

Nutritional Analysis Manual

Nutritional analysis of school lunches in Scotland

**A guide to demonstrating compliance with the
nutritional requirements for food and drink
in schools (Scotland) regulations 2020**

Revised and updated February 2021

Contents

1. Introduction
2. Key changes from 2008 Regulations
3. Software specification
4. Guiding principles for an accurate nutritional analysis
5. Determining customer numbers
6. Asymmetric weeks
7. Daily energy calculation
8. Weekly energy and nutrient calculations
9. Secondary school analysed lunch
10. Calculating meat weight loss on cooking
11. Red and red processed meat calculation
12. Self-evaluation cycle of nutritional analysis
13. Step one - Analysis of planned menu provision
14. Step two - Monitoring analysis
15. Step three - Review and improve

Annexes

Annex A - Food and drink standards, and nutrient standards for primary and secondary aged pupils - revised 2020

Annex B - The secondary school analysed meal

Annex C - Frequently asked questions

Annex D – Free sugars and total sugars

1. Introduction

1.1 The Schools (Health Promotion and Nutrition) (Scotland) Act 2007 places a duty on education authorities and managers of grant-aided schools to ensure that all food and drink provided in schools and at hostel evening meals complies with nutritional regulations (the Regulations). [Healthy eating in schools - A guide to implementing the nutritional requirements for food and drink in schools \(Scotland\) regulations 2020](#) explains the nutritional requirements within the Regulations and provides guidance on how to comply with them.

1.2 An accurate nutritional analysis of school lunch provision is needed to demonstrate compliance with statutory nutrient standards as set out within the Regulations. This manual provides guidance for schools and local authorities to undertake an accurate nutritional analysis to demonstrate compliance with nutritional requirements. These requirements consist of food and drink standards and nutrient standards which can be found in Annex A.

1.3 The nutritional analysis process is a key step in planning menus, allowing planners to see the impact of changes to menu options, portion sizes recipes and food frequency. As part of a self-evaluation approach to the planning, analysis and review of menus, nutritional analysis is central to continuous improvement.

1.4 The influence and impact of staff on the choices made by children and young people cannot be under-estimated. Staff are uniquely placed to create and encourage a culture of healthier eating practices that will enable children and young people to put their learning in nutrition and health into action, contributing to the establishment of life-long habits. Working practices of all staff must be based on the duty of the Act to ensure all schools are “health promoting”.

1.5 Education Scotland’s Health and Nutrition Inspectors (HNIs) monitor compliance with the Act through school inspections. Nutritional analysis forms an important part of this process and is evaluated along with other evidence to demonstrate how well a school is meeting the duties of the Act. Further information can be found at <https://education.gov.scot/Documents/HNI-Deployment.pdf>

1.6 This manual will be reviewed to align with the next review of the Nutritional Regulations.

2. Key changes from 2008 to 2020 Regulations

2.1 There are a range of food and drink standards and nutrient standards which differ from the 2008 Regulations. Full details can be found at <https://www.gov.scot/publications/healthy-eating-schools-guidance-2020/>.

2.2 To reflect and take account of the way young people use food services in secondary schools, a secondary school analysed lunch has been introduced. (See Section 9 for further details)

2.3 A daily tolerance for energy provision in primary, secondary and school hostel settings (see Section 7 for further details) ~~has~~ been introduced.

3. Minimum specification for software

3.1 A range of nutritional analysis software packages is available to demonstrate whether school lunch and hostel evening meal menus meet the required nutrient standards. A minimum [technical specification](#) defines the essential criteria required of the software. Whichever nutritional analysis software package is used, local authorities must ensure it conforms with the essential criteria set out in the technical specification.

3.2 Guidance on the use of individual nutritional analysis software is not included in this document and should be sought from your software provider. Support from a registered nutritionist or dietitian in undertaking accurate nutritional analysis is advisable.

4. Guiding principles for an accurate nutritional analysis

4.1 Nutritional analysis is based on food and drink provision. It does not take account of actual consumption or plate waste. Local systems should be in place to monitor and report on levels of plate waste.

4.2 Statutory food and drink standards apply at lunchtimes and out with lunches. Before starting analysis of planned menus ensure all relevant food and drink standards have been met.

4.3 Statutory nutrient standards apply to primary school lunches, secondary school analysed lunches and school hostel evening meals. An accurate nutritional analysis is needed to demonstrate compliance with these nutrient standards.

4.4 In primary schools, all food and drinks provided at lunchtime must be included in the nutritional analysis e.g., all food and drink served from a main service counter as well as anything provided from a salad or deli bar or served directly at the dining table.

4.5 In primary schools the number of servings applied to each item will be weighted to reflect the best estimate of uptake of available choices.

