

## Medical Studies of Chitosan

Interested in using chitosan as a weight loss product? Trying to lower your cholesterol? Maybe you should learn what the experts have to say before trying it.

Chitosan is a fiber that is chemically processed from the shells and bones of crustaceans like lobsters, crabs, and shrimp. It is a form of fiber that is not really digested by the human body. Studies have shown that as chitosan passes through the digestive tract, it bonds with the ingested fat and carries it out in the stool. It is for this reason that chitosan is being tried as an agent for lowering cholesterol and reducing weight. Unfortunately, almost all of the medical studies on chitosan have revealed results that have been more negative than positive.

There are two major claims maintained and studied by medical researchers. These include the belief that chitosan can improve one's cholesterol profile, and that it can aid in weight loss.

Most of the studies performed on chitosan were conducted to find out if chitosan can improve one's cholesterol profile. According to two-out-of-three double-blind placebo-controlled medical studies on chitosan, the compound can modestly improve one's cholesterol profile.

There was also an 8-week trial performed on 51 women which found that the use of chitosan at a dose of 1,200 mg twice a day slightly reduced the bad cholesterol (LDL) compared to placebo. Such intake of chitosan does not, however, affect the total or the good (HDL) cholesterol levels. Aside from this, another 8-week trial involving 84 people found modest benefits.

However, one of the most best-known medical studies on chitosan was a 4-month trial of 88 individuals. It found no significant improvement in cholesterol when the subjects took 1,000 mg, three times a day, of a different chitosan-based product. The results of this study were supported by a following 10-month study which employed a special microcrystalline form of the compound at a dose of 1200 mg twice a day. Based on these two medical studies on chitosan, the substance failed to improve the cholesterol profile.

Experts say that these contradictory results suggest that if chitosan does actually improve the cholesterol profile, it only does so to a slight degree.

Chitosan has recently gained great popularity as a weight-loss supplement. It has even been dubbed the fat magnet on the basis of its supposed ability to bind to fat in the digestive tract. Nevertheless, despite of a number of positive results in small preliminary medical studies, the largest and by far best designed trial conducted to prove the weight-loss claims failed to find benefit. This well-known study is actually a 6-month double-blind placebo-controlled study involving 250 overweight people who were required to use chitosan at a dose of 3 grams a day. The results of this trial were that chitosan failed to improve weight loss to any meaningful extent compared to placebo. There are also other medical studies on chitosan that support this result.

Taken

together, it is clear that chitosan has not been proven to help a person lose weight, increase their HDL cholesterol or decrease the LDL cholesterol. Although companies selling chitosan claim that it is very effective, and even claim to have medical research supporting how well their product works, the medical studies on chitosan suggest otherwise.