

Healthier and more sustainable catering: A toolkit for serving foods to adults.

Includes useful information for organisations aiming to meet Government Buying Standards for Food and Catering Services.

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Circulation List A range of stakeholders, many within organisations listed above, will have received the original document.

Description The toolkit provides practical information for caterers and procurement managers to work towards best practice catering, improving the nutritional quality of the food provided and reducing the environmental impact of their catering services. For nutritional best practice, this would be providing food to meet nutrient and food based standards.

Cross Ref References Government Buying Standards for Food, Defra

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For Recipient's Use

Healthier and more sustainable catering: A toolkit for serving foods to adults.

Includes useful information for organisations aiming to meet Government Buying Standards for Food and Catering Service.

Prepared by the Nutrition Advice Team

Sustainability text provided by Defra's Food Policy Unit

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Executive summary

1. This toolkit contains practical information for caterers who want to improve the nutrient content and sustainability of their menus. This toolkit provides information useful when commissioning catering services, buying food and food ingredients as well as when cooking and serving food.
2. The toolkit provides a range of practical tips for choosing, cooking and serving healthier and more sustainable food based on the Government dietary recommendations and advice on sustainability. The toolkit also explains how to develop menus to meet nutrient based standards and provides example menus that meet dietary recommendations for the population.
3. In addition, this toolkit will also support those working within Government Departments, their agencies and the wider public sector who must or choose to meet the minimum standards set out in the [Government Buying Standards for Food and Catering Services](#).

Introduction

4. The public sector in England spends around £2 billion a year on providing food and drink to service users, staff, the general public, clients and visitors¹. If the public sector can help to change wider eating habits by serving healthier food, it can help to reduce future costs to the NHS². The Department of Health estimates the costs to the NHS of treating the effects of poor diets to be around £4 billion per year³.
5. There is also an opportunity through the food the public sector buys and the way catering services are run to improve the sustainability of public sector organisations. Sustainable food procurement is a process whereby public authorities procure food, catering equipment and catering services that:
 - contribute to a healthy diet;
 - support a thriving and competitive food industry;
 - promote high animal health and welfare standards; and
 - deliver improving environmental impact throughout the lifecycle of the product or service.
6. The information contained in this toolkit is for caterers and procurement managers providing food to adults, particularly those within publicly funded organisations. This includes the NHS and prisons where food provision may be some or all of the day's consumption.
7. The toolkit aims to provide practical information for caterers and procurement managers to improve the nutritional content of the food provided while reducing the negative environmental impact of catering services. In addition, this toolkit can support those responsible for food provision within organisations that must or choose to meet [Government Buying Standards \(GBS\) for Food and Catering Services](#). A list of the GBS criteria can be found at Annex 1.

¹ National Audit Office, 2006 Smarter food procurement in the public sector. TSO.

² Healthy Futures, Sustainable Development Commission, 2004.

³ Choosing a Better Diet: a food and health action plan, Department of Health 2005

Who is this toolkit for?

8. This toolkit will be of interest to:

- those involved in commissioning catering services for large organisations;
- those responsible for purchasing food or food ingredients for use in catering;
- catering managers, chefs and cooks responsible for the preparation, cooking and serving of food;
- organisations, caterers and procurement managers with an interest in delivering healthier and more sustainable catering either within the workplace or in the wider catering industry; and
- caterers and procurement managers within organisations that must meet or have voluntarily chosen to adopt GBS for Food and Catering Services.

What information does this toolkit contain?

9. This toolkit contains practical information and useful tips to help those within large organisations to buy, cook and serve healthier, more sustainable food.
10. The toolkit also provides example, analysed menus that meet the nutrient based standards described in [Healthier and more sustainable catering: Nutrition Principles](#). Information on food hygiene, allergy and calorie labelling is also provided.

Background

Diet and Health

11. The Government recommends that everyone eats a diet that contains:

- plenty of starchy foods such as rice, bread, pasta and potatoes (choosing wholegrain varieties when possible)
- plenty of fruit and vegetables; at least 5 portions of a variety of fruit and vegetables a day
- some protein-rich foods such as meat, fish, eggs, beans and non dairy sources of protein, such as nuts and pulses
- some milk and dairy, choosing reduced fat versions or eating smaller amounts of full fat versions or eating them less often
- just a small amount of foods and drinks high in fat and/or sugar.

12. It is also important to avoid dehydration and so it is recommended that people drink between 6 – 8 glasses (about 1.2 litres) of water, or other fluids, every day.

13. The eatwell plate (figure 1, overleaf) is a pictorial representation of Government healthy eating advice and is helpful for planning healthier menus.

14. Data from the National Diet and Nutrition Survey of Adults (NDNS) ^{4 5} tell us that, on average, the population consumes too much saturated fat, salt and non-milk extrinsic sugars (NMES, often referred to as added sugars). The surveys also show that on average the population eat less fibre, fish, fruit and vegetables than is recommended. We also know that, some sections of the population have intakes of some vitamins and minerals below recommended levels.

⁴ Henderson et al (2002) National Diet and Nutrition Survey: adults aged 19 to 64yrs . The Stationary Office. London

⁵ Bates, B., Lennox, A., & Swan, G. (Eds.). (2010). National Diet and Nutrition Survey: Headline results from year 1 of the Rolling Programme (2008/09). [Online]. Available from: <http://www.food.gov.uk/science/dietarysurveys/ndnsdocuments/ndns0809year1>

Figure 1: The Eatwell plate

The eatwell plate

Use the eatwell plate to help you get the balance right. It shows how much of what you eat should come from each food group.



Department of Health in association with the Welsh Assembly Government, the Scottish Government and the Food Standards Agency in Northern Ireland

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- Diets high in salt, saturated fat and NMEs but low in fish, fruit, vegetables and fibre increases the risk of ill health. A poor diet may increase the risk of high blood pressure, cardiovascular disease and some cancers. Consuming foods and drinks that are high in fat and/or sugars too frequently can contribute to weight gain and obesity carries with it many negative effects on health.
- Large sections of the population rely on caterers for a significant number of their meals. In some cases all the food that they eat. Caterers and procurement managers, through careful buying of foods and ingredients, menu planning and catering practice, can reduce the salt, saturated fat and added sugars content and increase the fibre, fruit, vegetables and fish in the food they provide. By doing this they can make a positive impact on the dietary health of those who consume the food provided. This is particularly true where people eat most or all of their food in such settings e.g. within a residential setting.

Sustainability

17. The impacts of a growing population, climate change and the pressure on land means that more food will need to be produced more sustainably. Public sector organisations can help to achieve this through the food they procure and by providing consumers with the right information to make more informed choices about what they eat.
18. Diet is expected to have an impact not only on health and the economy, but also on sustainability. In response to these challenges, the Government's priorities for food and farming are to support and develop British farming and encourage sustainable food production. The Government aims to achieve this by enhancing the competitiveness and resilience of the whole food chain, including farms and the fish industry, to ensure a secure, environmentally sustainable supply of healthy food with improved standards of animal welfare.
19. The sustainability of food provision extends beyond the impact of the supply of raw ingredients. Food distribution; storage and preparation; packaging; consumption; and disposal all have significant environmental impacts, including in relation to energy and waste.
20. The total energy consumption of Britain's catering industry is estimated to be in excess of 21,600 million kilowatt hours per year, with more than 50% of that in non-commercial catering such as schools, hospitals and Ministry of Defence organisations. Reducing the energy used whether through changing practices among catering staff or by using more energy-efficient equipment, will help to reduce the costs of catering and help to meet the UK's climate change targets.
21. The total annual amount of food waste in the UK is around 16 million tonnes (WRAP⁶ estimates, 2010). Reducing the amount of food waste that is created, and where food waste does arise, ensuring that it is treated in the most environmentally-beneficial way possible, is crucial if we are to reduce the greenhouse gas impacts of waste management, and meet our obligations under the EU Landfill Directive to divert biodegradable waste from landfill. In 2006, the recycling rate for packaging waste stood at 56% (with overall recovery at 61%). Good progress has been made in this regard, but more needs to be done on minimisation of packaging in particular.

⁶ <http://www.wrap.org.uk/>

22. The GBS for Food and Catering Services reflect the importance the Government places on these issues and provide a list of practical things a catering provider can do to support the aims of reducing greenhouse gas emissions and waste sent to landfill; support biodiversity, species conservation and animal welfare; and support ethical trading and social responsibility of supply chains.

Buying, Cooking and Serving Healthier More Sustainable Food

Good Procurement Practice

23. Healthier and more sustainable catering practice starts with procurement.

Most organisations have contracts with companies that supply catering goods and services. This presents a good opportunity to make changes that can have a positive effect on both nutrition content and the environmental impact of the foods and services provided. When drawing up contracts with suppliers, specifications should be clear on what standards you wish your suppliers to meet. For Central Government, and other public sector bodies that have decided to meet GBS for Food and Catering Services, these standards can be clearly set out to potential contractors and suppliers from the beginning of the procurement process, as well as throughout the contract management phase. This applies to both procuring goods (equipment, ingredients and food products) and catering services (chefs and catering support staff).

Nutrition

24. We know, from the National Diet and Nutrition Survey of Adults (NDNS)^{7 8} that, on average, the population consumes too much saturated fat, salt and non-milk extrinsic sugars (NMES). The surveys also show that on average the population eat less fibre, fish, fruit and vegetables than is recommended. As a result, the principles for healthier purchasing of food and food ingredients focus on reducing salt, saturated fat and sugars whilst increasing the provision of fibre, fish, fruit and vegetables.

- **Reduce salt:** High intakes of salt are linked to increased blood pressure and this in turn is related to cardiovascular disease and stroke. The most recent population dietary surveys show we are currently eating 8.5g of salt per day compared to the recommendation

⁷ Henderson et al (2002) National Diet and Nutrition Survey: adults aged 19 to 64yrs. The Stationary Office. London

⁸ Bates, B., Lennox, A., & Swan, G. (Eds.). (2010). National Diet and Nutrition Survey: Headline results from year 1 of the Rolling Programme (2008/09). [Online]. Available from: <http://www.food.gov.uk/science/dietarysurveys/ndnsdocuments/ndns0809year1>

of no more than 6g of salt for adults. Practical ways to lower salt through procurement practice include, stipulating that suppliers meet Responsibility Deal salt targets⁹ for products they supply, requesting catering service providers do not provide salt on tables or use salt when cooking vegetables and starchy foods.

- **Reduce saturated fat:** High intakes of saturated fat can raise blood cholesterol levels and, in turn, increase the risk of coronary heart disease and stroke. The UK population generally eats more saturated fat than Government recommends as a proportion of food energy. In addition to using suppliers nutrition information to choose those products lower in saturated fat. Considering those ingredients that are used routinely can make significant reduction in saturated fat across the menu. For example buying lower fat versions of the following foods for use in recipes can significantly reduce the saturated fat across the menu:
 - milk
 - hard block cheddar type cheese
 - spreads and cooking fats
- **Increase fruit and vegetables:** Fruit and vegetables are good sources of fibre, vitamins and minerals. There is evidence to suggest that people who eat more than 400g of fruit and vegetables a day are less likely to develop chronic diseases such as coronary heart disease and some cancers. It is recommended that people aim to eat at least 5 portions of a variety of fruit and vegetables every day. Practical ways to increase fruit and vegetables available include; increasing the desserts that you buy that are based on fruit¹⁰ ; stipulating to catering providers that a portion of fruit costs no more than a serving of pudding and presented in equal prominence to desserts, confectionery and other snacks; and that meals include a portion of vegetables within the price.
- **Reduce added sugars:** High intakes of added sugars can cause tooth decay, contribute to calorie intake and may contribute to weight gain. In addition to considering the sugar content of products using information from suppliers, consider the portion sizes of confectionery, biscuits and sugary soft drinks that you offer.

