



C-peptide: a cleavage product of insulin

In the island cells of the pancreas, the blood sugar-lowering hormone insulin is formed. The first result is proinsulin, which is split into insulin and C-peptide. It has long been believed that C-peptide has no function in the blood. It is now clear that it affects numerous metabolic processes.



The C-peptide is always released into the blood at the same time as the insulin from the pancreas, thus indicating the current insulin secretion of the pancreas. The determination of C-peptide in the blood can thus help to distinguish different forms of sugar metabolism disorders. An increased increase in C-peptide during the sugar exposure-or insulin test indicates insulin resistance. A low value is found in type I diabetes. In case of suspicion of insulin resistance, the C-peptide determination is particularly recommended in addition to the sugar exposure or insulin test.

Adiponectin is produced in fat cells



The more adipose tissue, the less adiponectin in the blood!

Adiponectin, along with insulin and other hormones, regulates sugar and fatty acid metabolism and feelings of hunger. It enhances the effect of insulin on the fat cells (insulin sensitivity) and has anti-inflammatory effects on the blood vessels. Low adiponectin levels are linked to an increased cardiovascular risk, high levels of the hormone are considered heart-protective.

Red grapes contain the substance resveratrol and increase the adiponectin level!

The adipose tissue produces a number of hormones. The serum levels of these hormones are closely linked to the body fatmass. Some of these so-called adipocytokines play a significant direct role in the development of diseases that can arise as a result of obesity. There is therefore a link between adipocytokines and the development of obesity. In the case of obesity, the determination of the adiponectins is particularly recommended in addition to the sugar load or insulin test.