Healthy Eating

A guide for people with polio or Post Polio Syndrome (PPS)

today’s support and information network

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Registered charity No 1108335 (England and Wales); SCO38863 (Scotland)
Introduction

Eating a healthy, balanced diet is important for everyone’s health and well being. Good nutrition can help people with polio or Post Polio Syndrome (PPS) feel healthier and manage their symptoms better.

This factsheet is a general guide to nutrition and healthy eating. It does not recommend a special diet for people with polio/PPS, nor is it a slimming plan, although information about weight management is included. You may wish to consult a registered dietitian for more specific dietary advice. Your GP can refer you if necessary. You will find a list of useful organisations at the back of this factsheet.

Post Polio Symptoms

People who had polio years ago and made a full recovery may now be experiencing new symptoms. These can include new or increased muscle weakness and fatigue with or without other symptoms like muscle and joint pain, muscle atrophy or wasting, breathing or swallowing difficulties or cold intolerance.

Polio and PPS symptoms may influence your nutritional needs and affect how you can eat and how you prepare meals. Making positive changes to what you eat and how you prepare food can enable you to enjoy a healthy, balanced diet and therefore improve your health and quality of life.

Why is a well-balanced diet so important?

Correct nutrition is important to support all the functions of the body and to help it to work to its optimum potential. This is particularly important if you have a long-term health condition such as PPS.

A healthy diet can help to:
- control weight
- maintain energy levels
- maintain a healthy digestion
- maintain healthy bowel and bladder function
- maintain healthy skin, hair and nails
- keep bones strong and healthy
- maintain muscle and joint health
- maintain healthy teeth and gums
- support the immune system, reducing the risk of infections
- speed up recovery from illness/surgery and wound healing
- induce healthy sleep
- improve appetite and the enjoyment of food
- improve and stabilise mood
- increase feelings of well being
- reduce the risk of some cancers, diabetes, arthritis and other diseases
What makes up a healthy, balanced diet?

A healthy diet includes a balance of all the main nutrients:

- **proteins** - for the growth and repair of the body, blood sugar regulation and blood clotting and fighting disease (antibodies)
- **carbohydrates** - for energy
- **fats** - to help the body absorb certain vitamins and to provide essential fatty acids (EFAs), which have specific important roles within the body
- **fibre** - to help you to feel full, control blood sugar levels and keep your digestive system healthy
- **vitamins and minerals** - for numerous processes within the body, including growth and repair, digestion, vision, reproduction, fighting disease and the release of energy
- **water** - for the optimum functions of the body. Water is vital for the chemical processes within the body and for transporting nutrients around it

The eatwell plate represents the balance of foods needed for good health. It shows how much of what you eat should come from each food group. This includes everything you eat during the day, including snacks.

The eatwell plate

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

There are 5 food groups:

**Fruit and vegetables**

**Bread, rice, potatoes, pasta and other starchy foods**

Try to choose wholegrain versions e.g. wholemeal bread, brown rice, wholemeal pasta and wholegrain cereals instead of refined carbohydrates such as white bread, pasta, flour and rice.

These foods are filling, high in fibre and low in fat. Avoid adding lots of oil, butter or cream.

**Meat, poultry, fish, eggs, pulses (peas, beans and lentils), nuts and other non-dairy sources of protein**

Choose leaner cuts of meat and trim off visible fat and skin.
Milk and dairy foods

Choose lower fat options.

Food and drinks high in fat and sugar

Include just a small amount of these foods in your diet. Choose low fat spreads instead of butter and decrease the amount of fats and oil you use when cooking. Try to grill, bake, steam or poach food instead of frying it. Try to eat less sweets, cakes and biscuits and drink less sugary drinks. See The fat question on page 9 for more information about fats and the Healthy eating guidelines table on page 24 for more information about fats and sugar.

Look at the eatwell plate to see how much of your food should come from each food group. You don’t need to get the balance right at every meal, but try to get it right over time, such as a whole day or week. Try to choose options that are lower in fat, salt and sugar when you can.

These food groups contain nutrients with specific roles and a lack of any of these can cause health problems, or affect how the body absorbs other nutrients. For example, a lack of calcium can cause bone weakness, but even if there is enough calcium in the diet, a lack of vitamin D can hinder the absorption of calcium. As nutrients work together in the body, so the diet should provide a balance of all of them.

Balanced meals

As a general rule meals should be based on the following:

- fruit and vegetables
- starchy foods: bread, rice, pasta, couscous, cereals (choose wholegrain versions), other grains such as oats, starchy vegetables such as potatoes, yams and cassava
- moderate amounts of the protein foods: lean meat, poultry, fish, eggs, dairy foods (hard and soft cheeses, yoghurt—choose lower-fat versions), pulses, tofu, nuts and meat alternatives such as soya protein and Quorn

The importance of fresh fruit and vegetables

The Department of Health recommends that everyone should eat at least five portions of fruit and vegetables per day, but ideally you should aim for seven to nine portions, as eaten in some Mediterranean countries. Fruit and vegetables:

- are a good source of vitamins and minerals
- contain antioxidants, which help to reduce the risk of some cancers, heart disease and stroke, and other protective nutrients
- are usually low in fat and calories and are a good source of fibre

How much is a portion?

A portion of fresh, frozen or tinned fruit or vegetables is roughly 80g (3 ounces). Dried fruit counts and a portion is about the same as you would eat if it were fresh.

