Good food choices and portion sizes for 1-4 year olds



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This resource is provided for information only and individual advice on diet and health should always be sought from appropriate health professionals.

Acknowledgements

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Photo resources

For more information about photo resources for different age groups of children and young people, see the website www.firststepsnutrition.org

First Steps Nutrition Trust

First Steps Nutrition Trust is a charity which provides evidencebased and independent information and support for good nutrition from pre-conception to five years of age.

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Introduction

What is in this guide?

This guide provides a visual resource to support all those who look after and support children aged 1-4 years to eat well. Eating well in the first five years of life is essential for growth and physical and mental development, as well as for a child's future health. Encouraging good eating habits in the early years will contribute to a lifetime of good food choices.

This good food choices and portion size guide provides some simple ideas for the balance of different meal components that will meet the energy and nutrient needs of children in this age group. Some simple food-based recommendations for each food group are given, followed by photos showing appropriate portion sizes for 1-4 year olds.

Good meal choices, with appropriate portion sizes, for 1-4 year olds can be found in the following resources, produced by First Steps Nutrition Trust:

- Eating well recipe book
- Eating well: Packed lunches for 1-4 year olds
- Eating well: Vegan infants and under-5s.

For more information, see page 6.

How have the portion sizes been calculated?

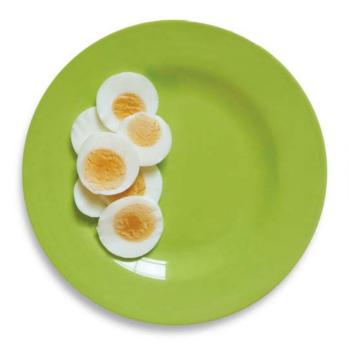
The portion sizes in this guide have been estimated from balanced menu plans that meet the average energy and nutrient needs of children aged 1-4 years. The portion sizes are average amounts and some children will want to eat more, and some less than this. However, it is useful to have an idea of the sorts of portion sizes that can form the basis of meals for children of this age, bearing in mind that some children may want 'seconds' and that children should be allowed to eat healthy food to appetite.

How can this guide be used?

This guide can be used to support catering staff in early years settings where groups of children eat, to help them consider the amounts of foods they cook and serve.

The resource can also be used with families, to help them consider the sorts of foods and amounts of foods that are appropriate for their pre-school children, and the photos may also encourage a wider variety of foods to be offered.

We hope the resource will also help families who may not have English as a first language, to accustom themselves to the names and appearance of common foods served in UK settings.





Where can I find out more information about eating well for children aged 1-4 years?

There are national good practice guidelines to support children aged 1-4 years to eat well in early years settings in the UK.

Scotland

The most recent guidance comes from Scotland. Setting the table: Nutritional guidance and food standards for early years childcare providers in Scotland is available at:

http://www.healthscotland.com/uploads/documents/21130-SettingtheTable_1.pdf

England

For England, Voluntary food and drink guidelines for early years settings in England, produced in 2012, can be found at:

www.childrensfoodtrust.org.uk.

This includes practical photographic resources showing example meals and snacks that meet current guidance. Seasonal menu plans and recipes can also be downloaded from the same website.

Wales

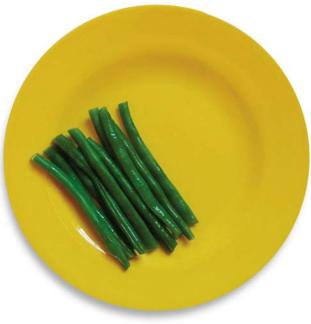
For Wales, Food and health guidelines for early years and childcare settings can be found at: http://gov.wales/docs/phhs/publications/foodandhealth/090414guidelinesen.pdf

Northern Ireland

For Northern Ireland, Nutrition matters for the early years: Guidance for feeding under fives in the childcare setting can be found at: www.publichealth.hscni.net/publications/nutrition-matters-early-years-guidance-feeding-under-fives-childcare-setting

For other useful resources to support eating well for this age group, see *For more information* on page 43.

