

## Healthy eating for liver disease (NAFLD)

**Nutrition and Dietetics** 

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Information for Patients

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This leaflet is for people with non-alcohol related fatty liver disease (NAFLD). Eating a balanced diet and keeping a healthy body weight helps your liver to work.

This leaflet is not for people with cirrhosis or advanced liver disease. Please read our 'Nutrition support in liver disease' (1445) diet sheet on the hospital's "Your Health" website: <a href="yourhealth.leicestershospitals.nhs.uk/">yourhealth.leicestershospitals.nhs.uk/</a>

It is important that you talk to your doctor or dietitian before making any changes to your diet or start to lose weight.

#### What does the liver do?

The liver has many functions. It is able to repair itself, but, the liver's ability to repair itself is limited. Continuous harm can lead to permanent scarring.

Some important roles of the liver are:

- Making important proteins that make your blood clot when you are injured
- Making bile to help with digestion of fat
- Fighting infection and disease
- Getting rid of toxins and drugs
- Processes food once it has been digested
- Releases energy when the body needs it fast
- Stores sugars, vitamins and minerals, such as iron
- Removes waste products from the body

## Health information and support is available at www.nhs.uk or call 111 for non-emergency medical advice

Visit www.leicestershospitals.nhs.uk for maps and information about visiting Leicester's Hospitals To give feedback about this information sheet, contact InformationForPatients@uhl-tr.nhs.uk



## What is non-alcohol related fatty liver disease?

A healthy liver should have little to no fat. In some people fat builds up in the liver. This leads to a condition called non-alcohol related fatty liver disease (NAFLD).

People are more likely to develop NAFLD if they:

- Have an unhealthy diet
- Are overweight or obese (see body mass index (BMI) section)
- Have raised fats (lipids) in the blood such as cholesterol or triglycerides
- Live with type 2 diabetes
- Have an underactive thyroid
- Have insulin resistance, for example, polycystic ovary syndrome (PCOS)

If fatty deposits build up over a long time, they can damage the liver and stop it working correctly.

## Stages of NAFLD:

#### Stage 1: Simple fatty liver or steatosis

This is a milder form of the disease. It may only be found during tests carried out for other reasons. At this point, NAFLD can be fully reversed.



#### Stage 2: Non-alcohol related steatohepatitis (NASH)

This is a more serious form of the disease. The build up of fat begins to trigger inflammation. This can damage the liver.



#### Stage 3: NASH with advanced fibrosis

Although the liver can repair itself up to a point, persistent inflammation can mean that the liver reaches the limits of this repair. This leads to liver scarring also called fibrosis.



#### Stage 4: Cirrhosis

Damage from the fat, inflammation and fibrosis in the liver can lead to a condition called cirrhosis. Cirrhosis increases the risk of developing life-threatening liver failure and liver cancer.

## Diet, weight and NAFLD

If you are overweight, your doctor will treat your NAFLD by advising you to lose weight. Losing 5 to 10% of your body weight has been shown to control and in some cases reverse NAFLD. For example: If you weigh 14 stones (89kg) that means losing around 10 to 20 pounds (5 to10kg) in total.

Losing weight can also reduce blood pressure, reduce cholesterol and improve diabetes control.

It is important that you lose weight sensibly. It is recommended to aim to lose 0.5 to 2lb (0.25 to 1kg) a week.

Eating a healthy balanced diet will help you lose weight. Even if you do not need to lose weight, healthy eating helps you to stop putting weight on which could damage the liver more. It is also an important way to improve your general health.

## Your BMI explained

Body Mass Index (BMI) is a measure used to guide if someone is a healthy weight for their height. It is not a perfect guide, but it is a useful guide for most people.

BMI divides an adult's weight in kilograms by their height in metres squared. You can find a BMI calculator on the NHS website or ask your dietitian/doctor to work it out for you if you are not sure.

BMI (kg/m²)	Weight range
Below 18.5	Underweight
Between 18.5 and 24.9	Healthy weight
Between 25 and 29.9	Overweight
30 or more	Obese

For people who are black, Asian or belong to another ethnic minority group the risk of type 2 diabetes and other long term conditions starts to rise at a BMI of 23. Even though this is in a healthy range, it is a good idea to keep an eye on your weight if your BMI is 23 or more.