4.6 Portion sizes used in calculations must reflect the average portion size served to children and young people.

4.7 Schools that do not follow a set menu cycle or where local variations to a core menu occur menu, must also demonstrate compliance with the nutrient standards and food and drink standards. Nutritional analysis may be carried out on a sample of actual menus as served throughout the year.

4.8 Adult customer sales information must not be included in the analysis. The nutrient standards are based on the nutritional requirements of children and young people. Meals served to adults must be excluded to avoid skewing the data used for the nutritional analysis.

4.9 For the purposes of nutritional analysis a school week is a normal school week of five consecutive days, Monday to Friday.

5. Finding a customer number in primary schools

5.1 A customer number must be input into the analysis software package for each day of the school week. This number is used to divide the total amount of nutrients in the foods and drink served, giving an average amount of nutrients per meal for each customer.

5.2 In primary schools where children receive a set meal (for example a main course, starter/dessert and drink for a standard price), the customer number is equal to the number of meals served. For ease, you may decide to base your planning analysis on a customer number of 100 and use proportionate figures for the estimated sales split.

5.3 For services which are based on a cafeteria system or has satellite sales outlets, finding the customer number can be more difficult as meal items may be selected individually rather than as a set meal. It is essential that customer numbers collected for these services are not skewed by individual purchases such as a drink or yogurt individually but reflect the main meals served.

5.4 To achieve a consistent approach to finding a customer number in these circumstances the following method is recommended. It can be used either with estimated sales split figures for a planning analysis, or with actual sales split figures for monitoring analysis. The customer number is the total number of main lunch items sold to children at lunchtime.

5.5 Main lunch items are defined as:

- traditional meals, for example roast chicken or spaghetti bolognese.
- sandwiches/baguettes/panini/salad boxes, for example tuna salad baguette.
- snack type options, for example filled baked potato or pizza.

If you are unsure as to which foods would be classed as a main lunch item, please contact one of the Health and Nutrition Inspectors at Education Scotland.

5.6 Once the customer number has been calculated, you can decide whether sales of food or drinks in the categories below need to be adjusted so that they are proportionate to your customer number. This approach takes account of the variety and quantities of items which have been bought without attributing multiple sales to individual purchases.

5.7 Group all items other than main lunch items listed above under the following categories and calculate the total number of items in each category:

- soups/desserts/fruit portions/yoghurts/crackers and cheese/sweet baked items
- vegetables or salad (where not already included with a main meal).
- drinks
- side dishes such as pasta, bread or potatoes where not included with a main meal
- portions of jam, margarine, tomato sauce or other condiments.

5.8 Where the total number of items in a category is less than the customer number, all items in the category will be included in the analysis. Where the total number of items in a category is greater than the customer number, these items must be included in proportion to the customer number.

6. Asymmetric weeks

6.1 A secondary school analysed lunch must be provided on each day of a normal school week, including in those schools that run an asymmetric week. This will enable all young people to access a nutritionally balanced school lunch on each day of a school week. Some modification may be needed on these early closing days where an alternative provision replaces the regular lunch e.g., a more substantial provision available at morning break or provision of a pre-packaged lunch. This alternative provision must meet food and drink standards and be included in nutritional analysis to meet nutrient standards across the week. It must also be within the 15% daily tolerance for energy. (See Section 7 for further detail)

6.2 Primary schools using an asymmetric week must supply lunch on each day of the school week, including early closing days. Provision on early closing days must meet required food and drink standards and be included in nutritional analysis to meet nutrient standards across the school week. It must also be within the 15% daily tolerance for energy. (See Section 7 for further detail)

7. Daily energy calculation

7.1 The introduction of a daily energy standard will address variation and extremes in energy provision from day to day. It applies to primary school lunches, the secondary school analysed

lunch and to evening meals in school hostels. A daily tolerance of within 15%, either above or below the stated nutrient standard, will apply to the calculation of energy. All other nutrients will continue to be calculated on a weekly basis.

7.2 Your nutritional analysis software provider must confirm that daily energy calculations for primary school lunches, the secondary school analysed lunch and school hostel evening meals are undertaken as follows:

A/B - where:

A is the total energy from all school lunches (or evening meals in a school hostel) provided in a day and

B is the estimated number of school lunches (or evening meals in a school hostel) served during that school day.

7.3 If energy falls out with the 15% tolerance on any day across the menu cycle action must be taken to address this. This could involve revising menu provision across the week, looking at portion sizes or altering recipes to achieve a more equitable energy balance across each day of the week.

8. Weekly energy and nutrient calculations

8.1 A tolerance of 10% is still in place for the weekly energy calculation. Fat, saturated fat, free sugars and sodium must not exceed maximum requirements and all other nutrients must meet minimum requirements. Your nutritional analysis software provider must confirm that average weekly energy and nutrient calculations for primary school lunches, the secondary school analysed lunch or school hostel evening meals are undertaken as follows:

(C/D)/E where:

C is the total energy and nutrients from all school lunches (or evening meals in a school hostel) served in a school week.