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http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/documents/digitalasset/dh_125228.pdf

¹⁰ GBS for Food and Catering services define a fruit based desert as containing at least 50% fruit based on the weight of the raw ingredients

- **Increasing the amount of fish:** Government recommends eating 2 portions of fish per week, one of which should be oily. Eating oily fish can reduce the risk of heart disease. Specifying the frequency of fish on the menu to catering service providers will ensure that your consumers are able to achieve this recommendation.
- **Increase fibre:** Government recommends that we eat an average of 18g of fibre per day, however people are not eating enough. Increasing the amount of fibre we eat could help to reduce the risk of colorectal cancer, which is one of the most common cancers in the UK. Ways to increase the fibre content of your menu include buying a greater proportion of higher fibre breads, breakfast cereals and grains, increasing the amount of vegetables in composite dishes and buying more pulses either within dishes or for use in recipes.

25. When choosing products you can use the criteria in Tables 1 and 2 to help you select products that are lower in fat, saturated fat, sugars and salt where this is possible.

Tables 1 and 2: Information that can be used to choose healthier products

Table 1 – Criteria for food (per 100g)

	Low (Green)	Medium (Amber)	High (Red)	
Total fat	3.0g or less per 100g	More than 3.0g and less than or equal to 20.0g per 100g	More than 20.0 g per 100g	More than 21.0g per portion
Saturated fat (saturates)	1.5g or less per 100g	More than 1.5g and less than or equal to 5.0g per 100g	More than 5.0g per 100g	More than 6.0g per portion
Sugars	5.0g or less per 100g	More than 5.0g and less than or equal to 12.5g per 100g	More than 12.5g per 100g	More than 15.0g per portion
Salt¹¹	0.3g or less per 100g	More than 0.3g and less than or equal to 1.5g per 100g	More than 1.5g per 100g	More than 2.40g per portion

¹¹ Sodium from all sources expressed as salt.

26. For sugars in food, the figures are determined using both the total and added sugar components as follows¹²: -

- a. **Low** if total sugars are less than or equal to 5g/100g.
- b. **Medium** if total sugars exceed 5g/100g and added sugars are less than 12.5g/100g.
- c. **Red** if added sugars are more than 12.5g/100g, or added sugars are more than 15.0g / portion if the per portion criteria apply.

Table 2 – Criteria for drinks (per 100ml)

	Low (Green)	Medium (Amber)	High (Red)
Total fat	1.5g or less per 100ml	More than 1.5g and less than or equal to 10.0g per 100ml	More than 10.0g per 100ml
Saturated fat (saturates)	0.75g or less per 100ml	More than 0.75g and less than or equal to 2.5g per 100ml	More than 2.5g per 100ml
Sugars	2.5g or less than 100ml	More than 2.5g and less than or equal to 6.3g per 100ml	More than 6.3g per 100ml
Salt	0.3g or less per 100ml	More than 0.3g and less than or equal to 1.5g per 100ml	More than 1.5g per 100ml

27. For sugars in drinks, the figures are determined using both the total and added sugar components as follows: -

- **Low** if total sugars are less than or equal to 2.5g/100ml.
- **Medium** if total sugars exceed 2.5g/100ml and added sugars are less than 6.3g/100ml.
- **High** if added sugars are more than 6.3/100ml.

28. Further information on these criteria and how they are used for nutrition labelling purposes can be found at:

<http://collections.europarchive.org/tna/20100927130941/http://food.gov.uk/healthiereating/signposting/technicalguide/>

¹² For the purposes of these criteria, added sugars is defined as any mono- or disaccharide or any other food used for its sweetening properties. This would include, but is not exclusively limited to: sucrose, fructose, glucose, glucose syrups, fructose-glucose syrups, corn syrups, invert sugar, honey, maple syrup, malt extract, dextrose, fruit juices, deionised fruit juices, lactose, maltose, high maltose syrups, Agave syrup, dextrin and maltodextrin. The sugars contained in dried fruit are assumed to be intrinsic and are not included as added sugars. The sugars in milk powder are not included as added sugars, in line with COMA dietary guidelines which deemed sugars in milk as a special case and did not set guidelines to limit their intake.

29. These principles guide the nutrition criteria within GBS for Food and Catering Services. The guidance notes for [GBS for Food and Catering Services](#)¹³ include specifications that can be used directly in a contract for goods and services.

Healthier menus: Choice and variety, not banning or excluding

30. A healthier menu is varied and balanced, uses a range of cooking methods and includes appetising, food and drink. It does not exclude or ban foods that are higher in fat, sugars and salt or methods of cooking like frying but when including those foods on the menu consider the following:

- Use suppliers' nutrition information to procure products within the food category that are healthier e.g. sausages with the lowest fat and salt content, opting for a lattice topped pie or single crusted pie so reducing the fat content of the pie. Even small changes in foods commonly served can make a large cumulative difference to the nutrition content of the menus.
- Consider the frequency of products which are high in salt, fat and sugars on the menus – if double crusted pies, which are high in saturated fat due to the pastry, are a regular feature, sometimes replacing pastry topped pies with an alternative e.g. cobbler, cottage pie or casserole, improves the nutrient content of the overall menu.
- Serve smaller portions of foods high in salt, fat or sugars e.g. source a smaller individual pie and serve more vegetables with it. Consider how any change to the way you serve food affects customers' perception of value for money.
- When cooking and serving foods try to ensure that good practice makes the food healthier. For example, when frying food ensure that the temperature of the fat is correct, if possible fry larger pieces of food e.g. chunky chips as opposed to skinny fries, and blot and drain excess fat from the fried food. Consider whether the food could be grilled or oven cooked instead.
- When cooking and serving food gradually reduce the salt used in cooking so that your customers become accustomed to the taste.

¹³ www.defra.gov.uk/sustainable/government/advice/public/buying/products/food/index.htm

Increasing Sustainability

31. There are a number of areas you should consider when looking to procure food and catering services in a more sustainable manner. The GBS for Food and Catering Services provides a good starting point and the GBS guidance provides example specifications that you can use in your tendering process to make it clear what it is you are asking a supplier to provide. Using this guidance will also help to avoid contravening EU public procurement law, which regulates the purchasing by public sector bodies of contracts for goods, works or services¹⁴.
32. The principle areas to consider to begin procuring more sustainably are described below along with the rationale behind them. The guidance for the GBS for Food and Catering Services¹³ provides specifications and additional information you can use to embed each of these into your catering service.
- **Animal Welfare:** People in the UK are known to attach a high importance to the welfare of animals raised for food and there are specific examples where UK standards are higher than in some other EU countries, for example for pigmeat. Specifying these higher standards will also ensure a level playing field for the producers both in the UK and elsewhere who meet these higher standards.
 - **Seasonal Produce:** Food produced when it is in season and able to be grown outside tends to require less inputs in terms of energy, water and other inputs than that produced out of season or under cover. Seasonality and the consequent reduction of these inputs will often over-compensate significantly for the environmental impacts of transport. Seasonality is not limited to fruit and vegetables, items such as meat and fish may also be seasonal.
 - **Sustainably Sourced Fish:** Overfishing is widely acknowledged as the greatest single threat to marine wildlife and habitats and many fish stocks are widely reported to be in a state of serious decline. The GBS requires that 100% of fish is from sustainable sources

¹⁴ It is designed to open up the EU's public procurement market to competition, to prevent "buy national" policies and to promote the free movement of goods and services. Public bodies must award all contracts in line with EU Treaty principles, including the principles of non-discrimination, equal treatment, transparency, procedural fairness, mutual recognition and proportionality. This applies whether or not the contracts are over the value threshold that would make them subject to the EU procurement rules.

- **Higher Environmental Production Standards:** Farmers are stewards of more than 70% of EU land. Encouraging the use of food from land that is farmed in ways that promote bio-diversity, such as organic or integrated farm management systems (e.g. LEAF Marque), supports these policies and should be considered amongst other production systems.
- **Fairly Traded Produce:** Procuring items such as tea, coffee, chocolate and bananas that are certified under schemes that help to promote ethical procurement practices and better social and economic conditions for producers and employees involved in the supply chain, for example providing assurance that minimum employment and pay standards are being observed.
- **Waste Minimisation and Management:** This includes reducing the amount of food wasted in the catering operation and avoiding sending all types of waste to landfill through recycling, composting and so on. This will reduce the greenhouse gas impacts of waste management and in addition minimising food waste can in a lot of cases reduce costs to the caterer.
- **Reducing Energy Consumption:** To reduce your greenhouse gas impacts you should look to reduce your organisation's energy consumption through the equipment you buy and the way you run your catering operations. This will also have the added benefit of reducing your costs.¹⁵
- **Opportunities for Small Suppliers:** Small and Medium Enterprises (SMEs) drive innovation and growth in the economy. They can provide innovative and cost-effective solutions and opening tendering opportunities to them increases competitiveness across the food industry. Procurers should look to create a level playing field so that smaller businesses are able to compete alongside larger businesses for access to government contracts. It is not about providing preferential treatment, but removing barriers like the size of contracts and complex and time consuming bidding processes.

¹⁵ This area is covered further in the Government Buying Standards for energy using products

Cooking and Serving Healthier, More Sustainable Food

33. Whilst procuring healthier foods and ingredients and specifying standards to catering service providers can improve the nutrient content of menus and make food provided healthier, healthier catering practices take this further. Careful planning of menus, choosing foods, varying and making changes to the way food is cooked and served can ensure that menus are healthier overall. Using the food groups depicted in the eatwell plate, Table 3 gives a range of practical information to help plan menus, choose foods and ingredients, and help staff cook and serve healthier, more sustainable meals.

Table 3 - Food-based guidelines for caterers to choose, cook and serve healthier food to adults

Bread, rice, potatoes pasta and other starchy foods	
Guidance	<ul style="list-style-type: none"> • Starchy foods should make up about a third of the daily diet. • Offer wholegrain varieties where possible, which are often higher in fibre and other nutrients.
What foods are Included?	<ul style="list-style-type: none"> • All breads including wholemeal and granary bread, pitta bread, chapattis, roti, tortillas and bagels. • Potatoes, plantain, yam, sweet potato, squash and cassava (where sweet potato or squash are eaten as a vegetable portion to a main meal, they do not count as a starchy food). • Breakfast cereals. • All rice, couscous, bulgar wheat, semolina, tapioca, maize, cornmeal. • All noodles, pasta. • Beans, peas, lentils and other pulses can be eaten as part of this group. • Other grains e.g. oats, millet, barley etc.
Why are these foods important?	<ul style="list-style-type: none"> • Foods from this group are a good source of energy and the main source of a range of nutrients in the diet. • As well as starch, these foods supply fibre: <ul style="list-style-type: none"> ○ <i>Insoluble fibre</i> in wholegrain bread, brown rice, fruit and vegetables etc helps to keep bowels healthy and help prevent constipation. ○ <i>Soluble fibre</i>, e.g. in oats and pulses, may help reduce cholesterol. • These foods can also provide a good source of folate, riboflavin and iron. Fortified breakfast cereals are a good example.
Tips on choosing starchy foods	<ul style="list-style-type: none"> • Ask suppliers information on the salt, fat, saturated fats and sugars in their products. • Choose products that meet Responsibility Deal salt targets.¹⁶ • Choose a variety of breads – wholegrain, brown, wholemeal, granary, with seeds in addition to white breads. • Look for white bread with added nutrients and fibre if customers don't like brown or wholemeal bread. • Choose lower salt bread where possible. • Wholemeal flour can be used for some recipes or used to replace some of the white flour to add folate, iron and fibre to the dish. • Choose wholegrain rice and pasta where possible, or consider using a mixture of wholemeal and white if customers are not keen on the wholemeal variety. • Choose fortified breakfast cereals as they are a good source of vitamin D, folate, and iron. • Have a good range of cereals, include higher fibre, cereals with added dried fruit and nuts, cereals with lower added sugar. • Potatoes can be a useful source of folate. • Beans and pulses such as soya beans, chick peas, lentils and broad beans can be useful sources of iron and fibre. They can be added to casseroles, curries and soups adding flavour, protein and fibre. • Look for products produced to certified or assured higher environmental standards such as organic or LEAF.

Tips on cooking and serving foods

- Offer a variety of starchy foods with main meals including potatoes, rice, pasta, noodles and other grains.

Breads

- Use thick cut bread for sandwiches.
- A variety of breads should be available daily as starters or meal accompaniments.
- Try not to add too much fat e.g. butter/spreads on bread, mayonnaise in sandwiches.
- Use combinations of wholemeal and white bread in sandwiches to encourage consumption of wholemeal varieties.

