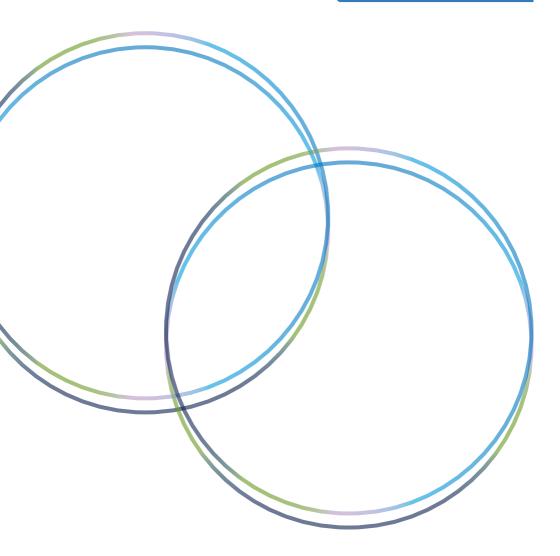


Dietary information to promote wound healing

Information leaflet



Dietary information to promote wound healing

This booklet aims to provide helpful information on diet to support wound healing. You may be provided with additional information or guidance from your doctor or Dietitian alongside this booklet.

Nutrition is an important part of recovery, especially in the healing of traumatic injuries, surgical wounds, or pressures sores. Your body needs extra protein, and adequate vitamins and minerals to support healing.

If you have kidney disease, please speak to your doctor or Dietitian as a high protein diet or increasing your vitamin A intake may not be appropriate.

The Eatwell Guide

Ensuring you have a well-balanced diet from different food groups will mean you are getting all the nutrients you need to promote wound healing.

From the diet it is important you are eating enough energy and protein to enable your wounds to heal. Micronutrients such as Iron and Zinc and Vitamins A, C and E are also beneficial for wound healing.

Fruits and vegetables

- Some energy from carbohydrate components
- Vitamins A, C and E

Carbohydrates

- Energy
- Iron
- Zinc

Oils and spreads

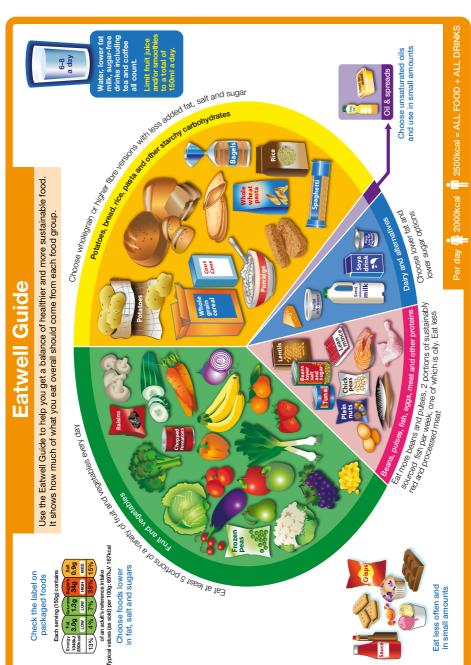
- Very energy dense
- Vitamin E

Dairy and alternatives

- Protein
- Energy
- Zinc

Meat, fish, eggs, legumes such as beans and lentils

- Protein
- Energy
- Iron
- Zinc



Source: Public Health England in association with the Welsh Government, Food Standards Scotland and the Food Standards Agency in Northern Ireland

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Protein

Protein is an essential nutrient for wound healing. Protein helps to build and repair muscle, skin and other body tissues.

Sources of protein:

- Meat red meat, chicken, pork, turkey.
- Fish and seafood.
- Eggs.
- Dairy milk, yoghurt, cheese, cream.
- Legumes and pulses beans, lentils, chickpeas.
- Nuts and seeds.
- Soy milk and soy-based products such as soy yoghurt.
- Tofu, Quorn, tempeh.

Tips to make sure you are getting enough protein

- Have a protein source at every meal.
- Ensure snacks also include protein. For example, yoghurt and fruit, cheese and biscuits.
- Add cream and cheese to any sauces or mashed potato.*
- Drink 2 cups of milk a day.
- Add cream or custard to puddings.*
- Add legumes and pulses to soups and salads.
- Cottage cheese or quark with fruit.

If you are struggling to incorporate enough protein into your diet, please get in touch with your dietitian/doctor.

*NB: These options are also high in energy as well as protein.

Energy and wound healing

All food contains energy (calories/kilojoules), some foods more than others.

You may require a high energy diet if

- You are underweight or losing weight unintentionally.
- You have a large wound or significant pressure sore.

A high energy diet can be achieved by

- Aiming for 1 pint of full fat (whole) milk each day.
- Including 2 high energy snacks each day (such as yoghurt, cheese, nuts, and biscuits).
- Aiming to eat 3 meals a day that have been fortified with extra fats or oils and adding extra breads and cereals to your diet.