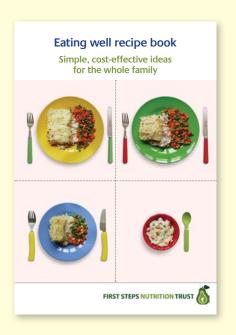




Other resources from First Steps Nutrition Trust

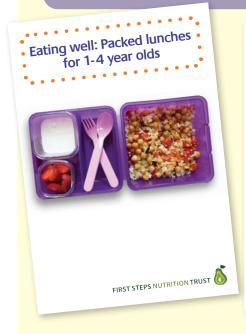
These resources can all be downloaded from www.firststepsnutrition.org

Eating well recipe book



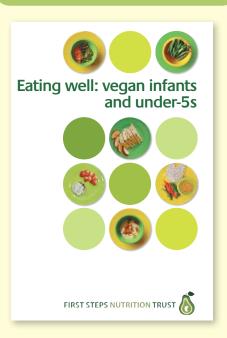


Eating well: Packed lunches for 1-4 year olds





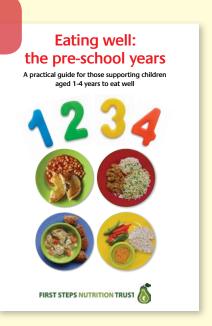
Eating well: Vegan infants and under-5s





In preparation

Eating well: The pre-school years



Plates used in the photos

The photos on pages 11-42 show individual foods, in portion sizes appropriate for 1-4 year olds. The plates and bowls used in the photos are shown below at actual size.







Bread, other cereals and potatoes

How much to serve?

Good choices

Notes

Foods from this group should be offered at every meal, and can be useful foods to offer as part of snacks.

These foods should make up about a third of the food served each day. All types of **bread** – wholemeal, granary, brown, wheatgerm, white, multigrain, soda bread, potato bread, chapattis, naan bread, rotis, rolls, bagels, pitta bread, wraps and tortilla

Look for lower-salt breads.

Potatoes or sweet potatoes

 boiled, mashed, baked or wedges Processed potato products like waffles or smiley faces should be avoided.

Yam, plantain, cocoyam, cassava and other starchy root vegetables

Pasta and noodles – wholemeal and white

Avoid dried or canned readyprepared pasta in sauce, as these are very salty.

Rice - brown and white rice

Avoid fried rice or flavoured dried rice in packets.

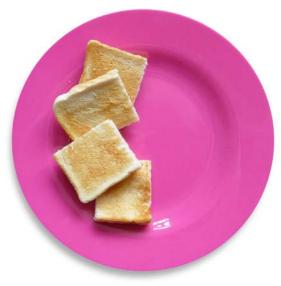
Other grains such as pearl barley, couscous or bulgur wheat, maize (polenta), quinoa and cornmeal

Breakfast cereals – lowsugar, low-salt cereals such as porridge, puffed wheat, weet bisks, crisped rice or flaked wheat. Avoid sugary breakfast cereals. Look for those that have no added sugar.



Fortified cereals can be a good source of iron.

