

A Patient's Guide to Healthy Eating After Spinal Injury



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Introduction

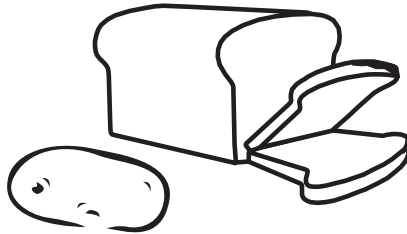
Good nutrition is important for all the population, however when people have a Spinal Cord Injury they have to take the following into consideration:

- Changes in body weight - initial weight loss, this is the body's response to trauma, and long-term weight gain mostly due to decrease in activity.
- The risk of developing pressure sores - due to immobility, poor circulation and lack of sensation.
- Prone to chest infections - depending on the level of injury due to the initial trauma and lack of cough reflex
- Bladder and urinary tract infections
- Bowel problems, sometimes due to reduced gut mobility leading to poor appetite, constipation/diarrhoea. Also, enforced bed rest and the change in eating habits as well as being dependent on others for feeding. For initiating and planning bowel routine, refer to bowel management education pack.

Healthy eating

Healthy eating is based on having a variety of foods from five food groups which are:

1. **Bread, other cereals and potatoes** - provide energy and vitamins.
2. **Fruit and vegetables** - provide minerals, vitamins and fibre.
3. **Milk and dairy products** - help with the formation and repair of bone and tissue.
4. **Meat, fish and alternatives** - provide protein for growth, tissue formation and iron for blood.
5. **Fatty and sugary foods** - provide energy for warmth and growth.



1. Bread, other cereals and potatoes

This group includes breakfast cereals, pasta, rice, oats, noodles, corn/maize and millet. Beans and pulses can be included in this group. Try to eat wholemeal, wholegrain or high fibre versions when possible. Try to avoid spreading too much fat on bread or cooking potatoes in fat eg. chips and roast potatoes.



2. Fruit and vegetables

This group includes fresh, frozen or canned fruit, vegetables and dried fruit. Fruit juice, beans and pulses can be included in this group. Aim to eat 5 portions of fruit and vegetables a day.

Examples of a portion of fruit are:

- A piece of fresh fruit, i.e. apple, small banana or pear
- 100g (small bowl) tinned fruit
- 1 tablespoon dried fruit
- 4 prunes

A portion of vegetables is:

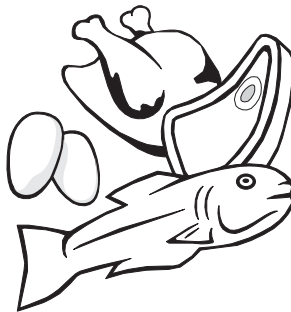
- 2 tablespoons of the vegetable
- 1 small side salad

These foods, except for fruit juice, add fibre to the meal. Try to avoid adding fat to the vegetables. Try to have tinned fruit in natural juice, rather than in syrup.



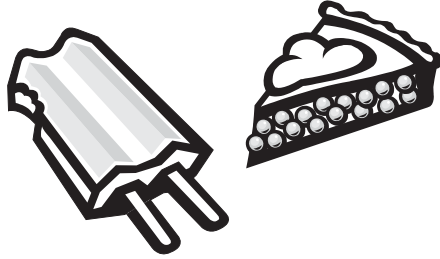
3. Milk and dairy foods

These foods provide calcium for healthy bones, teeth and muscle health. (Refer to paragraph on calcium intake). This group includes milk, cheese, yoghurt and fromage frais. This group does not include eggs. Choose low fat versions of these foods, eg. skimmed or semi-skimmed milk.



4. Meat, fish and alternatives

These are proteins needed for growth and tissue repair. This group includes meat, poultry, fish, eggs, nuts, beans and pulses. Trim fat off meat and choose lower fat versions when you can. Oily fish, eg. mackerel, salmon and tuna, provide vitamin D and Omega-3 polyunsaturated fatty acids. Have these 1-2 times a week.



5. Fatty and sugary foods

These foods provide energy and warmth. This group includes: margarine, low fat spread, butter, other spreading fats, cooking oil, salad dressings and mayonnaise, cream, ice cream, chocolate, biscuits, cakes, pastry, crisps, puddings, sweets and sugar.

Eat these foods in small amounts. High fat and sugar foods, and highly processed foods eg. puddings, crisps and pastry, should be occasional foods only, since they may also contain saturated fat, which may increase your blood cholesterol level. (Ask to see a Dietitian if you are worried about your blood lipid level).