## Losing weight sensibly

There are 2 ways to do this:

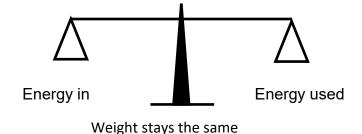
- Eat a healthy, balanced diet
- Be more physically active

We know that these are big changes and can be overwhelming. But you do not have to make all the changes in one go. It is important your goals are realistic and achievable; your healthcare team can help with this. The best changes are the ones that work for you and you can stick with.

## Let's talk about energy

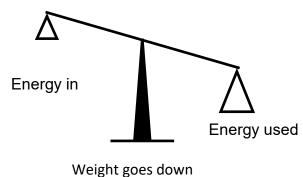
The energy in our food or drink is measured in calories. Why are calories important? You need energy from calories for your body to work properly to give you the energy to do daily actives such as breathing, digesting your food or going for a walk.

To maintain your weight, the calories your body uses should match the amount of calories you eat and drink.

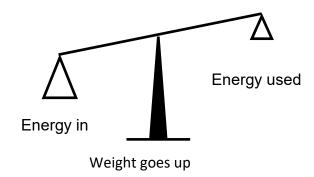


If you do not use the same amount of calories as you eat and drink, your body weight may change. For example:

If you consume less calories than what your body uses, you will lose weight. This is because your body will use its stored fat for energy.



If you consume more calories than what your body uses, you will gain weight. This is because your body will store the additional energy as fat.



Calorie information is often given in kcals, which is short for kilocalories. For example, 1,000 calories will be written as 1,000kcals.

The energy you need each day is based on many factors including:

- Age
- Body weight
- Height
- Exercise

As a guide:

An average women needs 2,000kcals a day and an average man needs 2,500kcals a day.

## Using the Eatwell\* guide for healthy eating

# Base your meals on higher fibre starchy carbohydrates

- Starchy carbohydrates should make up just over a 1/3 (third) of the food you eat. They include potatoes, bread, rice, pasta and cereals.
- Choosing higher fibre or wholegrain varieties such as whole-wheat pasta, brown rice, and skin on potatoes, will keep you feeling fuller for longer.
- Try to have at least 1 portion of starchy carbohydrate food with each main meal.
- One portion is a fist size portion or a quarter of an average dinner plate.



## Eat lots of fruit and vegetables



- It is recommended that you eat at least 5
  portions of different fruit and vegetables every
  day. They can be fresh, frozen, canned, dried
  or juiced.
- Having 5 a day is easier than it sounds. Why not add a chopped banana or frozen berries over your cereal, or swap a snack for a piece of fresh fruit?
- A portion of fresh, canned or frozen fruit or vegetable is 80g. A portion of dried fruit is 30g.
- A 150mls glass or fruit juice, vegetable juice or smoothie also counts as 1 portion. Limit the amount you have to no more than 1 glass a day as these drinks are sugary and can damage your teeth.
- Try to have half a plate of vegetables/salad on your average dinner plate.

<sup>\*</sup>The Eatwell Guide is acknowledged as Crown copyright: OHID in association with the Welsh government, Food Standards Scotland and the Food Standards Agency in Northern Ireland.

#### **Protein**



- Protein is important in the diet. It provides the building blocks of the body, which are needed to support and repair the body.
- Good sources of protein include: beans, pulses, nuts, fish, eggs, dairy products meat and meatfree alternatives.
- Pulses, such as beans, peas and lentils, are good alternatives to meat. They are low in fat and they are a good source of fibre.
- **Fish** is a good source of protein. It has many vitamins and minerals. Aim to eat at least 2 portions of fish a week. This includes at least 1 portion of oily fish. 1 portion of fish is 140g which is roughly the size of the palm of your hand.
- Oily fish include: salmon, trout, herring, sardines, pilchards and mackerel.
- You can choose from fresh, frozen and canned but remember that canned and smoked fish can be high in salt.