Breakfasts:

- Offer a variety of breakfast cereals (preferably fortified including high fibre, low sugar varieties), porridge and/or bread at breakfast.
- Porridge is a great warming winter breakfast and whole oats with fresh fruit and yoghurt makes a great summer breakfast.
- Serve toast, english muffins, soda bread instead of fried bread or hash browns or fried waffles with cooked breakfasts.

Potatoes

- Boil potatoes in the minimum amount of water and for the shortest amount of time to retain vitamins or steam them. Don't add salt to the cooking water or prior to serving.
- Use skimmed or semi-skimmed milk rather than butter or margarine to mash potatoes to smoothness.
- Roast potatoes in small amounts of vegetable oil, brush the oil on to potatoes to use smaller amounts.
- Try to cut down on the amount of fried potatoes offered, such as chips and other reconstituted potato dishes. Offer mash, steamed/boiled new potatoes, baked potatoes, oven baked potato products as alternatives.
- Choose thick cut chips or potatoes wedges instead of thin cut chips – they absorb less oil when cooking or use oven chips.
- Pre-blanch chips in steamers before frying, this will reduce the amount of oil absorbed.
- Use baked products where possible instead of frying as they are likely to contain less fat; compare product labels for more information.

Pasta, rice and other grains

- Don't salt cooking water when cooking pasta, rice and other grains. Herbs, spices, garlic, vegetables, dried fruit, seeds and nuts can be used during or after cooking to add flavour, depending on what they are accompanying.
- Use more starchy foods e.g. pasta in relation to meat/rich sauces e.g. in lasagne, potato to meat in cottage pie, sausages and mash – have more of the mash, add more vegetables etc.
- Serve plenty of boiled/steamed rice or Indian breads with curries, rather than poppadums, fried Indian breads or fried rice.
- Choose tomato and vegetable based sauces in preference to creamy, buttery sauces where appropriate.
- Wholegrain rice or other grains can make tasty alternatives e.g. rice salads, pearl barley risottos etc.

When frying starchy foods

- Make sure the oil used for frying is at the correct temperature – this reduces the amount of fat absorbed.
- Drain/blot fried foods before serving.

Allergy tips	<ul style="list-style-type: none"> • Be aware of adults who have coeliac disease, also known as gluten intolerance, who need to avoid all cereals containing gluten (wheat, oats, barley or rye). Alternative foods made from maize (i.e. polenta), rice, rice flour, potatoes, potato flour, buckwheat, sago, tapioca, soya and soya flour are available. Seek expert advice from a dietitian where necessary. Some gluten free foods are available on prescription.
Food safety tips	<ul style="list-style-type: none"> • Starchy foods and particularly foods such as grains and rice can contain spores of <i>Bacillus cereus</i>, a bacteria that can cause food poisoning. When the food is cooked, the spores can survive. Then, if it is left standing at room temperature, the spores will germinate, multiply and may produce toxins (poisons) that cause either vomiting or diarrhoea. Reheating will not get rid of the toxin. • Low numbers of <i>Bacillus cereus</i> won't make someone ill, but if food contains high numbers of the bacteria, or if a toxin has been produced, it could cause food poisoning. The longer that food is left at room temperature, the more likely it is that bacteria, or the toxins they produce, could make food unsafe. Therefore these types of food should be served directly after cooking, if this is not possible they should be cooled within an hour and kept in the fridge until reheating (for no more than 1 day). Avoid reheating more than once.
GBS for food and catering services (relevant criteria)	<ul style="list-style-type: none"> • Boiled starchy foods e.g. rice, potatoes and pasta, are cooked without added salt. • 50% of breakfast cereals (procured by volume) are higher fibre (ie more than 6g/100g) and do not exceed 12.5g/100g added sugars. • 50% of breads, breakfast cereals and pre-packed sandwiches (procured by volume) meet Responsibility Deal salt targets and all stock preparations are lower salt varieties (i.e. below 0.6g/100mls reconstituted). • Meal deals include a starchy carbohydrate.

Fruit and vegetables	
Guidance	<ul style="list-style-type: none"> • Fruit and vegetables should make up at least a third of the daily diet. • Offer at least 5 different portions of fruits and vegetables every day. • A portion of fresh or cooked fruit or vegetables should be about 80g see Annex 1.
What foods are included	<ul style="list-style-type: none"> • All types of fresh, frozen, tinned, juiced and dried fruit. • All types of fresh, frozen, juiced and tinned vegetables. • 100% fruit and vegetable juices count as one portion however much you drink. • Some smoothies can count as more than one portion if they contain all the edible pulped fruit/vegetable. The number of portions depends on how many fruits or vegetables are used and how the smoothie was made. • Beans and pulses are also included but, again, only count as a maximum of one portion per day.
Why are they important	<ul style="list-style-type: none"> • Fruit and vegetables are good sources of many vitamins (including folate) minerals and fibre. • There is some evidence that consuming more than 400g of fruit and vegetables every day may reduce the risk of developing chronic diseases such as coronary heart disease and some cancers. • Fruit and vegetables are very low in fat. • Fruit and vegetables are a good source of potassium, which may help to lower blood pressure. • Increasing fruits and vegetables in the diet helps to increase the fibre intake, which can reduce the total amount of calories consumed amongst those who wish to lose weight.
Tips on choosing foods	<ul style="list-style-type: none"> • Ask suppliers for information on salt, fat and sugar in their products. • Choose products that meet Responsibility Deal salt targets (eg for tinned products). • Buy tinned fruit in juice rather than in syrup. • Buy tinned vegetables and pulses in water, with no added salt or sugar. • Fruit and vegetables which are useful sources of iron include dark green leafy vegetables (but not spinach), broccoli, dried apricots and raisins, blackcurrants and broad beans. • Fruit and vegetables which are useful sources of folate include, green leafy vegetables, broccoli, Brussels sprouts, peas, asparagus and oranges. • Bananas, raisins, peas and pulses are a particularly good source of potassium. • When sourcing fresh fruit and vegetables choose those that have been grown in season. Guides on what is in season can be found at: http://www.defra.gov.uk/foodfarm/policy/publicsectorfood/documents/seasonal-salad-fruit.pdf http://www.defra.gov.uk/foodfarm/policy/publicsectorfood/documents/seasonal-vegetable.pdf • Look for fruit and vegetables produced to certified or assured higher environmental standards such as organic or LEAF. • When buying exotic fruits consider fairly traded options, for example Fair Trade or Rainforest Alliance certified produce.

<p>Tips on cooking and serving foods</p>	<p><i>Storing and preparation</i></p> <ul style="list-style-type: none"> • Use fresh fruit and vegetables as soon as possible, rather than storing them, to avoid vitamin loss. Alternatively, use frozen fruit and vegetables. • Store fresh vegetables in a cool, dark place. • Avoid leaving any cut vegetables exposed to air, light, heat or leaving them to soak. Cover and chill them. <p><i>Cooking and including fruit and vegetables in dishes</i></p> <ul style="list-style-type: none"> • Steaming or cooking vegetables with minimum amounts of water (with no added salt), for as short as time as possible and serving as soon as possible will help retain vitamins. • Pureed stewed fruit can be offered with custard or yoghurt or ice cream as dessert. • Add vegetables and pulses to stews, casseroles or other dishes and offer a variety of vegetables at main meals. • Incorporate fruit into other desserts and dishes, including cold starters and savoury dishes (e.g. citrus chicken, serving apple sauce with pork, dried fruits like apricots and raisins in Moroccan style tagines and casseroles). • Adding vegetables in rice e.g. mushrooms, peas, sweetcorn, peppers. <p><i>Serving</i></p> <ul style="list-style-type: none"> • Offer a variety of dried fruits to add to cereal options and porridge and include dried fruit in cakes and desserts. • Aim for 1 or 2 portions with each meal and offer fruit as a snack. • Offer colourful and interesting salads (with low fat dressings) and vegetables with main meals. • Always have appealing, blemish free, ripe fresh fruit on display. • Fruit juice is still a healthy choice at mealtimes, and counts as one of the five portions of fruit and vegetables. • Offer fruit and vegetables as prominently as other snack foods. • Try to avoid adding fat or rich sauces to vegetables (such as carrots glazed with butter). • Try to avoid adding sugar or syrupy dressings to fruit (such as stewed apple). • If you offer any kind of 'meal deal', ensure that you include at least one portion of vegetables and a portion of fruit. • Make a portion of fruit cost less than a portion of hot or cold dessert. • Place fruit conveniently and prominently with other snack foods. • Choose deserts with a higher proportion of fruit. For example GBS for Food and Catering Services suggest at least 50% of deserts are fruit based (ie at least 50% fruit based on raw weight of ingredients)
<p>Tips on food-related customs</p>	<ul style="list-style-type: none"> • Some people, such as Jains, have restrictions on some vegetable foods. Caterers should check with the individual customer about their needs.
<p>Allergy tips</p>	<ul style="list-style-type: none"> • Some people can be allergic to certain fruits, such as apples, peaches, melon, mango, pineapple and kiwi. Allergy to fruits can be linked to pollen allergy and hay fever.

Food safety tips	<ul style="list-style-type: none"> • Because most fresh fruits and vegetables are grown outdoors in non-sterile environments, it is possible that they may occasionally harbour potential food poisoning organisms that are present in soil, air and water. The number of potentially harmful micro-organisms on fresh produce intended to be eaten raw can be reduced by using hygienic growing practices and careful washing of fruit and vegetables with potable water before consumption. • NEVER use household cleaners/ washing up liquid as these products may not be safe for human consumption, and by using them, harmful residues may be left on the food.
GBS for food and catering services (relevant criteria)	<ul style="list-style-type: none"> • 50% of the volume of desserts available is based on fruit - which can be fresh, canned, dried or frozen. • Vegetables are cooked without added salt. • A portion of fruit is cheaper than a portion of hot or cold dessert. • Meal deals include vegetables and 1 portion of fruit.

Milk and dairy foods	
Guidance	<ul style="list-style-type: none"> • Milk and dairy foods should be served every day. • Moderate amounts should be offered each day as milk in drinks, cheese, yoghurt or milk-based puddings and sauces. • Where appropriate choose lower fat and salt options or use higher fat/salt options in smaller amounts or less frequently.
What foods are included	<ul style="list-style-type: none"> • All types of milk, including dried milk, reduced fat milk, goat's and sheep's milk. • Cheeses e.g. Cheddar, cottage cheese, cheese spreads, Edam, goat's cheese, stilton. • Yoghurt (fruit or plain, whole milk or low-fat), or fromage frais. • Milk-based sauces, custard and milk puddings. • Fortified Soya drinks.
Why are they important	<ul style="list-style-type: none"> • Milk and dairy products are excellent sources of calcium which is needed for optimal bone strength as well as sources of protein, vitamin A and riboflavin (B2) • The fat content of different dairy products varies, and much of this is saturated fat. • Fortified dried milks are a good source of vitamin D. • Milk, cheese and yogurt are useful sources of riboflavin.
Tips on choosing foods	<ul style="list-style-type: none"> • Ask suppliers for information on salt, fat, saturated fat and sugars content of their products. • Choose products that meet Responsibility Deal salt targets for salt wherever possible. • Dairy products can make a large contribution to the saturated fat content of your menu. Often, products are available that are lower in fat and saturates and can easily be incorporated into the menu. • Consider switching to semi-skimmed, 1% or skimmed milk. • Milk drinks such as milk shakes can be high in added sugars so choose varieties that are lower in sugar. • Choose a variety of cheeses to vary the fat content. Hard cheeses, such as Cheddar tend to be higher in saturated fat then softer cheese such as Edam and Brie. • Crème fraiche and soured creams are available in lower fat varieties and can be used with little difference to the taste of the recipe. • Hard, cheddar style cheese, used for general cooking use in catering kitchens, is available in lower fat varieties • Look for milk and dairy produced to certified or assured higher environmental standards such as organic or LEAF.

