



SCOTTISH EXECUTIVE

DEPUTY MINISTER FOR EDUCATION & YOUNG PEOPLE
EUAN ROBSON MSP

DEPUTY MINISTER FOR HEALTH & COMMUNITY CARE
RHONA BRANKIN MSP

TELEPHONE: 0845 774 1741
SCOTTISH.MINISTERS@SCOTLAND.GSI.GOV.UK
[HTTP://WWW.SCOTLAND.GOV.UK](http://www.scotland.gov.uk)

23 MARCH 2005

Dear Sir/Madam

The early years are crucial in children's development. Providing our youngest children with healthy, nutritious food is very important for their health and for developing positive habits and attitudes to food.

We are therefore delighted to be issuing the draft nutritional guidance for early years for consultation. The guidance is intended to support early years providers, such as nurseries and playgroups by giving practical advice on food choices and menu planning.

We want to hear the views of everyone involved in providing food to young children in early years settings. Details on how to respond are attached and we would encourage anyone with an interest in this subject to send us your comments by 30 June 2005.

RHONA BRANKIN



EUAN ROBSON

CONSULTATION ON NUTRITIONAL GUIDANCE FOR EARLY YEARS

Responding to this consultation paper

Appendix A of the draft nutritional guidance gives details about the Scottish Executive's consultation process. We are inviting written responses for the following questions (see attached page or Appendix B) by **30 June 2005**. **Please send your response to:**

EYnutrition@scotland.gsi.gov.uk

or

Consultation on Nutritional Guidance for Early Years
Early Education & Childcare Division
Scottish Executive
Area 2B (North)
Victoria Quay
Edinburgh
EH6 6QQ

If you have any queries contact Susan Neilands on 0131 244 7608.

We would be grateful if you could clearly indicate in your response which questions or parts of the consultation paper you are responding to as this will aid our analysis of the responses received.

Responding to this consultation paper

We need to know how you wish your response to be handled and, in particular, whether you are happy for your response to be made public. Please complete and return the **Respondent Information Form** attached to this letter as this will ensure that we treat your response appropriately. If you ask for your response not to be published we will regard it as confidential, and we will treat it accordingly.

All respondents should be aware that the Scottish Executive are subject to the provisions of the Freedom of Information (Scotland) Act 2002 and would therefore have to consider any request made to it under the Act for information relating to responses made to this consultation exercise.

SUMMARY OF QUESTIONS

The guidance will be relevant to different early years providers in different ways. By answering the following questions, let us know about the issues that will affect you and your colleagues in providing food for children in your care.

1. Does the nutritional guidance meet the particular needs of your pre-school setting? Please let us know if you and your colleagues need any additional advice.
2. Will the guidance be helpful in delivering healthier food for the children in your pre-school establishment?
3. Will you or your colleagues require additional skills or training to implement the guidance, as it will affect your establishment? If so, what training will be needed?
4. How easy will it be to implement this guidance in your early years setting?
5. Is the style and format of the guidance appropriate? Please tell us about any changes you think need to be made.
6. Please let us have any other comments you want to make about the guidance.

RESPONDENT INFORMATION FORM: NUTRITIONAL GUIDANCE FOR EARLY YEARS

Please complete the details below and return it with your response. This will help ensure we handle your response appropriately. Thank you for your help.

Name:

Postal Address:

1. Are you responding: (please tick one box)
- (a) as an individual go to Q2a/b and then Q4
- (b) **on behalf of** a group/organisation go to Q3 and then Q4

INDIVIDUALS

- 2a. Do you agree to your response being made available to the public (in Scottish Executive library and/or on the Scottish Executive website)?

Yes (go to 2b below)

No, not at all We will treat your response as confidential

- 2b. Where **confidentiality is not requested**, we will make your response available to the public on the following basis (**please tick one** of the following boxes)

Yes, make my response, name and address all available

Yes, make my response available, but not my name or address

Yes, make my response and name available, but not my address

ON BEHALF OF GROUPS OR ORGANISATIONS:

- 3 The name and address of your organisation **will be** made available to the public (in the Scottish Executive library and/or on the Scottish Executive website). Are you also content for your **response** to be made available?

Yes

No We will treat your response as confidential

SHARING RESPONSES/FUTURE ENGAGEMENT

- 4 We will share your response internally with other Scottish Executive policy teams who may be addressing the issues you discuss. They may wish to contact you again in the future, but we require your permission to do so. Are you content for the Scottish Executive to contact you again in the future in relation to this consultation response?

Yes

No

nutritional guidance for early years

food choices for children aged 1-5 years in early education and childcare settings

A CONSULTATION DOCUMENT



nutritional guidance for early years

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A CONSULTATION DOCUMENT

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1 introduction

A varied nutritious diet and regular physical activity is fundamental for proper growth and development in young children.^{1,2} In the short term it can help children and young people to improve their concentration, growth and to support their learning.^{1,3} A good diet in childhood can reduce the risk of ill health later in life.^{5,6} In addition, poor dietary intake is associated with the development of obesity⁴ and iron deficiency anaemia.^{3,5}

Securing better nutrition: Securing a better diet

Ensuring good nutrition in the early years is very important. Positive messages about food and eating can be consistently reinforced to children through: the snacks, drinks and meals provided; the activities they engage in; the attitudes and behaviour of staff and carers towards food and food choices. Children's food experiences in early years can influence food choices within the home impacting on the family's health as a whole.

Staff and carers in early education will recognise the importance of feeding children a nutritionally adequate diet and that they are in a position to influence this. Continuing improvements in food and nutrition in the early years settings will make a valuable contribution to children's health and educational development. Recent research and activities have highlighted that in order to achieve this, specific guidance to support staff and carers in their efforts to provide good nutrition to children in the early years sector is needed.

Who is this document for?

These guidelines are aimed at the early years sector (i.e. local authority nurseries, partnership nurseries, childminders, toddler groups, family centres, playgroups).

What does it hope to achieve?

To support staff and carers in meeting young children's nutritional and developmental needs.

To provide evidence-based nutritional guidance for children aged 1-3 years and 4-5 years who attend pre-school education and day care in Scotland.

To provide practical advice on food choices and menu planning based on sound evidence.

Where can I find out more?

The information in this guidance document is designed to be consistent with *Adventures in Foodland* and to complement it, by making the links between specific nutrient standards and practical food choices.

Adventures in Foodland is a comprehensive resource providing food, nutrition, oral health and physical activity guidance which has been developed by NHS Health Scotland for those caring for children aged between 0-5. This resource is available by emailing NHS Health Scotland at distribution@health.scot.nhs.uk

Securing the best start in life

Improving the health of Scottish children is a major priority for the Scottish Executive and key actions to achieve this are outlined in *Improving Health in Scotland – the Challenge* (Scottish Executive, 2003). This policy paper identifies early years as one of four key themes for health improvement activity, as well as giving a special focus to diet and physical activity as a means of achieving this. *Eating for Health: Meeting the Challenge* (Scottish Executive, 2004), a strategic framework for food and health in Scotland, identified the development of nutritional standards for the pre-school sector as a key route for taking action in this area forward in 2004/5.

In addition, improving child health and development is central to the *Curriculum Framework for Children 3 to 5* and the *National Care Standards for Early Education and Childcare up to the Age of 16*. This guidance will help establishments work towards these standards.

Increasing the rate of improvement of the health status of people living in the most deprived communities is a key objective of the Executive's new *Closing the Opportunity Gap* approach for tackling poverty and disadvantage. In Scotland improving diet and nutrition will benefit all sectors of the population but is likely to have its greatest impact on the most disadvantaged groups, including children living in socio-economically disadvantaged families.

The establishment and implementation of nutritional guidance in the pre-5 sectors will help to support carers in their efforts to provide a nutritious balanced diet for children. This in turn will contribute to improving the health of all children, in particular those who are currently poorly nourished at home.

2 eating habits, nutrients, foods and menu planning

2.1 Developing positive eating habits

The foundation for good health begins early in childhood⁷ and involves establishing good food habits. There are a number of aspects to this:

- › **Building food experiences** – offering a variety of foods, and repeated exposure to new foods from an early stage encourages children to experiment and accept different tastes and textures.⁸
- › **Structure** – staff and carers know that young children need structure to their day and this applies to planning times for eating and drinking. Children differ in their response to food being made available: most children enjoy food and usually welcome an opportunity to take a snack or drink when they are hungry. However some children are less interested and may be distracted while playing, and can ‘forget’ or be ‘too busy’ to choose to eat or drink. This can result in ‘over’ hunger or thirst and difficult behaviour.
- › **Timing** – children need to eat regularly and it is recommended that children be offered something to eat at least every three hours. Snacks are best given well before or after (2-2.5 hours) meal times so as to avoid spoiling their appetite for the next meal. Give children enough time to eat and drink – once they have started to eat, this may take around 15 minutes for a snack and around 30 minutes for a meal.
- › **Social skills** – when children sit to eat and drink together this provides an opportunity for them to learn good social skills and behaviours associated with eating and drinking. For example: chatting to other children and adults, developing good table manners, learning to respect others. Try to avoid distractions such as television and lots of noise close by.
- › **Role models** – children often model their behaviour on observation of other individuals. Therefore the food choices and eating habits of the adults, peers and siblings around children is important in reinforcing the right messages.

2.2 Nutrient guidance for early years

The information in Annex 1 provides nutrient guidance for adequate food and nutrition provision for children aged 1-3 years and 4-5 years attending partial day care or pre-school education. Children, as individuals, have different energy and nutrient requirements depending on their age, gender, body size, rate of growth and level of activity. For young children, there are no hard and fast rules about what must be served as a breakfast, a snack, a light meal or a main meal. Depending on the likes and dislikes of the children, their appetite, and their willingness to try foods, food items can be interchanged for snacks, meals or breakfast. Nutrient standards have therefore been based on a combination of one meal and one snack (including drinks) rather than for snacks, meals and drinks individually.

The figures in Annex 1, Table 1 represent the recommended nutrient intake provided by the combination of one meal plus one snack (averaged over five days).^a This is because nutrient requirements are met over a period of time, rather than within one day. These would apply, for example, to children who are in early years care or education for half a day, five days per week, and receive a snack and meal at each session. For children who attend for a snack and drink only Sections 3.2 and 3.3 give guidance on suitable food and drink. We have also given (Annex 1, Table 2) the recommended nutrient intake from food provided for children who are in day care for more than 8 hours per day (based on provision of breakfast, two meals and two snacks).^a

Energy needs – getting the balance right

Children need energy to enable them to grow, develop and be active. Essentially, energy from food and drink provides ‘fuel’ for the body. The precise amount of energy required for an individual child depends on their age, size, gender, rate of growth and level of activity. Energy for children is provided from foods containing carbohydrate, fats and protein. For good health and optimal growth in children there is an important balance between energy consumed in foods and the body’s need for energy.⁴ Children who are regularly active (see section 3.1) are able to achieve a better energy balance than children who are less physically active.⁴

Dietary fibre

There are no specific dietary reference values for dietary fibre intake in children aged 1-5 years. However dietary fibre, as part of a varied and balanced diet, is essential for good health at all ages. Children who follow the nutrient guidance on fruit and vegetable intake and who have wholegrain foods, e.g. wholegrain bread, cereals and pulse vegetables incorporated into their daily diets, will consume adequate dietary fibre. This will help them to achieve the dietary fibre they need to maintain their health as they grow.

Vitamins, minerals and bioactive components

These are essential to normal growth, development and normal body functions. Some vitamins and minerals are important in the immune system, for protection against ill health and disease. Children aged 1-5 years have high requirements for vitamins and minerals due to the rapid rate of growth and bone development during these years. Adequate intake of vitamins and minerals, with the exception of Vitamin D^b can be provided by a varied well-balanced diet as described in the guidelines. There are some compounds (bioactive components) in foods, which do not fall into the category of vitamins and minerals.

^a Annex 2 outlines key issues on achieving nutrient guidance for protein, iron, salt and Vitamin D.

^b With the exception of Vitamin D which depends on exposure to sunlight and/or supplementation (Annex 2).