## Dairy or dairy alternatives

- Milk, cheese, yoghurts and fromage frais are good sources of protein and some vitamins.
   They are also an important source of calcium which help to keep your bones healthy.
- Try to go for lower-fat and lower-sugar products where possible. Choose semi-skimmed, skimmed or 1% fat milk, reduced-fat cheese or plain low-fat yoghurts.
- Make sure dairy alternatives and substitutes (soya, oat, nut, plant based) are fortified with calcium and vitamins by checking the nutritional label.



### Cut down on saturated fat and sugar

Most people should be cutting the amount of sugar and saturated fat we eat. Both are high in calories and low in other nutrients.

**Saturated fat** comes in 2 types: saturated and unsaturated.

Too much saturated fat can raise the amount of cholesterol in the blood. This increases your risk of developing serious health conditions such as obesity or high blood pressure.



Saturated fat is found in many foods such as; fatty cuts of meat, sausages, butter, hard cheese, cream, cakes, biscuits, lard and pies.

Try to eat less saturated fat and choose foods that contain unsaturated fats instead such as vegetable oils and spreads, oily fish and avocados. Choose lean cuts of meat or cut off any visible fat.



#### Sugar

Regularly having foods and drinks high in sugar increases your risk of obesity and tooth decay.

Free sugars are

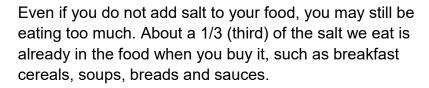
- any sugars added to foods and drinks or
- found naturally in honey, syrups and unsweetened fruit juices and smoothies.

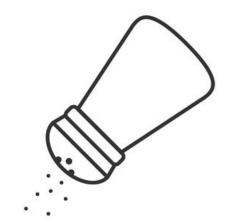
This is the type of sugar you should be cutting down on, rather than sugar found in fruit and milk.

Many foods and drinks are surprisingly high in free sugars. They can be found in many foods such as: sugary fizzy drinks, sugary breakfast cereals, cakes, biscuits, pastries and puddings, sweets and chocolate and alcoholic drinks.

## Eat less salt: no more than 6g a day for adults

Having too much salt in your diet is bad for you. It can raise your blood pressure. This puts more pressure on your blood vessels and organs. People with high blood pressure are more likely to develop heart disease or have a stroke. As part of healthy eating advice, it is important to be mindful of the salt in your diet. Do not exceed the recommended amount of 6 grams for adults. This is the same amount as one levelled teaspoon.







### Keep hydrated

You need to drink plenty of fluids to stop you from getting dehydrated. The government recommends drinking 6 to 8 glasses every day. This is on top of the fluid you get from food you eat, for example, cucumber which is mostly made of water.

All non-alcoholic drinks count, but water, lower fat milk and lower sugar drinks, like tea and coffee, are healthier choices.

Remember to drink more fluids during hot weather or when exercising.

## Get active and be a healthy weight

As well as eating healthier, regular exercise may help reduce your risk of getting serious health conditions. It is also important for your overall health and wellbeing.

It is recommended for adults to be active for at least 150 minutes a week of moderate intensity activity such as cycling, brisk walk or swimming where your breathing increases but are still able to talk. Or 75 minutes of vigorous intensity such as running, sports or taking the stairs where your are breathing faster and finding it difficult to talk.

To keep muscles, bones and joints strong, it is important to build strength. It is recommended that you do strength building on at least 2 days a week. This includes carrying heavy bags, lifting weights, and yoga.

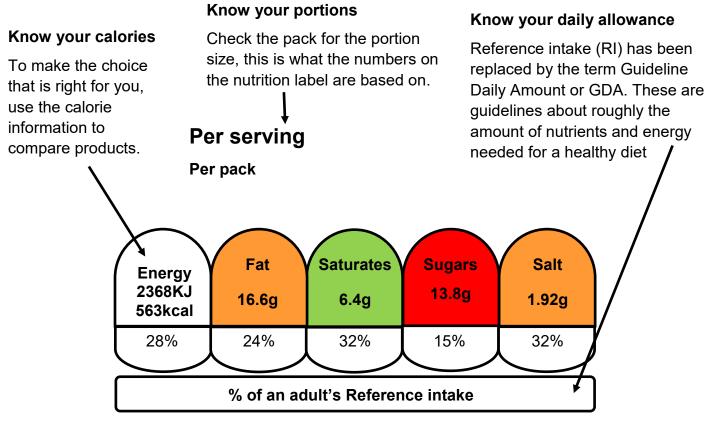
Limit the amount of time you are sitting by breaking up times of inactivity, by taking short walks between sitting down on the computer or watching TV.

