



How Insulin Increases Fat

To get a clearer understanding of insulin's role in making, accumulating, and storing fat inside our fat cells let's consider the following three facts:

1. Inside every fat cell are enzymes that are made to burn fat (called hormone-sensitive lipase or HSL)
2. On the surface of every fat cell are enzymes that shuttle in fat from the bloodstream (called lipoprotein lipase, or LPL)
3. Fat cells are covered with capillaries that can shuttle in blood sugar to be turned into fat

So what does this have to do with insulin?

When insulin is triggered from a meal including too many Sugar Calories it:

1. Shuts off fat burning enzymes
2. Turns on fat storing enzymes
3. Signals blood sugar to be shuttled into the fat cell to be turned into fat

When you eat a meal that is rich in protein, fat, and vegetables your insulin remains low, which as a result:

1. Keeps your fat burning enzyme burning fat
2. Shuts off your fat storing enzyme
3. Prevents blood sugar from elevating
4. No signal is given by insulin to shuttle it into your fat cells

Source: Cruise, Jorge (2013) *The 100*. New York, NY HarperCollins