Here are some examples of a portion of fruit and vegetables:

- a dessert bowl of mixed salad leaves/fresh spinach/watercress
- 3 heaped tablespoons mixed vegetables or peas
- 3 heaped tablespoons pulses (peas, beans, lentils)*
- 2 broccoli florets
- 5 spears of asparagus
- half a fresh green/red/yellow pepper
- 4 heaped tablespoons cooked French/runner beans/spring greens
- 8 Brussels sprouts
- 7 cherry tomatoes
- 1 medium sized fruit (apple, orange, pear, banana)
- 2 smaller fruits (satsumas, plums, kiwi fruit)
- a large slice of fruit (melon, pineapple, mango)
- 1 handful of berries and grapes, e.g. 7 strawberries, 12 grapes
- a glass (150 ml) of unsweetened fruit or vegetable juice*
- 1 tablespoon raisins, 3 dried apricots, 2 figs
- ½ can peaches (in juice)

* However much you eat or drink of these, pulses and juice can each only count as one portion per day.
Fresh, frozen, tinned or dried fruit and vegetables all count. Try to choose those tinned without added salt or sugar, eg fruit in juice not syrup, sweetcorn with no added salt or sugar. Try to eat as wide a variety of coloured fruits and vegetables as possible - EAT A RAINBOW! Different colours contain different nutrients known as "phytochemicals", which have antioxidant and anti-ageing properties and other health benefits.

If possible eat vegetables raw or lightly cooked (steamed rather than boiled), to preserve flavour, colour and texture and to minimise the loss of vitamins in cooking. Boiling vegetables until they are soft destroys vitamin C, which also leaches into the cooking water. It also impairs the flavour!

Potatoes are counted as starch, not vegetables, but are also a very good source of potassium, vitamin C and fibre. Try not to peel them, or peel them after cooking, as most of the nutrients lie underneath the skin. Also try not to add lots of fattening butter or cream.

Research has shown that the traditional Mediterranean diet - one rich in vegetables, fruits, grains, pulses and fish, but relatively low in meat and dairy products - can provide protection against cardiovascular disease, type-2 diabetes and some cancers.

Vitamin and mineral supplements

Vitamins and minerals have a number of vital functions. Generally speaking, eating a varied, balanced diet where food is prepared and cooked to minimise vitamin loss should provide a sufficient supply of vitamins and minerals. While a good multivitamin & mineral supplement provides a "top-up", taking large quantities of individual vitamin and mineral supplements have no proven benefits and may be harmful.

Certain drug treatments can lower levels of vitamins and minerals in the body and some people may be found to have low levels for other reasons. A doctor or dietitian may suggest supplements to replenish these.

Supplements should complement, not replace fresh fruit and vegetables in the diet. Supplements do not contain the nutrients known as phytochemicals that are found in fruit and vegetables, nor do they contain their important carbohydrates and fibre.

The fat question

While fats are a vital part of a balanced, healthy diet, not all kinds of fats are the same or have the same effects on your health.

Saturated fats are solid at room temperature and are found in meat, lard, butter and full-fat dairy products. Too much saturated fat in the diet can increase the levels of cholesterol in the blood, raising the risk of coronary heart disease. For further information about cholesterol, see High cholesterol.

Cutting down on the total amount of fat you eat can help to reduce weight and the risk of coronary heart disease. Replacing saturated fats with moderate amounts of monosaturated (eg in olive oil) and polyunsaturated (eg in sunflower oil) fats is also important for lowering blood cholesterol levels, while providing the body with essential fatty acids (EFAs). Other healthy fats are omega 3 and 6 EFAs. Good sources of omega 3 EFAs are oily fish, such as mackerel, salmon and sardines. Aim for 1-2 portions per week. Omega 6 EFAs are in sunflower and corn oils and seeds such as pumpkin and sunflower.

See the Healthy eating guidelines table on page 24 for further information about fats and oils.

Vegetarian and vegan diets

Eating a wide variety of plant-based foods and non-meat sources of protein provides a good mix of nutrients. Many vegetarians and vegans tend to be health conscious and their diets are likely to be high in vitamins, minerals and fibre and low in saturated fats. However care must be taken to ensure adequate sources of vitamin B12, as this is mainly found in animal-based foods. The Vegetarian Society and Vegan Society can provide nutritional information and recipes.
Food allergy and intolerance

Common foods that can cause allergies or intolerance include wheat, gluten (the protein in wheat and other grains such as rye, barley and oats), dairy products, lactose (a sugar in milk), shellfish, nuts (particularly peanuts) and soya. If you think you may have a food allergy or intolerance, speak to your doctor, who may be able to investigate further.

We do not advise cutting out specific foods or food groups without advice from a dietitian, as you may end up excluding important nutrients from your diet. However, if you are found to have a food allergy or intolerance, alternative foods are widely available and organisations such as Allergy UK can provide help and advice.

Making changes to your diet

Changing your diet is best done gradually, particularly if you have eaten the same foods for a number of years. Changing what you eat may seem daunting at first, but once you get used to the changes you will feel better and enjoy your food much more.

Take it one step at a time! A good place to start is to increase the amount of fresh fruit and vegetables in your meals. You could begin the day with a glass of fruit juice, have fruit with porridge or another cereal for breakfast and snack on fruit or raw vegetable sticks if you are hungry between meals. You could introduce more salads, steamed vegetables and vegetable soups into your daily meals and increase the amount of vegetables in a recipe, such as pasta sauce or a casserole. You might want to challenge yourself to regularly trying new fruits and vegetables and ways of preparing them.