Some of these provide us with protection against ill health and disease. Vegetables, some fruits and other plant foods such as fresh herbs are particularly good sources of these.

2.3 Menu planning

In planning a menu it is essential that a variety of sensory qualities, e.g. taste, texture, flavours, colours and temperature, are provided. This contributes to children's learning and enjoyment of food. Early and repeated exposure to a food helps children to accept it in the long term.⁸ For example we recommend that, over a period of days, children are offered both warm and cold foods; this provides variety in temperature and warm foods are comforting on cold winter days.

Young children have changing likes and dislikes and their appetite and willingness to try foods varies. Different foods and portions may need to be interchanged as breakfast, as snacks, as light meals or main meals. This need for flexibility in eating patterns and habits has been taken into account in the guidance on food groups and menu planning. Children's cultural background has to be respected and any special dietary requirements should be taken into account.

In the food groups and sample menus, descriptions of foods and frequencies served are given as basic guidance only. A flexible approach building on catering experience, skills and local tastes is important in allowing a wide range of food and menu options to be available. The menu planning guidance is based on five food groups.

The following table aims to provide practical guidance on food groups and menu planning. It is designed for staff, carers and those responsible for food provision for the early years sector to assist in providing good nutrition for children aged 1-5 years and meeting the nutritional guidance.

There are some key issues concerning nutrient provision to consider when menu planning in Annex 2. Staff responsible for the planning of menus may need to be supported by appropriate training (see section 4.3).

The quality of food purchased for the early years sector can be guided by *Nutritional Specifications for Manufactured Products for School Meals*. These are available from the Food Standards Agency and website www.scotland.gov.uk/library5/education/niss-00.asp

Table 3: Menu Planning by Food Group

Group 1: Bread, Other Cereals and Potatoes	Specific Guidance for Children age 1-5 years	Why?
All type of breads, other cereals (breakfast cereal, oats/oatcakes, rice, pasta, noodles, couscous, maize meal) potato and starchy root crops (e.g. sweet potato, yam)	Every meal and most snacks should contain a portion or portions of food from this group. Fibre-enriched cereals (i.e. breakfast cereals with added bran) should not be offered to children under 2 years.	Starchy foods provide essential energy for children and are an important source of many vitamins, minerals and fibre. Children should be encouraged to eat these foods to satisfy their appetites. Wholegrain bread, wholegrain cereals (e.g. wheat biscuits, mini wheats, porridge), pasta and brown rice, as well as the white varieties, should be incorporated into the diet to encourage children to eat these as part of a well-balanced, varied diet. Young children have small stomach capacities and too much high-fibre foods such as fibre-enriched (bran type) breakfast cereals (e.g. All Bran, Branflakes) can replace energy-rich foods needed for growth and interfere with the absorption of essential minerals like calcium and iron.
Bread	A variety of breads; wholegrain, brown, white, bread-based snacks (e.g. yeast-type buns, scones) should be available daily as part of a meal and/or snack for all children. Crusty bread, quarters of bread rolls and buns are popular and can be offered at snack or meal times. As part of a meal, bread (including naan, pitta and crusty bread) can be provided in a variety of forms to replace fried products.	Breads provide for the varying appetites and energy requirements within this wide age-group. These can provide variety and alternatives to fried potato products.

Table 3: Menu Planning by Food Group (continued)

Group 1: Bread, Other Cereals and Potatoes	Specific Guidance for Children age 1-5 years	Why?
Breakfast cereals	<p>Breakfast cereals may be offered at breakfast or snack time. A variety of low-sugar breakfast cereals e.g. wheat biscuits, porridge, cornflakes, rice snaps, should be available. These breakfast cereals are low in free sugars (NMES^a); most contain < 15% (< 15g/100g of product) free sugars.</p> <p>There are plenty of breakfast cereals with a low free-sugar content to choose from – highly sugared cereals and cereal bars (e.g. chocolate-coated cereals, frosted flakes, honey-coated cereals with a free (NMES^a) sugar content of > 15 % (> 15 g/100g of product) should not be provided.</p>	<p>Breakfast cereals are a popular food with young children; they provide energy, many vitamins, minerals and fibre. Many varieties are fortified with iron, foliate and other nutrients, providing an important source of these in the diets of young children. In addition, as they are usually eaten along with milk, this provides further nutrients, such as calcium, phosphorus, protein etc.</p> <p>Breakfast cereals with a high proportion of free sugars provide a poor balance of energy for young children. Excess intakes of free sugars promote dental decay and obesity. Choose cereals which are lower in added (free) sugars (NMES^a).</p>
Potatoes, sweet potatoes, yam	<p>Fresh cooked potatoes should be served regularly in different ways; mashed, boiled, oven-baked e.g. potato wedges and roast potatoes with olive or rapeseed oil can be offered as part of varied balanced diet.</p> <p>The following high-fat processed potato products should be served a maximum of twice a week: chips, smiley faces and other shaped products, croquettes and waffles.</p> <p>If possible, all potato products should be oven baked rather than fried.</p>	<p>Fresh cooked potatoes served in different ways provide a variety of textures. They are an excellent, high-quality source of energy and nutrients for children. They are rich in the B Vitamins and an important source of Vitamin C.</p> <p>Many of the high-fat potato products contain poor quality fat (hydrogenated [trans] fats) and are also high in salt.</p>

^a **Non-milk extrinsic sugars (NMES):** these are added sugars (or free, e.g. fruit juice) in foods, e.g. sweets, biscuits, soft drinks, added to breakfast cereals, table sugar, honey, sugar in fruit juice. NMES does not include sugars which are integrally present in the cells of food, e.g. fruit and vegetables or milk sugar (lactose).

Table 3: Menu Planning by Food Group (continued)

Group 1: Bread, Other Cereals and Potatoes	Specific Guidance for Children age 1-5 years	Why?
Rice, pasta, noodles, couscous	<p>These foods are popular with young children and should be provided regularly as alternatives to bread and/or potatoes. Children may enjoy these foods as part of hot or cold dishes or in soups. Vegetables can easily be combined with these.</p> <p>Processed products (e.g. noodles in a pot, salted savoury rice in a bag) may have a high salt content.</p> <p>Low salt varieties of canned spaghetti and similar products, e.g. spaghetti hoops, pasta shapes, should be used.</p>	<p>These foods are a good source of carbohydrate energy and B Vitamins. They provide a variety of textures and tastes for young children.</p> <p>These processed products are mostly very high in salt and additives. Manufacturers are beginning to produce lower salt versions.</p>

Table 3: Menu Planning by Food Group (continued)

Group 2: Fruits and Vegetables	Specific Guidance for Children age 1-5 years	Why?
<p>Fresh, frozen, canned and dried varieties of fruit and vegetable, and fruit juices</p>	<p>Every meal and snack combination, whether hot, cold, or a packed lunch should contain a minimum of two child-sized portions from this group.</p> <p>The snack and meal combinations should provide a variety of vegetables and fruits. Children may prefer raw vegetables, e.g. cucumber, tomato, carrots, celery.</p> <p>Offering these foods first before the rest of the meal, or as a snack, may improve uptake. They may find them easier to eat if served cut up into small portions, e.g. chopped apple, satsuma segments. Repeated exposure may improve acceptance.</p>	<p>Fruit, vegetables and salads are rich sources of vitamins, minerals and other bioactive components, which protect children from ill health. This protection may begin early and continue through life.</p> <p>They also provide an excellent combination of fluid and fibre to help prevent constipation in young children.</p> <p>The introduction of a variety of fruit and vegetables at a young age may improve consumption throughout life. This will contribute to meeting the overall daily recommendation of five portions.</p> <p>Encouraging these colourful foods with a variety of tastes and textures stimulates and expands interest in fruits and vegetables as well as challenging their palates.</p>

Table 3: Menu Planning by Food Group (continued)

Group 2: Fruits and Vegetables	Specific Guidance for Children age 1-5 years	Why?
Vegetables (green and salad vegetables, root crops, pulses)	<p>Vegetables should be served in an appealing and easy to eat way. They may be popular cold, raw, as finger foods, served with fruit in salad or incorporated into main dishes.</p> <p>Fresh soups with vegetables provide the opportunity to incorporate pulses and vegetables in the meal. Most dried and tinned soups are very high in salt and some are low in vegetables. These foods make it difficult to meet the standard for sodium. There should be a minimum of one portion of vegetables in one serving of soup.</p> <p>Baked beans are nutritious and popular with children and when they are served, lower salt versions should be used. Canned spaghetti and similar products, e.g. spaghetti hoops, pasta shapes and tomato ketchup are not vegetables and should not be counted as a portion.</p>	<p>Vegetables and salads are rich sources of vitamins, minerals and other bioactive components, which protect children from ill health. This protection may begin early in childhood and continue through life.</p> <p>Vegetables are essential to a balanced diet, in addition to fruit. They provide unique protective components which are not all found in fruits. Creative ways need to be found to ensure young children consume these on a daily basis.</p>

Table 3: Menu Planning by Food Group (continued)

Group 2: Fruits and Vegetables	Specific Guidance for Children age 1-5 years	Why?
Fruit	<p>Fruit should be offered with every meal and snack combination. Fruit-based desserts such as fresh fruit, fruit tinned in juice, fruit salads, fruit crumble, fruit jelly or fruit pie are popular options for young children. These composite fruit dishes should contain a minimum of one portion of fruit per serving.</p> <p>Most fruit yoghurts provide less than one portion of fruit and therefore fruit should be offered in addition to these.</p> <p>Pure fruit juice is a good source of Vitamin C. A small glass (150ml) of pure fruit juice provides enough Vitamin C for the day and should be taken as part of a meal.</p>	<p>There are many fruit-flavoured sweet products on the market, many of which do not contain any fruit and should be avoided.</p> <p>Fruit juice is high in free sugars, is acidic, and repeated exposure of juice alone (i.e. not as part of a meal) throughout a day contributes to dental caries and dental erosion.</p>

Table 3: Menu Planning by Food Group (continued)

Group 3: Milk and Dairy Foods	Specific Guidance for Children age 1-5 years	Why?
Milk and dairy foods, yoghurts and milk-based desserts	All meals and snack combinations should contain a portion or portions of food from this group.	In children aged 1-3 there is rapid development of the bones associated with independent movement. Calcium, Vitamin D, protein and other minerals are essential for this. Milk and milk products provide a rich source of some of these nutrients. Diets which do not include milk and dairy foods are unlikely to meet the calcium requirements of young children. Parents/guardians should seek specific advice from a health professional.
Milk	<p>Plain drinking milk should be available as an option every day. After 1 year of age, whole cows milk should be the main drink until the child is at least 2 years old. After age 2, semi-skimmed can be introduced gradually as a main drink as long as the child is eating well with enough energy and nutrients from a varied diet. Fully skimmed milk is not suitable as a main drink for children under 5 years.</p> <p>Drinking milk should be an accompaniment to meals and snacks and not a replacement for them.</p> <p>Plain rather than flavoured milks should be encouraged.</p>	<p>Milk provides essential nutrients and fluid. Whole milk can also provide a significant amount of energy in the diet of young children. Very low fat (skimmed) milk contains insufficient energy and fat-soluble vitamins for children aged 1-5 years.</p> <p>Some children get into a habit of drinking large amounts of milk (> 500ml per day) instead of eating other foods. Young children who persistently drink lots of milk in place of eating food are likely to have a diet deficient in energy and some nutrients, e.g. iron.</p> <p>Flavoured milks are high in sugars (NIMES^a).</p>

^a **Non-milk extrinsic sugars (NIMES):** these are added sugars (or free, e.g. fruit juice) in foods e.g., sweets, biscuits, soft drinks, added to breakfast cereals, table sugar, honey, sugar in fruit juice. NIMES does not include sugars which are integrally present in the cells of food, e.g. fruit and vegetables or milk sugar (lactose).