Tips on cooking and serving foods	<ul style="list-style-type: none"> • Use fromage frais, quark or plain yogurt in dishes in place of some of the cream (but be careful not to alter the taste or appearance of the dish). • Offer frozen yoghurts as an alternative to ice cream, to reduce fat content. • Use reduced fat milk in sweet and savoury sauces, custard and puddings. • Use béchamel, instead of cheese, sauce for dishes covered in cheese (e.g. lasagne). • Use reduced fat cheese in sandwiches, on cheese boards, in sauces, and for toppings on hot dishes like jacket potatoes, gratins etc • Use smaller amounts of stronger tasting cheese to provide flavour, this helps lower salt and fat content of dishes. • Grate cheese for use in salads, sandwiches and fillings; you will tend to use less. • Use plain yoghurt and fromage frais instead of cream, soured cream or crème fraîche. • Use reduced fat milk when making milky drinks such as lattes and hot chocolate as the default.
Tips on food-related customs	<ul style="list-style-type: none"> • People of certain religions, such as Hindus, Sikhs and Muslims may not eat milk products, and Jewish people may require kosher milk products. • Strict Jews who eat kosher foods do not eat milk products at the same time as, or immediately before or after foods/meals containing meat. • Vegans, including some Rastafarians, will not eat milk products. • Caterers should check with the individual customer about their needs.
Allergy tips	<ul style="list-style-type: none"> • Some people are allergic to milk and will need to avoid all milk products, including yoghurts and cheese. • Other people may be intolerant to lactose, the sugar found in milk. Such people may be able to tolerate small amounts of milk in their diets but people's sensitivities can vary. Lactose intolerance is found in about 5% of the adult population in the UK but is more common in certain ethnic communities where milk is not traditionally part of the adult diet. For example, in South America, Africa and Asia, more than 50% of the population are intolerant to lactose, rising to nearly 100% in some parts of Asia. • There are a number of alternative products such as soya or rice drinks. Choose alternatives that are fortified with nutrients such as calcium.
Food safety tips	<ul style="list-style-type: none"> • Unpasteurised (raw) milk should be avoided as it may contain micro-organisms harmful to health. • Milk and dairy products should always be refrigerated and stored at temperatures below 8°C (ideally at temperatures between 0°C & 4°C). • Pregnant women and older people should avoid unpasteurised and soft-mould-ripened cheese (e.g. Camembert, Brie and all blue-veined cheese). These cheeses should be clearly labelled. These cheeses are more inclined to allow the growth of bacteria such as <i>Listeria</i>, vulnerable groups are more susceptible to complications of food poisoning bacteria.

**GBS for
food and
catering
services
(relevant
criteria)**

- 50% of hard yellow cheese has a maximum total fat content of 25g/100g.
- 75% of milk is reduced fat.

Meat, fish, eggs, beans and other non dairy sources of protein

Guidance	<ul style="list-style-type: none"> • A meat or meat alternative should be offered at all main meals. • Fish should be offered at least twice a week, one of which should be oily (a typical portion is about 140g). • Meat alternatives for vegetarians should be varied and a variety of foods from this group should be used. Cheese may be used as a substitute; however it should not be used too often as the protein source for vegetarians as it can be high in salt and saturated fat. • Consider the amount and frequency of red and processed meats on your menu – it is recommended that consumers have no more than 70g per day on average.
What foods are included	<ul style="list-style-type: none"> • Meat, poultry, offal, fish, eggs, nuts, beans, pulses, seeds and other non dairy sources of protein. • Meat includes all cuts of beef, lamb and pork and meat and meat products such as ham, bacon, salami, corned beef, beefburgers and sausages. • Fish includes any fresh, frozen and tinned fish, such as tuna, sardines, pilchards, and mackerel, and fish products such as fish cakes and fish fingers. • Oily fish includes salmon, sardines, trout and fresh tuna. Canned tuna is not considered an oily fish as the long chain omega-3 fatty acids are lost in the canning process for tuna. Other canned oily fish are not affected in the same way. • All eggs e.g. boiled, poached, scrambled, fried, omelettes. • Beans and pulses – e.g. baked beans, runner beans, chickpeas, butter beans, kidney beans and lentils are in this group and provide a good source of protein for vegetarians and are low in fat. • Other textured protein products suitable for vegetarians, such as tofu, and textured protein products such as soya, quinoa and quorn[®].
Why are these foods important	<ul style="list-style-type: none"> • Meat and fish are good source of protein and of vitamins and minerals such as iron and all the B vitamins except folate. Meat is a particularly good source of riboflavin. • Oily fish provide long chain omega-3 fatty acids which may help to prevent heart disease. Such foods are also a source of vitamins A and D and iron. • Beans and pulses are sources of protein, fibre and iron. • Eggs are useful sources of protein, vitamins A, vitamin D and Riboflavin (B2). • Nuts provide a source of protein, iron, fibre and essential fatty acids.

Tips on choosing foods

- Ask suppliers for information on the salt, fat and saturated fat of their products.
- Choose products that meet Responsibility Deal salt targets wherever possible.
- Choose a variety of meats and meat products and choose less red and processed meat.
- Choose lean cuts of meat where possible. Some types and cuts of meat are higher in fat, particularly saturated fat.
- Look for meat products with higher meat content, look at the label for more information – also consider the fat and salt content.
- White fish are low in fat.
- Oily fish, such as herring, mackerel, pilchards, salmon, sardines, trout or roe and egg yolks are rich in vitamin D
- Choose tinned fish in spring water rather than oil .
- Source fish from sustainable sources¹⁷
- Turkey and chicken are lower in fat options when the skin is removed.
- Choose pies that have less pastry e.g. lattice topped, single crust, have a potato topping.
- Meat products in pastry, such as pies and sausage rolls, are often high in fat; choose the lower fat options where available.
- Look for canned beans and pulses with no added salt and sugar.
- Liver/pâté is a useful source of nutrients but liver and liver products should not be served more than once a week as it contains a lot of vitamin A and there are risks of having too much particularly for specific groups of people.
- Look for products produced to certified or assured higher environmental standards such as organic or [LEAF](#).
- Source eggs that have been produced in systems which do not use conventional cages, choose eggs produced from other systems such as enriched cages, free-range or organic.

a) ¹⁷Complete exclusion of those species and stocks identified by the Marine Conservation Society (MCS) as '[fish to avoid](#)'.

b) Inclusion of all [Marine Stewardship Council \(MSC\)](#) or equivalent and MCS '[fish to eat](#)' list. Where fish are not covered by a or b, require a systematic approach to traceability and demonstrable sustainability for the rest, with reference to [FAO Code of Conduct for Responsible Fisheries](#); new IUU regulation; fishery sustainability status; seasonality to avoid spawning seasons; use of a diversity of species.

**Tips on
cooking
and
serving
foods**

Preparation

- Remove visible fat from meat and skin from poultry

Cooking

- Stand poultry and joints on racks when cooking to allow the fat to flow away
- Larger pieces of meat will absorb less fat than smaller pieces
- Boil, bake, grill or poach rather than frying or roasting where possible as this will lower the fat content
- Add pulses to meat dishes to increase the fibre content, reduce the overall fat content and add extra protein.
- If frying, make sure the temperature is correct, change fat/oil regularly and drain well to reduce fat content.
- When baking fish, brush with unsaturated vegetable oil rather than butter.
- Boil, poach or scramble eggs rather than frying them.
- Gradually lower the salt content of food you cook to allow customers taste buds to adapt. Try using garlic, herbs and spices to flavour foods.

Serving

- Serve red and processed meat and processed fish e.g. coated chicken, burgers, fish fingers less often
- Serve slightly less meat with extra vegetables and starchy foods.
- Serve foods with tomato or vegetable based sauces rather than creamy, buttery sauces to lower the fat content.
- Quiches and flans can be high in fat and salt, so try not to provide these too often.
- Offer smoked meats and fish less often as they can be high in salt
- Serve oily fish as pâtés and spreads on bread and toast.
- If a dish must be finished with butter, try lightly brushing with melted butter before serving.
- When serving foods with gravy opt for lower salt versions of gravy mixes, or stock/bouillon cubes/granules.
- Season food sparingly with salt or seasonings containing salt, a chef's palette may be less sensitive to salt than many of the customers.
- Nuts and seeds can be a good alternative to snacks high in saturated fat, however avoid salted nuts where possible.
- Seeds can be eaten raw, dry fried or dry roasted in a frying pan or in a roasting tin without any oil.

<p>Tips on food-related customs</p>	<ul style="list-style-type: none"> • People of certain religions, such as Hindus and Sikhs, as well as vegetarians and vegans including some Rastafarians, may not eat eggs, meat or fish. • Some Jewish people will require kosher meat and Muslims will require Halal meat. Pork and pork products are not appropriate. • Strict Jews who eat kosher foods do not eat meat products at the same time as, or immediately before or after foods/meals containing milk. They may only eat fish with fins and scales and do not eat shellfish. Eggs should not contain blood spots. • Hindus who eat fish may only eat fish with fins and scales and may also not eat shellfish. • Caterers should check with the individual customer about their needs.
<p>Allergy tips</p>	<ul style="list-style-type: none"> • Some people are allergic to nuts, peanuts, fish, shellfish and eggs. The labelling of bought-in products will need to be checked carefully to see if these allergenic foods are used as ingredients.
<p>Food safety tips</p>	<ul style="list-style-type: none"> • Always store meat and fish in the fridge, ideally at temperatures between 0°C and 4°C. • Always ensure that uncooked meat and ready to eat foods are stored apart. Ideally raw meat & fish should be covered and stored on the bottom shelf where they can not drip onto other foods. Cooked meat and fish should be covered and stored above raw in the fridge. • Eggs are a useful source of nutrients but when served to older people and pregnant women they should always be well cooked, until both the yolk and white are solid. This is to avoid the risk of Salmonella, which causes a type of food poisoning. • At risk groups should avoid all types of pâté, including vegetable. This is because pâté can sometimes contain Listeria. • Always ensure that meat is well cooked. This is especially important with poultry and products made from minced meat, such as sausages and burgers. Make sure these are cooked until they are piping hot all the way through any juices run clear and no pink meat is left. • Vulnerable groups should avoid raw shellfish. This is because raw shellfish can sometimes contain harmful bacteria and viruses that could cause food poisoning. It is far safer to eat shellfish as part of a hot meal, such as in a curry.
<p>GBS for food and catering services (relevant criteria)</p>	<ul style="list-style-type: none"> • Meat and meat products (procured by volume) are lower in saturated fat where available. • 75% of ready meals contain less than 6g saturated fat per portion. • If caterers serve lunch and an evening meal, fish is provided twice a week, once of which is oily. If caterers serve only lunch or an evening meal, an oily fish is available at least once a week. • 50% of meat and meat products meet Responsibility Deal salt targets.

Foods and/or drinks high in fat and/or sugar	
Guidance	<ul style="list-style-type: none"> • Use foods containing fat sparingly. Look out for lower fat alternatives or eat these foods in smaller amounts. • Where possible replace saturated fat with unsaturated fat • Snacking on sugary foods and drinks throughout the day is discouraged as this can cause tooth decay.
What's included	<ul style="list-style-type: none"> • Foods containing saturated fat include: butter, margarine, lard, other spreading fats and, cooking oils (e.g. palm oil), oil-based salad dressings, mayonnaise, cream, crème fraiche, chocolate, crisps, biscuits, pastries, cakes, puddings, ice cream, rich sauces, and gravies. • Foods containing unsaturated fats include: low-fat spreads, cooking oils (e.g. sunflower, olive), oil-based salad dressings • Foods containing sugar include: soft drinks, fruit juice, sweets, jams, honey and sugar, as well as foods such as cakes, puddings, biscuits, pastries and ice cream.
Why are they important	<ul style="list-style-type: none"> • Foods from this group principally provide energy in the forms of fats and sugars but may contain other nutrients in much smaller amounts. Some can also be high in salt. These nutrients are consumed in greater amounts than required and are associated with disease progression and/or dental caries. • Foods from this group can contribute to excess energy intakes if they are eaten in large amounts. • Having too much saturated fat can increase the amount of cholesterol in the blood, which increases the chance of developing heart disease. • Often foods high in calories offer few other nutrients, it is important that these foods do not displace more nutrient rich foods.
Tips on choosing foods	<ul style="list-style-type: none"> • Ask suppliers about and check the levels of salt, fat, saturated fat and sugars in their products. • Choose products wherever possible that meet nationally agreed salt targets. • Opt for smaller pack sizes of confectionery, savoury snacks and soft drinks. • Choose cooking and spreading fats that are based on mono- and poly-unsaturated fats wherever possible. • Choose soya, rapeseed and olive oils for cooking and salad dressings • Choose sunflower oil, soya oil or olive oil fat spreads. • Choose a range of cold drinks that are lower in sugar e.g. chilled water (still, sparkling, with a slice of lemon or lime) unsweetened fruit juices and chilled milk drinks. • Choose wholegrain breakfast cereals rather than those coated with sugar or honey.