Many people think that they don’t like vegetables. This may be because they were fed overcooked, unappetising vegetables as children. You may find that you prefer a particular vegetable raw or juiced instead of cooked, or in combination with other foods, so it is good to experiment. How you prepare vegetables (eg grated, sliced or diced) can also make a difference to flavour and texture.

After this, you could increase the amount of whole grains in your diet, reduce the amount of sugar and refined carbohydrates you eat, and so on.

The Healthy eating guidelines table on page 24 provides further reading about eating a balanced diet and healthy ways to prepare food. It also outlines the nutritional content of food groups and the health benefits they bring.

Treat yourself!

Remember that food should be enjoyed. Eating healthily should mean including a wide variety of fresh, tasty foods in your daily diet and should not mean eating foods you don’t like or having to give up everything that you love. By all means treat yourself to some chocolate, a plate of chips or a Chinese takeaway now and then if you fancy them. Occasional treats like this should do no harm. And many treats are healthy- who could resist a bowl of strawberries?

Also remember that food is definitely not the only way you can treat and reward yourself. Consider how non-food rewards may be used instead.

Comfort foods

Many of us have our favourite comfort foods that are sweet or savoury, warming or cooling. Many of these can be easily adapted to make a healthier option.

Chips brushed with a little oil and baked in the oven, perhaps with a coating of herbs or spices, are just as delicious as deep-fried ones. Love shepherd’s pie? Why not mix lean meat with vegetables and/or pulses and use a mixture of potatoes and sweet potatoes for the topping? Fish pie can be just as creamy if made with reduced fat milk and cheese.

For healthier fruit crumbles, use eating apples instead of cooking ones, sweeten with fruit juice and/or dried fruit instead of sugar and make the topping with a mixture of wholemeal flour and
porridge oats. Delicious fools or mousses can be made by mixing pureed fruit with low fat yoghurt or whipped evaporated milk instead of cream. Be creative!

Variety is the key

People can get into habits and end up eating the same small number of foods day after day, missing out on nutrients and depriving themselves of new taste experiences. Be ready to try new things- discovering new foods that you like can be fun. You may wish to try new recipes or different cuisines. Remember that the wider the variety of foods you eat, the greater the spread of nutrients. Now who said that eating healthily was boring?

Weight management

Weight gain can be a problem for people with polio/PPS as being overweight is a further strain on weakening muscles and joints and can make fatigue worse. Maintaining a healthy weight is more of a challenge if you use a wheelchair and/or your ability to exercise is restricted.

There may be an underlying health problem other than polio that is causing you to put on weight, so you may wish to consult your doctor to have this investigated. Some drugs can also contribute to weight gain.

It may be tempting to try crash diets to lose weight quickly, but these offer only a temporary solution and deprive the body of important nutrients. People on unrealistic, calorie-restricted slimming diets frequently feel hungry and deprived, resort to their previous eating habits and regain any lost weight and more besides. Slimming diets that cut out carbohydrates are potentially harmful to health and should be avoided. The best way of keeping the weight off is to make gradual, healthy and sustainable changes, enjoying your daily diet and occasional treats, and to lose the weight slowly and steadily. An ideal weight loss target is 1-2lb (1kg) per week.

If you are unable to do large amounts of exercise, it is all the more important to eat more of the lower calorie and high fibre foods such as fruit, vegetables, pulses and whole grains and to eat less refined carbohydrates (white bread, flour and pasta), saturated fats and sugar. Also remember that alcohol is high in calories and can contribute to weight gain.

Drink plenty of water throughout the day as thirst can sometimes be confused with hunger. Not eating enough fibre and/or drinking enough water can cause constipation, which can interfere with weight management. Keep moving if you can and if you are able to exercise, get advice from a knowledgeable physiotherapist or other professional, so that you do it safely. See our leaflet, Pacing for Activity and Exercise.

Fatigue

Not only can a healthy diet help with fatigue, but also when and how you eat can make a difference.

Eating the right types of carbohydrate is very important. Even if you are trying to lose weight, you should not cut out carbohydrates, as they are a vital energy source for the body. Whole grains, fruit and vegetables provide a slow, steady release of energy. Sugar and refined carbohydrates cause a rapid increase in blood sugar levels, followed by an energy slump. Constipation can also increase feelings of sluggishness and fatigue.

Eating regular meals provides the body with the fuel it needs to function throughout the day. For some people, this will be three meals, spaced at regular intervals. Others may prefer to eat smaller, more frequent meals. It is important not to base these meals on fatty, sugary and low-nutrient foods such as instant soups, sweets, biscuits and crackers.

Breakfast is very important, as it is the first source of energy for the body after a night of fasting. If you can’t face food in the morning, try tempting yourself with some fresh fruit or a shake or smoothie. As well as worsening fatigue, skipping meals and going for long periods without food can cause low blood sugar.
hypoglycaemia), mood swings and irritability. If your appetite is poor, try stimulating it by making your meals as attractive, colourful and tasty as possible.

As well as causing weight gain and digestive problems, overeating can worsen fatigue. Eating too much at the evening meal can impair sleep, as can going to bed on a full stomach, so ensure that you do not eat your last meal too late in the evening. Also make sure you drink enough water throughout the day, as dehydration can make fatigue worse.

Other health issues

Many people with polio are concerned about other health issues, particularly high blood pressure, high cholesterol and arthritis. The food you eat can make a significant difference to these health problems.

High blood pressure

The higher your blood pressure, the greater your risk of having a heart attack or stroke. It is extremely important to lower your intake of salt, as the amount of salt we eat has a direct effect on our blood pressure.