Table 3: Menu Planning by Food Group (continued)

Group 3: Milk and Dairy Foods	Specific Guidance for Children age 1-5 years	Why?
Yoghurt	<p>Yoghurt is very popular with children and there is a huge variety of fruit and flavoured yoghurts to choose from. Whole milk plain natural yoghurt/plain fromage fraise do not have sugar added: these are ideal options and can be served with fresh, stewed or frozen fruit, or fruit in natural juices.</p> <p>Whole milk fruit yoghurt/fruit fromage fraise: try to choose those with high fruit and low free-sugar (NIMES^a) content.</p>	<p>Yoghurts are an excellent source of calcium, protein, Vitamin A and small amounts of Vitamin D (whole milk variety), they are easy to eat and popular with children. There is a huge choice of yoghurts on the market and it is often difficult to know which give best nutritional value. Some are less healthy than others.</p> <p>Fruit/flavoured yoghurts containing around 5% of added sugars are less harmful to teeth.⁹ Novelty yoghurts, e.g. cartoon type; thick and creamy yoghurts; corn yoghurts; mousses can be very high in free-sugars (NIMES^a). Some contain crumbly and sticky substances (chocolate, fudge), which stick to the teeth causing tooth decay and excess sugar consumption.</p>
Cheese	<p>Cheese can be served as the main protein item instead of meat, fish or pulses.</p> <p>Cheese can be served as cheese and biscuits, cheese and fruit, as part of a salad or as a filling for sandwiches and baked potatoes, sprinkled on top of pasta or rice dishes. A suitable portion of cheese for a young child is around 25-35g.</p> <p>Cheeses suitable for vegetarians should be available.</p>	<p>Cheese is a concentrated source of calcium and other minerals. It also has properties which promote dental health.</p> <p>Where a portion of cheese is served as the main protein item, it also counts as a portion of food from the meat, fish and alternative sources of protein food group.</p> <p>Some vegetarians will not take cheese which contains rennet as this is an animal-based additive.</p>

^a **Non-milk extrinsic sugars (NIMES):** these are added sugars (or free, e.g. fruit juice) in foods, e.g. sweets, biscuits, soft drinks, added to breakfast cereals, table sugar, honey, sugar in fruit juice. NIMES does not include sugars which are integrally present in the cells of food, e.g. fruit and vegetables or milk sugar (lactose).

Table 3: Menu Planning by Food Group (continued)

Group 4: Meat, Fish, Eggs, Pulses, Seeds and Nuts	Specific Guidance for Children age 1-5 years	Why?
Meat, fish and alternatives, e.g. eggs, peas, beans, lentils and nuts	Every main meal should contain a portion or portions of food from this group.	Meat, fish and alternatives such as eggs, beans and pulses are a major source of protein, iron and zinc. These help to promote growth in children. Most children have more than adequate amounts of protein in their diet.
Beef, pork, lamb and poultry	Red meat (beef, pork and lamb) based meals should be served a minimum of twice a week. Lean meat (fat trimmed off) should be used in dishes containing meat.	Red meat is a major source of iron and zinc. Lean meats are higher in protein, iron and zinc. This will help to improve the nutritional quality of meat used in recipes e.g. spaghetti bolognese.
Processed meat products and pies	Processed meat products, i.e. hot dogs, frankfurters, sausages, beefburgers, meatballs, haggis and shaped poultry products (e.g. nuggets), pastry topped pies and other pastry products (e.g. bridies, sausage rolls, Cornish pasties, Scotch pies) should be served a maximum of once a week. The vegetable content of composite dishes such as pies should be increased where possible. Potato-topped pies will have a lower fat content and should be encouraged in preference to pastry-topped pies.	Processed meat products are mostly high in fats and sodium. The quality of fat in them can be unhealthy (high in saturated and hydrogenated (trans) fats). The quality of protein in these products may be poorer than protein from fresh or frozen lean meats. Also they may be lower in iron and zinc than lean meat. This will help to provide bulk and filling to the composite dishes while adding in more nutrients e.g. vitamins and minerals.

Table 3: Menu Planning by Food Group (continued)

Group 4: Meat, Fish, Eggs, Pulses, Seeds and Nuts	Specific Guidance for Children age 1-5 years	Why?
Composite dishes	<p>These dishes e.g. lasagne, moussaka, macaroni cheese, spaghetti bolognese, tuna pasta bake, ravioli and other composite dishes should contain lean meats, small amounts of cheese and plenty of vegetables. The vegetable content should be increased where possible.</p> <p>When fat is used in cooking or in dishes, a vegetable oil which is high in mono-unsaturated or polyunsaturated fat should be used e.g. sunflower oil, olive oil, safflower oil, rapeseed oil.</p>	<p>Vegetables can be easily incorporated into these dishes or cold salad items (cucumber, tomato, lettuce, celery, carrot) can be served alongside as finger foods. This will help to increase vegetable intake.</p> <p>Vegetable oils high in monounsaturated and polyunsaturated fats help to improve the dietary fat profile.</p>
Fish	<p>Fish, in addition to canned tuna, should appear on the menu once a week.</p> <p>Oil-rich fish – sardines, kippers, salmon, mackerel, fresh tuna and herring (excluding tinned tuna) – should be served once a week.</p> <p>Processed fish products e.g. fish fingers and shaped fish products may be high in salt should be served a maximum of once a week.</p>	<p>This will provide variety in the menu. Tinned tuna fish is lower in the protective long chain polyunsaturated fatty acids (LC-PUFA) of the omega-3 series than other sources of fatty fish; they are lost during the canning process. This does not apply to fresh tuna fish.^a</p> <p>Oil-rich fish contain valuable, protective fatty acids that are deficient in the Scottish diet and their use should be encouraged. Oil-rich fish are one of a few naturally rich sources of Vitamin D. Many children are unfamiliar with these foods and should be encouraged to try them through the use of tasters (e.g. sardines on toast).</p> <p>Many of these products are high in salt, although manufacturers are starting to produce varieties with a lower salt content.</p>

^a Fish consumption; benefits and risks; report <http://www.food.gov.uk/multimedia/pdfs/fishreport2004full.pdf>
 Your guide to oily fish <http://www.food.gov.uk/multimedia/faq/oilyfishfaq/>

Table 3: Menu Planning by Food Group (continued)

Group 4: Meat, Fish, Eggs, Pulses, Seeds and Nuts	Specific Guidance for children age 1-5 years	Why?
Nuts and seeds	<p>These should not be given whole to children aged 1-5 years as there is a risk of choking.</p> <p>Nut and seed pastes may be given.</p>	<p>Chopped nuts in recipes may be used. These are a good source of energy, protein and minerals.</p> <p>Caution will need to be taken when children have an allergy to nuts (see section 3.6).</p>
Vegetarian sources of protein [refer to section 3.4 for more details about vegetarians]	<p>Protein sources for vegetarians include: pulses, peas, seeds, nuts, eggs, cheese, yoghurt, tofu and soya mince. These should be varied through the week.</p> <p>Soya mince, textured vegetable protein (TVP), quorn and tofu can substitute mince and chicken in main composite dishes e.g. spaghetti bolognese, casseroles, stir fries.</p> <p>Processed vegetarian products resembling meat products, e.g. sausages and veggie burgers should be served a maximum of once per week.</p>	<p>These should be the main sources of protein for vegetarians. The protein content of vegetarian dishes is often lower than meat dishes. However vegetarians can obtain adequate protein from these dishes along with the other sources of protein in their diets e.g. cereal protein, milk based foods – yoghurt, cheese. Pulses including beans, lentils and peas provide excellent nutrition, including protein. They are very versatile foods for quick light meals and as ingredients in soups and casseroles. Pulses can be an alternative to a portion of meat, fish, eggs or cheese. This increases the variety for the vegetarian option.</p> <p>Many meat substitutes are similar in texture to meat and may not appeal to children who do not like or eat meat. Also some may be high in salt.</p> <p>Processed vegetarian products are mostly high in fats and sodium. The quality of fat in some of them is unhealthy (hydrogenated (trans) fats) so these should be limited in the diet.</p>

Table 3: Menu Planning by Food Group (continued)

Group 5: Foods high in Fat and Drinks high in Free Sugars (NMES)^a	Specific Guidance for Children age 1-5 years	Why?
Desserts: puddings, cakes, biscuits, jam, jelly and ice cream	Where there is no choice, all desserts on offer should be fruit and/or milk-based (including yoghurt and ice cream).	Desserts and puddings are popular and are important for boosting the total energy in children's diets while providing nutrients. They can also help to increase fruit intake. There is a large range of these products on the children's food market and efforts need to be made to select those with a high milk and/or fruit content.
Sweetened soft/fizzy drinks, confectionery, e.g. chocolates, sweets, ice poles	Caterers are encouraged to review home-baking recipes to lower fats and sugars and include nutrient-rich, whole-food ingredients e.g. dried fruit/fresh fruits. Home baking/bakery products can be provided in mini portions (e.g. 25-35 g) as an accompaniment to fruit as a dessert.	The portion size of home baking/bakery products is often inappropriately high for young children. Mini portion sizes are more appropriate and served along with a source of fruit will help to improve the balance of the diet. Children enjoy the different tastes and texture this provides.

^a **Non-milk extrinsic sugars (NMES):** these are added sugars (or free, e.g. fruit juice) in foods, e.g. sweets, biscuits, soft drinks, added to breakfast cereals, table sugar, honey, sugar in fruit juice. NMES does not include sugars which are integrally present in the cells of food, e.g. fruit and vegetables or milk sugar (lactose).

Table 3: Menu Planning by Food Group (continued)

Group 5: Foods high in Fat and Drinks high in Free Sugars (NMES)^a	Specific Guidance for Children age 1-5 years	Why?
Sweetened soft/fizzy drinks, confectionery, e.g. chocolates, sweets, ice poles	<p>The use of foods from this group should be limited. They are very popular with children, which can lead to over consumption and imbalance in the diet.</p> <p>Confectionery, fizzy/sugary soft drinks should not be provided as part of the menu. It is recognised that most children will eat these foods and drinks at some time as part of celebrations and special events.</p> <p>Milk and plain water are considered appropriate drinks throughout the day.</p> <p>Fresh fruit juice can be given at meal times.</p>	<p>These foods are energy dense due to their high free sugars and/or high fat content. Many of them are of poor nutritional quality, providing little vitamins and minerals.</p> <p>A regular high intake of these foods by young children can replace foods of higher nutritional quality and result in an imbalance in the total diet. This imbalance can contribute to obesity, iron deficiency and poor growth. As they are currently consumed in high amounts by Scottish children specific attention should be given to guiding children and families with regard to over consumption.</p> <p>Sugary or carbonated (fizzy) drinks should not feature as part of pre-5s food provision as they are associated with the development of dental caries and can contribute to poor nutritional health and excessive weight gain.</p> <p>Milk provides an important source of nutrition for young children. Water provides essential fluid and along with fibre helps to prevent constipation.</p> <p>Fresh fruit juice should be distinguished from 'fruit drinks'. Fruit drinks often contain very little fruit juice and may have considerable amounts of added sugar.</p>

^a **Non-milk extrinsic sugars (NMES):** these are added sugars (or free, e.g. fruit juice) in foods, e.g. sweets, biscuits, soft drinks, added to breakfast cereals, table sugar, honey, sugar in fruit juice. NMES does not include sugars which are integrally present in the cells of food, e.g. fruit and vegetables or milk sugar (lactose).