BREAD



White toast 1 slice 25g



Wholemeal bread 1/2 bread roll 25g



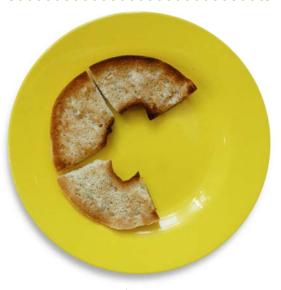
French bread 30g



White pitta bread 1/2 pitta bread 30g



Wholemeal pitta bread 1/2 pitta bread 25g



Bagel 3/4 bagel 30g

BREAD



Chapatti 20g



Breadsticks 15g



Rice cake 1 rice cake 10g



Crumpet 1 crumpet 30g



Wrap or tortilla 1/2 tortilla 25g



Oatcakes 2 oatcakes 16g

RICE AND OTHER GRAINS



White rice 80g



Brown rice 80g



Couscous 80g

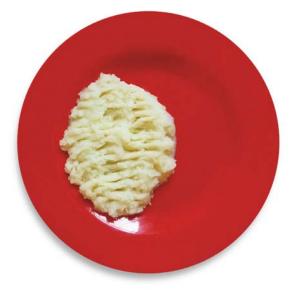


Polenta 80g



Pearl barley 25g

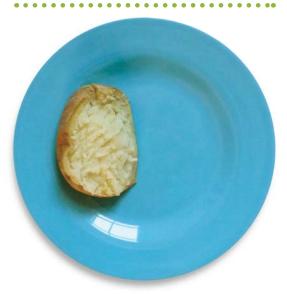
POTATOES AND STARCHY ROOT VEGETABLES



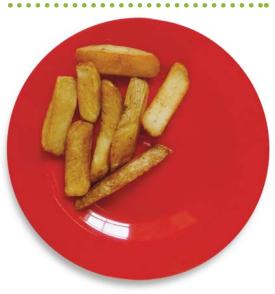
Mashed potato 80g



New potato slices 80g



Jacket potato 80g



Oven chips 80g



Mashed sweet potato 80g



Mashed yam 80g

PASTA AND NOODLES



Spaghetti 80g



Egg noodles 80g



Baby pasta 80g



Pasta penne 80g



Pasta rice 80g



Brown pasta spirals 80g

BREAKFAST CEREALS



Puffed wheat 15g and 100ml milk



Shredded wheat 1 bisk 12g and 100ml milk



Weet bisks 20g and 100ml milk



Porridge made with milk 100g Made from 15g porridge oats and 100ml milk



Porridge made with soy milk alternative 100g Made from 15g oats and 150ml unsweetened fortified soy milk alternative



Ready brek 100g

Vegetables and fruit

How much to serve?

Offer different fruits and vegetables at meals and snacks.

1-4 year olds should be encouraged to taste at least five different fruits and vegetables a day.

Aim for 40g portions of vegetables and fruits for all 1-4 year olds at meals and snacks.

Good choices

All types of fresh, frozen and canned vegetables – for example, broccoli, Brussels sprouts, cabbage, carrots, cauliflower, courgette, green beans, kale, mushrooms, parsnips, peas, peppers, pumpkin, red cabbage, squash, spinach, swede or turnip

All types of **salad vegetables** – for example, lettuce, watercress, celery, cucumber,

watercress, celery, cucumber, tomato, raw carrot, raw pepper, radish or beetroot

All types of **fresh fruit** – such as apples, bananas, pears, grapes, kiwi fruit, oranges, plums, berries, melon or mango

All types of **canned fruit** in juice – for example, peaches, pears, pineapple, mandarin oranges, prunes, guava or lychees

Stewed fruit such as stewed apple or pears, stewed dried fruit, stewed plums or stewed rhubarb

Dried fruit such as raisins, dried apricots, dates, dried figs, prunes

Notes

Avoid vegetables canned with added salt and sugar.

Do not overcook fresh vegetables, and don't cut them up a long time before cooking and leave them in water, or cook them early and reheat before serving. These practices all reduce the vitamin content.

Avoid fruit canned in syrup.

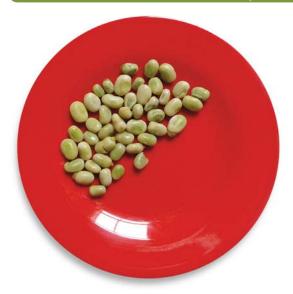
If the fruit to be stewed is sour, add a little apple juice, or mix with a sweeter fruit.

Avoid dried fruit with added sugar and vegetable oil.

