

## Cholesterol-Lowering Statin Drugs and Diabetes

**Bottom line at the top: Statins lower cholesterol, but also exert other effects in the body, some positive, some negative. Taking a statin does not relieve you of the responsibility to eat well and maintain an active lifestyle.**

People who start taking statin drugs to lower cholesterol are more likely to subsequently be diagnosed with diabetes. Those who take their statin as prescribed and don't miss any doses are more likely to be later diagnosed with diabetes. Who'd have thought that "being good" would come back to bite.

Overall, only a slightly higher percentage of statin users develop diabetes. New diabetics are more likely to have been prone to diabetes, having risk factors like excess weight, a family history of diabetes and a sedentary lifestyle. Human nature may factor in: Thinking that the drug protects them from the consequences of dietary indiscretion, some abandon all restraint and pig out.

Officially we don't know why statins predispose to diabetes, but a recent study suggests that statins activate an enzyme complex that induces inflammation. Inflammation from any source can induce resistance to insulin. Insulin resistance allows blood sugar to rise and is the underlying cause of high blood sugar in the vast majority of Type II diabetics.

The problem with postulating that statin-induced inflammation and insulin resistance is the mechanism for diabetes is that statins also *reduce* inflammation in blood vessels via another mechanism. In fact, scientists believe that this anti-inflammatory effect contributes significantly to statins' vascular and heart disease reduction. Perhaps the relative magnitude of the two competing effects in any given individual determines whether or not that person develops diabetes and/or is protected from coronary artery disease.

All this proves that taking a statin doesn't relieve you of the responsibility of following a prudent diet and

exercise program. A healthy lifestyle helps prevent heart disease no matter what medicines you take.

What should you do if you take a statin and your blood sugar rises? Discuss the issue with your doctor: You shouldn't stop taking the drug if your doctor feels you need it.

*(Scientific note for those who care: NLRP3/caspase inflammasome is the pro-inflammatory path. Statins exert an anti-inflammatory effect by reducing production of farnesyl pyrophosphate, which is necessary for membrane binding and activation of the pro-inflammatory NADPH oxidase.)*