

# How Fat Is Made

## Do fat & protein go to excess body fat?

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**Question:** I find it almost unbelievable that the protein and fat that we eat don't turn into fat (adipose tissue), and that carbohydrates are the sole culprit making us fat. Is this really true?

**Answer:** Yes.

It was demonstrated back in the late 1800s and again in the 1940s, but complete biochemical understanding were lacking until now.

1. Basic Medical Biochemistry, a medical textbook published in 1996, page 510, states: "Adipose tissue lacks glycerol kinase and can produce glycerol 3-phosphate only from glucose [carbohydrate]. Thus, adipose tissue [body fat] can store fatty acids [fats] only when glycolysis is activated, by eating [carbohydrates]. Fatty acid degeneration [use] is also coupled to the need for ATP [energy]."

Life-Systems Engineering translation: a. Adipose tissue (body fat), which biochemically consists of fatty acids and glycerol molecules, can become larger ONLY in the presence of sugar (carbohydrates). b. Mother Nature designed your body's preferred energy source to be the fatty acids generated by burning (hence, decreasing) your own body fat!

2. Stryer's Biochemistry, 4th edition, the "gold standard" of medical biochemistry textbooks, page 772, further confirms that adipose (fat) cells need sugar (glucose) for the synthesis of triacylglycerols (excess body fat). Page 660 states: "Following the ingestion of a high protein meal, the gut and liver utilize most of the absorbed amino acids [for their own energy] and very little [protein] enters the portal vein."

Life-Systems Engineering translation: Here, again, creation of extra body fat REQUIRES sugar (carbohydrates). The majority of the protein we eat doesn't get used directly for muscle growth, hormone production, cell structure maintenance, etc. Rather, it gets converted to fuel to power the digestion into amino acids. The body has excellent Life-Systems at work. Don't let anyone tell you that we don't need much protein. We need lots of protein each day.

3. Biochemistry, page 629, states: "Amino acids [from protein] can't be stored, in contrast with fatty acids and glucose, nor are they excreted."

Life-Systems Engineering translation: Your body can't make more body fat from protein like delicious tasting steak or cheese, because these foods contain little sugar (carbohydrates). Protein is used for STRUCTURE and important life-systems, such as hormone production and antibody production for immunity to infection. Fats are the building blocks of hormones, cell membranes, the brain, and nervous system. Dietary carbohydrates are mainly used to make extra body fat.

The leading biochemistry textbooks are quite clear on how we become overweight. So much for the "great 20-year carbohydrate eating experiment" ...

Are you angry that results such as these, conclusively showing the scientific basis of becoming fat, aren't publicized to the general public? You have every right to be outraged! Popular health and nutrition magazines keep touting: don't eat fat, eat lots of carbohydrates, exercise extensively, and take lots of vitamins and calcium. Could it be that everyone is repeating the wrong advice?

Yes, most sources are, and now **Beyond The Zone** gives you the established medical science that predicts the real-life results. Isn't it timed that you put the power of science to work for you instead of trusting popular opinion