Table 3: Menu Planning by Food Group (continued)

Group 5: Foods high in Fat and Drinks high in Free Sugars (NMES) ^a	Specific Guidance for Children age 1-5 years	Why?
Butter and spreads	<p>Only butter or spreads rich in mono-unsaturated and polyunsaturated fats and oils should be used e.g. sunflower, rapeseed, safflower, olive oil. These can be spread on breads and used in baking.</p> <p>Cooking margarines high in hydrogenated fats (trans) are not recommended.</p>	<p>These provide an important source of energy, essential fats and fat-soluble vitamins for children. They help to achieve a healthy fat profile in the diet.</p>
Cooking fats and oils	<p>Only monounsaturated and polyunsaturated oils should be used.</p>	<p>These used in cooking provide an important source of energy and essential fats for children. They help to achieve a healthy fat profile in the diet.</p>
Savoury potato snacks, crisps and corn snacks	<p>Crisps can be offered as part of a snack or meal option as an alternative texture and taste e.g. beside a filled sandwich or salad dish. However they should not be provided as the main staple of the meal and should not be included more than twice a week. For young children this would be a small portion (e.g. 15-20g).</p>	<p>These are popular with children and can provide a change of texture and taste to enjoy the meal. They should not be regarded as replacing one of the main staple foods (i.e. breads, potatoes, rice, pasta, cereals). They are high in sodium (as salt) therefore the portion size and frequency with which these foods are offered should be limited.</p>
Table salt, bottled sauces, relishes and pickles	<p>Table salt should not be used.</p> <p>Bottled sauces e.g. ketchup are popular with children and may be high in salt and sugar. They can be given in very small portions e.g. 5-10g occasionally.</p>	<p>These foods contribute to excess sodium intake in young children.</p>

^a **Non-milk extrinsic sugars (NMES):** these are added sugars (or free, e.g. fruit juice) in foods, e.g. sweets, biscuits, soft drinks, added to breakfast cereals, table sugar, honey, sugar in fruit juice. NMES does not include sugars which are integrally present in the cells of food, e.g. fruit and vegetables or milk sugar (lactose).

2.4 Example menus

Menus 1 – 2 are designed to meet the nutrient standards (averaged over a five-day period) for children aged 1-3 years and 4-6 years respectively with the exception of sodium for all children and Vitamin D for children age 1-3 (see Annex 2). The foods included in both menus are the same and are expressed in practical measures.^a However, the portion sizes in Menu 2 are larger in order to meet the higher nutritional needs of the older age group of 4-6 years old. These are meant to serve as an example only of the foods and balance of provision, which would meet the nutritional needs of children of this age.

Water should always be provided in addition to, rather than as a replacement for, the milk included in the menus.

Menu planners can be creative in adapting menus to provide for vegetarian children – often it is possible to modify a dish to make it vegetarian rather than give a completely different dish. In footnotes below the menus we have given some alternatives for vegetarian choices.

Glossary

tsp	teaspoon
dsp	dessertspoon
tbs	tablespoon
ptn	portion
av	average

^a In Annex 3 menus 1 and 2 are given with precise weights for each food item

Menu 1: a 10-day (two-week) menu for children aged 1-3 years old: WEEK 1

Day	Breakfast	Mid-morning snack	Lunch	Mid-afternoon snack	Supper
1.	2 tbs fresh orange juice diluted with water porridge served with whole milk 1 small slice toasted wholemeal bread spread with polyunsaturated margarine	small glass of milk 1 mini scotch pancake spread with margarine 1 tangerine	spaghetti bolognese ^a with added chopped carrot (1 baby carrot) 3 tbs custard and banana (½ small banana)	1 small glass of milk finger food selection including: 2 dried apricots fresh apple slices (½ medium apple) served with 1 heaped tbs of fruit yoghurt as a dip	grated cheddar cheese, (3 tbs) and tomato slices (3 or 4) – sandwiched between 2 slices of toasted white bread, spread with margarine mandarin orange segments in juice with 1 scoop of vanilla ice-cream
2.	2 tbs fresh orange juice diluted with water 1 biscuit of weetabix served with whole milk 1 small slice wholemeal toast spread with margarine	small glass of milk finger foods selection including: 3 bread sticks 2 cheese cubes (1 tbs grated) apple chunks (½ medium apple)	1 mini wholemeal pitta bread filled with a thin slice of roast chicken, ^b 1 tbs of sweet corn and served with 2 cherry tomatoes and diced cucumber milk jelly with peaches	small glass of milk mini fruit scone spread with jam 1 plum	small bowl of vegetable soup – broth served with 1 medium slice of crusty white bread 3 tbs custard and peaches
3.	1 boiled egg served with a small slice of toasted wholemeal bread spread with margarine 2 tbs fresh orange juice diluted with water	small glass of milk 1 toasted teacake spread with jam	1 large pork and beef sausage, ^c (grilled) served with a small baked potato and 2 tbs baked beans 1 small carton of fruit flavoured fromage frais	1 small glass of milk 2 dried apricot ½ tbs raisins ½ small banana sliced	chicken risotto with 1 large mushroom sliced and added apple crumble
4.	2 tbs fresh orange juice diluted with water 3 tbs corn flakes with milk 1 small slice of toasted white bread with margarine	1 small glass of milk 1 small banana	1 boiled egg with wholemeal bread soldiers (1 slice bread), spread with margarine rice pudding with ½ dsp sultanas	1 small glass of milk 1 mini, (or ½ large) muffin toasted and spread with margarine 1 small slice of melon	minced beef in gravy served with 2 tbs mashed potatoes and a spear of broccoli fruit cocktail in juice
5.	2 tbs fresh orange juice diluted with water 1½ tbs baked beans served with a toasted muffin spread with margarine	1 small glass of milk ½ crumpet spread with polyunsaturated margarine ½ fresh peach	1 wholemeal roll spread with margarine and filled with 1 av slice of ham, ^d ½ a sliced tomato, carrot sticks (1 baby carrot) sponge pudding topped with pineapple chunks (3 or 4)	1 small glass of milk ½ slice of pineapple in juice served with 1 tbs of fruit yoghurt	½ of a grilled salmon steak, basted with olive oil and served with 2 or 3 new potatoes and small portion green beans 1 small carton fruit fromage-frais served with 3 or 4 strawberries

^a For vegetarian choice substitute beef mince with soya mince

^b For vegetarian choice substitute chicken with humous or kidney beans

^c For vegetarian choice substitute pork or beef sausage with veggie sausage

^d For vegetarian choice substitute ham with cheese

Menu 1: a 10-day (two-week) menu for children aged 1-3 years old: WEEK 2

Day	Breakfast	Mid-morning snack	Lunch	Mid-afternoon snack	Supper
6.	2 tbs fresh orange juice diluted with water 7 tbs puffed wheat served with milk 1 small slice toasted white bread spread with margarine and jam	1 small glass of milk finger food selection including: grapes (6 grapes) banana (1/3 small banana) melon (3 chunks)	1 mini pitta bread filled with tuna and 1 dsp sweet corn mixed with 1 tbs plain yoghurt served with 2 cherry tomatoes fruit crumble and custard (3 tbs)	1 glass of water 1 mini blueberry muffin apple slices (1/2 small apple)	1 medium slice of ciabatta filled with 3 tbs grated cheddar cheese and 3 slices of tomato fruit yoghurt (2 tbs) with 1/2 pear in juice
7.	2 tbs fresh orange juice diluted with water porridge made with milk served with milk 1 half slice toast spread with margarine	1 small glass of milk 1 mini plain scones (or 1/2 scone) spread with margarine 1 tangerine	lean beef stew served with 2 or 3 boiled potatoes, 2 tbs boiled turnip and carrot (1 small) milk jelly topped with mandarin oranges	1 small glass of milk finger food selection including: carrot sticks (1 small carrot) cucumber 2 cherry tomatoes	Spanish omelette and 1 small baked potato apple pie with 1 scoop of vanilla ice cream
8.	2 tbs fresh orange juice diluted with water 1 small slice of toasted wholemeal bread spread with margarine and topped with 1 rasher of grilled bacon and 3 slices of tomato	1 small glass of milk 1 small banana	1 large slice of crusty bread spread with margarine and topped with 2 canned sardines (mashed), and 3 slice of chopped tomato 2 tbs orange juice diluted with water	1 small glass of milk 1 mini scotch pancake spread with margarine 3 or 4 strawberries	lentil soup 1 small slice wholemeal bread with margarine, topped with 1 thin slice of cold roast turkey, lettuce, 3 slices of tomato and 2 tsp cranberry sauce
9.	2 tbs fresh orange juice diluted with water porridge made with milk and served with semi skimmed milk 1 small slice of toasted white bread spread with margarine	1 small glass of milk 1 mini cheese scone (or 1/2 large) spread with margarine served with 3 cherry tomatoes	mild chicken korma served with 2 tbs boiled rice and a slice of naan bread (1/6 large naan) 1 small fruit yoghurt (60g carton)	1 small glass of milk 1 small banana	vegetable lasagne served with 1 slice of garlic bread rice pudding topped with 1 heaped tbs of puree apples
10.	2 tbs fresh orange juice diluted with water scrambled egg served on 1 small slice of toast spread with margarine	1 glass of water 1 small carton of fruit fromage frais (60g) 1 fresh plum	1 mini wholemeal roll spread with margarine, filled with 1 chopped boiled egg, 2 slices of tomato and mustard and cress sponge pudding and fruit cocktail	1 small glass of milk 1 or 2 crackers with cheddar cheese (1 1/2 tbs grated or 1/2 matchbox size piece) and apple (1/2 medium)	minestrone soup 1 large slice of toasted white bread, spread with margarine and topped with 1 slice ham and a pineapple ring

Menu 2: a 10-day (two-week) menu for children aged 4-6 years old: WEEK 1

Day	Breakfast	Mid-morning snack	Lunch	Mid-afternoon snack	Supper
1.	2 tbs fresh orange juice diluted with water porridge made with milk served with semi skimmed milk 1 small slice toasted wholemeal bread spread with margarine and jam	1 small glass of milk 1 scotch pancake spread with margarine 1 tangerine	spaghetti bolognese with added chopped carrot, (1 baby carrot) 5 tbs custard and banana (1/2 small banana)	1 small glass of milk finger food selection including: 5 dried apricots 1/2 fresh apple served with 2 tbs fruit yoghurt as a dip	cheddar cheese and tomato slices on 2 small slices of toasted white bread spread with margarine mandarin oranges in juice with 1 scoop of vanilla ice-cream
2.	2 tbs fresh orange juice diluted with water 1 1/2 biscuits of weetabix served with milk 1 small slice wholemeal toast spread with margarine and jam	1 small glass of milk finger food selection including: 3 1/2 bread sticks 3 cheese cubes (1 1/2 tbs grated) apple chunks (1/2 apple)	1 small wholemeal pitta bread filled with 2 thin slices of roast chicken and 1 tbs sweet corn, served with 2 cherry tomatoes and diced cucumber milk jelly with peaches	1 small glass of milk 1 mini fruit scone spread with margarine 1 plum	vegetable soup served with 1 thick slice of crusty white bread spread with margarine 5 tbs custard with peach segments
3.	2 tbs fresh orange juice diluted with water 1 boiled egg served with 1 small slice of toasted wholemeal bread spread with margarine	1 small glass of milk 1 toasted teacake served with jam	1 1/2 large pork and beef sausages (grilled) served with a small baked potato and 2 tbs baked beans 1 carton of fruit flavoured yoghurt (125g size)	1 small glass of milk finger food selection including: 3 dried apricot 1 tbs raisins banana slices (1/2 small fresh banana)	chicken risotto with 1 or 2 sliced added mushrooms apple crumble
4.	2 tbs fresh orange juice diluted with water 5 tbs cornflakes served with milk 1 slice of toasted white bread spread with margarine	1 small glass of milk finger food selection including: 1/2 small banana 1 dsp raisins 4 grapes	1 boiled egg served with wholemeal bread soldiers (1 1/2 slice bread), spread with margarine rice pudding with 1 dsp sultanas	1 small glass of milk 1 mini muffin (or 1/2 large) toasted and spread with margarine 1 small piece of melon	minced beef in gravy served with 3 tbs mashed potatoes and a spear of broccoli fruit cocktail in juice
5.	2 tbs fresh orange juice diluted with water 2 tbs baked beans served with 1 toasted muffin spread with margarine	1 small glass of milk 1 crumpet spread with margarine 1 fresh peach	1 1/2 medium (or 2 mini) wholemeal rolls spread with margarine and filled with ham (2 thin slices) tomato (1/2 tomato) and pineapple (1/2 ring), and served with carrot sticks (1 baby carrot) sponge pudding	1 glass of water 2 pineapple rings in juice served with 2 tbs fruit yoghurt	1 small grilled salmon steak basted with olive oil served with 2 or 3 boiled potatoes and a small portion green beans 1 carton fruit fromage frais (60g size), served with 3 or 4 strawberries