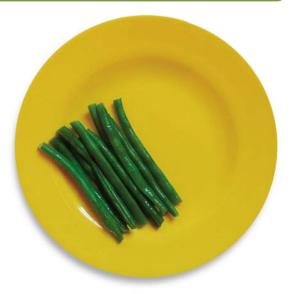
Serve dried fruit with meals and not as snacks.



BEANS, PEAS AND SWEETCORN



Broad beans 40g



Green beans 40g



Peas 40g



Baby sweetcorn 40g



Canned sweetcorn 40g

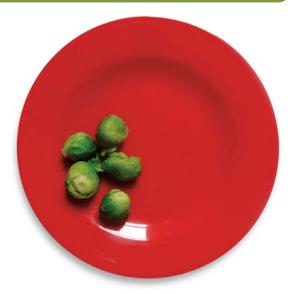


Mange tout 40g

GREEN, LEAFY VEGETABLES



Broccoli 40g



Brussels sprouts 40g



Cabbage 40g



Cauliflower 40g



Kale 40g



Spinach 40g

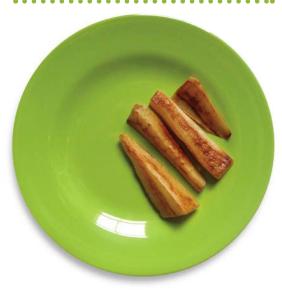
ROOT VEGETABLES AND SQUASH



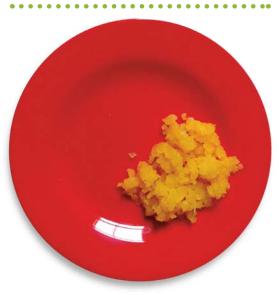
Butternut squash 40g



Carrots 40g



Parsnip 40g



Swede 40g

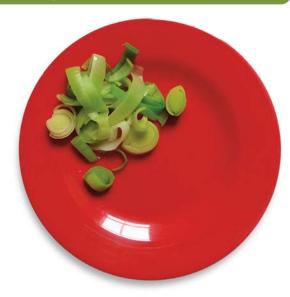


Turnip 40g

OTHER VEGETABLES



Courgette 40g



Leeks 40g



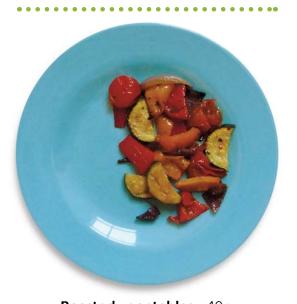
Mushrooms 40g



Mixed vegetables (frozen) 40g

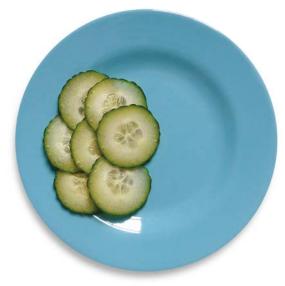


Plantain 40g



Roasted vegetables 40g

SALAD AND RAW VEGETABLES



Cucumber 40g



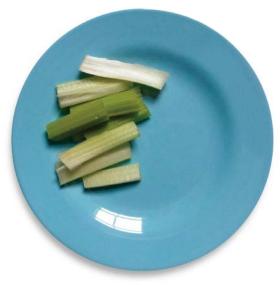
Avocado 40g



Beetroot 40g



Carrot sticks 40g



Celery sticks 40g



Lettuce 40g

PEPPERS AND TOMATOES



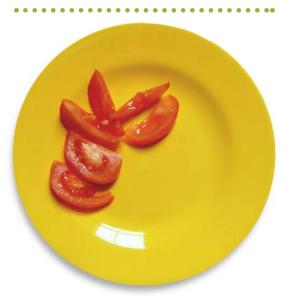
Yellow pepper 40g



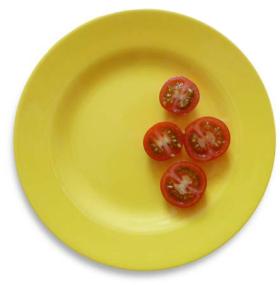
Red pepper 40g



Green pepper 40g



Tomato 40g

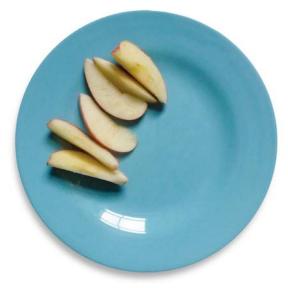


Cherry tomatoes 40g



Canned tomato 40g

APPLES AND PEARS



Apple 1/2 apple 40g



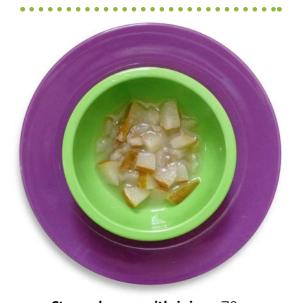
Stewed apple with juice 70g



Pear 1/3 pear 40g



Pears, canned in juice, served without juice 40g



Stewed pear with juice 70g

BERRIES



Blackberries 40g



Blackcurrants and redcurrants 40g



Blueberries 40g



Frozen mixed berries 40g



Raspberries 40g



Strawberries 40g

BANANAS AND ORANGES



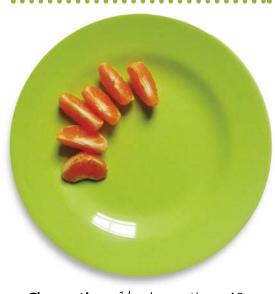
Banana 1/2 banana 40g



Banana 1/2 banana 40g



Orange 1/2 orange 40g



Clementine 1/2 clementine 40g