D is the estimated number of school lunches (or evening meals in a school hostel) served in a week. (See Section 8 for further detail on the secondary analysed school lunch).

E is the number of days that lunches are provided.

8.2 If weekly nutrient standards are not met across the menu cycle action must be taken to address this. This could involve revising menu provision across the week, looking at portion sizes or altering recipes to achieve a more equitable energy and nutrient balance across each day of the week.

9. Secondary School Analysed Lunch

9.1 The analysed lunch must include:

- a minimum of 2 lunch choices each day that reflect popular main meal choices across the week.
- at least 2 courses for each lunch.
- at least 2 portions of vegetables and 1 portion of fruit within each lunch choice and;
- food and drinks, all of which must comply with the required standards.

The secondary school analysed lunch choices must be easily identifiable, promoted and available to all young people for the equivalent cost of a free school lunch. Examples of lunch

combinations meeting these requirements, based on menus available on local authority websites, are provided in Annex B.

9.2 Nutritional analysis of a minimum of two 2-course lunches should use a customer number of 2. School lunch providers are free to analyse more than two choices if they choose to. Where this is the case this should be reflected in the customer number e.g., 5 lunches choices analysed = customer number of 5.

9.3 All food and drink supplied for young people at secondary school must meet the required food and drink standards. Only items selected for inclusion in the secondary school analysed lunch will be nutritionally analysed. The food and drink standards which apply to provision across the school day will define the frequency and content of all other food and drinks.

9.4 This secondary school analysed lunch approach may also be helpful in secondary school hostel settings, offering flexibility to recognise and reflect the bespoke nature of evening meal provision across school hostels in Scotland. Best practice is for hostel evening meals to be planned in collaboration with caterers supplying food and drinks across the school day e.g., lunchtime service.

10. Calculating meat weight loss on cooking

10.1 Prior to calculating the weekly red and red processed meat allowance, weight loss because of cooking meat from raw must be taken into account. The following percentages must be deducted to allow the red and red processed meat calculation to be carried out on the cooked weight of meat as served. Source: McCance and Widdowson

Sausages and burgers 25% (**NB** based on the raw weight of the complete product NOT the % of meat content)

Minced meat 30%

Roast meat 22%

Stewed meat 35%

10.2 Example: A recipe requires 1.2kg beef (stewed steak) to serve 20 portions.

1200g raw weight of beef – 35% cooking loss = 780g cooked weight of beef per recipe.

Divide by 20 to give the weight of cooked meat per portion served. $780 \div 20 = 39\text{g}$.

Therefore, 39g red meat should be deducted from the red and red processed meat allowance for the week.

10.3 In red meat processed products such as sausages or burgers calculate the appropriate weight loss from the total raw weight of the product regardless of the actual % meat content.

11. Red and red processed meat calculation

11.1 This calculation explains how to take account of cooked red and red processed meat provided throughout a school day and across a school week, and how to deduct this from the allowances.

11.2 If only one red or red processed meat item is provided on a particular day, deduct this amount from the allowance. For a red meat item, the weight of cooked red meat served per portion must be deducted from the red and red processed meat allowance. For a red processed meat item,

the weight of cooked red processed meat served per portion must be deducted from both the red and red processed meat allowance, and the processed meat allowance.

11.3 Be mindful that this standard applies across the school day. If a red or red processed meat is provided at any time in the school day for example at breakfast, morning break or lunchtime, the weight of the portion served must be considered, and the weekly allowance adjusted accordingly.

11.4 Where two red or red processed meat items are available within the same meal, the calculation must be carried out as below. For the purpose of this example assume that these products are **only** being served at lunchtime and at no other time across the school day.

11.5 Secondary school lunch example

The weekly allowance is 230g of red and red processed meat of which no more than 130g can be red processed meat.

A sandwich containing 40g ham and steak pie containing 60g beef are both available for lunch on the same day. To take account of the contribution each makes to the overall allowance of red and red processed meat and the specific allowance within this of red processed meat, the calculation must be undertaken as follows:

- Step 1. Deduct the processed meat (40g ham) from the red processed meat allowance. $130\text{g} - 40\text{g} = 90\text{g}$ red processed meat
- Step 2. Calculate the contribution made by red meat. Deduct the 40g of processed meat (ham) from the 60g of red meat (steak pie) = 20g red meat.
- Step 3. Add the 20g red meat to the 40g red processed meat = 60g red and red processed meat.
- Step 4. Deduct this from the red and red processed meat total. $230\text{g} - 60\text{g} = 170\text{g}$

This leaves 170g of the red and red processed meat allowance available across all outlets for the rest of the week, of which only 90g can be red processed meat.

11.6 Primary school example

The weekly allowance is 175g red and red processed meat of which no more than 100g can be red processed meat.

