



How to eat well for wound healing

A guide for patients, their families and carers

This leaflet gives you information to improve your diet and help your wound or pressure ulcer (bed sore) to heal.

The advice is for adults who have a normal body weight or who are overweight and have not experienced any unintentional weight loss.

HSE dietitians developed this leaflet, and we hope it will help you make good food choices to support your body as it heals.



Disclaimer:

The advice included in this guide is intended for adults only. It should be used under the supervision of a suitably trained healthcare professional. It is not suitable for patients with complex nutritional needs. This includes people who have renal (kidney) disease or poorly-controlled diabetes.

How improving your nutrition helps wound healing

Your body needs energy (calories), proteins, fluids, vitamins and minerals every day. This is especially important if you have a wound that is healing. Eating well at this time helps your body heal faster and fight infection.

If you are not eating enough healthy food or the right balance of foods, this can delay or slow down healing.

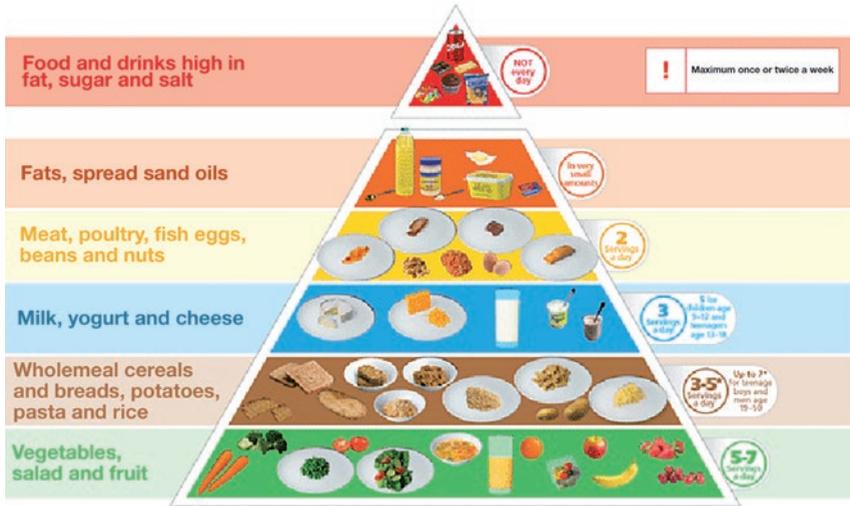
If you don't eat the right balance of foods, a healthcare professional may recommend that you take a supplement – a product usually a tablet or a drink to improve your diet. Examples of supplements include vitamin, mineral or oral nutritional supplements. Do not take a supplement without first discussing this with your doctor or other healthcare professional. Taking the wrong supplements could slow down your healing or cause other unwanted effects.

If you are overweight, we generally recommend that you maintain your current weight while your wound or pressure ulcer is healing. Try not to lose weight until your wound is fully healed.



Eat a balance of healthy foods

Food Pyramid



The foods on the top (**red**) shelf of the pyramid are not needed for good health. Have these a maximum of once or twice a week. The foods on the other five shelves are needed for good health. Eat a variety of these foods every day.

Using the Food Pyramid helps make healthy eating easier. It is a guide to help you get the right balance of nutritious foods each day.

Healthy eating is about getting the correct amount of nutrients each day. Nutrients include proteins, fats, carbohydrates, vitamins and minerals. You need all of these to keep in good health.

Foods that contain the same type of nutrients are grouped together on each of the six 'shelves' (parts) of the Food Pyramid. For example, you can see that the **blue** shelf has milk, yogurt and cheese. These foods are high in protein. The **blue** shelf gives you the option to choose from different types of proteins. The **brown** shelf gives you a choice of foods that contain energy and fibre.

Tip: For more information on The Food Pyramid, serving sizes, and amounts for people of different ages and activity levels, visit www.healthyireland.ie. The website also has other tips and advice.

What diet your body needs during healing

Follow the information below to help you get the energy, protein, vitamins and minerals you need to help your wound to heal. Let's look at each of these in turn.