Mandarins, canned in juice, served with juice 70g



Mandarins canned in juice, no juice 40g

STONE FRUIT



Mango 40g



Nectarine 40g



Peaches canned in juice, served with juice 70g



Plums 40g



Stewed plums with juice 70g

OTHER FRUIT



Grapes 40g



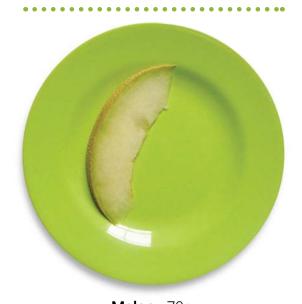
Kiwi 1/2 kiwi 40g



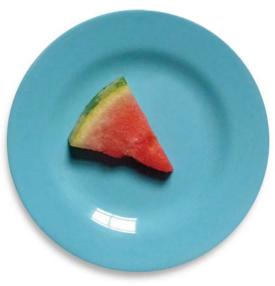
Fresh pineapple 40g



Pineapple canned in juice, served with juice 70g



Melon 70g



Watermelon 40g

Milk and dairy foods, and dairy alternatives

How much to serve?

meals and snacks each

day.

Foods from this group should be offered at 2-3 Who

Whole (full-fat) cows' milk (or other whole animal milk) can be used as the main milk drink from the age of 12 months. Over-2s can have semiskimmed milk if they are good eaters.

Non-dairy milk alternatives

For children who avoid dairy products, unsweetened calcium-fortified soy milk alternative can be given as the main milk drink from 1 year of age. Other unsweetened fortified milk drinks such as almond, oat or coconut milk can be used, but all milk alternatives (including soy milk alternative) are much lower in energy than full-fat animal milk so care needs to be taken that the rest of the diet provides adequate energy. For more information on milk alternatives, see the next page.

Good choices

Avoid unpasteurised milk.

Avoid milk drinks with flavours and added sugar.

Notes

Avoid growing up milks or toddler milks.

Do not serve rice milk to children under 5 years.

Cheese

Cheese is high in salt, so use in small amounts.

Avoid unpasteurised cheese and mould-ripened (blue-vein) cheeses.

Vegetarian cheese is available if needed.



Yoghurt and fromage frais

Choose plain
unsweetened versions.
Soya milk based or
coconut milk based
alternatives are
available for those on
dairy-free diets.