Menu 2: a 10-day (two-week) menu for children aged 4-6 years old: WEEK 2

Day	Breakfast	Mid-morning snack	Lunch	Mid-afternoon snack	Supper
6.	2 tbs fresh orange juice diluted with water 10 tbs purfed wheat served with semi skimmed milk 1 medium slice of toasted white bread spread with margarine and jam	1 small glass of milk finger food selection including: 6 grapes 1/3 medium banana 3 chunks of melon	1 small pitta bread, filled with tuna and 2 dsp sweet corn, mixed with 2 tbs plain yoghurt and 3 slice of tomato fruit crumble and 4 tbs custard	glass of water 1 mini blueberry muffin apple slices (1/2 medium apple)	1 large slice of ciabatta filled with 3 1/2 tbs grated cheddar cheese and 3 slices of tomato 1 carton of fruit yoghurt (125g) with 1/2 pear in juice
7.	2 tbs fresh orange juice diluted with water porridge made with milk served with semi skimmed milk 1 small slice of toast spread with margarine	1 small glass of milk 1 mini plain scone (or 1/2 of a large) spread with margarine 1 tangerine	lean beef stew served with 2 or 3 boiled potatoes, 3 tbs boiled turnip and 1 small chopped boiled carrot milk jelly topped with mandarin oranges	1 glass of milk finger foods carrot sticks, (1 small carrot) cucumber (chopped) 3 cherry tomatoes 1 large, (or 2 small), crackers, served with 2 tbs plain yoghurt as a dip	spanish omelette served with 1 small baked potato apple pie
8.	2 tbs fresh orange juice diluted with water 1 small glass of milk 1 small slice of toasted wholemeal bread spread with margarine, and topped with 1 rasher of grilled bacon and 4 slices of tomato	1 small glass of milk and 1 medium size banana	2 small slices of crusty bread spread with margarine and filled with 2 canned sardines, (mashed) and 3 slices of tomato chopped 1 carton of fruit yoghurt (125g) with 6 grapes	1 small glass of milk 1 scotch pancake spread with margarine 4 strawberries	lentil soup 1 large slice of wholemeal bread with margarine, topped with 2 thin slices cold roast turkey, lettuce, 3 slices tomatoes and 1 tbs cranberry sauce
9.	2 tbs fresh orange juice diluted with water porridge made with milk served with semi skimmed milk 1 small slice of toasted white bread spread with margarine	1 small glass of milk 1 cheese scone spread with margarine, with 3 cherry tomatoes	mild chicken korma served with 2 1/2 tbs boiled rice and 1/3 of a naan bread 2 tbs fruit yoghurt	1 small glass of milk finger food selection: chopped banana sliced apple (1/2 medium sized fruit) 1 plain digestive biscuit	vegetable lasagne served with 1 large slice of garlic bread rice pudding served with 1 heaped tbs of puree apples minestrone soup
10.	2 tbs fresh orange juice diluted with water scrambled egg (made with 1 egg), served with 1 medium slice of toast spread with margarine	glass of water 2 tbs fruit fromage frais served with 1 chopped fresh plum	2 mini wholemeal rolls spread with margarine, filled with 1 chopped boiled egg, 2 slices tomato and mustard and cress sponge pudding and fruit cocktail	1 small glass of milk finger foods 2 cream crackers 1 small chunk of cheddar cheese, (small match box size piece) and 1/2 a medium size apple	2 small slice of toasted white bread spread with margarine and filled with 1 1/2 thin slices of ham and 1 pineapple ring

3 additional information

3.1 Physical activity

Physical development and movement is a key aspect of a child's development and learning (Scottish Office, 1999). All children, including children with disabilities, should have the opportunity to be physically active and the pre-5 setting plays a key role in contributing to the minimum recommendation for at least one hour a day. Young children, given the chance, will be physically active as part of spontaneous play – this play allows them to have fun as well as to develop/enhance physical and social health.

Children should be encouraged to be physically active and carers should plan opportunities for structured activity and unstructured active play. Having access and opportunity to a range of physical activities encourages young children to develop positive attitudes to the benefits of physical activity.

Staff and carers should ensure that activities are developmentally appropriate to the age and stage of a child and ensure that links are made with the *Curriculum Framework for Children 3 to 5*.

3.2 Drinks

It is important for infants and young children to have plenty of fluids to drink to help their body to function properly, keep cool and prevent constipation.

- ▶ Children should be encouraged to drink water if they are thirsty. Water quenches thirst, replenishes body fluid, does not spoil the appetite and is safe for their teeth. Milk and water can be taken between meals and cool drinking water should be made available to all children, at any time throughout the day.
- ▶ After 1 year of age whole cows milk should be the main drink until the child is at least 2 years old. After age 2, semi-skimmed can be introduced gradually as a main drink, provided the child is eating well, with enough energy and nutrients from a varied diet. Fully skimmed milk is low in energy and low in some nutrients and for this reason is not suitable as a drink for children under the age of 5.
- ▶ Remember that cows and goats milk are unsuitable as the **main milk drink** for children under one year. However, cows milk can be given as part of milk-based dishes, e.g. yoghurt, custard, rice pudding and white sauce.
- ▶ Fresh fruit juice is a good source of Vitamin C and is best given with breakfast or a main meal to help with the absorption of iron. Fresh fruit juices are quite acidic so can be harmful to teeth and should be diluted with water (1 part juice to a minimum of 5 parts water). Juice should be served in a cup rather than a bottle and preferably taken with other food, to minimise the risk of tooth decay.

- › Children should be discouraged from frequent consumption of sugared or fizzy drinks. Unsuitable drinks include: fizzy (carbonated) drinks, still sugary drinks, squashes, sugared and fizzy waters. These contribute to dental problems, are a poor source of nutrition, tend to displace other more nutritious foods and can result in poor energy balance. If children have these drinks they should be diluted one part to ten of water.
- › Tea and coffee are not recommended for children under 5 as the tannin present can interfere with the absorption of iron.

3.3 Snacks

Children need a varied diet to ensure they get all the nutrients they require for growth and development. Nursery aged children often have small appetites and need regular meals with snacks in between. Snacks should be as nutritious as possible and low in free sugars to prevent tooth decay. Chocolate bars, sweets, cereal bars and sweet biscuits should be saved for after mealtimes and as treats rather than offered between meals.

Here are some suggestions for nutritious snacks:

- › Fruit – mouth size chunks, cubes or slices of apple, pear, satsuma, orange, banana, kiwi, melon, strawberries, grapes, peaches and plums.
- › Raw vegetables – carrot, pepper, celery, cucumber, cherry tomato, red cabbage, turnip, radish, courgette, broccoli.
- › Toast, breads, rolls, baps, french bread with a small amount of butter or spread. Mini sandwiches with marmite, cheese, tuna or thin slices of meat. Pitta bread pockets – cut into small slices; plain or with fat spread high in monounsaturated or polyunsaturated fat, e.g. sunflower or olive spread.
- › Bread sticks – on their own or with a dip or soft cheeses, home-made pizza triangles.
- › Oatcakes, rice cakes, crackers, crispbreads, melba toast; plain or with butter or spread high in monounsaturated or polyunsaturated fat, e.g. sunflower or olive spread.
- › Natural yoghurt with fruit or fromage frais – on its own or as a dip.
- › Muffins, plain, potato or cheese scones, crumpets, pancake, plain buns, plain popcorn, low sugar breakfast cereal.

Note: Crisps or corn snacks, e.g. Quavers, Golden Lights, Wheat Crunchies, Tortilla Chips or Twiglets – these can be offered as part of a snack or meal option as an alternative texture and taste, e.g. beside a filled sandwich or salad dish. However, they are high in salt and fat and young children should only be given a small portion (e.g. 15-20g) about twice in the week.

3.4 Vegetarian and vegan diets

▶ Vegetarian diets

Vegetarians don't eat fish or meat, but most will eat animal products, such as eggs, milk and dairy products. Using the menu guidance provide food from the main food groups. Choose alternatives to meat such as eggs, soya products such as tofu and humous, lentils, beans including baked beans, chopped nut and nut pastes, seed pastes such as in humous, meat substitutes such as soya mince or Quorn, chick peas, e.g. falafel.

Vegetarian meals and snacks are suitable for all children.

- ▶ Vegan diets do not include any food from animal sources, therefore in addition to meat and fish they exclude dairy produce, eggs and honey. In this situation meeting the nutritional needs of the child is more complex and should be discussed with the parents and guardian.

Meeting iron requirements on a vegetarian diet

As meat is one of the main sources of iron it is important that vegetarian and vegan children eat other iron rich foods such as wholemeal bread, breakfast cereals, pulses, beans, peas, dried fruits, fortified cereals and dark green vegetables, broccoli, tinned sweetcorn, baked sweet potato. Tea and coffee reduce the uptake of iron in the body and for this reason are not suitable for young children. Fresh fruit and fresh fruit juice are rich in Vitamin C. Vitamin C enhances the uptake of iron in the body when taken along with iron rich foods.

3.5 Food choices and religious faiths and beliefs

Families and children may choose to exclude, include or prepare foods in a particular way according to their religious faith and belief. There may be individual differences in food choices between families of a similar faith and these should be checked for each child with his or her parent or guardian from the outset.

3.6 Children with special needs or therapeutic diets

Children with special needs may have a particular problems associated with eating. It is important that anyone involved in caring for children with eating difficulties is trained to give the most appropriate assistance. These problems should not be a barrier to enjoyment and learning about healthy eating.

For a special or therapeutic diet, a parent/guardian or Registered Dietician will supply the staff or carer with details of the child's dietary needs. Early years staff, carers and caterers should be appropriately advised of the specific nature of the dietary requirements, including suitable food choices for meals and snacks and any foods, which should be excluded.

Food allergies are not uncommon in pre-school age children. There are foods which are more commonly associated with allergy in children: these are milk, wheat, peanuts, fish, soya, eggs, shellfish and citrus fruits. A wide range of symptoms can occur if a child is exposed to an allergen in food, ranging from a mild reaction to a very rapid and severe response.

Allergy to some foods for some children, e.g. peanuts, peanut products, other nuts and shellfish can be particularly serious. Children who are known to suffer from a severe food allergy need to know the exact ingredients in their food to avoid an acute, potentially fatal reaction. When a child has a severe allergy to a particular food the staff or carer may decide to minimise the risk of exposure in the child's environment, as far as is possible, e.g. avoid having the food/ingredient in the nursery at snack or meal times, incorporating information into the local policy with regard to food brought into nursery. In this situation it is important that advice is taken from a Registered Dietician.

3.7 Oral and dental health for toddlers and pre-school children

Staff and carers can work with young children and parents to help develop good oral and dental health habits.

The three most important points in promoting healthy dental habits are:

- ▶ choosing foods low in added sugar – if choosing sugary foods or drinks have them as part of a meal.
- ▶ Tooth brushing – teach children to use a toothbrush as early as possible.
- ▶ having check-ups with a dentist – parents should register their child with a dentist providing NHS care, where treatment is free up to the age of 18 years.

Tooth brushing

Parents and carers should begin tooth brushing as soon as teeth appear. Twice daily tooth brushing with a soft 'baby' toothbrush and fluoride toothpaste is important to prevent tooth decay. A smear of toothpaste should be used for babies and a small pea-sized amount for toddlers and older children. Help children with tooth brushing until they are around 6-8 years old.

Registering with a dentist

If parents have not registered their child with a dentist before leaving them in your care, ask them to do so. If they cannot register with a NHS dentist, then the Community Dental Service may be able to help. Children should visit a dentist for regular check-ups as early as possible and certainly before the age of 2 years.

3.8 Vitamin supplementation

Some children may receive vitamin drops, containing Vitamins A, D and C. This is the responsibility of parents and guardians and can be discussed with them. However, it may be helpful for early years staff and carers to be aware of current advice on children who may benefit from vitamin drops.