Pizza containing 35g of pepperoni and a beef bolognese containing 60g of beef are both available for lunch on the same day. To take account of the contribution each makes to the overall allowance of red and red processed meat and the specific allowance within this of red processed meat, the calculation must be undertaken as follows:

- Step 1. Deduct the processed meat (35g pepperoni) from the red processed meat allowance. $100\text{g} - 35\text{g} = 65\text{g}$ red processed meat.
- Step 2. Calculate the contribution made by red meat. Deduct the 35g of processed meat (pepperoni) from the 60g red meat (beef) = 25g red meat.
- Step 3. Add the 25g red meat to the 35g processed meat = 60g red and red processed meat.
- Step 4. Deduct this from the red and red processed meat total $175\text{g} - 60\text{g} = 115\text{g}$. This leaves 115g of the red and red processed meat allowance available throughout the rest of the week, of which only 65g may be processed meat.

11.7 In either primary or secondary calculations, if the weight of red processed meat is greater than that of red meat, a negative number is produced for the red meat contribution. In this case,

deduct only the processed meat amount from both the red and red processed meat allowance, and from the specific red processed meat allowance.

11.8 If there are more than two red and red processed meat items served at one meal time, the item with the greater weight of meat content should be used in the calculation for each of the red and red processed meat allowances.

12. Self-evaluation cycle of nutritional analysis

12.1 The menu planning and nutritional analysis process have been broken down into three steps which form the basis of a self-evaluation approach which supports evidence-based improvement. The [Food in schools across Scotland](#) self-evaluation framework supplies further information on how this approach can be used to drive improvement both in relation to nutritional analysis and in the delivery of all requirements under the Health Promotion and Nutrition Act. See Annex E for further information.

The three steps have been colour-coded and are shown below in **Diagram One**

Step One

Initial analysis of planned menu provision – first level analysis. Develop lunch menus, ensuring all relevant food and drink standards are met. Carry out planning analysis using estimated uptake. Does the analysis meet the required nutrient standards?

Step Two

Monitoring analysis – second level

Collect actual sales data. Carry out nutritional analysis based on these figures. Does the analysis meet the nutrient standards? How does this compare to the initial analysis of planned provision?

Step Three

Review and improve

What further changes are needed to meet the nutrient standards? Identify areas for improvements and take steps to address issues. Ensure children, young people and staff are consulted. Take account of observations and data collected.

And return to Step One

Diagram One

13. Step One - Analysis of planned menu provision – first level analysis

13.1 A planning analysis, which accurately reflects actual provision, is the first level of nutritional analysis needed to demonstrate that school lunch provision meets the nutrient standards set out in the Regulations. The document [Healthy Eating in Schools – A guide to implementing the nutritional requirements for food and drinks in schools \(Scotland\) regulations 2008](#) supplies useful information for planning school lunch menus. An essential part of planning a menu is to ensure firstly that it meets all the applicable food standards and drink standards.

13.2 Planning analysis should be carried out as part of the menu planning process, and before menus are issued to schools. This allows any necessary adjustments to be identified and made to the menu plan before it is put into operation in schools

13.3 The planning analysis is used to demonstrate that the food and drink provided across each week of the menu cycle makes it possible for an average lunch in primary school, the secondary school analysed lunch or hostel evening meal, to meet the required nutrient standards.

13.4 To carry out a planning analysis you will need:

- the weekly planned food and drink provision.
- the best estimate of splits for each food and drink item provided in primary schools. If a customer number of 100 is being used, then this figure will be the percentage split for the number of portions of each item. (See section 5 for further information)
- a customer number for the secondary school analysed lunch. A minimum of two 2-course lunches must be analysed. This would mean the customer number is two. If you choose to analyse more than two choices this should be reflected in the customer number e.g., 5 lunches analysed = customer number of 5.
- the number of days of provision in each week.
- to take account of all food and drink items available from all service points in the primary school analysis and be reflected in the secondary school analysed meal or hostel evening meal analysis.
- accurate information on portion sizes served.
- recipes and manufactured product information – where these are not already on the software database, they must be added manually. For manufactured products you should contact your supplier for this information to include it in your own database. If you are unable to access this information you must consider whether the product should be used as this will lead to inaccuracies in the nutritional analysis.

13.5 This information should be put into your nutritional analysis software. To ensure that data has been input correctly carry out the following checks.

- Have the correct units/measurements been used at all stages?
- Do portion sizes used reflect those served? Check the default settings on software.
- Checked for data entry errors at all stages.

