about eating a healthy diet.**

**Understanding the graphs:** First an explanation on how to read the graphs provided.

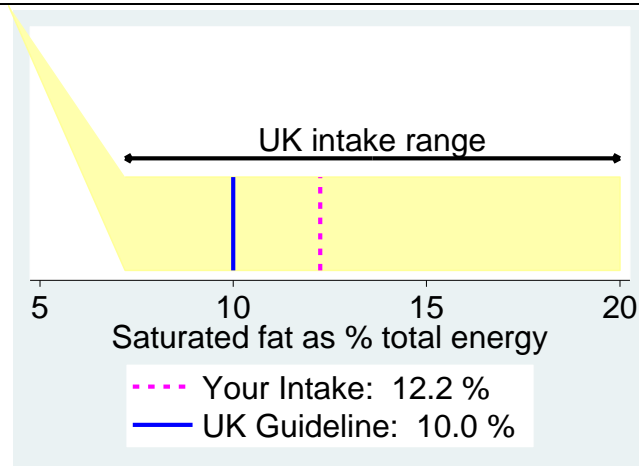
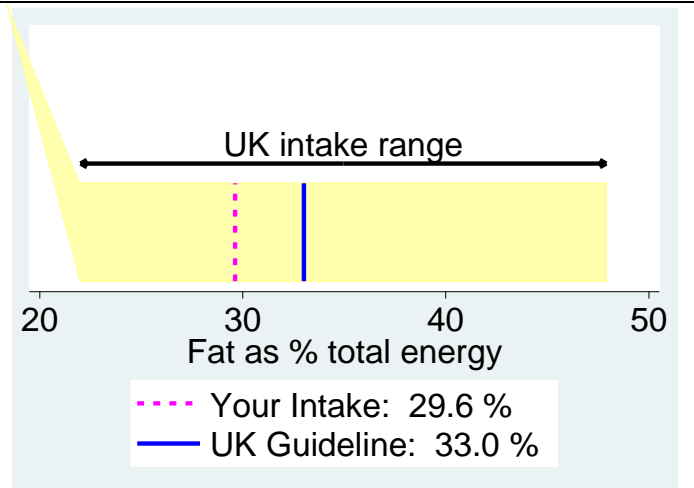


**What it means:** If your intake is to the right of the solid blue line you consume more than the guideline; if it is to the left, you consume less. Eating more than the guideline is good for some nutrients, for example, fibre and folate, but not for others, such as saturated fat, where intake should be limited.

Please refer to the last page for additional resources if you wish to read more about eating a healthy diet.

**Fat** intake is expressed as a % of total energy consumed. Some fat is essential in the diet but we tend to eat too much in the UK.

To assist with the maintenance of a healthy body weight and reduce the risk of chronic diseases such as heart disease, fat should only make up **33%** or less of total energy.



People in the UK also tend to eat too much **saturated fat**. Saturated fat is associated with an increased risk of heart disease. The guideline is to consume no more than **10%** total energy intake from saturated fat.

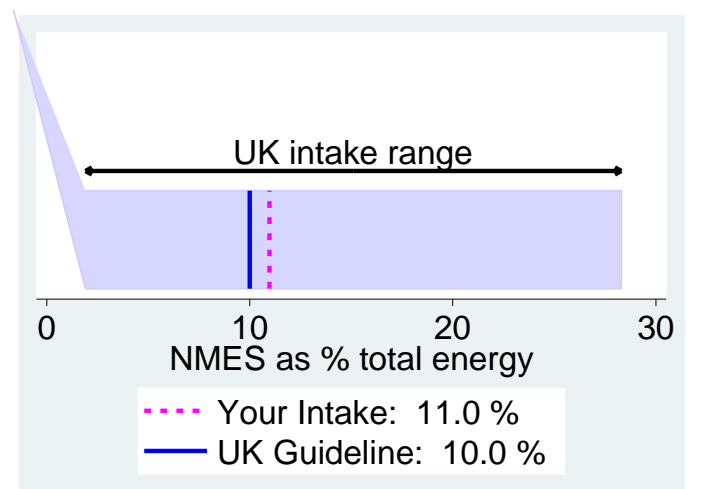


**Major contributors to saturated fats in the UK diet should be consumed in moderation.** These include various meat products (processed meats), cereal products (e.g. cakes), full fat dairy desserts and butter, savoury snacks, chips and chocolate.



