



LIVER DISEASE

FACT SHEET 15

LIVER DISEASE IN DOGS and CATS

The liver is the largest organ in the body and is situated in the abdomen, just behind the diaphragm. It has a number of important functions that are vital to wellbeing and general health.

The liver is involved in:

- The storage of fat, carbohydrates and vitamins A, D, K, and B₁₂.
- The manufacture of proteins and in their breakdown, producing urea, which is transported to the kidneys for excretion.
- The manufacture of glucose from glycogen, which is stored in the liver.
- Fat metabolism.
- The production and excretion of bile, which is involved in the process of digestion.
- The breakdown and excretion of drugs, poisons and similar substances.
- The immune system, as cells in the liver help remove toxins, bacteria and cellular debris.

THE CAUSES OF LIVER DISEASE

Liver problems are relatively common in older animals, but are by no means restricted to this age group. Anatomical abnormalities of the liver are rare, but can cause very serious problems in young animals. There are a number of infectious causes of liver disease, including canine viral hepatitis and Leptospirosis, both of which can be prevented by vaccination. Non-specific bacterial infections include those entering via the bile duct, causing jaundice, abdominal pain and a rise in temperature. Poisons can also damage the liver and interfere with its function. With age, there is a gradual reduction in the liver's ability to cope and when the reserve capacity of the liver is fully utilised then symptoms of liver disease will appear.

SYMPTOMS OF LIVER DISEASE

Symptoms vary, but may include:

- Depression
- Lethargy
- Poor appetite
- Weight loss or muscle wasting
- Diarrhoea
- Periodic vomiting
- Increase in thirst
- Jaundice, yellowing of the skin and mucous membranes
- Epileptic fits

In severe cases

- Ascites, a build up of fluid in the abdomen
- Anaemia
- Poor blood clotting

THE DIAGNOSIS OF LIVER DISEASE

Careful examination, together with details of the symptoms, may lead your vet to suspect a liver problem. In many cases, further investigations may need to be carried out to confirm the diagnosis and help decide on the best course of action.

The most common form of investigation involves taking a blood sample to check on various enzyme levels, which can provide useful information on liver function and the extent of any damage. Other less frequent investigations include estimation of bile acids, liver biopsy, ultrasound and X-rays.

THE MANAGEMENT OF LIVER PROBLEMS

Fortunately, the liver is able to repair itself and in many instances, with the correct treatment and dietary management, there is a good prognosis. Treatment varies with the nature of the problem but usually involves reducing the stress and workload on the liver to give it a chance to recover. Poisons and other damaging substances, including some drugs, should be eliminated if possible.

DIET AND LIVER DISEASE

Diet is of major importance in the control and treatment of liver disease and should be aimed at reducing the workload of the liver. The ideal diet should:

- Have the optimum quantities of protein, carbohydrate, fats, vitamins and minerals
- Contain quality protein sources such as chicken, fish and egg
- Contain high quality fats, although in some instances a low fat diet is necessary
- Provide easily digestible carbohydrates as an energy source
- Have lower levels of both phosphorus and sodium, compared to the average diet
- Be free from artificial additives. Many of these compounds need to be processed by the liver before they can be eliminated by the body

If you are unsure about what to feed, it would be best to check with your vet who may be able to supply you with a suitable prescription diet.

HERBAL REMEDIES IN THE TREATMENT OF LIVER PROBLEMS

Herbal remedies have always played a traditional role in the treatment of liver problems. Two of the most prominent herbs are:

- Milk Thistle seeds (*Silybum marianum*/*Carduus marianus*) A prominent liver herb with good background research supporting its benefits to the liver. It stimulates liver function, helps protect the cells of the liver from damage, helps repair damaged liver cells and promotes the flow of bile. It will also help improve and regulate the digestion and help the body to eliminate toxins.
- Dandelion (*Taraxacum officinale*) This has long been one of the most useful herbs, stimulating liver function, increasing the flow of bile, helping relieve jaundice, increasing appetite and cleansing the body of toxins.

SUPPLEMENTS IN THE TREATMENT OF LIVER DISEASE

Nutritional supplements (nutraceuticals) are frequently used to support the function of the liver where there is a problem. S-Adenosylmethionine (SAMe) is often used as it is involved in maintaining normal liver function, playing a central role in the synthesis and metabolic reactions carried out by liver cells. Supplementation is recommended to improve hepatic glutathione levels (a potent antioxidant that protects hepatic cells) and help maintain and protect liver function.

HOW DENES CAN HELP

Denes have several products which can help with liver problems.

- Denes Milk Thistle+ Powder

This supplement is based on 2 important liver herbs; Milk Thistle and Dandelion. This combination is effective in supporting the liver in a variety of ways. Its can protect the cells from damage, encourage repair where the liver is damaged and finally stimulate the production of bile and support the process of digestion.

- Denes Greenleaf Tablets

This herbal medicine is based on stinging nettles, which have a mild diuretic effect. The main action is one of cleansing the whole body, helping eliminate the toxins that can accumulate when the liver is not functioning well. Nettles also contain iron, which is needed if anaemia is present.

- Homeopathic Remedies

Homeopathic remedies can be as useful as herbal remedies in treating liver problems. Two commonly used remedies are:

Denes Phosphorus 30c as a general remedy especially if jaundiced or very thirsty

Denes Nux vomica 30c as a general supportive remedy especially if constipated

Any of these Denes products can be used alongside conventional medicines prescribed by your vet.

OTHER USEFUL DENES FACT SHEETS TO READ:

- Dandelion

If you have any queries concerning your pet's health or feeding problems, you can contact us for free pet care advice by:

- Visiting our website www.denes.com
- Emailing us at info@denes.com
- Calling us on 01273 325364 Mon-Fri, 9am – 12Noon
- Writing to us at:
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