13.6 If the nutritional analysis does not show that all nutrient standards have been met, check the following before undertaking another analysis:

- Are any nutrient values missing/incomplete/unrealistic? Look out for any nutrient value showing zero.
- Has the correct combination and quantities of food and drinks been used?
- Check that all the items provided at lunch or evening meals are included in the analysis for example all drinks, salad bars items, condiments and meal accompaniments.
- Check that pack sizes/units are not inadvertently used in place of weights/volumes i.e., 1 pack of milk rather than the actual volume of milk served.
- Have the correct recipes been used?
- Do recipes require alteration to improve their nutrient profile?
- Could specific items be moved elsewhere in the menu cycle to give a more balanced nutritional profile?

13.7 Undertaking nutritional analysis as part of the menu planning process identifies where improvements are needed to ensure provision meets the required weekly nutrient standards and is within the required daily and weekly tolerance for energy. Any adjustments made must be realistic and not undertaken to simply achieve a nutrient standard.

14. Step Two - Monitoring Analysis – second level analysis

14.1 A monitoring analysis is based on what children or young people select from the items available at lunch or school hostel evening meal over the period of a week. It is used:

- a) to compare the analysis of the planned menu with analysis based on actual uptake and highlight any anomalies
- b) to identify any significant areas of concern

14.2 A monitoring analysis can be carried out for an individual school or sample of schools across the authority. It is good practice to carry this out regularly throughout the year to test out the accuracy of the planning analysis and see where adjustments may need to be made.

14.3 In both primary and secondary schools, systems to record numbers of meals served and uptake of menu items provide useful monitoring information. Once you have figures based on actual uptake, put these into your software package to compare the planning analysis with the monitoring analysis.

14.4 For secondary schools, figures used will relate to the analysed meal choices only.

15. Step Three - Review and improve

15.1 Steps 1 and 2 of the self-evaluation process can be used to evaluate existing menus and inform the development of future menus. By comparing the results of the planned menu with the analysis undertaken once the menu is operational, differences because of actual food choice are highlighted, areas for improvement can be identified and adjustments made. For example, in primary schools, the number of children selecting a particular choice may differ significantly from the estimates used in the planning analysis.

15.2 Step 3 of the process should draw on a range of evidence in addition to the nutritional analysis data, including observations in the dining hall and consultation with children, young people, parents and staff, to highlight how well the service is doing and identify the difference you are making.

15.3 Use the reflective questions below to identify areas for improvement and make the adjustments necessary.

- How do you know your estimated numbers accurately reflect uptake?
- If food and drink or nutrient standards are not being met, how can this be addressed and what changes are needed in the next menu cycle to ensure they are met? Are timescales for change realistic and achievable?
- Does the analysis include a fair reflection of the full range of food and drinks available for example from a deli/salad provision or snack bar?
- Does the menu provide sufficient variety of foods and drinks?
- Are the foods and drinks supplied visually appealing to customers? How effective is marketing and promotion of for example, vegetables, salad and fruit?

- What positive impact is the lunchtime provision having on the food and drink choices made by children and young people?
- How closely does uptake of vegetables and fruit in each meal align with the aim of two vegetable and one fruit portion?
- Do recipes need adjustment to reduce fat, sugar or sodium content or increase the amount of specific micronutrients provided?
- Are portion sizes of menu items in need of adjustment to meet nutrient standards?
- Are all food and drink standards being met every day, across the day, week and all service points?
- How well does the range of food and drinks meet the dietary preferences and needs(allergens) of our customers?
- Are you making effective use of the views of others to improve your service?

Annexes

Annex A Food, drink and nutrient standards

At a Glance – Food and drink standards for <u>primary school</u> lunches	
1. Fruit and vegetables	At least two portions of vegetables and one portion of fruit must be offered every day.
2. Oily fish	Oily fish must be provided at least once every three weeks.
3. Red and red processed meat	No more than a total of 175g of red and red processed meat (cooked weight) can be provided in school lunches over the course of the school week, of which no more than 100g (cooked weight) can be red processed meat
4. Sweetened baked products or desserts	Sweetened baked products or desserts can be served no more than 3 times per week and only where they meet the specified criteria.
5. Breakfast cereals	Only breakfast cereals meeting specified criteria can be provided
6. Deep fried and Fried foods	Food that has been deep fried in the cooking or manufacturing process shall not be permitted more than 3 times in a week. Chips must only be served as part of a meal
7. Savoury snacks	Only plain savoury crackers, plain oatcakes and plain breadsticks can be provided
8. Bread	All bread and bread rolls must contain a minimum of 3g of AOAC fibre per 100g
9. Sweetened yoghurts fromage frais and other milk-based desserts	Only sweetened yoghurts, fromage frais and other milk-based desserts meeting specified criteria can be provided