**NMES = Non-Milk Extrinsic Sugars** are added to foods during manufacture and preparation and also include naturally occurring sugars in foods such as fruit juices. **Major sources** of NMES include sweets, biscuits, soft drinks, and sweetened breakfast cereals.

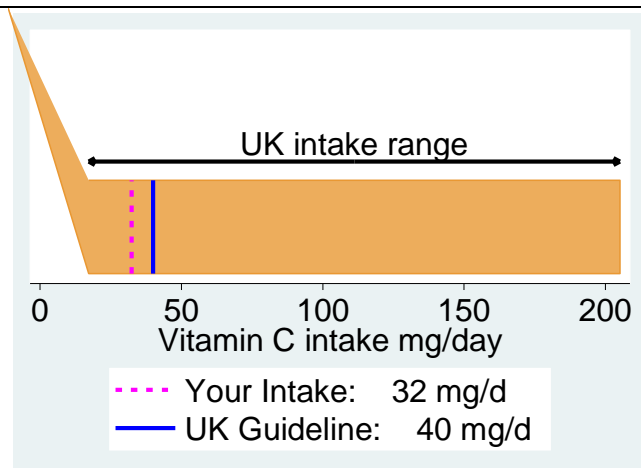
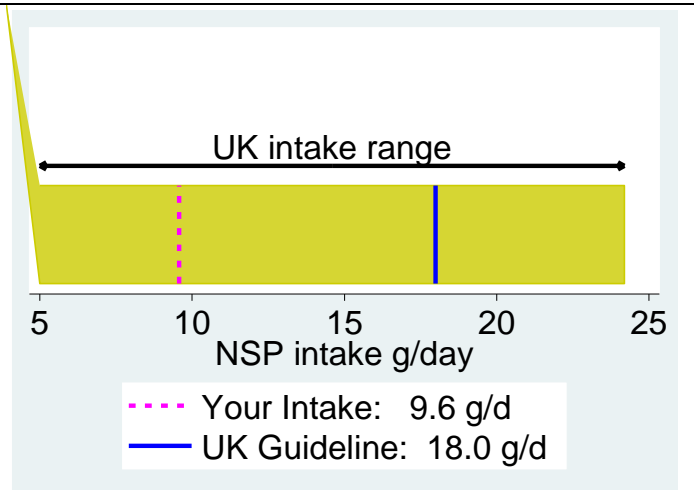
To reduce the risk of **tooth decay** and as part of a healthy diet, the guideline is to consume no more than **10%** of total energy as NMES.



**Dietary Fibre** is expressed in the UK as **Non-Starch Polysaccharide** or **NSP**. The guideline of **18 grams per day should be considered a minimum target**. Fibre helps to maintain a **healthy digestive system** and may also reduce the risk of chronic disorders and diseases, like heart disease and some cancers.



**Major sources** of fibre in UK diets are wholemeal and whole grain cereal & cereal products (especially bread and breakfast cereals), vegetables and potatoes.