<p>Tips on cooking and serving foods</p>	<p><i>Lowering fat</i></p> <ul style="list-style-type: none"> • Consider using spreads that are soft straight from the fridge, so it is easier to spread thinly. • Choose tomato and vegetable based sauces rather than cream based ones. • Offer fewer fried foods. • Use reduced calorie mayonnaise in dressings or dilute with lower fat yogurt. • Serve salad dressings and desert toppings separately so that customers can decide how much they want. • Don't automatically garnish potatoes and vegetables with butter prior to service. • Ensure correct temperatures when frying so that foods absorb less fat. <p><i>Lowering sugar</i></p> <ul style="list-style-type: none"> • Reduce the amount of sugar used in dishes where practical and acceptable. • Use dried or fresh fruit to sweeten dishes. • Try halving the sugar you use in your recipes. It works for most things except jam, meringues and ice cream.
<p>Tips on food-related customs</p>	<ul style="list-style-type: none"> • Many religious celebrations may include traditional foods that are high in fat or sugars. Providing these foods occasionally as part of a celebration or festival is important for many adults.
<p>Allergy tips</p>	<ul style="list-style-type: none"> • Many foods high in fat or sugar, such as cakes and biscuits, can contain eggs, milk or nuts and are not suitable for people allergic to these foods.
<p>Food safety tips</p>	<ul style="list-style-type: none"> • Some foods high in fat would traditionally use raw egg e.g. mayonnaise, some desserts. Where providing food for older people and pregnant women, use products where the egg has been pasteurised. This is to avoid the risk of Salmonella, which causes a type of food poisoning.
<p>GBS for food and catering services (relevant criteria)</p>	<ul style="list-style-type: none"> • Biscuits, cakes and pastries (procured by volume) are lower in saturated fat where available. <p><i>Voluntary Best Practice criteria</i></p> <ul style="list-style-type: none"> • All sugar containing drinks are available in no more than a 330ml portion size (excluding hot drinks). • Confectionery and packet sweet snacks are in the smallest standard single serve portion size available within the market. • Savoury snacks are only available in packet sizes of 35g or less.

Menus that Meet Nutrient Based Standards

34. Analysed menus allow you to know whether the menus you provide meet the needs of the people for whom you provide. The standards summarised in Table 4, for adults aged 19-74 years, look to lower intakes of salt, fat and sugars and increase intakes of some vitamins and minerals where intakes are known to be lower than recommended levels. The aim is to improve the overall dietary pattern of this population.
35. This approach, together with calorie labelling of menus and pack size criteria, provides the voluntary, best practice criteria for GBS for Food and Catering Services.

Setting nutrient based standards for the population you serve

36. The nutrient based standards used to develop menus in this toolkit use evidence from National Diet and Nutrition Survey and set targets for a range of nutrients consumed in excess or in insufficient amounts by adults aged 19-74 years. The basis for setting these targets are covered in [Healthier and more sustainable catering: Nutrition principles](#). These principles define an average population requirement which is the dietary reference value for each nutrient listed as a minimum or maximum provision and in addition set targets for those foods consumed in excess or insufficient amounts.
37. Where vitamin and mineral intakes are below recommended levels, menus aim to provide food such that 90-100% of the daily reference nutrient intake¹⁸ is provided before inclusion of snacks. For adults, this would include **riboflavin, potassium, folate and iron**.
38. Where intakes are greater than recommended amounts e.g. salt, saturated fat and added sugars these are included in lower amounts

¹⁸ The reference nutrient intake is the amount of a nutrient that is enough for almost every individual, even those with high needs.

relative to the energy content of meals to prevent excess consumption. Menus developed in this toolkit therefore provide fat, salt and NMES at 98% of the average population requirement from all meals and snacks.

Table 4. Nutrient-based standards for adults aged 19-74yrs:

Nutrient	Average population requirement (provided as daily averages over 7 days)	Recommended target for areas of excess or insufficiency (provided as daily averages over 7 days)
Energy (kcal/MJ)	2349	
Total fat (g)	Max 91	Less than 89
Saturated fat (g)	Max 29	Less than 28.42
Carbohydrate (g)	Min 313	
NMES (g)	Max 70	Less than 68.6
Fibre (as NSP g)	18	
Protein (g)	Min 50	
Sodium (mg)	Max 2400	Less than 2352
Salt (equivalent g)	Max 6.0	Less than 5.9
Iron (mg)	15	More than 15
Potassium (mg)	3500	More than 3500
Riboflavin (mg)	1.3	More than 1.3
Folate (mcg¹⁹)	Min 200	>200
Vitamin D (mcg)	Min 10 ^{*20}	

39. In addition, nine percent of women aged 19-64 have insufficient intakes of vitamin A and younger men and women aged 19-24 in particular have intakes below the lower reference nutrient intake (16 & 19% respectively). However, recommending target intakes above the dietary reference value for the whole population might result in some individuals consuming more than the safe level of vitamin A²¹. However, those providing food for adults could consider how they may provide awareness to relevant adults about this issue.

40. Women who could become pregnant or who are planning a pregnancy are advised to take an additional 400 micrograms of folic acid per day as a supplement from before conception until the 12th week of pregnancy. In addition to this, they should also eat folate rich foods such as, green vegetables, brown rice and fortified breakfast cereals (making a total of 600 micrograms of folate per day from both folate rich foods and a supplement).

¹⁹ mcg is used as an abbreviation for micrograms, µg is also used.

²⁰ see paragraph 41 for further information on meeting vitamin D requirements

²¹ Safe Upper Levels for Vitamins and Minerals. Expert Group on Vitamins and Minerals. Food Standards Agency 2003.

41. The action of sunlight on the skin is the major source of vitamin D and some adults particularly may not receive sufficient sunlight if they spend large periods of time indoors. Most people can get all the vitamin D they need by eating a healthy, balanced diet and getting a little sun. However, the Department of Health recommends a daily 10 microgram vitamin D supplement for the following people:

- all pregnant and breastfeeding women
- all people aged 65 and over
- people who are not exposed to much sun, for example those who cover up their skin for cultural reasons, who are housebound or confined indoors for long periods
- people with darker skin such as people of African-Caribbean and South Asian origin.

Food provision across the day

42. When planning menus it is useful to consider how people consume food and how to apportion nutrient intake throughout the day. For the purposes of developing menus, the convention is that people usually divide their intakes across four eating occasions; breakfast, lunch, evening meal and foods consumed between meals i.e. snacks.

43. Using this approach, you can estimate the proportion that each eating occasion makes. Since most people usually consume a wider range of foods at lunch and evening meals, these meals account for a greater proportion of intake. As such, breakfast contributes 20% of daily intake with lunch and evening meals contributing 30% each. The remaining 20% is for foods consumed between meals (snacks).

44. Not all caterers will be providing all meals for their customers. Using the proportions identified here will allow those providing for only some eating occasions to set and plan menus to meet relevant nutrient intake levels.

45. This approach has been used to develop the example menus in Annex 3. These example menus provide illustrations of how menus might be developed to provide the necessary nutrient intake across the day and across the different eating occasions. The five example menus given meet the nutrient based standards for adults aged 19-74 years identified in Table 4.

46. The five menus are designed to reflect different approaches for different settings, such as hospitals, work place canteens and prisons. There are many ways to meet nutrient based standards and other menu options will be able to meet these standards including different hot and cold main meals, snacks and drinks. Careful consideration of the acceptability of the options and sufficient variety are extremely important.
47. Developing menus that meet nutrient based standards requires the support of someone with nutrition knowledge and training. It is likely that an organisation wishing to do this would need to secure the services of a registered nutritionist or dietitian or procure a catering supplier that has the capacity to carry out menu planning in this way.
48. Registered nutritionists or dietitians are able to develop appropriate nutrient standards for the population being catered for, develop menus and assess menus against nutrient based standards. Assessment of menus using the information in Tables 3 and 4 will ensure that those consuming that food, without specific medical dietary need, can meet their dietary requirements.
49. In order to do this a software packages that can provide nutrient analysis of menus, there are several such packages on the market. It is important that appropriate software with up-to-date information (as a minimum the most recent edition of McCance & Widdowson²²) is used and takes accounts of cooking losses and waste. Those responsible for commissioning food provision to nutrient standards will wish to check that actual provision reflects the planned menus and that analysis has been carried out appropriately.
50. The nutrient analysis of the five example menus is also provided in Annex 3. The technical basis for this analysis is recorded in separate reports from an independent dietitian.²³ The analysis of the menus is taken as a daily average over a 7 day period. All five 7-day example menus have

²² Food Standards Agency (2002) McCance and Widdowson's The Composition of Foods, Sixth summary edition. Cambridge: Royal Society Chemistry.

²³ Daniels, L. Example Menus for adults (2007) and Daniels, L. Example Menus for adults in prison (2008) – see <http://collections.europarchive.org/tna/20100927130941/http://food.gov.uk/healthiereating/healthycatering/pubinstguide>

met all the standards and targets over the average of seven days and for each eating occasion²⁴.

51. The menus are not intended for those who may have different nutritional requirements due to illness or disease, and are undernourished or at risk of under nutrition (e.g. because of a poor appetite). Hospital inpatients need appropriate assessment and monitoring of their food intakes and nutritional status. If patients are unable to meet their requirements for energy and other nutrients or have other specific medical dietary needs, then these must be appropriately provided for.
52. The example menus identified as relevant to the prison service have further assumptions applied. As the prison service is responsible for the provision of meals, example menus 4 & 5 do not include the contribution from snacks, which inmates have the opportunity to purchase. The prison service will need to consider the implications where such opportunities may not be available. Targets and analysis of example menus 4 & 5 therefore exclude snacks, covering only breakfast, lunch and evening meal.

Calorie labelling

53. Calorie labelling in catering settings provides people with information they can use to make informed choices when eating away from home, and gives them a greater ability to control and balance their energy intake with their needs.
54. When displaying calorie information it is recommended that you follow these four principles of calorie labelling:
 - Display calorie information clearly and prominently at the point of choice. In quick service settings, point of choice would mean the menu boards, unless there is robust evidence to show that other points of choice are equally effective for consumers.
 - Provide calorie information for standardised food and drink items sold or provided (standardised is defined as a reproducible product that is offered for at least 30 days a year).

²⁴ Analysis of the menus identifies some occasions across individual eating occasions where the salt target has not been met. Since the development of these example menus there has been considerable reformulation and it would be expected that level of salt would now be lower than the analysed levels stated in Annex 3.

- Provide calorie information per portion/item/meal; and for multi-portion or sharing items provide the number of portions,
- Display reference information on calorie requirement (e.g. women need around 2000 calories per day) clearly and prominently and in a way that is appropriate for the consumer.

Food Hygiene

58. Food businesses in the UK must comply with both the European and national food hygiene legislation and be aware of the food hygiene regulations, temperature control requirements, and other information. The food business operator should be able to demonstrate, on inspection, that they have the required knowledge to prepare food in a safe manner. They would also need to show that any staff handling food are supervised and instructed and/or trained in food hygiene matters relating to their job.

59. The Food Standards Agency has the remit for food safety and hygiene and provides much information and guidance on its web site.