Most adults eat far too much salt, at around 10-12 grams per day. Aim to get your salt intake down to 5-6 grams per day or less. Follow the advice for reducing salt in the Healthy eating guidelines table and learn to read food labels, as the levels of “hidden” salt in foods, even sweet foods such as biscuits and breakfast cereals, can be surprising. The more you reduce your salt intake, the greater the fall in blood pressure will be.

As well as reducing your salt intake, you can also help to reduce blood pressure by following the healthy eating guidelines previously outlined, aiming to reach a healthy weight, exercising regularly, drinking alcohol sensibly and stopping smoking.

If you need to take medication for high blood pressure, making these changes to your diet will help your medication work more effectively.

You can get further information about diet and high blood pressure from the Blood Pressure Association.
High cholesterol

Cholesterol is a fatty substance that is made in the liver from the saturated fats in food. Too much cholesterol can cause coronary heart disease.

Coronary heart disease begins when atheroma, a fatty material, builds up in the inside walls of the arteries. This build-up narrows the arteries, reducing their ability to deliver enough oxygen-containing blood to the heart muscle. This can lead to angina, a pain that happens when the heart muscle is starved of oxygen.

Coronary heart disease can become more serious if a narrowed coronary artery becomes blocked by a blood clot. This causes a heart attack.

Following a healthy diet, as outlined in this factsheet, can help to reduce your total cholesterol level by between 5% and 10%.

Certain foods, such as eggs, liver and seafood such as prawns contain cholesterol, but this does not usually make a great contribution to blood cholesterol levels. There should be no problem in eating up to 4 eggs a week if your diet is healthy and well balanced. Eating a diet low in saturated fats and replacing these with moderate amounts of healthier, unsaturated fats is much more important and has the greatest cholesterol lowering effect. See The fat question on page 9 and the Healthy eating guidelines table on page 24 for more information on sources of healthier fats.

However, all fats and oils are high in calories and should be used in moderation, particularly if you are overweight.

Eating a high-fibre diet may also help to reduce the amount of cholesterol absorbed by the body. Oats, pulses, fruit and vegetables are all high in a type of cholesterol-lowering fibre.

If you have been prescribed cholesterol-lowering medication, you should still follow the healthy eating guidelines, as this will help your medication to work better.

You can get more information about cholesterol, coronary heart disease and diet from the British Heart Foundation.

Arthritis

Arthritis, inflammation of the joints, can be a painful fact of life for many people with polio, particularly for those who have lived with abnormal gait and have used equipment such as crutches for a number of years. Being overweight can cause additional strain on painful joints.

When joints are inflamed, good nutrition in the form of antioxidants in fruit and vegetables, essential fats and vital vitamins and minerals can be of huge help. This is of even greater importance if you are taking medication for your arthritis, as good nutrition will help protect the body against some of the side effects.

Research has shown that people who eat plenty of fresh fruit and vegetables, particularly those containing vitamin C, seem to have a lower risk of developing inflammatory arthritis. In addition, some studies have shown that people who eat large amounts of red meat seem to have a higher risk of developing it. Too much refined sugar, saturated fats and protein are strongly associated with arthritic conditions.

Many people with arthritis have food sensitivities that can make their symptoms flare up, so you may wish to investigate this.

For further information about diet and arthritis contact the Arthritis Research Campaign or Arthritis Care.
Practical solutions for preparing food

If you have polio/PPS, weakness, fatigue, manual dexterity and mobility problems mean that shopping for and preparing food can take longer or may need more careful planning. Fatigue can make shopping trips over-tiring and chopping and mixing food may be difficult if you have wrist or arm weakness. An occupational therapist can suggest energy saving strategies and advise you about kitchen equipment or adaptations. There are also energy saving tips in our leaflet, Pacing for activity and exercise.

Shopping

If shopping trips and carrying heavy bags home have become impossible, there are now many grocery delivery services available.

Planning

It may be a good idea to plan cooking and shopping activities around your energy levels. You could ask yourself if there are times of the day or week when you feel your best. “Good” days could be used for cooking larger amounts of a particular dish, some of which could then be frozen for eating on less energetic days. It may also be a good idea to keep your cupboards stocked with basic, non-perishable ingredients, such as rice, pasta, pulses and tinned tomatoes and a selection of vegetables, meat and fish in your freezer, so that you always have the basics for a quickly and easily prepared meal.

Preparing food

- To avoid moving around the kitchen unnecessarily, gather all the ingredients and equipment together before you start to cook
- Have the most frequently used crockery and utensils within easy reach
- Sit for as many activities as possible, as standing uses 25% more energy
- Use energy-saving devices like an electric tin opener, food processor or blender

- If you have limited hand mobility and/or reduced grip strength, use products like non-slip bottle openers and adapted tools such as knives and graters (see Useful equipment on page 20)
- Cooking with a microwave means there are no heavy pans to lift
- Dishwashers can be a great alternative to washing up by hand, but they still need to be filled and emptied
- If you live with other people, encourage them to help you to prepare meals more quickly and efficiently
- A slow cooker is easy to use and saves fuel

Pre-prepared foods and ready meals

Ready meals can be a godsend when you feel too tired to prepare a meal. However, they are frequently high in saturated fats and salt and low in vitamins, minerals and fibre, so are not suitable to be relied on regularly. Look out for healthier options lower in fat and calories, and serve with fresh or frozen vegetables to make the meal more balanced. Dietitians can advise on easy to prepare alternatives, or you might like to look at books of quick and easy recipes for ideas.

