



## Bile Acids Testing

Bile acids are salts that are made in the liver from cholesterol and stored in the gallbladder. After a meal, they are released from the gall bladder into the intestine to aid in fat digestion and absorption. Once that job is done, they are reabsorbed by the liver. In a liver that is not functioning properly, these bile acids will not be reabsorbed and the levels will be elevated in the blood.

A bile acids test differs from routine blood tests for liver disease. If liver values are elevated on routine testing, we only know that there has been some kind of insult or damage to the liver tissue. These values do not tell us if the liver is working properly. A bile acids test **does** tell us how well the liver is functioning.

A bile acids test needs to be performed on an animal that has been fasted for at least 12 hours. An initial blood sample is drawn, the animal is fed, and another blood sample is taken 2 hours later. Results generally take 1-2 days.

Certain conditions that may cause an elevation in bile acid levels include congenital liver shunts (blood bypasses the liver), cholestasis (interruption of bile flow through the liver), and liver failure secondary to chronic medications (phenobarbital for seizures).

If bile acids levels are high, the next step is advanced imaging studies such as ultrasound with or without a biopsy of the liver.