For children aged 1-5 the current advice for vitamin supplementation is to take Vitamins A, D and C.^{10,11} Children at risk of vitamin deficiency include: those who are persistent poor eaters and those who consume a very limited number of foods; children on restricted diets of choice, e.g. vegan or exclude food items for management of allergy or intolerance.

Children at risk of Vitamin D deficiency specifically are those living in northern latitudes (Scotland) and those from traditional Asian or Islamic communities (this is particularly important in Scotland in the winter months¹² (see Annex 2)).

There is no recommendation to give young children aged 1-5 years other more complex multi vitamin and/or mineral preparations unless they are on a special or therapeutic diet and then should be advised by a Registered Dietician.

4 implementation, monitoring and evaluation

4.1 Involving parents and guardians

Building partnerships between early years staff and carers, parents and guardians is important. This could include:

- › Early engagement with parents/guardians about individual needs which may impact on food choices and intake during induction.
- › Regular informal contact to let them know what food has been eaten and if their child has eaten well.
- › Involving parents/guardians in developing and updating your policy (see section 4.2) on food and health. This lets parents/guardians know about your commitment to providing healthy, varied and enjoyable food as part of childcare. It lets them know what to expect and asks for their contribution.
- › Making menus available to parents in advance so they can see what the child will receive that day and plan other food in the day accordingly.
- › Giving parents/guardians notice of changes to meals and food provision, allowing them to comment on menus.
- › Inviting parents to share special recipes with you.

4.2 Developing a food and nutrition policy

The recommendations and advice on food and nutrition should be understood and accepted by the staff, carers, parents/guardians of the children. The best way to achieve this is to write down what the staff and carers aim to do with regard to foods and drinks in the nursery/home setting. This helps by allowing everyone a chance to agree the ideas, to add or change what is decided and it can be given out to new parents as information on the approach of the nursery to healthy eating. This written information (or policy) can then be updated as new information develops over time.

Here are some ideas of the sort of information you may wish to consider in developing a policy:

Who should see the policy? How will it be communicated to them?

New parents and guardians, new staff, carers and caterers . . .

You may decide to give a copy of the policy out at the beginning of each year to new recruits.

Ongoing . . .

The policy may contain a copy of the menu cycle, thereafter weekly menus may be displayed on a notice board.

Changes to the policy could also be posted.

What are you going to say about developing good eating habits?

Staff and carers . . .

Will encourage children to enjoy sitting and eating and drinking with others, helping others with obtaining their food and drink (e.g. at snack time pouring the drinks).

Children will not be expected to finish everything on their plate and will be allowed seconds of fruits, bread or milk if still hungry.

What will you do if a child does not eat?

If a child does not like the food . . .

Children who do not eat the food will be offered an alternative that they may accept e.g. milk-based dessert, fruit, cheese and biscuits.

If it is a continuing problem . . .

Regular informal contact with parents will let them know how their child has been eating and make them aware of any difficulties.

What types of drinks will you provide to the children?

Throughout the day . . .

Cool water will be available to children throughout the day.

At snack and meal times . . .

Offer fresh orange juice diluted with water at breakfast and milk and water with snacks and meals.

What advice will you give to parents about bringing food into the nursery?

Bringing sweets and chocolates into the nursery . . .

Sweets and chocolates are not given to children on a regular daily basis. We ask parents not to give children sweets or chocolates to bring into the nursery. For special celebrations this may be an exception when the nursery may provide these.

4.3 Training

Effective early education and childcare requires a well-qualified workforce, all of whom should be appropriately trained.¹³ Early years staff and carers have a significant role to play in helping children develop an appreciation for a wide range of foods and encourage active play.

Staff in management roles should consider how the guidelines can inform nursery curriculum development, planning and monitoring and links to the National Care Standards.

Appropriate training needs to be available to support the implementation of these guidelines. Scottish Vocational Qualifications (SVQ) and the Higher National Certificate (HNC) in Childcare and Education provide training opportunities for early years staff. Nutrition and healthy eating should become an integral part of those qualifications within the relevant units. Other qualifications for those caring for the pre-5s should contain an appropriate section on nutrition and healthy eating.

Staff development opportunities should provide access to in-service training. This will enable staff to develop a knowledge and understanding of nutritional needs of pre-5 children and how the guidelines can be applied practically in their setting.

Catering staff will require the knowledge and skills for planning, procurement and preparation of food to meet the nutritional guidelines and to fulfil the requirements of the National Care Standards.

4.4 Monitoring and Evaluation

The Scottish Executive hopes that providers of childcare and pre-school education will find the guidance helpful in providing nutritious food in their establishments. To ensure that this is the case, and that the guidance is meeting the needs of everyone concerned, evaluation and monitoring of the implementation of the guidance will need to be undertaken. Further work on the most appropriate way to develop an evaluation process will take place in 2005.

5 references

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national documents and links

Eating for Health – meeting the challenge; strategic framework for Food and Health 2004-2005 (2004) www.scotland.gov.uk/library5/health/efhmtc-00.esp

A Curriculum Framework for Children 3 to 5, The Scottish Consultative Council (1999). National advice and guidance on the learning and development needs of young children for all centres involved in the education of young children ages 3 to 5.

<http://www.ltscotland.org.uk/earlyyears/files/cf25.pdf>

The Child at the Centre – Self-evaluation in the Early Years, Scottish Executive (2000).

A self-evaluation tool for pre-school centres for children aged 3-5. It contains an introduction to the use of performance indicators for self-evaluation and explains how this approach can be used to assess quality in a range of settings.

Scottish Executive. (2003) *Let's make Scotland more active. A Strategy for Physical Activity in Scotland*. Edinburgh: Scottish Executive.

<http://www.scotland.gov.uk/library5/culture/imsa-00.asp>

National Care Standards – Early Education and Childcare up to the Age of 16, Scottish Executive (2002). The standards have been developed from the point of view of the user of the service and focus on the quality of experience that they receive. They can be downloaded from www.scotland.gov.uk/government/rcp

Towards better oral health in children (2002); A Consultation Document on Children's Oral Health in Scotland www.scotland.gov.uk/consultations/health/ccoh-00.asp

Hungry for Success; a whole school approach to school meals in Scotland (2002)

www.scotland.gov.uk/library5/education/niss-00.asp

Nutrient Specification for Manufactured Products 2004

www.scotland.gov.uk/library5/education/niss-00.asp

annex 1 – nutrient guidance for children aged 1-5 years

The nutrient guidance in Annex 1 gives guidance for adequate food and nutrition provision for children aged 1-3 years old and 4-5 years old. Children, as individuals, have different energy and nutrient requirements depending on their age, gender, body size, rate of growth and level of activity. In the UK we have estimates for the average amount of energy and nutrients required for groups of children at different ages. These are known as the UK Dietary Reference Values (DRVs). The nutrient standards in this document are based on the UK DRVs for groups of children aged 1-3 years and 4-6 years. The standards have been based on energy requirements of boys, which are marginally higher than for girls. As such the nutrient standards represent **average requirements for groups of children** and do not apply to individual children. Also, for young children, there are no hard and fast rules about what must be served as a breakfast, a snack, a light meal or a main meal. Depending on the likes and dislikes of the children, their appetite, their willingness to try foods, food items can be interchanged for snacks, meals or breakfast. For this reason it was more appropriate to set nutrient standards based on a combination of one meal and one snack (including drinks) rather than for snacks, meals and drinks individually.

Therefore the figures in Table 1 represent the recommended average energy and nutrient intake from the combination of one meal plus one snack (averaged over 5 days). This is because nutrient requirements are met over a period of time, rather than within one day. These would apply, for example, to children who are in the early years setting for half a day, 5 days per week, and receive a snack and meal at each session. We have also given (Table 2) the recommended average energy and nutrient intake from food provided for children who are in day care for more than 8 hours per day (based on provision of breakfast, two meals and two snacks). Annex 2 outlines key issues with regard to achieving the guidance on iron, salt and Vitamin D.

To assist in food choices and menus to meet the nutrient standards, menu-planning guidance and sample menu plans (10 days) for children in both age groups are provided in section 2.4. These menus are designed to meet the guidance (with the exception of salt and Vitamin D – see Annex 2). They aim to be **sample menus** and do not pertain to cover the full spectrum of food choices suitable for this age group. In practice the foods appropriate for both age groups are similar, but the quantities and the way in which the food is presented may differ.

Tables 1 and 2 set out nutrient standards for groups of children in each of the respective age groups for energy and key nutrients as a percentage of nationally agreed Dietary Reference Values.

Table 1: Nutrient Standards for snack and meal combination. For example: provision for children who are in the early years setting for half days during the week, and receive a snack and meal at each session.

Nutrient	1-6 years		Unit	1-3 years	4-6 years
Energy	40% of EAR		MJ (kcal)	2.06 (493)	2.86 (684)
Total fat	About 40% of food energy for 1-3 years falling to 35% for 4-5 years		g	22	27
Carbohydrate	About 50% of food energy		g	64	89
... of which NMES ^a	No more than 10% of food energy	Max	g	13	18
Protein (see Annex 2)	40% of RNI	Min	g	5.8	7.9
Vitamin C	Not less than 40% of RNI	Min	mg	12	12
Vitamin D (see Annex 2)	Not less than 40% of RNI for 1-3 years only	Min	µg	2.8	NA (see Annex 2)
Vitamin A	Not less than 40% of RNI	Min	µg	160	200
Iron (see Annex 2)	Not less than 40% of RNI	Min	mg	2.8	2.4
Calcium	Not less than 40% of RNI	Min	mg	140	180
Zinc	Not less than 40% of RNI	Min	mg	2	2.6
Sodium (see Annex 2)	No more than 40% of SACN recommendation	Max	mg	314	471
Fruit and vegetables	No less than 40% of the recommendation 2-3 child-sized portions (Annex 4)	Min			
Water	Cool drinking water available throughout the day.	Min			

Estimated Average Requirement (EAR)

The amount which satisfies 50% of the children in a group (defined by age and gender).

Reference Nutrient Intake (RNI)

The amount of a nutrient which is sufficient to meet the dietary requirements for about 97% of the children in a group (defined by age and sometimes by gender). Intakes above this amount will almost certainly be adequate.

Percentage of energy (%)

Energy in kilojoules (KJ) provided as fat, carbohydrate and non-milk extrinsic sugars.

Scientific Advisory Committee on Nutrition (SACN)

Salt and Health (2003) London www.sacn.gov.uk

^a **Non-milk extrinsic sugars (NMES):** these are added sugars (or free, e.g. fruit juice) in foods, e.g. sweets, biscuits, soft drinks, added to breakfast cereals, table sugar, honey, sugar in fruit juice. NMES does not include sugars which are integrally present in the cells of food, e.g. fruit and vegetables or milk sugar (lactose).

Table 2: Nutrient Standards for full day provision (around 8 hours). For example: provision for children who are in the early years setting for full days during the week, and receive breakfast, two meals and two snacks at each session.

Nutrient	1-6 years		Unit	1-3 years	4-6 years
Energy	80% of EAR		MJ (kcal)	4.12 (986)	5.73 (1371)
Total fat	About 40% of food energy for 1-3 years moving to 35% for 4-5 years		g	44	54
Carbohydrate	About 50% of food energy		g	129	179
... of which NMES ^a	No more than 10% of food energy	Max	g	26	36
Protein (see Annex 2)	80% of RNI	Min	g	11.6	15.8
Vitamin C	Not less than 80% of RNI	Min	mg	24	24
Vitamin D (see Annex 2)	Not less than 80% of RNI for 1-3 years only	Min	µg	5.6	NA (see Annex 2)
Vitamin A	Not less than 80% of RNI	Min	µg	320	400
Iron (see Annex 2)	Not less than 85% of RNI	Min	mg	5.9	5.2
Calcium	Not less than 80% of RNI	Min	mg	280	360
Zinc	Not less than 80% of RNI	Min	mg	4	5.2
Sodium (see Annex 2)	No more than 80% of SACN recommendation	Max	mg	627	941
Fruit and vegetables	No less than 80% of the recommendation Around 4 child sized portions (Annex 4)	Min			
Water	Cool drinking water available throughout the day.	Min			

Estimated Average Requirement (EAR)

The amount which satisfies 50% of the children in a group (defined by age and gender).

