

HOW **LIVER** DISEASE AFFECTS **BRAIN** YOUR



Discover what...
... your liver does
... you can do to keep it healthy
... causes liver diseases



THERAPEUTICS



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Your liver can change your life

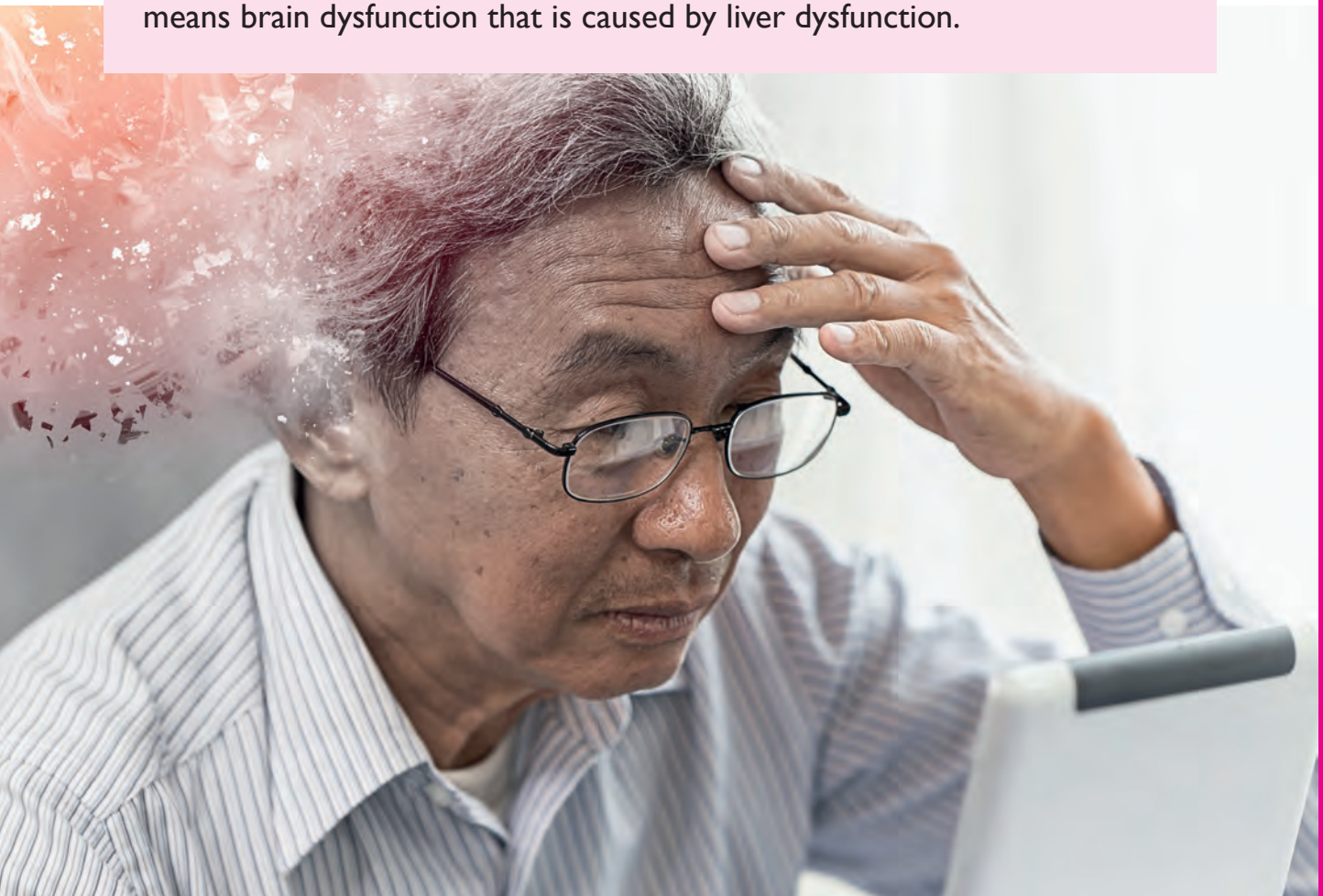
Dear patient,

You have just been diagnosed with a liver disease? Or have you been living with a chronic liver disease such as fatty liver, cirrhosis or a complication such as hepatic encephalopathy for a longer period?

This brochure answers some of the questions you might have and includes advice on how to live with your condition.

Useful to know ...