Avoid yoghurts and fromage frais that have a high sugar content (often those with added bits, or mousse style). If the sugar content on a yoghurt or fromage frais label says it has more than 15g of sugar per 100g, it is a high-sugar option. It is preferable to add fresh fruit to natural yoghurt or fromage frais.

Milk and non-dairy milk alternatives

Where mothers choose to breastfeed their toddler into the second year and beyond, this should be supported. Parents may choose to continue to provide expressed breastmilk for toddlers in childcare settings, and information on the safe storage of expressed breastmilk can be found at http://www.nhs.uk/conditions/pregnancy-and-baby/pages/expressing-storing-breast-milk.aspx

Follow-on milks or fortified toddler milks are not recommended for use as these are frequently sweetened and may have the wrong balance of nutrients.

Full-fat cows' (goats' or sheeps') milk can be the main milk drink from 1-2 years of age. After 2 years if children are eating well they can have semi-skimmed milk, but they should not have 1% fat or skimmed milk under the age of 5.

There are a number of non-dairy milk alternatives available, and any drink offered should be unsweetened and fortified. Below, we give information about the four main types of unsweetened fortified milk alternatives that are available, and compare them with whole cows' milk.

Non-dairy milk alternatives compared with cows' milk

	Whole cows' milk	Unsweetened calcium- fortified oat milk alternative ¹	Unsweetened calcium- fortified soy milk alternative ²	Unsweetened calcium- fortified coconut milk alternative ³	Unsweetened calcium- fortified almond milk alternative ⁴
Energy (kcal) per 100ml	66	45	33	27	13
Protein g per 100ml	3.3	1.0	3.4	1.9	0.4
Calcium mg per 100ml	120	120	120	120	120
Riboflavin mg per 100ml	0.2	0.2	0.2	Not added	0.2
Vitamin B12 micrograms per 100ml	0.9	0.4	0.4	0.4	0.4
Typical cost per 100ml	8p	14p	6р	17p	14p

¹ Based on unsweetened Oatly brand.

² Based on typical own-brand unsweetened soy milk alternatives from major supermarkets.

³ Based on unsweetened Kara brand.

⁴ Based on unsweetened Alpro brand.

Unsweetened calcium-fortified soy milk alternative is the most cost-effective and easily sourced milk alternative, but all the alternatives are lower in energy than full-fat milk. If these alternatives are used, care has to be taken that the diet is sufficiently energy-dense. Unsweetened fortified coconut and almond milks are more expensive alternatives and a significantly greater volume of almond milk is needed to provide the same amount of energy as soy milk alternative.

Coconut milk is typically not fortified with riboflavin.

Oat milk, coconut milk and almond milk alternatives

Children should be discouraged from drinking too much milk if this means they have less appetite for a good range of foods at meal times, so it is worth considering the impact of using milk alternatives which have low energy density.

Animal milk is also a good source of iodine and it is not known how much, if any, iodine is in these milk alternatives.

If children are being given a vegan diet, it is important that care is taken that all nutrient needs are met. For more information on this, see our resource *Eating* well: vegan infants and under-5s at

www.firststepsnutrition.org

The glasses of milk below all provide the same amount of energy (calories).



are all low in protein.

Whole cows' milk 50ml



Oat milk 75ml



Soy milk alternative 100ml



Coconut milk 120ml



Almond milk 250ml

MILK AND NON-DAIRY MILK ALTERNATIVES



Whole cows' milk 100ml

Whole cows' milk (or another whole animal milk) can be used as the main milk drink from the age of 12 months.

Over-2s can have semiskimmed milk if they are good eaters.



Unsweetened fortified soy milk alternative 200ml

For children who follow a vegan diet, or have a cows' milk protein allergy, unsweetened calcium-fortified soy milk alternative can be used as the main drink from 1 year. This has only about half the energy content of full-fat animal milk, however, so care needs to be taken that the diet is energy-dense in other ways, or that a greater volume of soy milk alternative is offered without impacting on appetite. For information on other milk alternatives see page 30.