Special points to consider

Being underweight

You may have a poor appetite and be losing weight. Your weight may have dropped quickly after the injury - this is the body's natural response to injury. You may have physical difficulties in eating or drinking while lying down. If you are underweight it will be harder to fight infections and lengthen the time taken to regain muscle strength. If you have any wounds they will also take longer to heal.

Nutritional supplements may be prescribed for you at this stage. A State Registered Dietitian will assess your requirement and liaise with your GP.

Being overweight

This is the most common problem experienced by people who have had an injury for a few years; this is mostly due to the decrease in physical activity.

Being overweight will:

- Impair your ability to move or do transfers.
- Make you more prone to develop pressure sores.
- Make it harder to catheterise yourself.
- Make it difficult to fit into your wheelchair, requiring a wider wheelchair which can make access difficult.
- Affect the way you sit, alter your seating pressures on your cushion.
- If you have carers, it may be more difficult for them to care for you.
- It will also put more strain on your heart.

You will need to reduce food from Group 5 (fatty and sugary foods). You may need additional advice from a State Registered Dietitian. Remember that it is easier to keep weight off than to lose the weight you have put on.

Bowel control

When taking a high fibre diet from Group 1 and 2, it is important to drink plenty of fluids. It is recommended that you should have at least 2 litres (3-4 pints) of fluid daily, preferably water. Your fluid intake may be influenced by your type of bladder management. This will help in forming a soft stool and also keep your kidneys working well. Remember that a glass of hot water on rising (on an empty stomach) may initiate gastro-colic reflex (peristalsis) and this helps to push the stool towards the rectum for evacuation or to defecate.



Cranberry Juice

Two 200ml glasses per day is recommended to reduce the risk of contracting bladder infections. Cranberry contains an inhibitor that stops some bacteria sticking to the bladder wall. Cranberry capsules may be an alternative, but this has yet to be researched. Too much cranberry juice will prevent the absorption of calcium.

Calcium

Immobility can lead to a rise in calcium levels in the blood and an increased risk of calcium stones forming in the bladder and kidneys. It seems sensible, therefore, not to take excessive amounts of calcium in the diet, but to meet daily requirements for calcium so that you get sufficient amounts.

The current recommended reference intake for calcium is 700mg per day for men and women over 19. This is equivalent to just over a pint of milk per day. Children and young adults require more. For further advice ask a State Registered Dietitian.

1/3 pint of milk = 1oz hard cheese = 1 pot of yoghurt for calcium intake



Salt

Avoid too many salty foods as this may lead to heart disease. When possible choose fresh food.

- Avoid adding salt at the table.
- Reduce salt in cooking.
- Cut down on salty snack foods, eg. crisps, salted nuts and other salty nibbles.



Alcohol

Overweight patients should only drink alcohol in moderation as it provides empty calories. It may also affect the action of some of your medication. Consult your doctor first, then alcohol should be taken in moderation, within Government guidelines: men 21 units per week, women 14 units per week, with 2 alcohol-free days. Also, remember that alcohol acts as a diuretic, ie. it can make you pass more urine, making you dehydrated. You need to be aware of this if you use intermittent catheters, as you could potentially leak in between catheters and alcohol may also affect your bowels.

1 unit of alcohol is:

- pint of standard strength bitter/cider/lager
- 1 small glass of wine or pub measure of sherry
- 1 pub measure of spirits

Tea, coffee and fizzy drinks

Caffeine in drinks can also have a diuretic effect and make you pass more urine. Water, therefore, is the best fluid to drink.

Vegetarian

Ensure protein is eaten in the form of beans, other pulses, or textured vegetable products such as tofu or Quorn.

Portion sizes

In any one week try not to use more than:

- 100g unsaturated margarine or
200g unsaturated low fat spread

Recommended helpings of meat / fish / cheese / lentils at a main meal are:

- 150g chicken or turkey (without skin)
- 200g white fish
- 100g oily fish
- 150g lentils or other pulses
- 50g low fat cheese, eg. half fat cheddar
- 100g lean meat

All weights are for the cooked product unless otherwise stated and are equivalent to 270k calories approximately.

The reference daily energy intake is 3000 calories for men and 2200 calories for women (in the range of light to moderate activity). Children need more for growth and play. Counting your intake of calories but not adhering to healthy eating principles can be detrimental to your health. Ask your doctor to refer you to a State Registered Dietitian should you need further advice.

References:

Coma Recommendations (DH 1994)
Bodel PT, Cotran R, Kass EH J Lab Clin Med 1959:54:881-8
Schidt DR, Sobota AE: Microbios 1998:55:173-81

Additional Information:

Please note that this is an advisory leaflet only.
Your experiences may differ from those described.
If you need anymore advice please contact your
Dietitian at the RNOH on 020 8909 5456.

If you have any comments regarding this leaflet please contact:
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