Reference Nutrient Intake (RNI)

The amount of a nutrient which is sufficient to meet the dietary requirements for about 97% of the children in a group (defined by age and sometimes by gender). Intakes above this amount will almost certainly be adequate.

Percentage of energy (%)

Energy in kilojoules (KJ) provided as fat, carbohydrate and non-milk extrinsic sugars.^a

Scientific Advisory Committee on Nutrition (SACN)

Salt and Health (2003) London www.sacn.gov.uk

^a **Non-milk extrinsic sugars (NMES):** these are added sugars (or free, e.g. fruit juice) in foods, e.g. sweets, biscuits, soft drinks, added to breakfast cereals, table sugar, honey, sugar in fruit juice. NMES does not include sugars which are integrally present in the cells of food, e.g. fruit and vegetables or milk sugar (lactose).

annex 2 – menu planning

Protein

The standard set is for the combination of one meal and one snack to provide 40% of the daily RNI for protein. Menu analysis shows that generally the protein content will come out higher than 40%. It is recognised that this is in line with eating patterns in the UK population and helps to provide sufficient iron and zinc in the diet.

Vitamin D

The UK Reference Nutrient Intake for Vitamin D for children aged 6 months to 3 years is 7µg/day.¹ For children 4 years and older there is no RNI set; the action of sunlight on the skin will ensure adequate Vitamin D status. This depends on regular exposure to summer sunlight to accumulate Vitamin D stores for over the winter months. Vitamin D status in pre-school children shows variation dependent on season of the year and dietary intake of Vitamin D can be an important contributor to maintaining Vitamin D status during the autumn, winter and spring months.^{2,3} Children at risk of Vitamin D deficiency specifically are those living in northern latitudes (Scotland) and those from traditional Asian or Islamic communities (this is particularly important in Scotland in the winter months²).

Achieving the dietary RNI is not possible in the winter months without supplementation.

Routine Vitamin D supplementation is recommended for all children over 1 year of age and should be continued until 5 years unless the diet is diverse and plentiful.^{3,4}

It is essential that there is outdoor space where children can play, or have access to an outside area such as a garden, park or other safe open space. Exposure to direct sunlight on the skin (face and arms unprotected with sunscreen) in outdoor play helps children to maintain their Vitamin D status.³ The exposure time required for adequate synthesis of Vitamin D in the skin is short (10-15 minutes on face and arms in summer months) and should not conflict with 'sun policy' on protective clothing, sunhats and sunscreen.

¹ Department of Health. *Dietary Reference Values for Food Energy and Nutrients for the United Kingdom*. Report on Health and Social Subjects 41. 1991 London: HMSO.

² Davies PSW, Bates CJ, Cole TJ, Prentice A, Clarke PC. Vitamin D: seasonal and regional differences in pre-school children in Great Britain. *Eur J Clin Nutr* 1999;53:195-198.

³ Department of Health. *Nutrition and Bone Health*. Report on Health and Social Subjects 49. 1998 London: HMSO.

⁴ Department of Health. *Weaning and the Weaning Diet*. Report on Health and Social Subjects 45. 1994 London: HMSO.

Iron

We have adopted a standard of 40% of RNI for iron. Children between the ages of 1-5 years have high iron requirements due to rapid growth and the build up of iron stores. A high proportion of pre-school age children in the UK have sub optimal iron intakes and iron deficiency anaemia is common in this age group.^{1,2} Iron deficiency can have lasting effects on health and development.³ Therefore it is important that efforts are made to improve iron status of young children through improving diet.

In practice, achieving adequate iron intake is not easy and requires careful menu planning to ensure the inclusion of iron rich foods on a regular basis.⁴ Red meats are the richest and most easily absorbed source of iron, however, breakfast cereals fortified with iron have also been shown to be an important source of iron for children. The formal childcare setting offers an opportunity through the practise of good nutrition to boost overall iron intakes.

¹ Gregory JR, Collins DL, Davies PSW, Hughes JM, Clarke PC. *National Diet and Nutrition Survey Children Aged 1.5-4.5 Years*. Report of the Diet and Nutrition Survey, Volume 1. 1995 London: HMSO.

² Watt RG, Dykes J, Sheiham A. Socio-economic determinants of selected dietary indicators in British pre-school children. *Public Health Nutrition* 2001;4(6):1229-33.

³ Grantham-McGregor S, Ani C. A review of studies on the effect of iron deficiency on cognitive development in children. *Journal of Nutrition* 2001;131(2S-2):649S-666S.

⁴ Gibson SA. Iron intake and iron status of pre-school children: associations with breakfast cereals, vitamin C and meat. *Public Health Nutrition* 1999;2(4):521-528.

Sodium

The standard set is for the combination of one meal and one snack to provide a maximum of 40% of the daily SACN¹ recommendation for sodium for the age group 1-5 years. The sample menus given in this document do not meet the nutrient guidance for sodium. This reflects the fact that the majority of the sodium in the diet is found in processed food and also in breads. In order to address this there needs to be a marked decrease in the sodium content of food products currently used in the UK. Work is currently underway with partners in food industry to address this issue. The implementation of the product specifications for the sodium content of manufactured foods developed for school meals will help to reduce the sodium content of processed foods used in public sector catering.²

¹ Scientific Advisory Committee on Nutrition. *Salt and Health Report*, 2003
www.sacn.gov.uk

² Nutrient Specification for Manufactured Products 2004
www.scotland.gov.uk/library5/education/niss-00.asp

annex 3 – menus 1 and 2 with weighted portion sizes

Menu 1: a 10-day (two-week) menu for children aged 1-3 years old: WEEK 1

Day	Breakfast	Mid-morning snack	Lunch	Mid-afternoon snack	Supper
1.	porridge (110g) toasted wholemeal bread (small slice, 25g) with polyunsaturated margarine, (5g) fresh orange juice (25ml) (diluted with water) whole milk (50ml)	milk (100ml) mini scotch pancake (20g) with margarine (3g) tangerine (50g)	spaghetti bolognais (180g, including sauce and spaghetti) with added carrots, (40g) custard (60g) and banana (50g)	milk (100ml) dried apricots (15g) fresh apple (50g) served with fruit yoghurt as a dip (40g)	cheddar cheese (30g) on toasted white bread, (45g) with margarine (5g), tomatoes (50g) mandarin oranges in juice (50g) with vanilla ice-cream (40g)
2.	Weetabix (20g) with milk (50ml) small slice wholemeal toast (25g) with margarine (5g) fresh orange juice (25ml) (diluted with water)	milk (100ml) bread sticks (20g) cheese cubes (10g) apple chunks (50g)	small wholemeal pitta bread (35g) with chicken (40g) and sweetcorn (50g) served with cherry tomatoes (30g) and diced cucumber (20g) milk jelly (70g) topped with diced peaches (40g)	mini fruit scone (25g) with jam (3g) 1 plum (55g) milk (100ml)	vegetable soup – broth (150g) crusty white bread (40g) custard (80g) and peaches (50g)
3.	boiled egg (50g) small slice of toasted wholemeal bread (40g) with margarine (10g) fresh orange juice (25ml) (diluted with water)	milk (100ml) with toasted teacake (30g) and jam (10g)	pork and beef sausage (grilled) (40g) baked potato (75g) baked beans (80g) fruit flavoured fromage frais (60g)	milk (100ml) dried apricot (15g) raisins (15g) fresh banana (30g)	chicken risotto (150g) with added mushrooms (20g) apple crumble (70g)
4.	corn flakes (20g) with milk (50ml) small slice of toasted white bread (25g) with margarine (5g) fresh orange juice (25ml) (diluted with water)	milk (100ml) small banana (80g)	boiled egg (50g) with wholemeal bread soldiers (30g) spread with margarine (7g) rice pudding (100g) with sultanas (10g)	milk (100ml) mini muffin toasted (40g) with margarine (5g) melon slices (40g)	minced beef in gravy (120g) mashed potatoes (90g) broccoli (50g) fruit cocktail in juice (60g)
5.	baked beans (60g) toasted muffin (40g) with margarine (5g) fresh orange juice (25ml) (diluted with water)	milk (100ml) crumpet (20g) with polyunsaturated margarine (5g) fresh peach (50g)	wholemeal roll (50g) with margarine (7g), filled with ham (30g) tomato (35g) and served with carrot sticks (30g) sponge pudding (50g) and pineapple (20g)	milk (100ml) pineapple in juice (50g) served with some fruit yoghurt (40g)	grilled salmon (50g) basted with olive oil (5g) with new potatoes (100g) and green beans (40g) fruit fromage frais (60g) served with strawberries (40g)

Menu 1 (continued): a 10-day (two-week) menu for children aged 1-3 years old: WEEK 2

Day	Breakfast	Mid-morning snack	Lunch	Mid-afternoon snack	Supper
6.	puffed wheat (20g) with whole milk (50ml) toasted white bread (small slice, 25g) with margarine, (5g) and jam (8g) fresh orange juice (25ml) (diluted with water)	milk (100ml) grapes (30g) banana (30g) melon (30g)	tuna (45g) with plain yoghurt (20g) and sweetcorn (20g) and tomatoes (20g) and pitta bread (35g) fruit crumble (60g) and custard (40g)	water muffin (35g) apple (30g)	cheddar cheese (30g), ciabatta (35g) tomatoes (50g) fruit yoghurt (80g) with pears in juice (60g)
7.	porridge made with milk (110g) with milk (50ml) small half slice toast (15g) with margarine (5g) fresh orange juice (25ml) (diluted with water)	milk (100ml) plain scones (25g) margarine (10g) tangerine(30g)	lean beef stew (90g) with boiled potatoes (100g) turnip boiled (30g) carrots (30g) milk jelly (90g) top with mandarin oranges (50g)	milk (100ml) chopped carrots (30g) and cucumber (30g) cherry tomatoes (30g)	spanish omelette (80g), baked potatoes (100g) apple pie (60g) with vanilla ice cream (40g)
8.	grilled bacon (25g) with tomato (50g) small slice of toasted wholemeal bread (25g) with margarine (10g) fresh orange juice (25ml) (diluted with water)	milk (100ml) banana (80g)	crusty bread (40g) with margarine (10g) sardines (40g) with tomato (50g) fresh orange juice (25ml) (diluted with water)	milk (100ml) scotch pancakes (20g) with margarine strawberries (40g)	lentil soup (150g) wholemeal bread (25g) with margarine (5g), cold roast turkey (25g) with lettuce (10g), tomatoes (50g) and cranberry sauce (10g)
9.	porridge made with milk (110g) with milk (50ml) small slice of toasted white bread (25g) with margarine (5g) fresh orange juice (25ml) (diluted with water)	milk (100ml) cheese scone (25g) with margarine (10g) cherry tomatoes (45g)	mild chicken korma (90g) with boiled rice (80g) naan bread (25g) fruit yoghurt (60g)	milk (100ml) banana (80g)	vegetable lasagne (160g) garlic bread (25g) rice pudding (100g) with puree apples (30g)
10.	scrambled egg (60g) toast (25g) with margarine (5g) fresh orange juice (25ml) (diluted with water)	water fruit fromage frais (60g) plums (30g)	mini wholemeal roll (30g) with margarine (10g), boiled egg (50g) tomato (35g) and mustard and cress sponge pudding (60g) and fruit cocktail (60g)	milk (100ml) cream crackers (10g) and cheddar cheese (15g) apple (40g)	minestrone soup (150g) white bread toasted (45g) with margarine (10g), ham (25g), pineapple (40g)