How much milk do 1-4 year olds need each day?

It is suggested that at 1-2 years about 400ml of cows' milk a day fits into a healthy balanced diet. The 400ml might be made up of a drink in the morning, milk with snacks and a drink before bed or a nap, depending on how families manage their children's eating and sleeping patterns across the day.

Children of 2-4 years old probably need about 300-350ml of milk a day as they will eat bigger portions of food at meals, may need fewer or shorter daytime naps, or not need a drink before bed.

CHEESE



Cheddar cheese 15g



Cottage cheese 30g



Edam cheese 15g



Mozzarella 20g



Soft cheese 20g



Cheese triangle 18g

YOGHURT



Plain yoghurt (full-fat) 60g



Greek yoghurt 50g



Soya yoghurt 60g



Coconut yoghurt 50g

Meat, fish, eggs, pulses, nuts, seeds and meat alternatives

How much to serve?

Good choices

Notes

Main meals should always contain an item from this group.

Foods in this group are high in iron and zinc and can also be usefully served as part of snacks, for example as sandwich fillings. **Meat** – all types including beef, lamb, pork, chicken and turkey

Avoid processed meat and fish products that are high in fat and salt, such as crumb-coated products, burgers, pies, sausages and canned meats.

Fish includes:

- white fish such as cod, haddock, coley and white fish varieties from sustainable fish stocks such as pollack and blue whiting
- oil-rich fish such as herring and mackerel, salmon, trout, sardines, sprats or pilchards.
 Canned tuna does not count as an oil-rich fish but is a good source of nutrients.

If you are buying fish from a supermarket, look for the blue and white logo of the Marine Stewardship Council, which quarantees sustainability.

Make sure fish dishes are free of bones.

Eggs – including boiled, scrambled or poached, or in an omelette

All eggs should be well cooked.

Pulses – including all sorts of beans and peas such as butter beans, kidney beans, chickpeas, lentils or baked beans

Look for canned pulses with no added salt and sugar.

Choose lower-salt and low-sugar baked beans.

Ground nuts – such as smooth peanut butter, cashew or almond butter

Crushed seeds or ground seeds – such as sunflower seeds, pumpkin seeds or tahini

Meat alternatives – such as soya mince/ textured vegetable protein, Quorn or tofu

Avoid processed meat alternatives (such as vegetarian sausages, burgers and pies), as these can be high in salt.