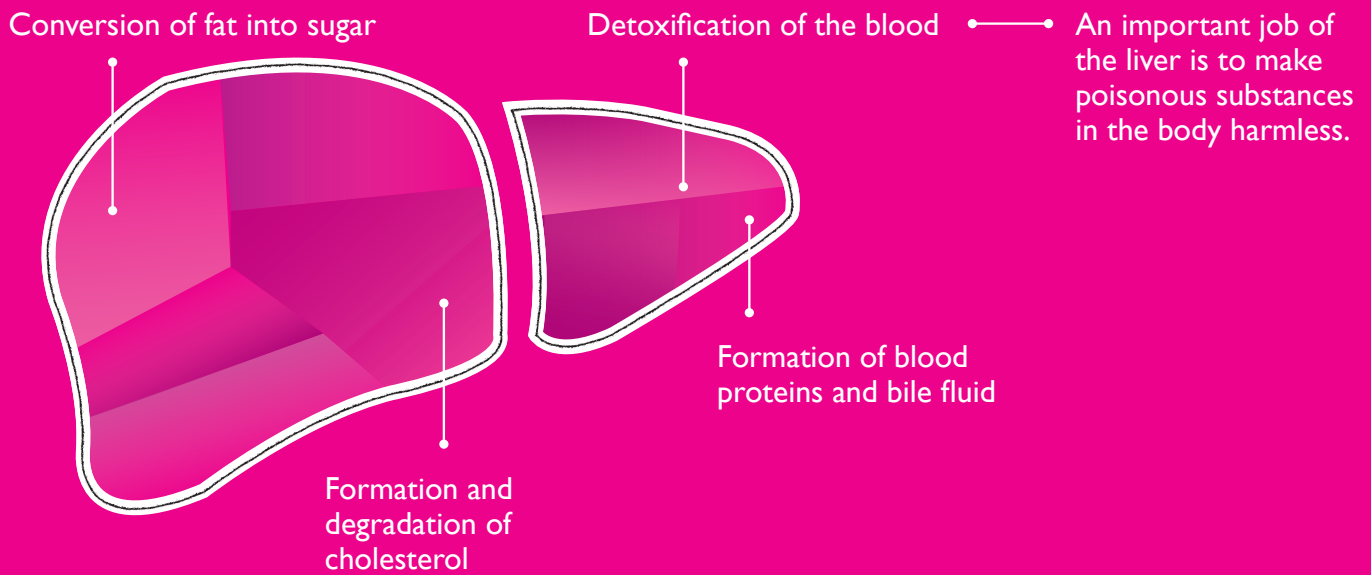
The word “hepatic” means to do with the liver. And the term “encephalopathy” means brain dysfunction. So hepatic encephalopathy means brain dysfunction that is caused by liver dysfunction.



Learn about your liver

What does your liver do?

To help you understand why liver problems can lead to other problems, let's look at one of the most important jobs of the liver – cleaning your body from poisons.



How does your liver affect your brain?

When the liver is damaged, toxic substances can build up in the bloodstream. One of them is ammonia, a substance that is produced naturally when proteins are digested.

But ammonia is also a powerful brain poison – it can cause damage to the nervous system leading to symptoms of hepatic encephalopathy.

Useful to know ...

For more information on hepatic encephalopathy, go to page 7!



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Help your liver

What can you do yourself?

Diseases of the liver are quite common nowadays. There are many different factors that can cause them, but there are also many things we can do to maintain or improve the health of the liver.

The two most important lifestyle changes are: more exercise and a healthy diet.



Why is exercise good for you?

Physical activity can improve the quality of life of people with liver disease. If you are not sure what kind of exercise is right for you, please always consult a healthcare professional.

In general, sports recommended for people suffering from liver diseases are:



Walking



Light jogging



Swimming



Skiing and skating



What diet is good for you?

Your diet can affect your symptoms – there's plenty you can do to support your liver:

Don't drink alcohol

because it is the biggest enemy of the liver! Also think of hidden alcohol in chocolates and other foods.

Eat sufficiently

(35–40 kcal per kg body weight per day) and keep an eye on your protein intake – it is important to have a balanced mix of all nutrients including protein.

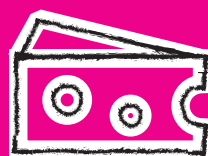
Avoid sugar

and foods you do not tolerate well, for example, very fatty foods.



Ask your doctor for a meal plan

Your doctor can recommend a meal plan that is well balanced and provides enough calories and protein.