Meals-on-wheels deliver ready prepared meals to your door and can cater for special diets on health or religious grounds. Contact your local social services department for further information.
Useful equipment

There are tools and gadgets to help with almost every daily kitchen task.

If you have manual dexterity problems, use:

- jar, bottle and ring pull openers
- easy-grip handles on cutlery, chopping knives, peelers and other utensils
- tap turners - large handles to fit over taps
- knob turners - gadgets that fit different shapes and sizes of knobs and controls
- two-handed cups
- non-slip chopping boards

If lifting heavy items is difficult, use:

- cooking baskets - these let you lift food in and out of pans, rather than lifting a heavy pan of boiling water
- a wheeled trolley to move ingredients, pans and crockery and prepared food more easily
- a kettle tipper - this allows you to pour a kettle without lifting it

Organisations like the Disabled Living Foundation can provide further information about equipment and suppliers.

Swallowing difficulties

If you have swallowing difficulties, diagnosis and treatment should involve a speech and language therapist and a dietitian. Your dietitian will be able to advise you about ways to make your food easier and safer to swallow and how you can maintain a healthy, balanced diet.

Eating healthily on a low income

Many people with polio/PPS live on low incomes and you are strongly advised to seek advice about any benefits you may be entitled to. The British Polio Fellowship Support Services team will be able to give you further information.

It is a common myth that eating healthily costs a lot of money, when it is the fat and sugar-laden convenience foods and ready meals that can leave a huge dent in your wallet.

Here are some tips for eating healthily and well on a budget:

- avoid ready meals and takeaways as much as possible
- avoid crisps, sweets and snack foods except as a special treat
- buy fruit and vegetables in season, for example broccoli and carrots are winter vegetables, while courgettes and peppers are summer vegetables. Buying fruit and vegetables out of season and less fresh can be expensive
- frozen vegetables do not contain added salt, can be bought in large amounts and divided into portions for future meal planning
- dried pulses and pasta are cheaper than tinned beans and processed pasta
- tinned fruit is more expensive than fresh fruit and lower in nutrients, however can be useful for convenience. Choose those in juice, not syrup
- eat porridge or home-made muesli for breakfast instead of expensive breakfast cereals
- avoid fruit squashes, fizzy drinks and commercial juices and smoothies. Drink water and eat fresh fruit instead. You may wish to invest in a juicer or blender and make your own juices and smoothies
- compare prices in local shops and supermarkets and look out for special offers
- use supermarket brands instead of famous brands. They often contain the same ingredients, but are cheaper
- where possible, shop for fruit and vegetables in local and farmers’ markets instead of supermarkets
• combine supermarket shopping with small, independent fishmongers, butchers and bakers- they can help you with what is cheap and in season. Ask for fish trimmings to turn into soup, a cheap ham bone to cook with split peas, buy half-price day-old bread for toast and for use in recipes
• investigate ethnic food shops for fruit and vegetables and ingredients such as herbs and spices- these will often be sold at cheaper prices than supermarket produce
• make your own delicious bread by investing in a breadmaker
• make meat and fish go further in recipes by adding pulses, vegetables and rice
• introduce more dishes based on pulses into your diet
• buy whole fish and chicken rather than fillets and pieces
• oily fish like mackerel and sardines are cheaper than most white fish
• tinned fish such as sardines can be even cheaper- choose versions without brine where possible
• buy whole lettuces rather than bags of mixed salad leaves
• keep your cupboards stocked with cheap basics such as rice, pasta and pulses and use olive oil, tomato puree, herbs, onions, garlic, mustard and other spices to liven up meals
• cook and eat together with others and share the costs
• you may wish to form a food co-op with friends and buy some foods in bulk
• make a shopping list and plan your food budget every week. Ask for help with this if you need it

Summing up

Making changes to your eating habits can be daunting and reading everything in this factsheet may have caused fatigue! But changing to a healthier way of eating will not only benefit your overall health and well being- it is also a great opportunity to try new foods and ways of preparing them. Eating healthily can be easy, enjoyable, exciting and affordable.

Remember to take it slowly at first. If you make gradual changes to your daily diet, you will find them easier to stick to. In time, you will notice that you will look and feel healthier and are able to manage your symptoms better. Also, your enjoyment of good food and quality of life should improve.
### Healthy eating guidelines table