- Background to the food hygiene legislation and pdf copies of the EU rules can be accessed from:

<http://www.food.gov.uk/foodindustry/regulation/europeleg/eufoodhygieneleg>

- Guidance to the legislation can be found at:
<http://www.food.gov.uk/foodindustry/guidancenotes/hygguid/fhlguidance/>

- 'Food Hygiene - a Guide for Businesses' is aimed at catering establishments as well as shops selling food. It tells you about the key laws that affect your business, what they require you to do and how they are enforced. This booklet also explains about good food hygiene:
<http://www.food.gov.uk/multimedia/pdfs/hygieneguidebooklet1007.pdf>

- If you have any questions about how the EU food hygiene legislation applies to your institution, the Agency strongly recommends seeking further advice from your local authority Environmental Health Department. New businesses should be registered with the EHD at least 28 days before they start to trade. To find contact details for the relevant EHD please go to:
<http://www.food.gov.uk/enforcement/enforceessential/yourarea/>

Allergen labelling

60. The consequences for someone with a food intolerance or a food allergy consuming food containing an allergenic ingredient range from discomfort to severe illness for some days. In some rare cases of food allergy, eating a very small amount of an allergen can result in a life threatening reaction known as anaphylaxis.
61. Food labelling legislation requires foods sold pre-packed to declare the presence of a list of specified allergenic foods. This applies to foods sold retail or to mass caterers. The list currently consists of cereals containing gluten (wheat, barley, rye, and oats), crustaceans, fish, peanuts, soybeans, milk, nuts (such as almond, hazelnut, walnut, cashew, and Brazil nut), celery, mustard, sesame, sulphur dioxide/sulphites, molluscs and lupin.
62. Within a catering setting there are several important points to consider to help give people with food allergies or intolerances confidence when consuming food that you provide:
- Clear labelling of allergenic food ingredients wherever possible, ensuring that labelling is kept up-to-date in response to any changes in ingredients or to the menu,
 - Careful training of staff to minimise cross contamination with foods containing the specified allergenic foods
 - Training staff to deal appropriately and accurately with an enquiry regarding ingredients that may cause a reaction.
63. The Food Standards Agency produced advice for caterers on food allergy in 2004. This is available on their website:
<http://www.food.gov.uk/safereating/allergyintol/guide/caterers/>
64. There is also guidance on providing allergen information for non pre-packed food. This guidance, published in 2008, is applicable to caterers and provides information covering a range of catering situations.
<http://www.food.gov.uk/multimedia/pdfs/loosefoodsguidance.pdf>

Annex 1 –Government Buying Standards for Food and Catering Services

Nutrition Criteria

- Tap water is visible and freely available and such provision is promoted.
- Vegetables and boiled starchy carbohydrates such as rice, potatoes and pasta, are cooked without added salt.
- Salt is not available on tables.
- At least 50% of the volume of desserts available is based on fruit - which can be fresh, canned, dried or frozen.
- A portion of fruit is cheaper than a portion of hot or cold dessert.
- If caterers serve lunch and an evening meal, fish is provided twice a week, one of which is oily. If caterers serve only lunch or an evening meal, an oily fish is available at least once every 3 weeks.
- At least 50% of meat and meat products, breads, breakfast cereals, soups and cooking sauces, ready meal and pre-packed sandwiches (procured by volume) meet Responsibility Deal salt targets and all stock preparations are lower salt varieties (i.e. below 0.6g/100mls reconstituted).
- Meat and meat products, biscuits, cakes and pastries (procured by volume) are lower in saturated fat where available. 50% of hard yellow cheese has a maximum total fat content of 25g/100g; 75% of ready meals contain less than 6g saturated fat per portion; 75% of milk is reduced fat; and 75% of fats, oils and spreads are based on unsaturated fats.
- At least 50% of breakfast cereals (procured by volume) are higher fibre (ie more than 6g/100g) and do not exceed 12.5g/100g added sugars.
- Meal deals include a starchy carbohydrate, vegetables and 1 portion of fruit

Voluntary best practice criteria: -

- Savoury snacks are only available in packet sizes of 35g or less.
- Confectionery and packet sweet snacks are in the smallest standard single serve portion size available within the market.
- All sugar containing drinks (including fruit juices) are available in no more than a 330ml portion size (excluding hot drinks).
- Menu cycles are analysed to meet stated nutrient based standards relevant to the major population subgroup of catering provision.
- Menus (for food and beverages) include calorie and allergen labelling.

Sustainability criteria

- All eggs (in shell) sourced from systems that do not use conventional cages. If from a caged system, enriched cages are used
- Where fresh produce is used, menus are designed to reflect in-season produce and in-season produce is highlighted on menus.
- All Fish is sourced from sustainable sources
- 10% of the total value of primary commodity (i.e. raw ingredient) food and drink is produced to certified or assured higher level environmental standards (e.g. organic, LEAF)
- 50% by value of tea and coffee is fairly traded
- Provide opportunity for separate contracts for supply and distribution; and advertise all food-related tenders to SMEs.
- Pre-bottled water (mineral or spring) is not included in the hospitality menu
- Facilities are available to staff and customers for recycling cans, bottles, cardboard and plastics
- The procuring authority must check whether a separate food waste collection service can be provided (see guidance on how to do so). If it can be provided, while achieving value for money, then it should meet the best practice standard*.
- *Voluntary best practice standard: An appropriately licensed separate food waste collection service should be included (either as part of overall site waste management or as part of on-site catering service). The food waste collected should be sent for treatment either at an in-vessel composting or AD facility or other suitable facility (as opposed to landfill). NB: subject to further work led by Defra, it is expected that this will become a minimum mandatory criterion in the future.
- Any contractor must take steps to minimise food waste in its on-site operation using the guidance provided to help decide what action they will take. Contractors should set out what they will do, and feed back to clients on progress and results.
- Staff are trained in using catering equipment so as to minimise energy use (including switching off equipment, other than refrigerators, when not in use).
- Any replacement or new equipment bought meets the relevant minimum mandatory Government Buying Standards (relates to fridges/freezers, dishwashers, electric ovens and kitchen taps)
- Any paper products, such as napkins and kitchen paper, meet the relevant minimum mandatory Government Buying Standards for tissue paper

<http://sd.defra.gov.uk/advice/public/buying/products/food/>

²⁵ Fresh produce that is outdoor grown or produced during the natural growing or production period for the country or region where it is produced. It need not necessarily be grown or produced locally to where it is consumed and this applies to seasonal food from both the UK and overseas.

Annex 2 – Information on fruit and vegetables

What is a portion of fruit and veg?

ONE portion = 80g = any of these
1 apple, banana, pear, orange or other similar sized fruit
2 plums or similar sized fruit
½ a grapefruit or avocado
1 slice of large fruit, such as melon or pineapple
3 heaped tablespoons of vegetables (raw, cooked, frozen or tinned)
3 heaped tablespoons of beans and pulses (however much you eat, beans and pulses count as a maximum of one portion a day)
3 heaped tablespoons of fruit salad (fresh or tinned in fruit juice) or stewed fruit
1 heaped tablespoon of dried fruit (such as raisins and apricots)
1 handful of grapes, cherries or berries
a dessert bowl of salad
a glass (150ml) of fruit juice (however much you drink, fruit juice counts as a maximum of one portion a day)

Further information on fruit and vegetables can be found on the following website:

<http://www.nhs.uk/LiveWell/5ADAY/Pages/5ADAYhome.aspx>

<http://www.nhs.uk/Livewell/5ADAY/Pages/Portionsizes.aspx>

Annex 3 - Example Menus provided to illustrate possible approaches for delivering the nutrient based standards identified in *Healthier and more sustainable catering: Nutrition principles*

1. Example Menu for Adults 19-74

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Early Morning	Tea / Coffee / Water	Tea / Coffee / Water	Tea / Coffee / Water	Tea / Coffee / Water	Tea / Coffee / Water	Tea / Coffee / Water	Tea / Coffee / Water
Breakfast	Fruit / Fruit Juice Cereals / Porridge Sausage & Tomato Yoghurt / Parfait Toast with butter / spread Preserves Tea or Coffee Water	Fruit / Fruit Juice Cereals / Porridge Poached Egg Yoghurt / Parfait Toast with butter / spread Preserves Tea or Coffee / Water	Fruit / Fruit Juice Cereals / Porridge Bacon & Mushroom Yoghurt / Parfait Toast with butter / spread Preserves Tea or Coffee / Water	Fruit / Fruit Juice Cereals / Porridge Cottage Cheese & Tomato Yoghurt / Parfait Toast with butter / spread Preserves Tea or Coffee / Water	Fruit / Fruit Juice Cereals / Porridge Baked Beans Yoghurt / Parfait Toast with butter / spread Preserves Tea or Coffee / Water	Fruit / Fruit Juice Cereals / Porridge Bacon & Tomato Yoghurt / Parfait Toast with butter / spread Preserves Tea or Coffee / Water	Fruit / Fruit Juice Cereals / Porridge Boiled Egg Yoghurt / Parfaits Toast with butter / spread Preserves Tea or Coffee / Water
Mid Morning	Tea / Coffee / Water	Tea / Coffee / Water	Tea / Coffee / Water	Tea / Coffee / Water	Tea / Coffee / Water	Tea / Coffee / Water	Tea / Coffee / Water
Snack							
Lunch	Carrot & coriander Soup Beef Goulash Vegeburger & gravy Jacket Potato & Cheese Egg Mayonnaise Sandwich Ham Salad Boiled New Potatoes / Rice Carrots/Green Beans/Salad Apple Crumble & Custard Fruit/Yoghurt/Ice- Cream	Mushroom Soup Grilled Salmon Vegetable Moussaka Jacket Potato & Beef Chilli Turkey Salad Sandwich Vegetable Samosa & Salad RoastPotato/ Smashed Potato Broccoli/MixedVeget ables/Salad Chocolate Gateau Fruit/Yoghurt/Ice- Cream	Vegetable Soup Cottage Pie Tofu/Cashew StirFry &Noodles Jacket Potato & Tuna Pate & Tomato Sandwich Egg & Bean Salad Peas / Leeks / Salad Plum Sponge & Custard Fruit/Yoghurt/Ice- Cream	Tomato Soup Roast Turkey Cheese & Tomato Pizza JacketPotato,Ratato uille,Cheese Beef Salad Sandwich Sardine Salad Roast Potato/Mashed Potato Spinach/Broad Beans/ Salad Fruit Pie & Custard Fruit/Yoghurt/Ice- Cream	Leek & Potato Soup Fried Haddock Pasta & Tomato Sauce Jacket Potato &Baked Beans Cheese & Pickle Sandwich Corned Beef Salad Chips / Mashed Potato Peas / Sweetcorn / Salad Banana Custard Fruit/Yoghurt/Ice- Cream	Minestrone Soup Chicken Tikka Masala & Rice Chicken Liver & Onions Vegetarian Quiche Jacket Potato&Vegetable Chilli Sardine & Salad Sandwich Mozzarella & Tomato Salad Smashed New Potatoes GreenBeans/Courge ttes/Salad Rice Pudding & DriedApricots Fruit/Yoghurt/Ice- Cream	Pea Soup Roast Lamb Vegetable Curry & Rice Jacket Potato&Cottage Cheese Ham & Cheese Sandwich Chicken Salad Roast Potato/Mashed Potato Broccoli / Parsnip Rhubarb Pie & Custard Fruit/Yoghurt/Ice- Cream

