

Wellbeing Resources

The Disabled Police Association

Looking After Your Liver

'Love Your Liver!!!'

Your liver is your very own chemical processing plant. It receives 30% of the blood circulating in your system every minute – performing chemical reactions to remove harmful toxins and distribute and store essential nutrients.



This vital process is called metabolism and cells in the liver know as hepatocytes are put to work to keep your body working at its best. Essentially, the liver loves and cares for you.

The Nutrient Processing Plant

Every time the body takes in fuel, the liver feeds you. Once food is digested, nutrients enter the blood, which are taken straight to your liver for processing. Depending on how long or plentiful these nutrients are in your body, the liver cells will either release the goodness to where it needed or store it for when your body needs a boost.

Keeping You Energised......

The body needs carbohydrates for energy, but did you know that it's the liver that does the job of managing the release of this vital energy source. Once carbs have been broken down into glucose in your gastrointestinal tract, the glucose enters the blood stream and is taken straight to the liver to regulate and maintain healthy levels. The Liver also stores excess glucose in the form of glycogen, ready for converting back into glucose when levels drop between meals, during exercise or when you are fasting. Another clever thing that the liver can do is that it can convert no sugars, such as amino acids, into glucose to keep levels healthy. The liver also does some impressive things with fats too.

Making Fats Work For You!

The liver is a fat processing factory – it breaks down fat

and compounds such as lipoproteins, cholesterol and phospholipids. If fats is in excess, the liver combines fatty acids and glycerol to form a storage molecule and transports it to your body's storage depots, such as the subcutaneous tissue (tissue just under the skin). Then, at times when energy levels are low, between meals and during exercise, this stored fat is converted back into glycerol and the liver turns the remaining fatty acids into an alternative energy supply.

Processing Your Proteins.....

Proteins are also vital for a healthy body, and the liver takes charge of these too. Once proteins are broken down into amino acids in the intestines, they enter the blood stream and flow direct to the liver. The liver cells go to work on removing nitrogen from the proteins which rapidly changes to ammonia – a highly toxic substance. The liver then acts fast to convert this into urea to then be extracted into urine and eliminated from your body. With excess amino acids, your liver converts them into fat for storage, or if your body needs an energy boos, it will use them to create glucose.



Your Very Own Health Store!

As well as glycogen for energy, many vitamins and minerals are also stored in your liver for

use when your body needs them the most. Each individual liver cell will stock many of your essentials, including vitamins A, B12, D, E and K, as well as minerals like iron and copper.

When harmful toxins and substances enter your blood stream, your liver acts fast to detoxify and destroy them. Some may simply be a byproduct of a normal metabolism, others may be ingested or inhaled substances such as drugs and alcohol.

Filtering the blood, your liver removes dead cells and invading bacteria, processes nitrogen and cholesterol and neutralizes harmful hormones. All the unwanted substances and toxins are then quickly transported to your intestines or your kidneys for disposal

Making Everything Better With Bile...... 25856 - mic

To aid absorption of fat and fat soluble vitamins and flush out unwanted substances from your body, your liver produces bile. It stores bile in your gall bladder, where it can be emptied into your intestines when needed.

What Can Damage Your Liver??

Damage to the liver may result from a number of factors which include:

- Poor diet
- Hepatitis virus
- Alcohol
- ⊗ Some genetic defects and autoimmune disorders

Are YOU the 1 in 10 with fatty liver disease?

A poor diet, unhealthy weight, lack of exercise, high cholesterol, diabetes and heart disease can put you at risk of developing nonalcoholic fatty liver disease. It's one of the most common causes of liver problems. Fats build up on the liver cells when the liver fails to break down, transfer and store fat effectively, causing abnormal liver function and inflammation, which can lead to liver scaring.

How to prevent and reverse fatty liver disease

Keeping your diet low in fat and well balanced will reduce the processing work the liver has to do. But there is also had evidence that exercise (with or without weight loss) can help prevent and even reverse fatty liver disease. If you have diabetes or heart disease, consume only small amounts of fat, and make sure they are unsaturated fats to keep cholesterol levels under control.

Hepatitis?

The term hepatitis means inflammation of the liver. It can develop when the liver is damaged by viruses, alcohol, drugs and over consumption of other toxins. In less common causes, it can be be a breakdown in the immune system that sparks the onset of hepatitis.

There are five viruses known to cause hepatitis and all



can infect and inflame the liver. The main difference between them is the way they are transmitted and he effects they have on your health.

How serious is Hepatitis?

Hepatitis can lead to an acute or chronic illness. With chronic hepatitis the virus reproduces in the liver and can cause liver damage. As more liver cells are damaged and destroyed, scare and tissue takes their place – a process known as fibrosis. Severe fibrosis can cause the liver to become hardened, preventing it from functioning normally. This is called cirrhosis of the liver.

How do you look after your liver?

The liver is the largest organ inside the human body. It does work hard and can take a lot of abuse – but like an elastic band – it can only stretch so far before it breaks. Liver disease is on the increase in the UK and it can be a silent killer with no symptoms until it is too late. It's now the fifth largest cause of death and affects the health and wellbeing of many thousands of people every day. To help:

- ✓ Watch your alcohol intake the liver already undertakes 500 vital functions so every time you add alcohol into the mix it has to work a little harder
- ✓ Reduce portion sizes
- ✓ Cut down on fizzy drinks
- ✓ Drink plenty of water
- ✓ Have a decaff coffee break
- ✓ Stop smoking
- ✓ Get moving
- ✓ Eat more nuts
- ✓ Cut down on carbs