Energy

Your body needs enough energy (or calories) from food while your wound is healing. If you are a normal weight or overweight, the goal is generally to maintain your weight and not lose weight while healing.

Wholemeal cereals and breads, potatoes, pasta, and rice are important sources of energy. Choose three to five servings from the wholemeal cereals and breads shelf (**brown**) each day.

One serving is:

- 2 thin slices of wholemeal bread or 1½ slices of wholemeal soda bread or 1 pitta pocket
- ½ cup dry porridge oats or ½ cup unsweetened muesli
- 1 cup of flake-type breakfast cereal
- 1 cup of cooked rice, pasta or noodles
- 2 medium-sized or 4 small potatoes or 1 cup of yam or plantain (plantains are a starchy, unsweet variety of banana that must be cooked before eating)

Protein

Protein is very important for wound healing. It helps build and maintain muscle, heals tissue and supports a healthy immune system. Your body needs more protein to help a wound heal, so you need to include foods that are high in protein.

To get enough protein, eat foods from the meat, poultry, fish, eggs, beans and nuts shelf (the **yellow** shelf) and the milk, yogurt and cheese (the **blue** shelf) of the food pyramid. Your healthcare professional may recommend a higher or lower amount of protein, based on your individual needs.

Choose two servings from the meat, poultry, fish, eggs, beans and nuts shelf (**yellow**) each day.

One serving is:

- 50-75g cooked lean beef, lamb, pork, mince or poultry (half the size of the palm of your hand)
- 100g cooked fish, soya or tofu
- 40g unsalted nuts or seeds
- 1 cup beans or lentils
- 2 eggs

Tip: Try to choose a variety of options rather than choosing the same foods each day.

Choose three servings from the milk, yogurt and cheese shelf (**blue**) each day.

One serving is:

- 1 glass (200ml) milk
- 1 carton (125g) yogurt
- 1 bottle (200ml) of yogurt drink
- 25g hard or semi-hard cheese, such as cheddar or edam
- 25g soft cheese, such as brie or camembert

Fluid

Plan fluid and drinks into your daily routine. Don't wait until you are thirsty. You can count water, milk, juice, soup or teas as part of your daily fluid intake.

Make sure your body is properly hydrated while your wound is healing. Fluid helps oxygen and nutrients get directly to the site of the wound, where they help with the healing process.

Aim to drink 1.5 to 2 litres of fluid per day (8 to 10 cups), unless you have been advised otherwise for health reasons. If there is a lot of exudate (oozing or discharge) from your wound, your healthcare professional may advise that you take more fluids than usual.

Avoid sugary drinks such as fizzy drinks. Choose sugar-free alternatives and use low-calorie sweeteners in hot drinks.

If you are choosing fruit juice, look for 100% fruit with no added sugar (try to include 150mls or one small glass each day).

Tip: Drink fluids between meals or at the end of a meal, so they don't fill you up. Keep a glass or bottle of water near you all day.

Fruit and vegetables

Fruit and vegetables contain lots of vitamins and minerals. These help protect us against infection and help wounds to heal. Include plenty of vegetables, salads and fruits, up to half your plate or bowl, at each meal. Choose a variety of colours (think of a rainbow) as the different coloured fruits and vegetables have different types of nutrients.

One serving is:

- 1 medium-sized fruit: apple, orange, pear or banana
- 2 small fruits: plums, kiwis or mandarin oranges
- Small fruits: 6 strawberries, 10 grapes or 16 raspberries
- ½ cup cooked vegetables: fresh or frozen
- 1 bowl of salad: lettuce, tomato or cucumber
- 1 bowl of homemade vegetable soup
- 150ml unsweetened fruit juice



Vitamins and minerals needed for healing

Vitamins A and C, and minerals iron and zinc will help with wound healing.

Vitamin A

Vitamin A helps maintain skin strength. It is found in foods in different forms. It is directly absorbed from animal sources and can also be made by the body from plant-based sources such as those listed below. Try to eat foods rich in vitamin A each day to help healing.