Afternoon Tea & Nighttime Snack*	Tea / Coffee / Water & snack	Tea / Coffee / Water & snack	Tea / Coffee / Water & snack	Tea / Coffee / Water & snack	Tea / Coffee / Water & snack	Tea / Coffee / Water & snack	Tea / Coffee / Water & snack
Evening Meal	Fish Pie Vegetable Lasagne Jacket Potato & Tuna Beef Sandwich Pate & Salad Peas / Spinach ChocGinger&Apricot Mousse Fruit/Yoghurt/Ice-Cream	Lamb Casserole Mushroom Risotto JacketPotato&Cottage Cheese Prawn Sandwich Ham & Cheese Salad Boiled Potatoes Broad Beans / Ratatouille Prune & Hazelnut Cream Fruit/Yoghurt/Cheese&Biscuits	Sausage & Tomato Nut Roast Jacket Potato & Cheese Chicken Cranberry Sandwich Smoked Mackerel Salad Smashed Potatoes Carrots /Baked Beans/ Salad Fruit & Cereal Yoghurt Fruit/Yoghurt/Ice-Cream	Spaghetti Bolognese Vegetarian Sausages Jacket Potato &Beef Chilli Egg Mayonnaise Sandwich Chicken Salad Boiled New Potatoes Sweetcorn / Swede / Salad Fruit Mousse & Flapjack Fruit/Yoghurt/Ice-Cream	Stir Fry Pork & Rice Vegetarian Shepherds Pie Jacket Potato&Cottage Cheese Hummus & Pitta Bread Tuna Salad Broccoli / Spinach / Salad Banana Bread & Apricots Fruit/Yoghurt/Ice-Cream	Braised Steak Vegetarian Ravioli Jacket Potato & Tuna Turkey Sandwich Ham Salad Roast Potatoes Broad Beans/ Carrots / Salad Black Forest Gateaux Fruit/Yoghurt/Ice-Cream	Grilled Chicken Breast Cauliflower Cheese Jacket Potato&Baked Beans Beef Sandwich Prawn Salad Smashed New Potatoes Sweetcorn/Spinach/ Salad Trifle Fruit/Yoghurt/Ice-Cream
Daily Snacks	Currant Bun Fruit/Nuts/Biscuits/Cereal Bar Cheese&Crackers/Yoghurt Chocolate/Crisps Beverages	Scone & Jam Fruit/Nuts/Biscuits/Cereal Bar Cheese&Crackers/Yoghurt Chocolate/Crisps Beverages	Chocolate Swiss Roll Fruit/Nuts/Biscuits/Cereal Bar Cheese&Crackers/Yoghurt Chocolate/Crisps Beverages	Malt Loaf Fruit/Nuts/Biscuits/Cereal Bar Cheese&Crackers/Yoghurt Chocolate/Crisps Beverages	Toasted Tea Cake Fruit/Nuts/Biscuits/Cereal Bar Cheese&Crackers/Yoghurt Chocolate/Crisps Beverages	Carrot Cake Fruit/Nuts/Biscuits/Cereal Bar Cheese&Crackers/Yoghurt Chocolate/Crisps Beverages	Chocolate Krispie Cakes Fruit/Nuts/Biscuits/Cereal Bar Cheese&Crackers/Yoghurt Chocolate/Crisps Beverages

* Hot drink for nighttime snack is choice of tea, coffee, hot chocolate

Nutrient analysis of example menu 1 for adults aged 19-74yrs setting.

Nutrient	Average population requirement (provided as daily averages over 7 days)	Recommended target for areas of excess or insufficiency (provided as daily averages over 7 days)	Nutrient Provision from example menu plan for <u>mixed adults</u> (provided as daily averages over 7 days)
Energy (kcal)	2225		2244.3
Total fat (g)	Max 87	Less than 85.3	74.5
Saturated fat (g)	Max 27	Less than 26.5	24.4
Carbohydrate (g)	Min 297		311.4
NMES (g)	Max 65	Less than 63.7	50.3
Fibre (as NSP g)	18		28
Protein (g)	Min 50		101.2
Sodium (mg)	Max 2400	Less than 2352	2200.7
Salt (equivalent g)	Max 6.0	Less than 5.88	5.3
Iron (mg)	14.8	More than 14.8	16.8
Potassium (mg)	3500	More than 3500	5288.7
Riboflavin (mg)	1.3	More than 1.3	2.7

2. Example Menu for Adult Men 19-74 years

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Early Morning	Tea / Coffee / Water	Tea / Coffee / Water	Tea / Coffee / Water	Tea / Coffee / Water	Tea / Coffee / Water	Tea / Coffee / Water	Tea / Coffee / Water
Breakfast	Fruit / Fruit Juice Cereals Scrambled Egg Yoghurt / Parfait Toast with butter / spread Preserves Tea or Coffee / Water	Fruit / Fruit Juice Cereals Baked Beans & M'room Yoghurt / Parfait Toast with butter / spread Preserves Tea or Coffee Water	Fruit / Fruit Juice Cereals Poached Egg & Tom Yoghurt / Parfait Toast with butter / spread Preserves Tea or Coffee Water	Fruit / Fruit Juice Cereals Sausage Sandwich Yoghurt / Parfait Toast with butter / spread Preserves Tea or Coffee Water	Fruit / Fruit Juice Cereals Cheese on Toast Yoghurt / Parfait Toast with butter / spread Preserves Tea or Coffee / Water	Fruit / Fruit Juice Cereals Bacon Sandwich Yoghurt / Parfait Toast with butter / spread Preserves Tea or Coffee / Water	Fruit / Fruit Juice Cereals Boiled Egg Yoghurt / Parfaits Toast with butter / spread Preserves Tea or Coffee / Water
Mid Morning Snack	Tea / Coffee / Water	Tea / Coffee / Water	Tea / Coffee / Water	Tea / Coffee / Water	Tea / Coffee / Water	Tea / Coffee / Water	Tea / Coffee / Water
Lunch	Vegetable Soup Chicken Pie Tuna Pasta Bake Jacket Potato & Vegetable Chilli Boiled New Potatoes Carrots/Broccoli/Salad Cheesecake Fruit/Yoghurt/Ice-Cream	Tomato Soup Beef Goulash Quorn Curry & Rice Jacket Potato & Tuna Mashed Potato Cabbage/Peas/Salad Fruit Pie & Custard Fruit/Yoghurt/Ice-Cream	Minestrone Soup Roast Chicken Meat Moussaka Jacket Potato & Cheese & Fromage Frais Roast / Mashed Potato Spinach/Leeks/Salad Apple Crumble & Ice-Cream Fruit/Yoghurt	Leek & Potato Soup Pork Chop Vegetable Quiche Jacket Potato & Baked Beans & Coleslaw Smashed New Potatoes Cauliflower/Carrots/Salad Rice Pudding & Fruit Compote Fruit/Yoghurt/Ice-Cream	Chicken Noodle Soup Fried Cod Broccoli & Cheese Sauce Jacket Potato & Chicken Salad Chips /Mashed Potato Peas/ Corn /Salad Bread Pudding & Custard Fruit/Yoghurt/Ice-Cream	Carrot & Coriander Soup Lamb Casserole Vegeburger in Bun Jacket Potato & Chilli Con carne Boiled New Potatoes Leeks/Green Beans/Salad Fruit Pie & Ice-Cream Fruit / Yoghurt	Mushroom Soup Roast Beef & Y Pudd Vege Curry & Rice Jacket Potato & Ratatouille & Cheese Roast / Mashed Potato Sprouts /Carrots/Salad Plum Sponge & Custard Fruit/Yoghurt/Ice-Cream
Afternoon Tea & Nighttime Snack*	Tea / Coffee / Water & snack	Tea / Coffee / Water & snack	Tea / Coffee / Water & snack	Tea / Coffee / Water & snack	Tea / Coffee / Water & snack	Tea / Coffee / Water & snack	Tea / Coffee / Water & snack

Evening Meal	Lancashire Hot Pot Mushroom Risotto Egg&CottageCh Salad Roast Potato Green Beans/Leeks/Salad Chocolate Ginger & Apricot Mousse Fruit/Yoghurt	Grilled Salmon Cheese & Tom Pizza Ham Sandwich Smashed New Potatoes Ratatouille/Corn/Salad Trifle Fruit/Yoghurt	Beefburger in Bun Vege Shepherds Pie Prawn Salad Jacket Potato Peas/Swede/Salad Tinned Peaches & IceCream Fruit /Yoghurt	Spaghetti Bolognaise Vegetable Pakora & Rice Tuna Salad Sandwich Ratatouille / Salad Black Forest Gateaux Fruit / Yoghurt	Stir Fry Turkey&Noodles Vege Lasagne Egg Sandwiches Mixed Vegetables/Salad Fruit Mousse & Flapjack FruitYoghurt	Chicken Tandoori Cottage Pie Cheese Ploughmans Rice / Mashed Potato Broccoli/ Leeks/Salad Banana Custard Fruit/Yoghurt/Ice- Cream	Grilled Sausage & Onions Pasta & Tomato Sauce Prawn Sandwiches Smashed New Potatoes Tomato/Mushroom/Sal ad Lemon Meringue Pie Fruit/Yoghurt/Ice- Cream
Daily Snacks	Carrot Cake Fruit/Nuts/Biscuits Yoghurt/Cereal bar Cheese & Crackers Chocolate/Crisps Beverages	Chocolate Muffin Fruit/Nuts/Biscuits Yoghurt/Cereal bar Cheese & Crackers Chocolate/Crisps Beverages	Currant Bun Fruit/Nuts/Biscuits Yoghurt/Cereal bar Cheese & Crackers Chocolate/Crisps Beverages	Toasted Tea Cake Fruit/Nuts/Biscuits Yoghurt/Cereal bar Cheese & Crackers Chocolate/Crisps Beverages	Sponge Cake Fruit/Nuts/Biscuits Yoghurt/Cereal bar Cheese & Crackers Chocolate/Crisps Beverages	Scone & Jam Fruit/Nuts/Biscuits Yoghurt/Cereal bar Cheese & Crackers Chocolate/Crisps Beverages	Chocolate Eclair Fruit/Nuts/Biscuits Yoghurt/Cereal bar Cheese & Crackers Chocolate/Crisps Beverages

*** Hot drink for nighttime snack is choice of tea, coffee, hot chocolate**

Nutrient analysis of example menu 2 for men aged 19-74yrs setting.

Nutrient	Average population requirement (provided as daily averages over 7 days)	Recommended target for areas of excess or insufficiency (provided as daily averages over 7 days)	Nutrient Provision from example menu plan for <u>men</u> (provided as daily averages over 7 days)
Energy (kcal)	2515		2506.9
Total fat (g)	Max 98	Less than 96	87.6
Saturated fat (g)	Max 31	Less than 30.3	29.5
Carbohydrate (g)	Min 335		342.6
NMES (g)	Max 74	Less than 72.5	53.9
Fibre (as NSP g)	18		29.1
Protein (g)	Min 55		104.2
Sodium (mg)	Max 2800	Less than 2744	2563.3
Salt (equivalent g)	Max 7	Less than 6.86	6.2
Iron (mg)	9	More than 9	16.6
Potassium (mg)	3500	More than 3500	5486.1
Riboflavin (mg)	1.3	More than 1.3	2.5

3. Example Menu for Adult Women 19-74

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Early Morning	Tea / Coffee / Water	Tea / Coffee / Water	Tea / Coffee / Water	Tea / Coffee / Water	Tea / Coffee / Water	Tea / Coffee / Water	Tea / Coffee / Water
Breakfast	Fruit / Fruit Juice Cereals / Porridge Yoghurt / Parfait Toast with butter / spread / preserves Tea or Coffee Water	Fruit / Fruit Juice Cereals / Porridge Yoghurt / Parfait Toast with butter / spread / preserves Tea or Coffee Water	Fruit / Fruit Juice Cereals / Porridge Yoghurt / Parfait Toast with butter / spread / preserves Tea or Coffee Water	Fruit / Fruit Juice Cereals / Porridge Yoghurt / Parfait Toast with butter / spread / preserves Tea or Coffee Water	Fruit / Fruit Juice Cereals / Porridge Yoghurt / Parfait Toast with butter / spread / preserves Tea or Coffee Water	Fruit / Fruit Juice Cereals / Porridge Yoghurt / Parfait Toast with butter / spread / preserves Tea or Coffee Water	Fruit / Fruit Juice Cereals / Porridge Yoghurt / Parfaits Toast with butter / spread / preserves Tea or Coffee Water
Mid Morning	Tea / Coffee / Water	Tea / Coffee / Water	Tea / Coffee / Water	Tea / Coffee / Water	Tea / Coffee / Water	Tea / Coffee / Water	Tea / Coffee / Water
Lunch	Roast Chicken Vegetable Curry & Rice Jacket Potato & Smoked Mackerel Roast Potatoes/ Boiled potato Carrots/Spinach/Salad Fruit & cereal yoghurt Fruit/Yoghurt/Ice-cream	Lamb Chop Pizza Jacket Potato & Tuna Smashed Potato/Rice Peas/Cauli/Salad Chocolate Gateau Fruit/Yoghurt/Ice cream	Beef Goulash Tuna Pasta Bake Jacket Potato & Baked Beans Boiled Potatoes/Rice Courgette/Broad beans Fruit pie & custard Fruit/Yoghurt/Ice-cream	Chicken liver & onions Vegetarian Sausages Jacket potato & cottage cheese Rice/ Mashed potato Green beans/Cabbage Banana & apricot custard Fruit/Yoghurt/Ice-cream	Fried cod Vegetarian lasagne Jacket potato & beef chilli Chips/mashed potato Peas/Sweetcorn Prune & Hazelnut Cream Fruit/Yoghurt/Ice-cream	Chicken curry & rice Grilled salmon Jacket potato, ratatouille & cheese Smashed potatoes Mixed vegetables Fruit Mousse & Flapjack Fruit/Yoghurt/Ice cream	Roast Beef Vegetable Shepherds Pie Jacket Potato, cheese & Fromage fraise Roast potatoes/Mash Parsnips/Broccoli Apple crumble & custard Fruit/Yoghurt/Ice cream
Afternoon Tea & Nighttime Snack*	Tea / Coffee / Water & snack	Tea / Coffee / Water & snack	Tea / Coffee / Water & snack	Tea / Coffee / Water & snack	Tea / Coffee / Water & snack	Tea / Coffee / Water & snack	Tea / Coffee / Water & snack