<table>
<thead>
<tr>
<th>Suggestion</th>
<th>Health benefits</th>
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<tbody>
<tr>
<td><strong>At least 5 portions (more if possible) of fruit and vegetables every day, including at least one portion of dark green, leafy vegetables, for vitamins, minerals and fibre.</strong></td>
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  - Dark green, leafy vegetables are particularly rich in vitamins and minerals, including iron, calcium and magnesium.  
  - The fibre in fruit and vegetables can help lower cholesterol.  
  - Iron helps the blood to carry oxygen around the body and is vital for energy production.  
  - Calcium is needed for strong bones and teeth.  
  - Magnesium is important for healthy bones and teeth, muscles, the heart and nervous system.  |
| **Eat starchy vegetables, such as potatoes, sweet potatoes, yams and cassava, for a low fat source of carbohydrates, vitamins, minerals and fibre.** |  
  - Carbohydrates are a vital source of energy.  
  - Vitamins and minerals have many benefits, including working as antioxidants and helping the body to absorb and use other nutrients.  
  - Fibre helps to make you feel full, helps to control blood sugar levels and keeps your digestive system healthy.  
  - The fibre in fruit and vegetables can help lower cholesterol.  |
| **Eat wholemeal bread, whole grain crispbreads, brown rice and wholemeal pasta, other whole grains and wholegrain cereals, eg oats, rye, polenta and quinoa.**  |  
  - These are a low fat source of carbohydrates and are high in B vitamins, vitamin E, minerals including iron and zinc and fibre.  
  - If you are wheat or gluten sensitive, the following grains do not contain gluten:  
    - rice  
    - corn  
    - millet  
    - buckwheat  
    - amaranth  
    - quinoa  |
| **Carbohydrates are a vital source of energy.**  |  
  - Iron helps the blood to carry oxygen around the body and is vital for energy production.  
  - Zinc is important for growth, repair and healing and allows the body to use carbohydrates, fats and proteins effectively.  
  - Vitamin E has many functions, including acting as an antioxidant, protecting cells from damage, improving wound healing and fertility and maintaining healthy skin.  
  - B vitamins have a variety of uses: for a healthy nervous system, to help release energy from food and to help the blood carry oxygen around the body.  
  - Fibre helps to make you feel full, helps to control blood sugar levels and keeps your digestive system healthy.  
  - The fibre in oats can help lower cholesterol.  |
| **Use polyunsaturated oils such as sunflower and corn oil, monosaturated oils such as olive oil and polyunsaturated margarines instead of saturated fats such as lard and butter.** |  
  - Sunflower and corn oils are monounsaturated fats and good sources of the omega 6 EFAs.  
  - Olive, rapeseed and nut oils and avocados are monosaturated fats.  |
| **Avoid too much saturated fat (in meat, lard, dripping, full-fat milk and yogurt, cream, butter, ghee, hard and soft full-fat cheeses, mayonnaise, creamy dressings and palm oil) and hydrogenated vegetable oil in cooking fats, margarine, cakes, biscuits, croissants, pastry and chocolate.**  |  
  - When liquid vegetable oil is turned into solid fat through a process called hydrogenation - harmful “trans” fats are formed. Like saturated fat, trans fats can raise cholesterol levels.  |
| **Grill, bake, steam or poach food instead of frying.** |  
  - Frying food often means using greater amounts of fat.  
  - Frying food in oil produces damaging “free radicals” that can destroy essential fats in food and can cause the damage to cells that increase the risk of cancer and degenerative diseases. It also causes the formation of harmful, “trans” fats, which can raise blood cholesterol levels and stop the body from making use of essential fats.  
  - Polyunsaturates can lower blood cholesterol levels and therefore help reduce the risk of heart disease.  
  - Omega 6 EFAs are important for a healthy nervous and immune system, help with blood sugar balance, decrease inflammation and pain and lower blood pressure.  
  - Monosaturated fats can lower blood cholesterol levels and therefore help to reduce the risk of heart disease.  |
| **Cut down on saturated fats can reduce the risk of heart disease.** |  
  - Cutting down on saturated fats can reduce the risk of heart disease.  
  - Cutting down on hydrogenated fats can reduce the risk of heart disease.  
  - Cutting down on trans fats can reduce the risk of heart disease.  |

*Factsheet: The British Polio Fellowship*
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**Suggestion** | **Health benefits**
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Use lean cuts of meat and trim off visible fat and skin. Sausages, pork pies,corned beef, luncheon meats, pates and beefburgers are high in saturated fat and salt.  
- Meat is rich in iron, zinc, B vitamins and protein. |  
- Iron helps the blood to carry oxygen around the body and is vital for energy production.  
- Zinc is important for growth, repair and healing and allows the body to use carbohydrates, fats and proteins effectively.  
- B Vitamins have a variety of uses: for a healthy nervous system, to release energy from food, for a healthy digestion and to help the blood carry oxygen around the body.  
- Protein is used for the growth and repair of the body, blood sugar regulation and blood clotting and fighting disease (antibodies).  

Eat at least 2 portions of fish a week, one of which should be oily fish like mackerel, pilchards, salmon, trout, fresh tuna or sardines.  
- Fish is a good source of protein, vitamins and minerals, such as selenium and iodine.  
- Oily fish is rich in omega 3 EFAs, vitamins A and D.  
- Omega 3 EFAs are important for a healthy heart, circulation and nervous system, improve immune function and metabolism, reduce inflammation and maintain water balance.  
- Vitamin A is good for the skin and eyes.  
- Vitamin D keeps bones and teeth healthy.  
- Selenium helps to keep the immune system healthy and acts as an antioxidant.  
- Iodine helps produce important hormones for a healthy metabolism.  
- Protein is used for the growth and repair of the body, blood sugar regulation and blood clotting and fighting disease (antibodies).  
- White fish is particularly low in fat.  

If you don’t like oily fish, you may wish to take fish oil capsules. If you are a vegetarian, you can get omega 3 EFAs from flax seeds and oil, hemp seeds and oil and pumpkin seeds. |  
- Protein is used for the growth and repair of the body, blood sugar regulation and blood clotting and fighting disease (antibodies).  
- Calcium and vitamin D are needed for strong bones and teeth.  
- Vitamin A is good for the skin and eyes.  
- Vitamin B12 is important for a healthy nervous system.  