10. Pastry and pastry products	Pastry and pastry products must not be provided more than twice per week including school lunch and at other times of the school day.
11. Oils and spreads	Only oils and spreads high in polyunsaturated and/or monounsaturated fats can be used.
12. Table salt and other condiments	Additional salt cannot be provided. Condiments (if provided) must be dispensed in no more than 10ml portions.
13. Confectionery	No confectionery can be provided at any time of the day either as a separate product such as a chocolate bar or as an ingredient in products under any other standard such as sweetened baked goods or pastry items.
14. Drinks	Only the following drinks can be provided at any time of the primary school day: Plain still or sparkling water Plain lower fat milk Plain lower fat, calcium enriched milk alternatives No added sugar, lower fat milk drinks No added sugar. Lower fat drinking yoghurts

At a Glance – Food and drink standards for <u>secondary school analysed lunches</u> and <u>secondary school hostel evening meals</u>	
1. Fruit and vegetables	At least two portions of vegetables and one portion of fruit must be offered every day as part of the analysed school lunch and separately as part of the school hostel evening meal.
2. Oily fish	Oily fish must be provided at least once every three weeks as part of the school lunch (or at other times of the school day). Oily fish must be provided at least once every three weeks as part of the school hostel evening meal.
3. Red and red processed meat	No more than a combined total of 230g of red and red processed meat (cooked weight) can be provided in the analysed school lunch, non-analysed school lunch options and at all other times of the day over the course of the school week (not including the school hostel evening meal), of which no more than 130g can be red processed meat (cooked weight). In addition, no more than a total of 115g of red and red processed meat (cooked weight) can be provided as part of the secondary school hostel evening meal over the course of the school week, or which no more than 65g can be red processed meat (cooked weight).
4. Sweetened baked products or desserts	Only sweetened baked products and desserts meeting specified criteria can be provided.
5. Breakfast cereals	Only breakfast cereals meeting specified criteria can be provided

6. Deep fried and Fried foods	<p>Food that has been deep fried in the cooking or manufacturing process shall not be permitted more than 3 times in a week as a combined total across the whole school day.</p> <p>Chips must only be served as part of a meal.</p> <p>In addition, food that has been deep fried in the cooking or manufacturing process shall not be permitted more than 3 times in a week as part of the school hostel evening meal.</p> <p>Chips must only be served as part of a meal.</p>
7. Savoury snacks	Only plain savoury crackers, plain oatcakes and plain breadsticks along with other savoury snacks meeting specified criteria can be provided
8. Bread	All bread and bread rolls must contain a minimum of 3g of AOAC fibre per 100g
9. Sweetened yoghurts fromage frais and other milk-based desserts	Only Sweetened yoghurts, fromage frais and other milk-based desserts meeting specified criteria can be provided
10. Pastry and pastry products	<p>Pastry and pastry products can only be provided as part of the analysed school lunch, non-analysed school lunch or at any other times of the school day a combined total of twice per week across the school day</p> <p>In addition, Pastry and pastry products must not be provided more than twice per week as part of a school hostel evening meal.</p>
11. Oils and spreads	Only oils and spreads high in polyunsaturated and/or monounsaturated fats can be used
12. Salt and other condiments	<p>Additional salt cannot be provided.</p> <p>Condiments (if provided) must be dispensed in no more than 10ml portions.</p>
13. Confectionery	No confectionery can be provided at any time of the day either as a separate product such as a chocolate bar or as an ingredient in products under any other standard such as sweetened baked goods or pastry items.
14. Drinks	<p>Only the following drinks can be provided at any time of the secondary school day:</p> <p>Plain still or sparkling water</p> <p>Plain lower fat milk and</p> <p>Plain lower fat, calcium enriched milk alternatives</p> <p>Tea and Coffee</p> <p>No added sugar, lower fat milk drinks</p> <p>No added sugar, lower fat drinking yoghurts</p> <p>Sugar free drinks (excluding high caffeine – 150mg per litre)</p>

Statutory nutrient standards for school lunches and hostel evening meals (2020)

This table sets out the amount of energy (calories), the **minimum** levels for key nutrients and the **maximum** levels for total fat, saturated fat, free sugars and sodium that must be contained in an average day's primary school lunch, analysed secondary school lunch and school hostel evening meal.

	An average day's primary school lunch	An average day's secondary school analysed lunch and hostel evening meal for secondary pupils
Energy(calories/kilojoules)	518kcal (+/- 78kcal) 2165kJ (+/- 325kJ)	745kcal (+/- 112kcal) 3114kJ (+/- 467kJ)
Total fat	Not more than 20.1g	Not more than 29.0g
Saturated fat	Not more than 6.3g	Not more than 9.1g
Total carbohydrate	Not less than 69.1g	Not less than 99.3g
Free sugar[^]	Not more than 10.4g	Not more than 14.9g
Fibre (AOAC*)	Not less than 6g	Not less than 9g
Protein	Not less than 19.4g	Not less than 27.9g
Iron	Not less than 3mg	Not less than 4.4mg
Calcium	Not less than 165mg	Not less than 300mg
Vitamin A	Not less than 150 µg	Not less than 187 µg
Vitamin C	Not less than 9mg	Not less than 11mg
Folate	Not less than 45 µg	Not less than 60 µg
Sodium^à	Not more than 686mg	Not more than 824mg
Zinc	Not less than 2.1mg	Not less than 2.8mg

kcal = kilocalories; kJ = kilojoule; g = grams; mg = milligrams; µg = micrograms

[^]See Annex D for further information on free and total sugar definitions and calculations

