



Berkshire Healthcare NHS Foundation Trust
Royal Berkshire NHS Foundation Trust

Your diet and liver disease

Name _____

Dietitian _____

Dietitian contact number: 0118 322 7116

The effect of diet on advanced liver disease

The liver plays a very important role in the breakdown of nutrients in the body. A liver that is damaged or diseased is not able to work as well as a healthy liver. For this reason your body needs more energy, protein and other nutrients in order to maintain or improve your nutritional status.

Protein-energy malnutrition (an inadequate intake of energy and protein in the diet leading to a poor nutritional status and loss of muscle mass) is common with advanced liver disease and can lengthen your hospital stay for various reasons.



Reduced appetite or food/fluid intake due to nausea, vomiting, pain, ascites (fluid build-up), fatigue or extended periods of being nil by mouth for tests can often result in protein-energy malnutrition. The aim of this booklet is to help you improve your dietary intake to reduce the length of time you need to be in hospital.

Meal patterns

Aim for four to six small but regular meals per day, containing foods that are rich in carbohydrates. Ideally you should avoid fasting for more than two hours at a time during the day.

A late night carbohydrate rich snack is recommended at around 10pm, to reduce night-time fasting and avoid early morning hunger pangs.

A 50g carbohydrate snack is recommended, this could be:

- 2 slices of bread with jam
- 300ml milk and 3 plain or chocolate biscuits
- 5 plain or chocolate biscuits
- Breakfast cereal with milk and a banana
- Scone with jam/small flapjack with 300ml milk
- 1 bottle (220ml) of Ensure plus juice®
- 1½ bottles (310ml) of Ensure plus milkshake

Foods and their food groups

A balanced diet contains foods from each of the following five food groups, in the correct proportions. This will mean your body gets all the nutrients that it needs.

Potatoes, bread and cereals

Include these with every meal and snack. It is recommended that you consume 7-14 portions per day.

One portion includes one of the following:

- 2-4 tablespoons (tbsp) cereal
- 1 slice of bread.
- 2-3 crispbreads or crackers.
- 2-3 tbsp rice, pasta or mashed potato.
- 2 new potatoes or half a baked potato.



Fruit and vegetables

Aim to have 5 portions per day. A portion includes one of the following:

- Banana or apple.
- 1 slice of melon.
- 2 plums.
- 1 small glass of fruit juice or smoothie.
- 1 handful of grapes.
- 1 cereal bowl of salad.
- 3 heaped tbsp of vegetables.



Meat, fish, eggs and alternatives

Have 2-3 servings daily. Alternatives include beans and pulses but avoid large portions of these if you find that they upset you or cause bloating. A serving includes one of the following:

- 2-3 oz (60-85g) meat, poultry or vegetarian alternative
- 4-5 oz (120-140g) fish
- 2 eggs
- 2 tbsp nuts
- 3 tbsp beans, lentils

Dairy products

Try to have 3 portions of milk, cheese and yoghurt daily. Use full fat products if your appetite is poor or you are trying to gain weight.

A portion of dairy includes one of the following:

- $\frac{1}{3}$ pint of milk.
- Small pot yoghurt.
- 2 tbsp cottage cheese.
- 1½ oz (40-45g, matchbox size) cheese.

Foods containing fat and sugar

These include cooking and spreading fats, sugar, cakes, biscuits, crisps and so on. More can be eaten if your appetite is poor or if weight gain is desired, snacks between meals are a good idea. Suitable snacks include:

- Yoghurt and fruit.
- Small sandwich or cake.
- Cereal with full fat milk.
- Cheese and biscuits



Oral nutritional supplement drinks

You may be asked to drink high energy milk or juice based drinks in addition to your hospital menu. These drinks are available in a variety of styles, volumes and flavours. Therefore if you did not like one that was given to you, please speak to the nursing staff to find an alternative.

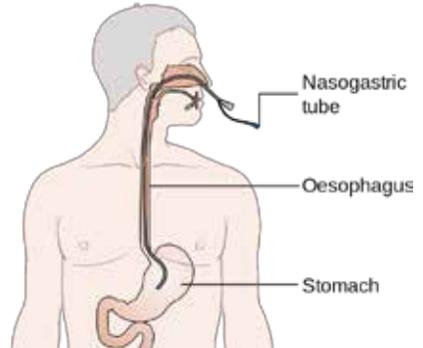
These drinks also taste better when they are cold; if they are not cold enough ask the nurses to give you some ice. The juice style drinks can be very thick and sweet, and an easier way of having them is by diluting them with still or sparkling water or lemonade. The milkshake style drinks can also be diluted with milk. Please be aware that this means you have more to drink, and may be an issue if you are on a fluid restriction.



Supplementary enteral tube feeding

Artificial tube feeding may be needed during your hospital stay if you are unable to meet your nutritional requirements orally. As previously mentioned; your body needs a higher amount of energy, protein and other nutrients when you have advanced liver disease.

For this reason, a naso-gastric (NG) tube may be placed down your nostril which enters the stomach, to allow a liquid feed supplementary to what you are able to digest normally..



No added salt diet

If you have ascites (collection of fluid in the abdomen) or oedema (fluid build-up in your limbs) then you may be asked to follow a no added salt diet. A salt free diet is not required; however you should reduce your intake of salt to less than 100mmol sodium or 5.2g salt per day, as additional salt exacerbates fluid retention.

Try not to add extra salt to the meals that you are given during your inpatient stay. When you go home avoid adding salt to food and cooking water. You can use herbs and spices to add flavour to your food, for example:

- Use black pepper and/or fresh herbs instead of salt
- Add lemon juice to fish or meat
- Eat meat with sauces such apple sauce & redcurrant jelly
- Add olive oil or vinegar to salads/vegetables

If you are using ready-made meals at home check the label to ensure that there is less than 0.3g salt per 100g, as a lot of the salt that we eat comes from processed food. If the labelling does not say 'per 100g' then aim to choose foods that have less than 1.25g salt (0.5g sodium) per serving.

Limit	Try
Soups: packet, tinned or instant	Homemade soups without added salt
Stock cubes and gravy granules	Herbs and spices to flavour dishes, homemade sauces for meat made from milk, butter, onions and garlic. Try low salt gravy granules
Tinned vegetables and beans	Fresh or frozen vegetables, reduced salt versions of baked beans
Cured and processed meats (ham/bacon/sausages/salami)	Un-smoked varieties, or cooked fresh meat
Tinned fish in brine or tomato sauce	Tinned fish in oil or spring water
Yeast extracts eg: Bovril TM or Marmite TM	Savoury spreads: cream cheese, hummus or low salt peanut butter
Hard cheese	Good source of protein and energy, but try to limit to a small matchbox size every other day
Salted butter/margarine	Unsalted varieties

Dealing with nausea

- If smells make you sick try to get fresh air before you eat.
- Opt for cold foods (sandwiches) if cooking smells make you feel unwell.
- Keep your mouth fresh by brushing your teeth, using mouthwash or sucking mints.
- Do not let yourself get too hungry, as hunger can make nausea worse, try to eat every two hours during the day.
- When you are feeling well, try to eat as much as you can manage.



Notes:

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