MEAT



Chicken 45g



Pork 40g



Beef 40g



Minced lamb 40g



Turkey mince 40g

FISH



White fish 40g



Salmon fillet 40g



Canned tuna 40g

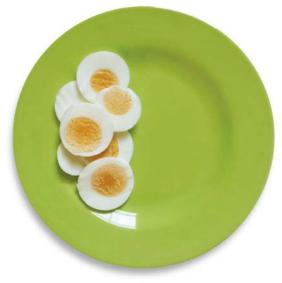


Canned pilchards in tomato sauce 50g

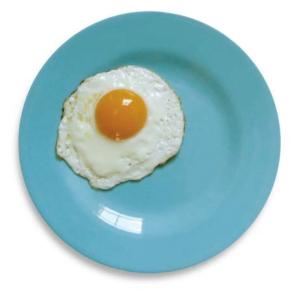


Canned sardine 40g

EGGS



Boiled egg 50g



Fried egg 50g



Poached egg 50g



Omelette 50g



Scrambled egg 50g

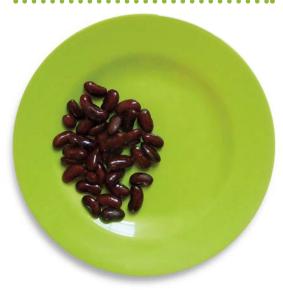
PULSES



Butter beans (chopped) 40g



Cannellini beans 40g



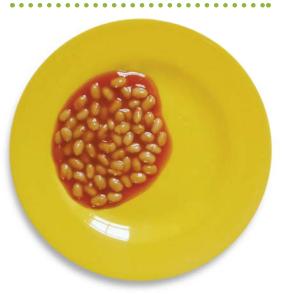
Red kidney beans 40g



Soya beans 40g



Mixed beans 40g



Baked beans 55g

PULSES



Chickpeas 40g



Humous 40g



Mini falafels 40g



Green lentils 40g



Red lentils 40g



Dahl 50g

NUTS AND SEEDS, AND THEIR PRODUCTS



Peanut butter 15g



Cashew nut butter 15g



Sunflower seeds (crushed) 20g



Tahini 15g



Pumpkin seeds (crushed) 20g

MEAT ALTERNATIVES



Quorn mince 50g



Quorn pieces 50g



Soft tofu 50g



Tofu pieces 50g

For more information

Useful websites and publications

Child Feeding Guide

www.childfeedingguide.co.uk

Website and app to support families around fussy eating.

Children's Food Trust

www.childrensfoodtrust.org.uk

Voluntary food and drink guidelines for early years settings in England. A practical guide.

First Steps Nutrition Trust

www.firststepsnutrition.org

Eating well: The first year

Eating well: Packed lunches for 1-4 year olds Eating well: Vegan infants and under-5s

Infant milks in the UK

Making the most of Healthy Start: A practical guide

Eating well recipe book

Eating well sustainably: A guide for early years settings

Healthy Start

www.healthystart.nhs.uk www.healthystartalliance.org

www.nearthystartamance.org

Information about the Healthy Start scheme in the UK.

HENRY

www.henry.org.uk

Provides support to families with young children about changing behaviour around eating well and activity.

Institute of Health Visiting

www.ihv.org.uk

Provides a range of tips for parents, and good practice points related to nutrition and pre-school children.

NHS Choices

www.nhs.uk

The NHS Choices website contains information on healthy eating for under-5s.

NHS Health Scotland/Scottish Government

www.healthscotland.com

A website providing up-to-date information, resources and support for practitioners working with or supporting pregnant women and families with young children.

Setting the table: Nutritional guidance and food standards for early years childcare providers in Scotland is available at: http://www.healthscotland.com/documents/21130.aspx

Ready, steady, toddler!

www.readysteadytoddler.org.uk

A website for families.

Is your child a fussy eater?

Leaflet. Available from www.healthscotland.com

Public Health Agency (Northern Ireland)

The following publications can be downloaded from www.publichealth.hscni.net

Getting a good start – Healthy eating from one to five (2004)

This booklet outlines advice on many key nutritional issues for children aged 1-5.

Nutrition matters for the early years: Guidance for feeding under fives in the childcare setting can be found at: www.publichealth.hscni.net/publications/nutrition-matters-early-years-guidance-feeding-under-fives-childcare-setting

Public Health Wales

Bilingual resources (in English and Welsh) have been produced by the Welsh Assembly Government and can be downloaded from: www.publichealthwales.wales.nhs.uk

Bump, baby & beyond

A book with information on pregnancy, birth and into the toddler years. Available from: www. healthchallengewales.org/infantfeeding-publications

Food and health guidelines for early years and childcare settings (2009)

http://gov.wales/docs/phhs/publications/foodandhealth/090414quidelinesen.pdf

Start4Life

www.nhs.uk/start4life

Start4life provides a range of information to support eating well in the early years.

Sustain

www.sustainweb.org

Guide to sustainable food.

Tiny Tastes

Tiny tastes

A pack to help parents manage fussy eating and encourage young children to try new vegetables. Available for sale from www.fbsresources.com



FIRST STEPS NUTRITION TRUST



www.firststepsnutrition.org

Good food choices and portion sizes for 1-4 year olds

ISBN (e-book): 978-1-908924-14-8