*The fibre value is based on the AOAC methodology.

a To convert salt(g) to sodium(mg) - multiply by 1000 then divide by 2.5

Example 0.5g salt x1000 = 500mg salt, then divide by 2.5 = 200mg sodium

To convert sodium(mg) to salt(g) – multiply by 2.5 then divide by 1000

Example 200mg sodium x 2.5 = 500mg sodium then divide by 1000 = 0.5g salt

Annex B

The Secondary School Analysed Lunch

To help visualise how this might look, a few examples of a minimum 2 choice, 2 course lunches, taken from local authority online secondary school menus, are shown below. Items highlighted in **green** show where vegetables and fruit contribute to meeting the standard of 2 portions of vegetables and one of fruit. The relative proportions of each are not defined e.g. either a full portion of vegetables or fruit, or that this will be achieved in combination with other items served as part of the meal choice. For example, it is unlikely that a fruit muffin or Eve’s pudding will achieve a full 80g portion on their own.

For other standards which apply across the full lunchtime provision items are coloured to show the contribution these could make when included as part of the secondary school analysed lunch.

Red = red and red processed meats, **blue** = fried items and **orange** = pastry items These examples have not been nutritionally analysed and are included for illustrative purposes only.

Spaghetti, beef bolognese with salad A portion of fruit	Pasta pot with a tomato and vegetable sauce. Eves Pudding and custard
Chicken and vegetable curry with salad Fruit salad and ice cream	Macaroni cheese with baked beans and salad Fresh fruit
Vegetable soup with bread Steak Pie with potatoes and carrots Fruit kebab	Vegetable soup with bread Salmon nibbles in a bun with a salad pot Fruit with yoghurt dip
Breaded fish , chips , peas and coleslaw Rice pudding and fruit	Tomato and basil soup with bread Tuna and sweetcorn salad sandwich Fruit muffin
Vegetable chilli (2) with rice Seasonal fruit , meringue and cream	Beef burger in a bun, salad and vegetable sticks with dip Fresh fruit platter
Pork and vegetable meatballs, tomato sauce and spaghetti Eves pudding and custard	Baked potato, baked beans and salad Fresh fruit
Breaded fish , chips , peas and sweetcorn Fruit tart	Vegetable soup Sub roll with salmon mayo and salad Fruit muffin
Chicken and vegetable pie with potato and broccoli Fruit with dip	Tomato , sweetcorn and pepper pizza Salad Fruit muffin
Sweet and sour chicken with rice and sweetcorn Fruit with ice cream	Macaroni cheese pot with sweetcorn and salad Fruit kebabs
Pepperoni pizza, vegetable sticks with tomato salsa	Vegetable burger in a bun with salad Fruit sponge, fruit coulis and custard

Carrot cake with raisins and cranberries	
Minestrone soup Pasta and tomato sauce with salad Fruit pot with yoghurt	Salmon baguette with salad and veg sticks Fruit pot with yoghurt
Chicken Tikka, rice sweetcorn and salad Fruit pot	Coronation chicken sub, sweetcorn and salad Fruit pot
Chicken and vegetable chow mein with peas Fruit pot	Tomato, pepper and ham pizza with salad Fruit pot
Beef and vegetable chilli, rice and sweetcorn cobs Fruit pot	Chicken sausage, sweet potato wedges and baked beans Fruit pot
Fish, chips, peas and coleslaw Fruit pot	Macaroni cheese, peas and salad Fruit pot
Sticky sausage, mashed sweet potato, sweetcorn and salad Fresh fruit	Baked potato, cheese, baked beans and salad Fruit
Chicken fajitas, salsa pot and salad Fruit kebab	Vegetable soup Ham and tomato salad sandwich Fresh fruit
Salmon, chips and peas with salad Fruit muffin	Pepperoni pizza, vegetable sticks and salsa dip, sweetcorn cobs Fruit
Sweet and sour chicken with salad Fruit pot with yoghurt	Shepherd's Pie topped with root vegetable mash, and peas Fruit kebab
Beef curry, rice, salad and vegetable sticks Fruit in jelly	Carrot soup Coronation chicken roll with salad and vegetable sticks Carrot cake

Annex C Frequently asked questions

Q1. Would it be possible to provide red meat dishes on several days across the week?

A. Yes. Smaller amounts of red meat could be included in dishes across a week using pulses and vegetables to replace a proportion of red meat. The addition of pulses and vegetables will contribute to meeting several nutrients, and food and drink standards.