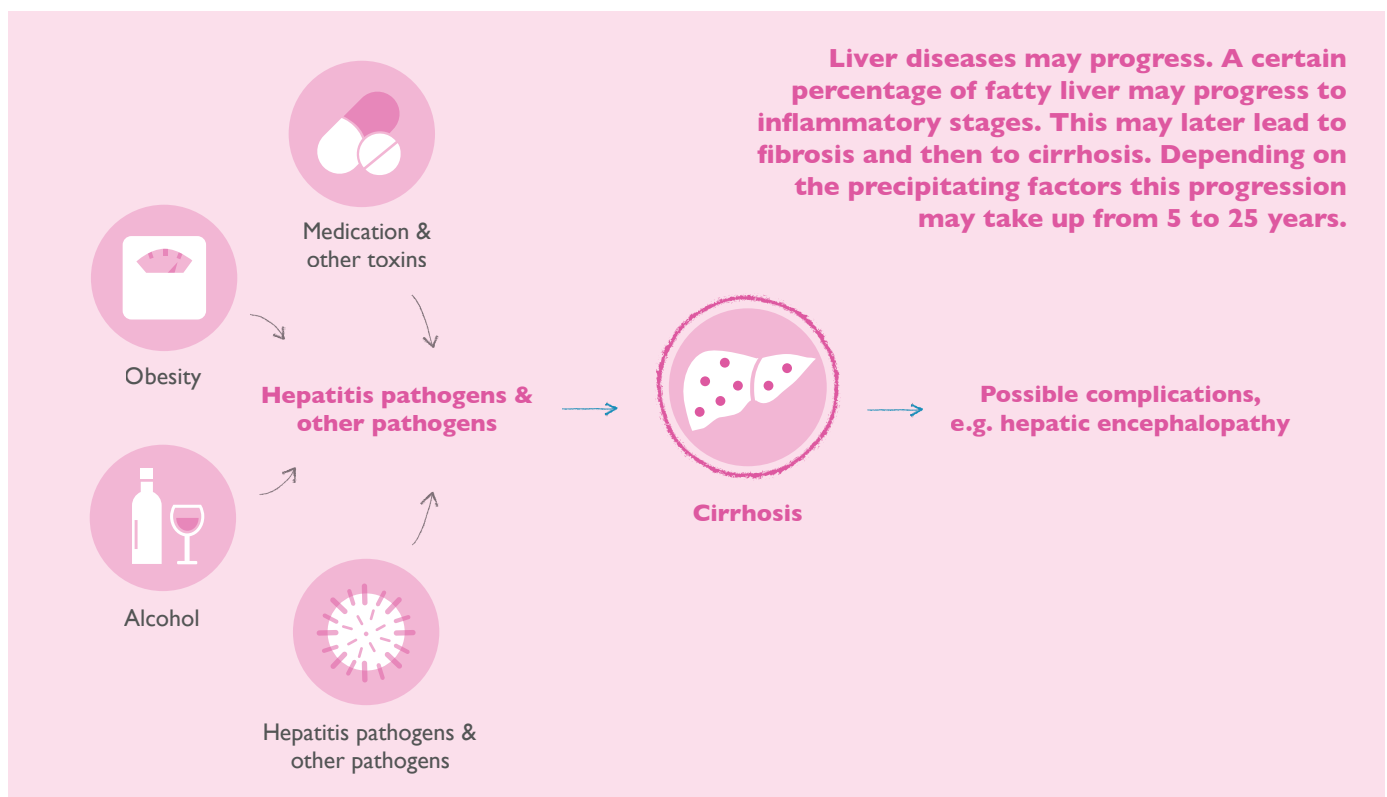


Learn about liver diseases

What are the causes?

Diseases of the liver can have many different causes. These include overeating, excessive alcohol consumption, hepatitis viruses (especially B and C) as well as drugs and toxins, but also metabolic and autoimmune diseases.

Especially chronic diseases of the liver (CLD) require treatment, as they can easily lead to further complications.



What are common chronic liver diseases?



Fatty liver

In fatty liver disease, the fat content of the liver cells is greatly increased. The liver becomes larger, heavier and takes on a “fat-yellow” colour.



Liver cirrhosis

Liver cirrhosis is a chronic disease affecting the entire organ. If the underlying disease is not sufficiently treated or discovered too late, cirrhosis can damage the liver structure over the years.

What is hepatic encephalopathy?

Hepatic encephalopathy (HE) occurs as a result of either acute or chronic liver failure. The liver can no longer ensure ammonia detoxification, leading to an increasing poisoning and consequently to the disturbance of the brain function.



So what are the symptoms of HE to look out for?

The main symptoms of HE:

- Personality changes
- Mental impairment
- Reduced levels of consciousness

The symptoms of HE can be treated and even reversed – there are therapeutic approaches and a change in lifestyle can also be beneficial.



Important facts at a glance

Hepa-Merz®

- Improves liver function¹
- Decreases level of ammonia¹
- Improves cognitive function and mental health

For more information,
advice and support,
please visit
www.liverandbrain.com



Hepa-Merz® – Basic information

Hepa-Merz® Granules. Hepa- Merz® Granules. Active substance: **L-ornithine- L-aspartate**. **Indications:** Treatment of concomitant disease and sequelae due to impaired detoxification activity (e.g. in cirrhosis of the liver) with the symptoms of latent and manifest hepatic encephalopathy. Contains orange yellow S (E110), fructose. For risks and side effects please read package insert and ask your doctor or pharmacist. **Version July 2019.** Merz Pharmaceuticals GmbH, 60048 Frankfurt.

Reference: 1. Butterworth RF et al. J Clin Exp Hepatol. 2018; 8(3):301–313.

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