[Why a Low Insulin Lifestyle Is Essential for Health](#)

As you age, you have an increasing susceptibility to chronic disease, and much of that is due to insulin resistance and increased insulin levels.

Insulin and heart disease

What's the real cause of [coronary heart disease](#)?

I've noted many times here that it couldn't be [cholesterol](#), but if not that, what is?

Insulin resistance, with subsequent high insulin levels, is a good candidate.

Insulin is the hormone that your body uses to control blood glucose, and it rises when you eat, particularly food high in refined carbohydrates and sugar.

Consider [the Helsinki Policemen Study,](#) 970 of whom were examined and given glucose tolerance tests.

After 22 years, those who were in the lowest quintile of glucose and insulin, indicating good insulin sensitivity, had the lowest rate of coronary heart disease. See chart below.
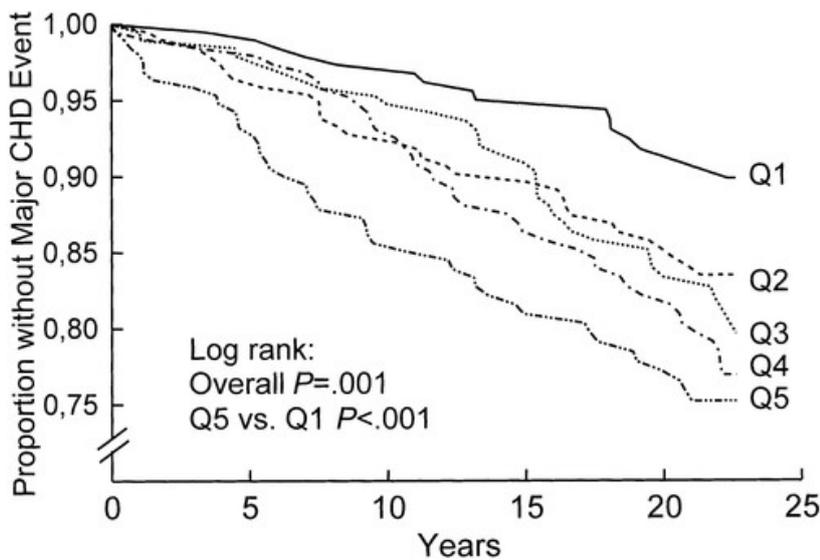
Figure 2. Kaplan-Meier survival curves for remaining free of major CHD events during 22-year follow-up by quintiles of AUC insulin. The risk of having a major CHD event was significantly higher in men in the highest quintile than in those in the lowest quintile (P<0.001; age-adjusted P<0.001). The overall trend for the risk of a major CHD event tested over all AUC insulin quintiles was also statistically significant (P=0.001; age-adjusted P=0.006).

As Ivor Cummins suggests, the results might have been even starker had the study measured insulin sensitivity more than once, at the beginning. The reason is that many of the policemen would likely have gone from insulin sensitive to insulin resistant over the years. Those who stayed insulin sensitive would have even better health and freedom from CHD.

This isn't the only study to have found these results. Hyperinsulinemia as an Independent Risk Factor for Ischemic Heart Disease. In this study there was no glucose tolerance test; instead, they measured fasting insulin. Results
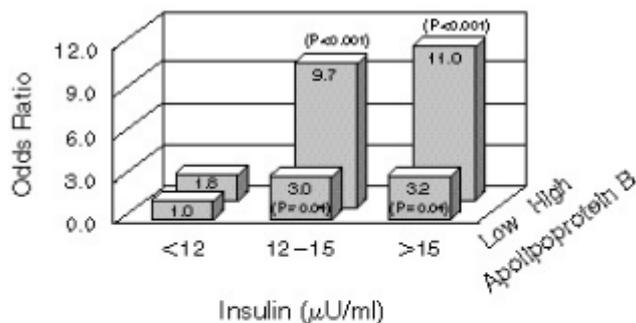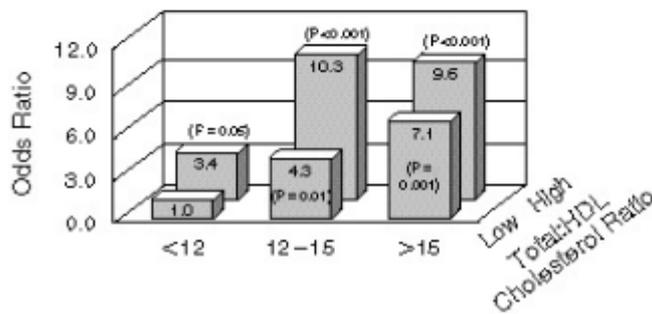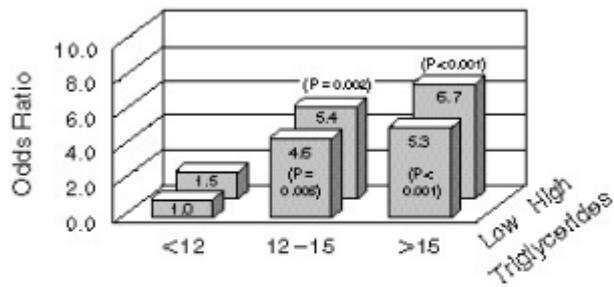
Odds Ratios for Ischemic Heart Disease
According to Plasma Insulin and Triglyceride
Concentrations, Total:HDL Cholesterol Ratios,
and Apolipoprotein B Concentrations.

below.