Evening Meal	Leek & potato soup Cottage pie Vegetarian quiche Ham sandwich Boiled potato Leeks/Sweetcorn Trifle Fruit/Yoghurt	Tomato & rice soup Stir fry pork & rice Hummus & salad Egg sandwich Banana bread & apricots Fruit/Yoghurt	Carrot & coriander soup Grilled trout Spaghetti & tomato sauce Beef sandwich Smashed potatoes Spinach/Ratatouille Malt loaf Fruit/Yoghurt	Pea soup Spaghetti bolognaise Broccoli & cheese sauce Prawn sandwich Mashed potato Salad Chocolate Krsipie cakes Fruit/yoghurt	Vegetable soup Beef grillsteak Stir Fry Tofu, Cashew & Noodles Cheese Ploughman's Boiled potatoes Courgettes/Cabbage Rice Pudding & Compote Fruit/Yoghurt	Butterbean/ tomato soup Lamb Casserole Vegetarian Moussaka Pate Sandwiches Jacket Potato Broad beans/carrots/Salad Chocolate Ginger & apricot dessert Fruit/Yoghurt	Spinach soup Shish Kebab Vegetable Chilli & Rice Salmon sandwich Chips Tomato/Salad Peaches & ice-cream Fruit/Yoghurt
Daily Snacks	Fruit/Nuts/Biscuits Yoghurt/Cereal bar Cheese & Crackers Chocolate/Crisps Beverages	Fruit/Nuts/Biscuits Yoghurt/Cereal bar Cheese & Crackers Chocolate/Crisps Beverages	Fruit/Nuts/Biscuits Yoghurt/Cereal bar Cheese & Crackers Chocolate/Crisps Beverages	Fruit/Nuts/Biscuits Yoghurt/Cereal bar Cheese & Crackers Chocolate/Crisps Beverages	Fruit/Nuts/Biscuits Yoghurt/Cereal bar Cheese & Crackers Chocolate/Crisps Beverages	Fruit/Nuts/Biscuits Yoghurt/Cereal bar Cheese & Crackers Chocolate/Crisps Beverages	Fruit/Nuts/Biscuits Yoghurt/Cereal bar Cheese & Crackers Chocolate/Crisps Beverages

*** Hot drink for nighttime snack is choice of tea, coffee, hot chocolate**

Nutrient analysis of example menu 3 for women aged 19-74yrs setting.

Nutrient	Average population requirement (provided as daily averages over 7 days)	Recommended target for areas of excess or insufficiency (provided as daily averages over 7 days)	Nutrient Provision from example menu plan for women (provided as daily averages over 7 days)
Energy (kcal)	1930		1949.1
Total fat (g)	Max 75	Less than 73.5	60.4
Saturated fat (g)	Max 24	Less than 23.5	20.3
Carbohydrate (g)	Min 257		275.7
NMES (g)	Max 57	Less than 56	42.4
Fibre (as NSP g)	18		25.2
Protein (g)	Min 45		89.9
Sodium (mg)	Max 2000	Less than 1960	1754.3
Salt (equivalent g)	Max 5	Less than 4.9	4.1
Iron (mg)	14.8	More than 14.8	15.6
Potassium (mg)	3500	More than 3500	4893
Riboflavin (mg)	1.1	More than 1.1	2.5

4. Example Menu for Adult Men in Prison

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Breakfast	Fruit Cereal & milk Bread with spread Preserves Tea Water	Fruit Cereal & milk Bread with spread Preserves Tea Water	Fruit Cereal & milk Bread with spread Preserves Tea Water	Fruit Cereal & milk Bread with spread Preserves Tea Water	Fruit Cereal & milk Bread with spread Preserves Tea Water	Fruit Cereal & milk Bread with spread Preserves Tea Water	Fruit Cereal & milk Bread with spread Preserves Tea Water
Lunch	Shish kebab, pitta and hummus Pork chop Vegetarian Chilli Tuna fish sandwiches Rice Peas Fresh Fruit Fruit Bun Tea/Water	Spicy chicken with fruit Fish Pie Vegetarian lasagne Egg & tomato s'wich Boiled potatoes Carrots Fresh Fruit Choc Chip Muffin Tea/Water	Lamb chop & mint gravy Cottage Pie Vegetarian Quiche Sardine Sandwich Roast Potatoes Sweetcorn Fresh Fruit Cake Tea/Water	Spaghetti Bolognaise Roast Turkey & stuffing Mushroom risotto Cheese Pickle S'wich Mashed Potatoes Green beans Fresh Fruit Flapjack Tea/Water	Fish & chips Beef & onion pie Vegeburger & bun Ham and salad sandwich Chips Mixed Vegetables Fresh Fruit Cake Tea/Water	Jerk Chicken Beef Hotpot Tuna Pasta bake Dahl curry & rice Rice & peas Broccoli Fresh Fruit Fruit Cake Tea/Water	Roast beef & Y Pudd Gammon & p'apple Roast chicken+stuffing Jacket Potato & baked beans & cheese Roast Potatoes Cabbage Fresh fruit Applecrumble+custard Tea/Water
Evening Meal	BBQ Chicken Legs Chilli con Carne Liver & Onions Vegetarian Sausages Beef Baguette Pack Up Jacket Potato Leeks Fresh fruit Crunchy Fruit Dessert Tea/Water	Beefburger in bun Turkey stir fry & rice Moussaka Falafel & Hummus Ham Baguette Pack up Potato Wedges Diced Salad Fresh Fruit Carrot Cake Tea/Water	Grilled Salmon Sausage & Onion Beef Goulash Pasta & Tomato Sauce Egg Baguette Pack up Boiled Potatoes Carrot & Parsnip Mash Fresh Fruit Cheesecake Tea/Water	Moroccan Lamb Ham/ Pineapple Pizza ChickenMushroom Pie Cheese/Tomato Pizza Chicken Pack Up Rice Ratatouille/Coleslaw Fresh Fruit Banana Bread Tea/Water	Pack Up Baguettes Cheese Sardine Beef Rice Salad Mixed Salad Fresh Fruit Yoghurt Biscuit Pack Tea/Water	Pack Up Baguettes Egg Turkey Corned Beef Coleslaw Mixed Salad Fresh Fruit Yoghurt Biscuit Pack Tea/Water	Pack Up Baguettes Tuna Ham Hummus Potato Salad Mixed Salad Fresh Fruit Yoghurt Biscuit Pack Tea/Water

Nutrient analysis of the example menu 4 adult men in prison

Nutrient	Male Prisons	
	Standard/ Target^φ	Menu provision
Energy (kcal)	2012	2043
Total Fat (g)	Less than 76.4	58.3
Saturated fat (g)	Less than 24.2	17.8
Carbohydrate (g)	268	303.8
Non Milk Extrinsic Sugars (g)	Less than 57.7	44.8
Fibre (g)	18	24.1
Protein (g)	55	90.9
Sodium (mg)	Less than 2184	2160.6
Salt equivalent (g)	Less than 5.46	5.3
Potassium (mg)	More than 3500	3946.5
Iron (mg)	More than 9	16.4
Riboflavin (mg)	More than 1.3	2

^φ compared to dietary recommendations for breakfast, lunch and evening meal excluding snacks.

5. Example Menu for Adult Women in Prison

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Breakfast	Fruit Cereal & milk Bread with spread Preserves Tea Water	Fruit Cereal & milk Bread with spread Preserves Tea Water	Fruit Cereal & milk Bread with spread Preserves Tea Water	Fruit Cereal & milk Bread with spread Preserves Tea Water	Fruit Cereals & milk Bread with spread Preserves Tea Water	Fruit Cereal & milk Bread with spread Preserves Tea Water	Fruit Cereal & milk Bread with spread Preserves Tea Water
Lunch	Beef Goulash Pork Sausage Cheese & onion s'wich Salmon & cucumber sandwich Bean/VegetableBake Rice Carrots Potato crisps Fruit/Yoghurt Tea/Water	Shish kebab & pitta Chicken nuggets Tuna salad sandwich Corned beef and tomato sandwich Jacket potato & baked beans Oven Chips Green beans/Salad Fruit/Yoghurt Tea/Water	Bolognaise Bruschetta Fish pie Humus & salad sandwich Ham & salad s'wich Vegetarian sausages Potato wedges Peas Fruit/Yoghurt Tea/Water	Jacket potato & beef chilli Meat Pie Sardine salad s'wich Beef coleslaw s'wich Cheese & tomato pizza Boiled potatoes Cabbage/Coleslaw Potato crisps Fruit/Yoghurt Tea/Water	Chicken & lentil soup Beefburger in bun Egg & cress sandwich Tuna sandwich Jacket potato & vegetarian chilli Potato wedges Sweetcorn Fruit/Yoghurt Tea/Water	Moroccan lamb Pork Chop BBQ Chicken Wings Vegeburger Boiled potatoes Broccoli Rice Pudding & fruit puree Tea/Water	Roast beef Grilled fish Chicken Curry and rice Tofu stir fry & rice Roast potatoes/Rice Mixed vegetables Fruit Pie & custard Tea/Water
Evening Meal	Roast Turkey Grilled Salmon Coronation chickensalad Mixed Bean salad Vegetarian lasagne Boiled potato Ratatouille Fruit Krispie Cakes Tea/Water	Tandoori Chicken Liver & onion Smoked mackerel salad Egg mayo salad Stir Fry Veg & noodles Rice Mixed Vegetables Fruit Currant Bun Tea/Water	Lamb Kheema & rice Chicken chasseur Tuna & pasta salad Ploughman's salad Dahl curry & rice Mashed potato Carrots Fruit Flapjack Tea/Water	Spaghetti bolognaise Gammon Steak Cottage cheese & pineapple salad Beef salad Cheese & Onion Flan Boiled Potato Spinach Fruit Fruit Cake Tea/Water	Breaded fish Cottage Pie Humus & tahina salad Ham & egg salad Pasta & Tomato sauce Chips Peas Fruit Chocolate Chip Muffin Tea/Water	Pack Up Sandwiches Salmon/ Beef Soft Cheese Mixed Salad Rice salad Fresh Fruit Yoghurt Biscuit Pack Tea/Water	Pack Up Sandwiches Turkey Tuna Egg Mixed Salad Bean Salad Fresh Fruit Yoghurt Biscuit Pack Tea/Water

Nutrient analysis of the example menu for adult women in prison

Nutrient	Female Prisons	
	Standard/ Target ^φ	Menu provision
Energy (kcal)	1544	1574
Total Fat (g)	Less than 58.5	42.1
Saturated fat (g)	Less than 18.7	13.5
Carbohydrate (g)	206	234.8
Non Milk Extrinsic Sugars (g)	Less than 44.5	34.3
Fibre (g)	18	20.9
Protein (g)	45	75.6
Sodium (mg)	Less than 1560	1619.3
Salt equivalent (g)	Less than 3.9	4.0
Potassium (mg)	More than 3500	3520.9
Iron (mg)	More than 14.8	15.1
Riboflavin (mg)	More than 1.1	2

^φ compared to dietary recommendations for breakfast, lunch and evening meal excluding snacks.