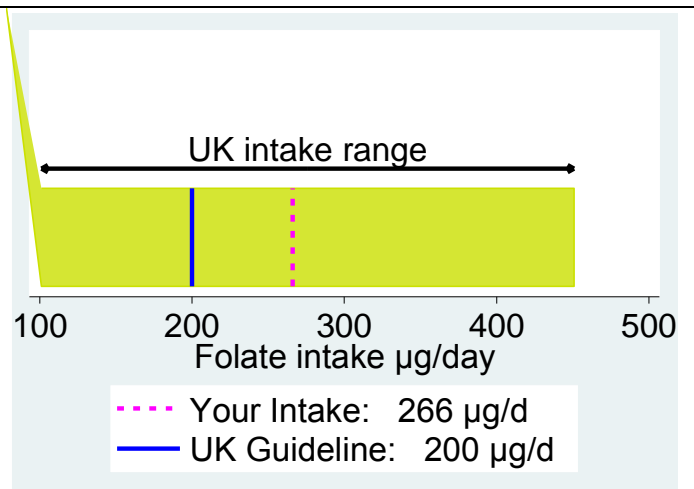


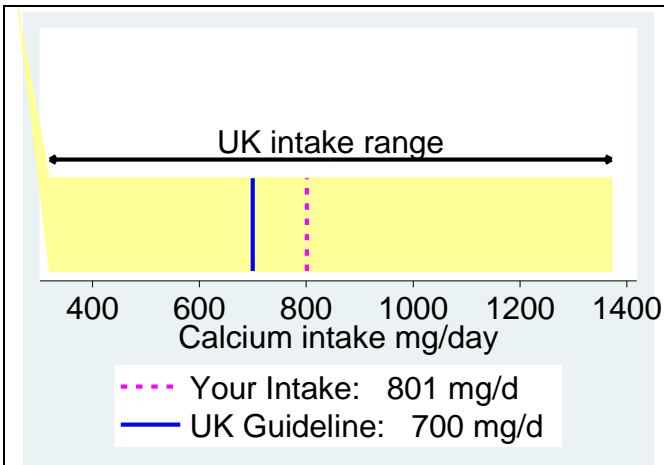
**Vitamin C** is important for many functions in the body and helps to absorb iron from food. Most people who consume some fruits and vegetables each day achieve the recommendation for Vitamin C of 40 mg/day. **Good sources** of Vitamin C include peppers, broccoli, cabbage, white and sweet potatoes, oranges, kiwi and blackcurrants. **Smokers** have an increased turnover of Vitamin C and need 80 mg per day.

**Folate** (including folic acid) is one of the **B vitamins** and is emerging as an important factor to reduce the risk of chronic diseases such as cancer and heart disease. In women of child bearing age folate reduces the risk of delivering a baby with birth defects such as spina bifida.



**Good sources** of folate are green leafy vegetables as well as pulses and legumes such as chickpeas and beans.





**Calcium** is important for many functions in the body, including building strong bones and teeth, helping muscles to contract and blood to clot properly.

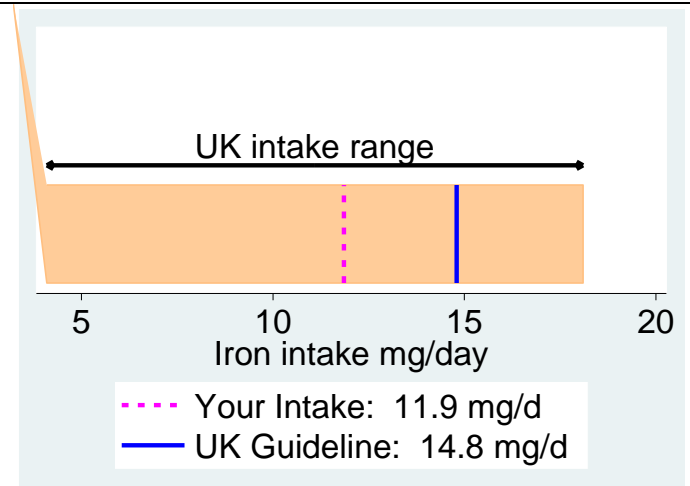
An important source of calcium is **low fat dairy products** including cottage cheese,



yoghurt and fromage frais. Good **non-dairy sources** of calcium are broccoli, kale, soya products with added calcium and fish with bones such as sardines/pilchards.

**Iron** is required for healthy blood and to help carry oxygen around our body. Lack of iron leads to anaemia, which causes tiredness, and can affect work capacity, intellectual performance, behaviour and resistance to infection.

**Iron is derived from many foods** including cereals and pulses, but the iron in meat, called haem iron, is much better absorbed into the body than iron from other sources.



**Energy or calories** are obtained from the protein, fat, carbohydrates, and alcohol we take in each day and everything we do uses calories. **How many calories we need depends on how active we are.**

To lose or maintain weight each person may need to do **different amounts of physical activities.**

**Regular physical activity** may also make you more energetic, improve your mood and reduce the risk of developing some chronic diseases.