Men with low fasting insulin, in the bottom tertile, were remarkably protected from heart disease, even when they had other risk factors. High fasting insulin was bad news, especially when other risk factors were added, such as high triglycerides and low HDL, both of these also measures of insulin sensitivity.

Why would insulin cause heart disease?

A key factor may be that it causes hyperplasia, the growth of tissue.

Consider that both fasting insulin and obesity are related to increased risk of benign prostatic hyperplasia. Men in the highest quartile (fourth) of fasting insulin had 2.5 times the risk of prostatic hyperplasia than those in the lowest quartile.

Insulin is an anabolic hormone, and causes tissue growth.

[Excessive intimal hyperplasia in coronary arteries may be the initiating factor in coronary heart disease](#).

As we say previously, [the ratio of triglycerides to HDL is the most important lipid marker](#), and blows away any other in predicting risk. This ratio is a measure of insulin resistance.

Insulin and cancer

[Insulin resistance and visceral fat (or abdominal obesity) are highly related to risk of colorectal cancer.](#) The highest tertile (third) of visceral fat had a 6-fold increase in cancer risk.

Insulin and aging

Aging is a risk factor for heart disease. And insulin resistance increases with age.

Why does it increase with age? Is it something inherent in aging?

Insulin resistance may be much more related to abdominal adiposity — increased waist size, basically — [than to aging itself.](#)

In essence, people get older and they also get fatter, and their fatness is driving their insulin resistance and therefore their susceptibility to chronic disease and death.

Increased insulin resistance, with increased insulin levels, are likely driving much of the susceptibility to chronic disease seen in aging.

Other evidence

Reducing insulin levels in mice by genetic means [increases their lifespan by 25%.](#)

[Centenarians have similar insulin sensitivity to healthy adults,](#) but much better than non-centenarian older people. It appears that one reason they lived to be 100 or more was by preserving their insulin sensitivity.

[The drug metformin increases lifespan in lab animals, and will likely do so in humans](#). Perhaps the main reason for its life extension capability is that it decreases insulin levels.

For the mTOR fans (and I'm one), [insulin activates mTOR,](#) thus promoting aging.
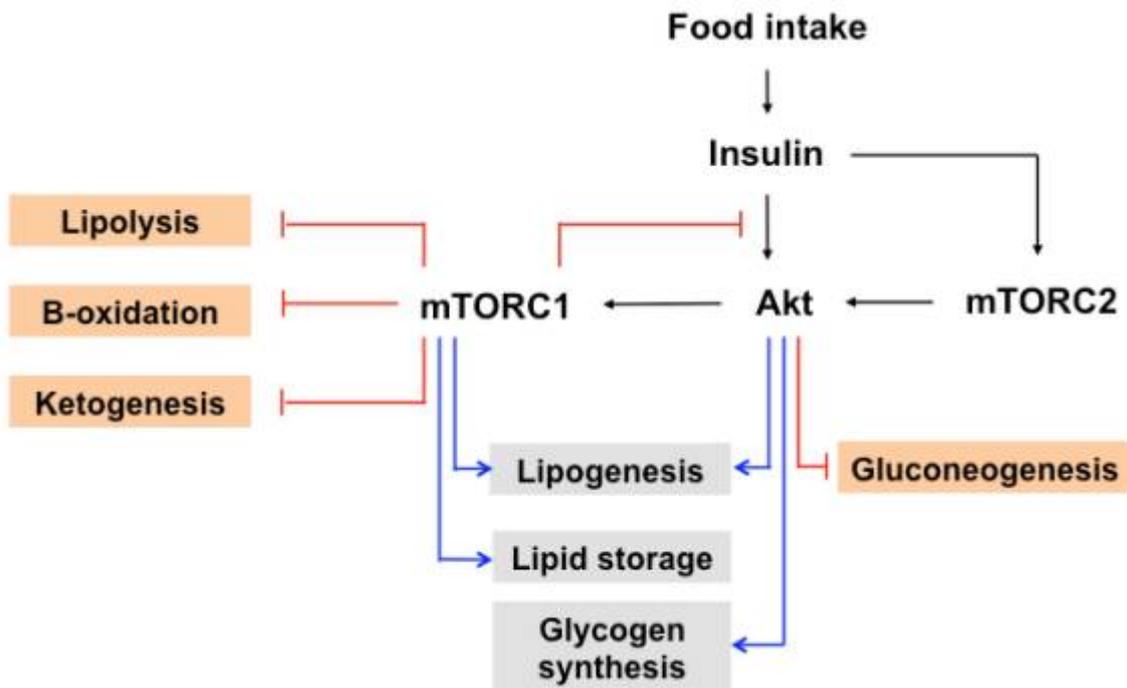
The low-insulin lifestyle

Given the evidence above, a low-insulin lifestyle is imperative for remaining free from chronic disease and living a long, healthy life.

I have little doubt it's the most important thing you can do in that regard.

How do you live a low-insulin lifestyle? Follow these steps:

1. Don't eat ultra-processed food, loaded with sugar, refined carbohydrates, and seed oils. Consider eating a ketogenic diet. Avoid starches and sugars.
2. Get or stay lean. Being overweight/obese means more insulin resistance and higher insulin.
3. Exercise, preferably strength training and/or high-intensity interval training. Periodic depletion of muscle and liver glycogen stores improves insulin sensitivity. Steady-state aerobic exercise is less effective in this regard.
4. Intermittent fasting. Also depletes glycogen and lowers insulin.

That's it. That's the recipe.

PS: If you need to lose weight and you want to save yourself years of poor results with bad information, I've put everything in a simple guide for you. The World's Simplest Fat-Loss Plan.