If you are above your healthy weight

- Try having moderate servings of breads and cereals, choosing low fat varieties and limiting additional fats and oils to reduce energy intake.
- Choosing leaner protein sources (those with lower energy content). These include white meats (chicken, turkey), lower fat dairy products, legumes and pulses.
- Choose healthier cooking methods, for example, poaching rather than frying eggs and removing visible fat from meat before cooking.

Fluid requirements and wound healing

Fluid comes from water and any other drinks or beverages, including milk, juice, squash etc. We can also get fluid from the food we eat such as fruits and vegetables, custards, soups, yoghurts and sauces.

Inadequate fluid intake leads to dehydration, which can delay or impair wound healing due to the impact on blood supply to and from cells.

Signs of dehydration

- Thirst
- Dry or sticky mouth.
- Headaches.
- Dizziness
- Decreased urine output.
- Dark and strong smelling urine.

Causes of dehydration

- Not drinking enough fluid.
- Increased fluid loss via a wound or skin damage.
- Vomiting, diarrhoea or increased sweating.

Recommended daily fluid intake

- Adults about 6 to 8 glasses (2 to 2.5 litres per day).
- Older adults about 6 glasses (1.5 to 2 litres per day).

If your doctor has advised you to have a fluid restriction, please follow the doctors advice with regards to your allowed fluid intake.



Other key nutrients for wound healing

The micronutrients listed in the table below play an important role in wound healing. Adequate amounts can be obtained if you follow the NHS Eatwell Guide and eat a wide variety of nutritious foods each day.

If you cannot eat a varied diet, or are unable to eat enough, an A to Z Multivitamin and Mineral supplement may be required.

The major micronutrients for wound healing	Major food sources	
Vitamins		
Vitamin A Recommend dietary intake: • For adults 19+: 600 µg / day women 700 µg / day men	 Milk and yogurt, cheese, eggs, oily fish, fortified low-fat spread, liver and liver products. Fruits and vegetables including dark green leafy vegetables, carrot, mango, apricots, sweet potatoes, red and yellow peppers. 	
Vitamin C Recommend dietary intake: • For adults 19+: 40mg / day	 Fruits including citrus fruits (oranges, orange juice, grapefruit), strawberries, blackcurrant, kiwi fruit, tomatoes. Vegetables including broccoli, peppers, Brussel sprouts. 	
Vitamin E Adequate intake: • For adults 19+: 3 mg / day women 4 mg / day men	 Plant oils including sunflower oil, olive oil, rapeseed oil. Nuts and seeds including almonds, hazelnuts, walnuts, pecans, sunflower seeds. Wheatgerm – found in cereals. 	

The major micronutrients for wound healing	Major food sources	
Minerals		
Zinc Recommend dietary intake: • For men 19+: 9.5mg / day • For women 19+: 7mg / day	 Red meat, fish, shellfish especially oysters. Egg, poultry. Legumes, lentils and nuts. Milk, cheese, yoghurt. 	
Iron Recommend dietary intake: • For men 19+: 8.7mg / day • For women 19-50: 14.8mg / day • For women over 50: 8.7mg / day	 Red meat, offal especially liver, seafood, fish. Dark green leafy vegetables.* Beans, nuts, seeds.* Fortified breakfast cereals. Dried fruit e.g. dried apricots. *Absorption improved when taken with foods high in vitamin C. 	

Diabetes and wound healing

Good blood glucose control is important for wound healing. High blood glucose levels can delay the healing process by

- Narrowing the blood vessels and reducing blood flow and oxygen to the wound.
- Increasing the risk of wound infection.

Why blood glucose levels can be higher if you have injury or wound

Stress hormones are released if you have an injury or wound. This causes your body muscle or tissue to breakdown to supply extra nutrients (including sugar or glucose). This causes your blood glucose levels to be raised. Dietary changes and medication may be needed to achieve good blood glucose levels.

If you have a poor appetite, limiting your diet to control blood glucose levels is not advised. High blood glucose levels should instead be managed with optimisation of medication. If you have high blood glucose levels, please discuss this with your doctor or specialist diabetes nurse.

Healthy eating for diabetes

- Eat regular meals include a lean protein source at each meal and spread carbohydrate foods evenly over the day.
- Avoid foods or drinks high in refined sugar such sweetened soft drinks, pastries, cakes.
- Maintain a healthy weight, be mindful of portion size and choose low fat or reduced fat foods.
- Choose carbohydrate foods high in fibre such as wholegrain breads and cereals, fruits and vegetables.
- Be active, exercise at least 30 minutes most days of the week when you can.

Notes

Further information

If you would like an interpreter, please speak to the department where you are being seen.

Please also tell them if you would like this information in another format, such as:

- Easy Read
- large print
- braille
- audio
- electronic
- another language.

We have tried to make the information in this leaflet meet your needs. If it does not meet your individual needs or situation, please speak to your healthcare team. They are happy to help.

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