What is Chitosan

Chitosan is a natural dietary fiber and is made from the shell of shrimps that were harvested from northern Atlantic Ocean, where has the least level of pollution. The unique property of Chitosan makes it the effective fat blocker. Chitosan can bind dietary fat and cholesterol. Each gram of Chitosan can bind equal amount of fat. By binding with cholesterol, Chitosan can reduce the re-absorption of cholesterol of the bile acid. The Chitosan bound dietary fats and cholesterol is excreted from body. Chitosan also reduces the micelle formation of fat in the intestine and interferes the enzymatic interaction of pancreatic lipase with the fat.

The following are the functionality of Chitosan and its biological effects in the digestive system: Taken as a nutritional supplement, chitosan dissolves in the stomach and mixes with the dietary fat. Being a dietary fiber, chitosan increases the viscosity, giving a filling effect (1, 2).

From the stomach, the dietary fats are passed on to the small intestine, in the small intestine; bile acids are released and later reabsorbed. Bile acids solubilize the fat and decrease the fat droplet size to what is called micelles. Chitosan binds to the micelles and disturbs the structure of the fat-bile acid complex (3, 4).

Pancreatic lipase is an enzyme also released in the small intestine, which breaks down micelle fat into free fatty acids and monoglycerides.

Chitosan partly inhibits this enzyme, and thereby reduces the fat digestion (5).

Bile acids mainly consist of cholesterol, and are normally reabsorbed in the small intestine. In addition to binding fatty acids and monoglycerides, chitosan also binds bile acids (3,6).

Chitosan thereby directly reduces the uptake of cholesterol, reducing the total blood cholesterol level (7). This process is called bile acid sequestration.

Chitosan with a high degree of deacetylation increases the capacity to bind dietary fat and bile acids. Chitosan-bound fat and bile acids are excreted in the stool (2). As a result, Chitosan reduces the digestion and absorption of the fats in the intestine. Long-term use of this product will help to reduce both cholesterol and triglycerine in the blood and reduces the body overweight. These results have been demonstrated in several clinical studies (8-12).

References:
3. G. V. Vayanos, T. Siddall, and D. M. Cannon, Chromium picolinate to help normalizing energy metabolism and weight control. chromium picolinate also helps to control high cholesterol.

For maximum results: Take Chitosan Fat Blocker with a full glass of liquid. Use this product in conjunction with other CHS products.

Growyoung Chitosan Fat Blocker*