Q2. We use butcher's sausages on our menus which have a specified meat content. Do we use the weight of each sausage when counting the allowance of red processed meat?

A. You should use the weight of the portion of sausage as served after deducting the % weight loss during cooking. (see section 10). The weight loss on cooking calculation is applied to the full weight of the raw portion. Further information on processed meat products can be accessed in the [Scottish Statutory Instruments - FOOD The Products Containing Meat](#).

Q3. Does breakfast cereal used as an ingredient need to comply with the breakfast cereal standard?

A. No. Where breakfast cereal is used as an ingredient in a recipe for example a tray bake, it is the final product which must comply with the required food and drink standard. It would be sensible however to use the same product for both breakfasts and as an ingredient to avoid any confusion.

Q4. What could be included as "other milk desserts"?

A. This might include milk puddings such as rice pudding, milk whips or custard.

Q5. Lactose is the sugar found naturally in milk so can I use drinks which contain added lactose?

A. No, drinks containing added lactose will not meet the relevant drink standard. When lactose is extracted from milk then added into other products it is being used as an added sugar.

Q6. Is it necessary to undertake a nutritional analysis if all food and drinks meet the required food and drink standards?

A. Yes. The nutrient standards are separate from the food standards and drink standards. All food and drinks provided must meet the food and drink standards. Nutritional analysis is undertaken to ensure that the balance of food and drinks provided in a primary school lunch, the secondary school analysed lunch or hostel evening meal across the school week meets the required nutrient standards.

Q7. Is it necessary to analyse food and drinks served out-with lunch?

A. No, nutrient standards only apply to food and drinks served at lunchtime.

Q8. Do salad or vegetables need to be provided with “snack” items such as sandwiches, baked potatoes panini or pizza at lunchtime?

A. Where these items are included as part of the secondary school analysed lunch they must do so as part of a 2-course meal which includes at least 2 portions of vegetables and 1 portion of fruit.

Where these items are served as part of the non-analysed lunch, a portion of salad or vegetables must be provided, and included in the cost of any non-analysed main lunch item. (See Table 4 in Healthy Eating in Schools guidance).

A main lunch item is defined in the Technical Working Group report as

- a traditional lunch such as roast dinner,
- sandwich, baguette or panini,
- pizza slice or baked potato.

Q9. Some drinks look like they comply with the relevant standards but are labelled with:

“may have an adverse effect on activity and attention in children”.

Can these be provided in secondary schools?

A. Only additives permitted in the UK are permitted in drinks in the UK. All drinks provided in schools in Scotland must meet the relevant standards within the Nutritional Regulations. Decisions about the drinks provided in schools which meet these requirements but include additives must be carefully considered by each local authority. The focus must remain on the health and wellbeing of children eg in relation to the impact they may have on children and young people across different settings. Further information on food additives and colourings can be found [in the Food Standards Scotland: Additives and E-numbers](#).

Annex D

Free sugars and total sugar

Free sugar This is the sugar referred to in the nutrient standards and includes:

- all sugars in table sugar, honey, sucrose, glucose and glucose syrups and lactose or galactose added to foods (including whey powder);
- all sugars in drinks including sugars naturally present in fruit and vegetable juices and the fruit and vegetable component of smoothies, and sugars in milk substitutes but not lactose naturally present in milk or in products containing milk; and
- all sugars in fruit and vegetable purees and pastes, including jam and preserves, and products made from extruded fruit or vegetables, (but not the sugars integrally present in the cells of foods such as fruit and vegetables, including in dried, stewed or canned fruit).

Total sugars This is the sugar referred to in the food and drink standards and includes:

- all sugars included in the definition of free sugar shown above
- the sugars naturally present in milk
- and the sugars integrally present in the cells of foods such as fruit and vegetables, including in dried, stewed or canned fruit.

To calculate free sugars, take the existing NMES calculation but deduct any sugars from dried, stewed or canned fruit and vegetables. Please note that the sugar content of fruit juice or syrup present in canned fruit should be counted as NMES/ free sugars.

Further information on the evidence and rationale for reducing sugar can be found in the [Public Health England: Sugar Reduction](#).

Education Scotland

Denholm House
Almondvale Business Park
Almondvale Way
Livingston EH54 6GA

T +44 (0)131 244 4330
E enquiries@educationscotland.gsi.gov.uk

www.education.gov.scot

© Crown Copyright, Choose an item.

You may re-use this information (excluding images and logos) free of charge in any format or medium, under the terms of the Open Government Licence providing that it is reproduced accurately and not in a misleading context. The material must be acknowledged as Education Scotland copyright and the document title specified.

To view this licence, visit <http://nationalarchives.gov.uk/doc/open-government-licence> or e-mail: psi@nationalarchives.gsi.gov.uk

Where we have identified any third party copyright information you will need to obtain permission from the copyright holders concerned.