Good sources of vitamin A include:

Animal sources

- cheese
- eggs
- oily fish, such as mackerel and salmon
- cod liver oil
- milk and yogurt
- fortified margarine and fat spreads (alternatives to butter)
- liver (a particularly rich source of vitamin A, but do not eat liver if you are pregnant)

Plant-based sources

- brightly-coloured fruit and vegetables such as red bell peppers, sweet potato, carrots
- dark green vegetables: kale, spinach, broccoli

Vitamin C

Vitamin C also plays an important role in wound healing and in forming new tissue. A lack of vitamin C can cause your skin to become fragile, and it slows down the healing process.

The following are particularly good sources of vitamin C:

- oranges
- strawberries, blueberries, raspberries
- kiwi fruit
- fruit juice (100% fruit, no added sugar) - 150mls per day
- tomatoes
- peppers
- potatoes (with skin on)
- broccoli and Brussels sprouts
- cauliflower

Tip: Cooking can reduce the amount of vitamin C in food. Where possible, eat fruit and vegetables raw to maximise the amount of vitamin C you get. Otherwise, steaming or microwave is best to preserve nutrients.

Iron

Healthy blood cells are vital for wound repair, and iron is essential for healthy blood cells. The body absorbs iron from animal sources more easily, but plant-based sources can also be important.

Foods that contain iron include:

Animal sources

- liver (do not eat liver if you are pregnant)
- meat (red meat has a high iron content), chicken, fish
- eggs

Plant-based sources

- fortified breakfast cereals
- beans
- nuts
- dried fruit, such as dried apricots
- whole grains, such as brown rice
- soybean flour
- most dark-green leafy vegetables, such as watercress and curly kale



Tip: Vitamin C helps increase your absorption of iron. Eat foods that are rich in vitamin C along with foods that are rich in iron. For example, drink a glass of orange juice (rich in vitamin C) with a fortified breakfast cereal (rich in iron).

Tip: Drinking tea or coffee with your meals can make it harder for your body to absorb iron from food. Cut down on tea and coffee during mealtimes if you have been told that your iron levels are low.

Zinc

Zinc is another important mineral for wound healing and to help your body form new tissue. Like iron, it is more easily absorbed from foods that come from animal sources. Some plant sources are also included below.

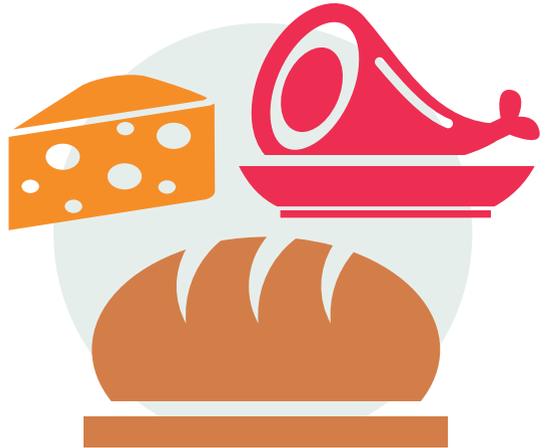
Foods that contain zinc include:

Animal sources

- meat and chicken
- seafood and shellfish
- liver
- eggs
- dairy foods, like milk, cheese and yogurt

Plant-based sources

- bread
- cereal products, such as wheat germ
- legumes (beans, lentils and chickpeas)
- nuts and seeds
- whole grain foods (brown rice, cereals, oatmeal, barley)



More information

Healthy eating and meal plans are available at www.healthyireland.ie.

Other considerations

Diabetes and wound healing

As well as good nutrition, maintaining healthy blood glucose (sugar) levels will help your wound to heal. The HSE offers free courses across the country for people with Type 2 Diabetes. Ask your GP (doctor) to refer you or search 'HSE diabetes course' online.

When you are underweight or lose weight during wound healing

If you are underweight or have lost weight without trying to, speak to your healthcare professional. A registered dietitian can provide advice to help you increase energy and protein in your diet. For example, they can give you a copy of 'Making the Most of Every Bite' – a full-colour cookbook with high calorie, high protein recipes. Or you can read it online or download it: www.hse.ie/nutritionsupports.

Notes:



The information contained in this guide is based on the content of the HSE National Wound Management Guidelines 2018.

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