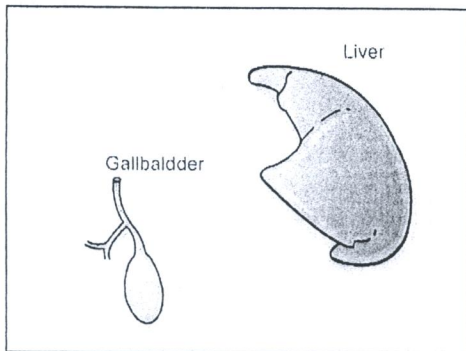




BILE ACID TESTING

What is the purpose of the bile acid test?

The bile acid test is performed to determine if the liver is able to do its job. In order to function properly, the liver must have enough healthy cells to do the job, and a good blood supply. If the liver has enough healthy cells, it is described as having "*adequate functional mass*". The bile acid test is based on the principle that a healthy liver, with adequate functional mass and a good blood supply, can "recycle" bile acids, while a damaged or defective liver cannot.



Bile acid testing may be recommended for pets that have elevated liver enzymes or low albumin levels, since these suggest underlying liver disease. The bile acid test is also used to detect congenital liver defects in very young pets that are not growing well, and it is an essential test for any pet that has had a seizure, since liver disease may be the root cause of the seizure disorder.

Where do bile acids come from and what do they do?

Bile acids are made in the liver and stored in the gall bladder. Bile acids help with digestion, and are particularly important in the digestion of fat. When food is eaten, the body sends a signal to the gall bladder, causing the gall bladder to contract and push bile acids out into the small intestine. The bile acids mix with the food, and break down large complex fats into small simple fat particles that are more easily absorbed.

How does the liver "recycle" bile acids?

When digestion is complete, the bile acids are absorbed from the intestine, and are carried in the blood stream back to the liver. The liver retrieves the bile acids from the blood stream, and returns them to the gall bladder, where they are stored until the next meal.

Is there special preparation for the test?

Before starting the test, the pet must be completely fasted (all food and water withheld) for 12 hours. It is important the animal does not smell or (think about food if possible). We want to prevent premature contraction of the gallbladder.