## **Know your label**

Checking the nutrition label is a good way to compare products, make healthier choices and eat a balanced diet. Nutrition information is legally required on all packaging with a few exemptions.

Labels found at the front of the packaging show some nutrients that are important to keep an eye on for your health. This allows you to make a quick choice based on the colours. It is not a legal requirement for packaging to use this.

If shown, the label will contain the amount of energy in calories (kcal) or kilojoules (KJ), per serving and per 100g. It also shows the amount of fat, saturates (saturated fat), sugars and salt in a serving.



Typical Energy values per 100g: 554KJ/132kcal

## Know your colours

The green, amber and red colours show at a glance whether a product is low, medium or high for fat, saturates, sugars or salt.

- Red means high. Any red on the label means the food if high and you should limit the intake
  of these foods and drinks.
- Amber means medium. This is neither high nor low, so you can eat foods with all or mostly amber on the label most of the time.
- Green means low. In general, a food or drink that is mostly green on the label is a healthier choice.

## **Eating habits**

Try to make it as easy as possible to stick with the healthy changes you are making:

- Plan meals in advance. Go shopping with a list so you do not forget anything or get tempted by offers on unhealthy foods and drinks.
- Start your day with a healthy breakfast such as porridge, reduced sugar cereal or scrambled eggs on wholegrain bread. This will give you energy and keep you going until lunch.
- If you get hungry between meals, swap snacks like chocolate or crisps for healthier options such as a piece of fruit, a handful of unsalted nuts, or yoghurt.
- Try to have a regular meal pattern and eat at the same time each day.
- Avoid eating on the go. Take your time and focus on your meal and what you are eating. Try
  to eat slowly away from distractions.
- Wait 15 to 20 minutes before deciding that you need more food. It takes time for your mind to register that you are full. Once you feel full stop eating, even if you have not cleared your plate. You can save leftovers safely in the fridge for another day.
- Be mindful about portions. Do not pile food on your plate except vegetables
- It is hard to keep track of how much you are eating from sharing bags of crisps, chocolate and sweets. Try to have individual portion packets.
- If you crave something sweet after your meal, try having fruit such as peaches, pears or berries.
- Think about your drinks too.

Most importantly enjoy your food. Try to include dishes that you like, share meals with family, and remember, it is alright to have a treat now and again.

## How to prepare and cook healthy food

- Choose cooking methods that use little or no added fat. Try air frying, grilling, baking, boiling, steaming and casseroling instead of frying or roasting.
- Swap some or all of the meat in your curry, pasta or chilli dishes for extra vegetables, beans or lentils, making meat go further and saves money too.
- Use herbs and spices to add flavor to food instead of salt.
- Trim visible fat off meats and take the skin off poultry before you cook it.
- Be mindful of the amount of food you prepare. Use scales, jugs or markings on packets to help you use the right amount.
- Become familiar with what a portion looks like, so you do not need to measure it every time.
- Look for more ways to add more fruit and vegetables to every meal. For example, cooking frozen peas with you pasta or adding raw carrots and cucumber to lunch

Patient Information Forum



#### More information

These sites have information on healthy eating and weight loss:

British Liver Trust website: www.britishlivertrust.org.uk

British Dietetic Association website:

Healthy eating: https://www.bda.uk.com/resource/healthy-eating.html

Healthy snacks: https://www.bda.uk.com/resource/healthy-snacks.html

Weight loss: https://www.bda.uk.com/resource/weight-loss.html

Portion sizes: https://www.bda.uk.com/resourse/food-facts-portion-sizes.html

#### These tools can help you too

Free NHS apps:

- Easy meals
- Active 10
- Couch to 5k
- Weight loss
- Food scanner

MyFitnessPal (in app purchases)

Carbs & Cals (a subscription fee is required)

#### Contact details

If you would like more information or have any questions, please contact the Dietetic team on: 0116 258 5400

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