Use low fat dairy products such as skinned and semi-skimmed milk, low fat yoghurt and low fat and reduced-fat cheeses.  
- Dairy products are a good source of protein, calcium and vitamins A, B12 and D.  
- Lower fat versions, such as skinned and semi-skimmed milk reduce the fat but keep the other nutrients. |  
- Protein is used for the growth and repair of the body, blood sugar regulation and blood clotting and fighting disease (antibodies).  
- Nuts and seeds are a good source of protein, monosaturated fats, fibre, B vitamins, vitamin E, calcium, iron zinc, magnesium and selenium.  
- Seeds contain omega 3 and 6 EFAs.

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<tr>
<td>Eat up to four eggs a week (boiled, hard-boiled, poached and baked).</td>
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- Eggs are a good source of protein, iron, zinc, B vitamins, vitamins A and D.  
- Health benefits include:  
  - Protein is used for the growth and repair of the body, blood sugar regulation and blood clotting and fighting disease (antibodies).  
  - Iron helps the blood to carry oxygen around the body and is vital for energy production.  
  - Zinc is important for growth, repair and healing and allows the body to use carbohydrates, fats and proteins effectively.  
  - B vitamins have a variety of uses: for a healthy nervous system, to release energy from food, for a healthy digestion and to help the blood carry oxygen around the body.  
  - Vitamin A is good for the skin and eyes.  
  - Vitamin D keeps bones and teeth healthy.  

Use pulses (beans, peas, lentils) eg baked beans, kidney beans, hummus and dhal.  
- Pulses are a good source of protein, iron, B vitamins and fibre.  
- Iron helps the blood to carry oxygen around the body, blood sugar regulation and blood clotting and fighting disease (antibodies).  
- Iron helps the blood to carry oxygen around the body and is vital for energy production.  
- B Vitamins have a variety of uses: for a healthy nervous system, to release energy from food, for a healthy digestion and to help the blood carry oxygen around the body.  
- Fibre helps to make you feel full, helps to control blood sugar levels and keeps your digestive system healthy.  
- The fibre in pulses can help lower cholesterol.  

Eat unsalted nuts (eg Brazil nuts, cashews, almonds, pecans) and seeds (eg sunflower, sesame, pumpkin and flax) and unsalted nut butters and tahini (sesame paste).  
- Nuts and seeds are a good source of protein, monosaturated fats, fibre, B vitamins, vitamin E, calcium, iron zinc, magnesium and selenium.  
- Seeds contain omega 3 and 6 EFAs.  
- Health benefits include:  
  - Protein is used for the growth and repair of the body, blood sugar regulation and blood clotting and fighting disease (antibodies).  
  - Monosaturated fats can lower blood cholesterol levels and therefore help to reduce the risk of heart disease.  
  - Fibre helps to make you feel full, helps to control blood sugar levels and keeps your digestive system healthy.  
  - Iron helps the blood to carry oxygen around the body and is vital for energy production.  
  - Zinc is important for growth, repair and healing and allows the body to use carbohydrates, fats and proteins effectively.  
  - Magnesium is important for healthy bones and teeth, muscles, the heart and nervous system.  
  - Selenium helps to keep the immune system healthy and acts as an antioxidant.  
  - Omega 3 EFAs are important for a healthy heart, circulation and nervous system, improve immune function and metabolism, reduce inflammation and maintain water balance.  
  - Omega 6 EFAs are important for a healthy heart, circulation and nervous system, improve immune function and metabolism, reduce inflammation and maintain water balance.  
  - Omega 6 EFAs are important for a healthy nervous and immune system, help with blood sugar balance, decrease inflammation and pain and lower blood pressure.
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<tr>
<td>Cut down on the amount of sugar you eat. Try to add less to coffee and tea and limit your intake of sweets, biscuits, cakes, puddings, jams, chutneys, squashes and fizzy and energy drinks. Sugar is also added to canned and packet foods, breakfast cereals, snack foods, pickles, dressings and sauces. Refined sugar contains negligible vitamins and minerals and therefore contains “empty calories”. Sugary foods can lead to a quick energy rush, followed by a slump afterwards. A high sugar intake is associated with tooth decay, obesity, blood sugar disturbances, diabetes, heart disease and cancer. Try adding spices like cinnamon, nutmeg, ginger, star anise and cardamom to food instead of sugar. Cinnamon has been proven to lower blood pressure and blood sugar levels in diabetics.</td>
<td>Cutting down on sugar can help with weight loss and improve general health.</td>
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<td>Cut down on the amount of salt you eat. Do not add salt to your food at the table, use less in cooking and reduce your intake of high-salt foods such as ready meals, instant soups, canned and packet foods, takeaway foods, cured and processed meats, cheese, salted fish, crisps, biscuits, salted nuts, pickles, chutneys, sauces, marinades, dressings and stock cubes.</td>
<td>Cutting down on salt can help to reduce blood pressure and lower the risk of a heart attack or stroke and improve general health.</td>
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<td>Drink alcohol within sensible limits. Men should drink no more than 4 units of alcohol a day and a total of no more than 21 units a week. Women should drink no more than 3 units a day and a total of no more than 14 units a week. Don’t binge drink and have at least 2 alcohol-free days per week. A unit of alcohol is a measure of spirits, a small glass of wine or a half-pint of lager or beer.</td>
<td>Plant chemicals in red wine, known as polyphenols, have been found to interfere with the production of a body chemical that is vital to the process that clogs up arteries and increases the risk of a heart attack.</td>
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- Moderate drinking- between 1 and 2 units of alcohol a day- has a protective effect on the heart in men over 40 and women who have gone through the menopause.
- Heavy drinking can contribute to vitamin/mineral deficiencies, disorders of the heart muscle, liver disease, stomach ulcers, pancreatitis, high blood pressure, stroke and certain cancers.
- Alcohol is high in calories and can cause weight gain.