Menu 2: a 10-day (two-week) menu for children aged 4-6 years old: WEEK 1

Day	Breakfast	Mid-morning snack	Lunch	Mid-afternoon snack	Supper
1.	porridge made with milk (140g) toasted wholemeal bread small slice (25g) with margarine (10g) and jam (15g) semi skimmed milk (50ml) fresh orange juice (25ml) (diluted with water)	milk (100ml) mini scotch pancake, (30g) with margarine (10g) tangerine (50g)	spaghetti bolognaise (275g, including sauce and spaghetti) with added carrots, (40g) custard (100g) and banana (50g)	milk (100ml) dried apricots (40g) fresh apple (65g) served with fruit yoghurt as a dip (80g)	cheddar cheese (45g) on toasted white bread (45g) with margarine (15g) tomatoes (50g) mandarin oranges in juice (50g) with vanilla ice-cream (50g)
2.	Weetabix (30g) with milk (100ml) small slice wholemeal toast (25g) with margarine (10g) and jam (15g) fresh orange juice (25ml) (diluted with water)	milk (100ml) bread sticks (25g) cheese cubes (15g) apple chunks (50g)	small wholemeal pitta bread (75g) and roast chicken (50g) sweetcorn, (35g) – served with cherry tomatoes (35g) and diced cucumber (20g) milk jelly (110g) topped with diced peaches (70g)	mini fruit scone (25g) with margarine (10g) 1 plum (55g) milk (100ml)	vegetable soup (220g) crusty white bread (50g) margarine (5g) custard (100g) peaches (60g)
3.	boiled egg (50g) small slice of toasted wholemeal bread (40g) with margarine (15g) fresh orange juice (25ml) (diluted with water)	milk (100ml) toasted teacake (50g) and jam (10g)	pork and beef sausage (grilled) (55g) baked potato (100g) baked beans (80g) fruit flavoured yoghurt (125g)	milk (100ml) dried apricot (20g) raisins (20g) fresh banana (30g)	chicken risotto (180g) with added mushrooms (30g) apple crumble (95g)
4.	cornflakes (30g) with milk (100ml) slice of toasted white bread (35g) with margarine (5g) fresh orange juice (25ml) (diluted with water)	milk (100ml) small banana (50g) raisins (20g) grapes (20g)	boiled egg (50g) with wholemeal bread soldiers (60g) bread with margarine (15g) rice pudding (150g) with sultanas (20g)	milk (100ml) mini muffin (40g) with margarine (10g) melon slices (40g)	minced beef in gravy (150g) mashed potatoes (120g) broccoli (50g) fruit cocktail in juice (90g)
5.	baked beans (80g) toasted muffin (50g) with margarine (15g) fresh orange juice (25ml) (diluted with water)	milk (100ml) crumpet (40g) with polyunsaturated margarine (10g) fresh peach (50g)	wholemeal rolls (60g) with margarine (15g), filled with ham (30g) tomato (35g) and pineapple (20g), and served with carrot sticks (35g) sponge pudding (90g)	water pineapple in juice (80g) served with some fruit yoghurt (80g)	grilled salmon (75g) basted with olive oil (10g) with boiled potatoes (100g) and green beans (50g) fruit forage frais (60g) served with strawberries (40g)

Menu 2 (continued): a 10-day (two-week) menu for children aged 4-6 years old: WEEK 2

Day	Breakfast	Mid-morning snack	Lunch	Mid-afternoon snack	Supper
6.	puffed wheat (30g) with whole milk (100ml) fresh orange juice (25ml) (diluted with water) toasted white bread (small slice 35g) with margarine (5g), jam (10g)	milk (100ml) grapes (30g) banana (30g) melon (30g)	tuna (45g) with plain yoghurt (40g) and sweetcorn (40g) and tomatoes (50g) and pitta bread (75g) fruit crumble (95g) and custard (60g)	water muffin (40g) apple (50g)	cheddar cheese (35g), ciabatta (50g) tomatoes (50g) fruit yoghurt (125g) with pears in juice (80g)
7.	porridge made with milk (130g) with milk (100ml) fresh orange juice (25ml) (diluted with water) small slice toast (25g) with margarine (10g)	milk (100ml) plain scones (25g) margarine (10g) tangerine (50g)	lean beef stew (105g) with boiled potatoes (100g) turnip boiled (40g) carrots (40g) milk jelly (150g) top with mandarin oranges (50g)	milk (100ml) crackers (10g) plain yoghurt (80g) chopped carrots (35g) and cucumber (30g) cherry tomatoes (45g)	spanish omelette (120g), baked potatoes (110g) apple pie (90g)
8.	grilled bacon (25g) with tomato (60g) small slice of toasted wholemeal bread (40g) with margarine (10g) milk (100ml) fresh orange juice (25ml) (diluted with water)	milk (100ml) banana (100g)	crusty bread (50g) with margarine (10g) sardines (50g) with tomato (50g) fruit yoghurt (125g) grapes (30g)	milk (100ml) scotch pancakes (30g) with margarine (5g) strawberries (50g)	lentil soup (170g) wholemeal bread (70g) with margarine (10g), cold roast turkey (45g) with lettuce (20g), tomatoes (50g) and cranberry sauce (20g)
9.	porridge made with milk (140g) with milk (100ml) fresh orange juice (25ml) (diluted with water) small slice of toasted white bread (40g) with margarine (10g)	milk (100ml) cheese scone (40g) with margarine (10g) cherry tomatoes (45g)	mild chicken korma (100g) with boiled rice (100g) naan bread (50g) fruit yoghurt (80g)	milk (100ml) banana (50g) apple (50g) plain digestive biscuit (15g)	vegetable lasagne (180g) garlic bread (40g) rice pudding (150g) with puree apples (30g)
10.	scrambled egg (70g) toast (35g) with margarine (10g) fresh orange juice (25ml) (diluted with water)	water fruit fromage frais (100g) plums (55g)	mini wholemeal roll (50g) with margarine (10g), boiled egg (50g) tomato (35g) and mustard and cress sponge pudding (90g) and fruit cocktail (60g)	milk (100ml) cream crackers (15g) and cheddar cheese (25g) apple (50g)	minestrone soup (170g) white bread toasted (55g) with margarine (15g), ham (30g), pineapple (40g)

annex 4 – children's fruit and vegetable portion sizes

The portion sizes are derived from the portion size guide for adults used in the Scottish Health Survey 2004 and the Health Survey for England 2003 – the portion size for pre-school age children is suggested here and is approximately two-thirds of an adult portion:

Vegetables (fresh, frozen or canned):	50g, 2 tablespoons
Pulses:	50g, 2 tablespoons
Salad:	half a cereal bowlful
Vegetables in composites, such as vegetable chilli:	50g, 2 tablespoons per portion of the recipe
Banana:	60g, 1 small
Very large fruit, such as melon:	1 small slice
Large fruit, such as grapefruit:	quarter a fruit
Medium fruit, such as apples:	50g, half a fruit
Small fruit, such as plum:	40g, 1 fruit
Very small fruit, such as blackberries:	1 average handful
Dried fruit:	1/2 tablespoon
Fruit in composites, such as stewed fruit in apple pie:	60g, 2 + tablespoons per portion of the recipe
Frozen fruit/canned fruit:	60g, 2 tablespoons
Fruit juice:	1 small glass (150 ml)

annex 5 – working group

NHS Health Scotland

The following working group was convened by NHS Health Scotland to produce the draft guidelines for consultation:

Julie Armstrong	Public Health Advisor, NHS Health Scotland and Lecturer in Nutrition, Glasgow Caledonian University
Cathy Higginson	Research Specialist: Nutrition, NHS Health Scotland
Fiona MacDonald	Senior Health Promotion Officer, Nutrition Argyll and Clyde Health Board
Ruth Campbell	Public Health Nutritionist, Lanarkshire Health Board
Jenny Jackson	Community Dietician, Ayrshire and Arran

Scottish Executive

Gillian Kynoch	Scottish Food and Health Co-ordinator, Scottish Executive
Shuna Cant	Policy Manager, Early Education and Childcare Division, Scottish Executive

appendix a – Scottish Executive consultation process

Consultation is an essential and important aspect of Scottish Executive working methods. Given the wide-ranging areas of work of the Scottish Executive, there are many varied types of consultation. However, in general, Scottish Executive consultation exercises aim to provide opportunities for all those who wish to express their opinions on a proposed area of work to do so in ways which will inform and enhance that work.

The Scottish Executive encourages consultation that is thorough, effective and appropriate to the issue under consideration and the nature of the target audience. Consultation exercises take account of a wide range of factors, and no two exercises are likely to be the same.

Typically Scottish Executive consultations involve a written paper inviting answers to specific questions or more general views about the material presented. Written papers are distributed to organisations and individuals with an interest in the issue, and they are also placed on the Scottish Executive website enabling a wider audience to access the paper and submit their responses. Consultation exercises may also involve seeking views in a number of different ways, such as through public meetings, focus groups or questionnaire exercises. Copies of all the written responses received to a consultation exercise (except those where the individual or organisation requested confidentiality) are placed in the Scottish Executive library at Saughton House, Edinburgh (K Spur, Saughton House, Broomhouse Drive, Edinburgh EH11 3XD, telephone 0131 244 4565).

All Scottish Executive consultation papers and related publications (eg, analysis of response reports) can be accessed at: Scottish Executive consultations (<http://www.scotland.gov.uk/consultations>)

The views and suggestions detailed in consultation responses are analysed and used as part of the decision-making process, along with a range of other available information and evidence. Depending on the nature of the consultation exercise the responses received may:

- ▶ indicate the need for policy development or review
- ▶ inform the development of a particular policy
- ▶ help decisions to be made between alternative policy proposals
- ▶ be used to finalise legislation before it is implemented

Final decisions on the issues under consideration will also take account of a range of other factors, including other available information and research evidence.

While details of particular circumstances described in a response to a consultation exercise may usefully inform the policy process, consultation exercises cannot address individual concerns and comments, which should be directed to the relevant public body.

This consultation, and all other Scottish Executive consultation exercises, can be viewed online on the consultation web pages of the Scottish Executive website at <http://www.scotland.gov.uk/consultations>. You can telephone Freephone 0800 77 1234 to find out where your nearest public internet access point is.

The Scottish Executive now has an email alert system for consultations (SEconsult: <http://www.scotland.gov.uk/consultations/seconsult.aspx>). This system allows stakeholder individuals and organisations to register and receive a weekly email containing details of all new consultations (including web links). SEconsult complements, but in no way replaces SE distribution lists, and is designed to allow stakeholders to keep up to date with all SE consultation activity, and therefore be alerted at the earliest opportunity to those of most interest. We would encourage you to register.

Next steps in the process

Where respondents have given permission for their response to be made public (see the separate Respondent Information Form), these will be made available to the public in the Scottish Executive Library by 31 August 2005. We will check all responses where agreement to publish has been given for any potentially defamatory material before logging them in the library or placing them on the website. You can make arrangements to view responses by contacting the Scottish Executive Library on 0131 244 4565. Responses can be copied and sent to you, but a charge may be made for this service.

What happens next?

Following the closing date, all responses will be analysed and considered along with any other available material and will be used to inform the final version of the guidance. We aim to issue a report on this consultation process by Autumn 2005.

Comments and complaints

If you have any comments about how this consultation exercise has been conducted, please send them to Susan Neilands at Early Education and Childcare Division, Scottish Executive (2BCN), Victoria Quay, Edinburgh EH6 6QQ.

appendix b – summary of questions

Summary of questions

The guidance will be relevant to different early years providers in different ways. By answering the following questions, let us know about the issues that will affect you and your colleagues in providing food for children in your care.

1. Does the nutritional guidance meet the particular needs of your pre-school setting?
Please let us know if you and your colleagues need any additional advice.
2. Will the guidance be helpful in delivering healthier food for the children in your pre-school establishment?
3. Will you or your colleagues require additional skills or training to implement the guidance, as it will affect your establishment? If so, what training will be needed?
4. How easy will it be to implement this guidance in your early years setting?
5. Are the style and format of the guidance appropriate? Please tell us about any changes you think need to be made.
6. Please let us have any other comments you want to make about the guidance.

Please send responses by 30 June 2005 to:

Susan Neilands
Early Education and Childcare Division
Scottish Executive
2B(N) Victoria Quay
Edinburgh
EH6 6QQ

A separate Respondent Information Form is also supplied.

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