**Guideline energy intake calculated for a moderate level of activity:**

**1940 kcal/day**



**Your calorie intake: 1480 kcal/day**



The current intake figures in these charts are taken from the most recent *National Diet and Nutrition Surveys* (<http://www.food.gov.uk/science/dietarysurveys/ndnsdocuments/>). The figures given are for your sex and age group and are for food and drinks, including alcohol, but do not include supplements. Ranges shown exclude 2.5% of individuals at each end of the spectrum as these are considered extremes of intake. The dietary guidelines shown come from the report: *Dietary Reference Intakes for Food Energy and Nutrients in the UK* from the Committee of Medical Aspects of Food Policy and published by the Department of Health in 1991. These are also given for your sex and age group.



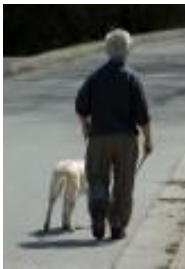
# Healthy Eating



If you wish to obtain more information about a healthy diet and tips for achieving this, there are a number of organisations that can help. It is best to look at websites from registered health professional and Government organisations where you can trust the information and know that it is supported by good scientific evidence. There is a lot of information about nutrition on the web that is not supported by evidence coming from research. If you do not have access to the Internet, these organisations have other resources to help you. You should be able to find these in your GP's surgery.

The Food Standards Agency (FSA) is an independent government department responsible for protecting public health and consumers' interest in relation to food. One of the FSA's key aims is to improve diets by making healthy eating easier and so help to reduce diet-related disease.

<http://www.eatwell.gov.uk> This is the healthy eating part of the FSA website and it has many tips on following a healthy diet. In particular there is a page giving 8 tips for eating well:



1. Base your meals on starchy foods
2. Eat lots of fruit and vegetables
3. Eat more fish
4. Cut down on saturated fat and sugar
5. Try to eat less salt – no more than 6g a day
6. Get active and try to be a healthy weight
7. Drink plenty of water
8. Don't skip breakfast



<http://www.salt.gov.uk> The FSA has a major programme of work aimed at reducing salt intake in the UK. This FSA site gives valuable tips on trying to reach 6g/d salt target. We have not given your salt or sodium intake because this is very difficult to do using dietary intake alone.



<http://www.bda.uk.com> This is the website of the British Dietetic Association (BDA). Dieticians are the health professionals trained to give individual dietary advice. If seeking individual help or counselling, a qualified dietician gives you confidence that the advice is supported by scientific evidence.

<http://www.nutrition.org.uk> This is the website of the British Nutrition Foundation, a charitable organisation funded by the food industry, government and other sources. The Healthy Eating section of this site provides useful information about nutrition and health, food labels and dietary modifications for age at various stages of life.

<http://www.5aday.nhs.uk> The Department of Health has a website to assist with the 5 a day programme which is intended to help people increase their intake of fruit and vegetables. Increasing fruit and vegetable intake is one of the positive steps you can take to improve your diet. Fruit and vegetables are loaded with nutrients and are low in calories, so are ideal for improving your intake of key nutrients.



## Who we are:

The National Diet and Nutrition Survey ([www.natcen.ac.uk/NDNS](http://www.natcen.ac.uk/NDNS)) collects information on the eating habits and nutritional status of people in the United Kingdom. NatCen, the National Centre for Social Research, is Britain's largest independent research organisation studying social policy. The Food Standards Agency has asked NatCen with the Health and Social Surveys Research Group at University College London (UCL), and the Cambridge based Medical Research Council Human Nutrition Research Centre (HNR) to carry out the survey. The role of HNR is to advance knowledge of the relationships between human nutrition and health by providing a national centre of excellence for the measurement and interpretation of biochemical, functional and dietary indicators of nutritional status and health ([www.mrc-hnr.cam.ac.uk](http://www.mrc-hnr.cam.ac.uk)). If you have any questions about your feedback, please call the NDNS nutrition team on 01223 437613.

Dr Name  
Address

Our ref: P2753GPa1M/serial no

DATE

Re: Patient name & address

This patient of yours recently took part in the National Diet and Nutrition Survey (NDNS). BMI and blood pressure measurements and a blood sample were obtained to enable analysis of a number of health and nutritional status indicators for research purposes. She gave us written permission to send you the following potentially clinically relevant examination results from a nurse visit on *date*. Please see overleaf for details of the survey.