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<td>Drink 8 glasses of water daily (about 1.5 litres). Don’t rely on high-caffeine drinks such as tea, coffee and cola to keep hydrated. Herbal teas have medicinal properties and do not contain caffeine. Redbush or rooibos tea contains no caffeine and may be enjoyed with or without milk.</td>
<td>Water is vital for the body to function.</td>
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- Dehydration can affect memory, concentration and energy levels.
- A good fluid intake can keep the bladder and bowels healthy.
- Caffeine and alcohol can make the body more dehydrated.
Further reading

I-Can't-Chew Cookbook

Delicious Soft-Diet Recipes for People with Chewing, Swallowing and Dry-Mouth Disorders, by J Randy Wilson. Published by Hunter House Publishers (2003), ISBN 0-89793-399-0

This American book includes recipes for a wide variety of soft and easy to swallow dishes, together with nutritional guidelines and suggestions for boosting protein, calories (where appropriate) and fibre in the diet.

Useful organisations

Allergy UK

Allergy UK is the leading medical charity for people with allergies, food intolerance and chemical sensitivity.

Planwell House
LEFA Business Park
Edgington Way
Sidcup
Kent DA14 5BH

Allergy Helpline: 01322 619898
Website: www.allergyuk.org

Arthritis Care

Arthritis Care is the largest UK organisation working with and for people with arthritis.

18 Stephenson Way
London NW1 2HD

Telephone: 020 7380 6500
Helpline: 0808 800 4050
Website: www.arthritiscare.org.uk

Arthritis Research UK

Arthritis Research UK is the only charity in the UK solely dedicated to investigating arthritis in all its forms.

Copeman House
St Mary's Gate
Chesterfield
Derbyshire S41 7TD

Telephone: 0300 790 0400
Website: www.arthritisresearchuk.org

Blood Pressure Association

The Blood Pressure Association is the UK charity dedicated to lowering the nation’s blood pressure.

60 Cranmer Terrace
London SW17 0QS

Information Line: 0845 241 0989
Website: www.bpassoc.org.uk

British Dietetic Association (BDA)

The professional association for dietitians, the BDA provides factsheets on food and nutrition, search facilities for freelance dietitians and information about training as a dietitian.

5th Floor, Charles House
148/9 Great Charles Street Queensway
Birmingham B3 3HT

Telephone: 0121 200 8080
Website: www.bda.uk.com
British Heart Foundation
The British Heart Foundation promotes research into heart disease and provides information and support into its prevention and treatment.

Greater London House
180 Hampstead Road
London NW1 7AW

Heart HelpLine: 0300 330 3311
Website: www.bhf.org.uk

British Nutrition Foundation
The British Nutrition Foundation produces a range of free newsletters, providing consistent, scientifically accurate and up-to-date food and nutrition information.

High Holborn House
52-54 High Holborn
London WC1V 6RQ

Telephone: 020 7404 6504
Website: www.nutrition.org.uk

Diabetes UK
Diabetes UK is the largest charity in the UK devoted to the treatment and care of people with diabetes and the largest funder in the UK of research into better treatments for diabetes and the search for a cure.

Macleod House
10 Parkway
London NW1 7AA

Careline: 0845 120 2960
Website: www.diabetes.org.uk

Disabled Living Foundation
The Disabled Living Foundation is a national charity that provides free impartial advice about all types of daily living equipment and mobility products for older and disabled people, their carers and families.

380-384 Harrow Road
London W9 2HU

Helpline: 0845 130 9177
Website: www.dlf.org.uk

Food Standards Agency
The Food Standards Agency is an independent Government department set up to protect the public's health and consumer interests in relation to food.

Food Standards Agency
Aviation House
125 Kingsway
London WC2B 6NH

Telephone: 020 7276 8000
Helpline: 020 7276 8829
Website: www.food.gov.uk

The IBS Network
The IBS Network is the national charity for people with Irritable Bowel Syndrome in the United Kingdom.

The IBS Network
Unit 5
53 Mowbray Street
Sheffield S3 8EN

Telephone: 0114 272 3253
Helpline: 0872 300 4537
Website: www.theibsnetwork.org
The Vegan Society

The Vegan Society provides information on eating healthily while following a vegan diet.

Donald Watson House
21 Hylton Street
Birmingham B18 6HJ

Telephone: 0845 458 8244
Website: www.vegansociety.com

The Vegetarian Society

The Vegetarian Society provides information on eating healthily while following a vegetarian diet.

Parkdale
Dunham Road
Altrincham
Cheshire WA14 4QG

Telephone: 0161 925 2000
Website: www.vegsoc.org

For copies of any of our factsheets and leaflets, contact:

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Eagle Office Centre
The Runway
South Ruislip
Middlesex HA4 6SE

Freephone: 0800 018 0586
Website: www.britishpolio.org.uk
E-mail: infobenefits@britishpolio.org.uk

Written by Laura Skorupa

The British Polio Fellowship would like to thank Jo Felton, Specialist Dietitian (Respiratory), the Lane-Fox Unit, St Thomas’ Hospital, London, and Andrew Probert for their help and advice with the writing of this factsheet.

October 2011

Medical disclaimer

The information given in this factsheet is not medical advice and is therefore not a substitute for the advice your doctor, dietitian or specialist may give you based on his or her knowledge of your condition.

By providing this information The British Polio Fellowship and our medical advisors do not undertake any responsibility for your medical care.