**Body Mass Index**

	Result 1	Result 2	Result 3	Units
<b>Blood Pressure<sup>1</sup></b>				
Systolic				mmHg
Diastolic				mmHg
<b>Pulse</b>				bpm

<sup>1</sup> These 3 measurements/results were taken 1 minute apart after a 5 minute rest

Test	Analyte	Results <sup>2</sup>	Reference Range <sup>3</sup>	Units
<b>Blood count</b>	Haemoglobin		M 13-18 yrs: 13-17 F 13-18 yrs: 11.5-16 M 19+ yrs: 13-18 F 19+ yrs: 11.5-16.5	g/dl
	Haematocrit		M 13-18 yrs: 0.37-0.49 F 13-18 yrs: 0.36-0.46 M 19+ yrs: 0.40-0.54 F 19+ yrs: 0.38-0.47	l/l
	Mean Cell Volume		M 13-18 yrs: 78-98 F 13-18 yrs: 78-100 M&F 19+ yrs: 76-100	fl
	Mean Cell Haemoglobin		13-18 yrs: 25-35 19+ yrs: 27-32	pg
	Red blood cell count		M 13-18 yrs: 4.5-5.3 F 13-18 yrs: 4.1-5.1 M 19+ yrs: 4.5-6.5 F 19+ yrs: 3.8-5.8	10 <sup>12</sup> /L

	Platelet Count		150 - 450	10 <sup>9</sup> /L
	White blood cell count		4.0-11.0	10 <sup>9</sup> /L
	Neutrophils		1.5-7.5	10 <sup>9</sup> /L
	Lymphocytes		1.0-4.0	10 <sup>9</sup> /L
	Monocytes		0.2-1.0	10 <sup>9</sup> /L
<b>Glycated Haemoglobin</b>	HbA1c		4.9-6.3 30-45	% mmol/mol
<b>Fasting Blood Lipids</b>	Triglycerides		High >1.7mmol/l	mmol/L
	Total Cholesterol		Desirable < 5.0 Target for those with high CVD risk < 4.0	mmol/L
	HDL Cholesterol		Desirable > 1.1	mmol/L
	Total:HDL ratio		<6.0	
<b>Thyroid function</b>	Free T4		11.5-22.7	pmol/L
	Free T3		3.5-6.5	pmol/L
	TSH		0.35-5.5	pmol/L

<sup>2</sup> Results that fall outside the reference range are marked with an \*

<sup>3</sup> Results apply to men and women of all ages, except where specified

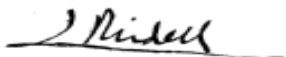
NA = not applicable, NM = not measured, NR = for technical reasons it was not possible to carry out this analysis

This patient wished to have her results and these are being sent at the same time as this notification to you.

We leave any follow-up of these results to your discretion. But if you wish to discuss any of the results, please contact me at UCL on xxx xxxx xxxx.

All other outstanding results from additional analytes (glucose, plasma ferritin, 25-hydroxyvitamin D, creatinine and vitamin B12) will be sent to you in a few months time when analysis is complete.

Yours sincerely,



Dr Jennifer Mindell  
Survey Doctor  
UCL Department of Epidemiology & Public Health

## **NATIONAL DIET AND NUTRITION SURVEY (NDNS)**

The NDNS is a study of the population living in private households, funded by the Food Standards Agency and the Department of Health. The aim of the survey is to provide robust data on food and nutrient intakes, sources of nutrients and nutritional status of the UK population.

This study is being carried out during 2008-2012, and around 4,000 people will be interviewed in total. Participation in the survey involved interviews and separate nurse visits. The interview collected information about respondents' general shopping, cooking and eating habits, lifestyle, and general health as well as any longstanding illnesses. Records were also made of what a respondent consumed on at least three separate days. Nurses collected information about any prescribed medicines being taken, measured blood pressure, made other body measurements, and took a fasting sample of blood (subject to the respondent's written consent).

Results from the first year of the survey can be found on FSA's website:

<http://www.food.gov.uk/news/pressreleases/2010/feb/ndns09>