

## Evolution created obesity epidemic? Theory of calorie-hoarding genes challenged

The obesity crisis has given prehistoric dining a stardom not known since Fred Flintstone introduced the Bronto Burger. Last year, “Paleo diet” topped the list of most-Googled weight loss searches, as modern Stone Age dieters sought the advice of bestsellers like *The Paleo Solution* or *The Primal Blueprint*, which encourages followers to “honor your primal genes.”

The assumption is that America has a weight problem because human metabolism runs on ancient genes that are ill equipped for contemporary eating habits. In this line of thinking, a diet true to the hunter-gatherers we once were — heavy on protein, light on carbs — will make us skinny again. While the fad has attracted skepticism from those who don’t buy the idea whole hog, there’s still plenty of acceptance for one common premise about the evolution of obesity: Our bodies want to stockpile fat.

For most of human history, the theory goes, hunter-gatherers ate heartily when they managed to slay a fleeing mastodon. Otherwise, prehistoric life meant prolonged stretches of near starvation, surviving only on inner reserves of adipose.

Today, modern humans mostly hunt and gather at the drive-thru, but our Pleistocene genes haven’t stopped fretting over the coming famine.

The idea that evolution favored calorie-hoarding genes has long shaped popular and scientific thinking. Called the “thrifty gene” hypothesis, it has arguably been the dominant theory for evolutionary origins of obesity, and by extension diabetes. (Insulin resistance and diabetes so commonly accompany obesity that doctors have coined the term “diabesity.”)

However, it’s not that difficult to find scientists who call the rise of the thrifty gene theory a feat of enthusiasm over evidence. Greg Gibson, director of the Center for Integrative Genomics at Georgia Tech in Atlanta, calls the data “somewhere between scant and nonexistent — a great example of crowd mentality in science.”

Instead, thrifty genes, if they exist, are just part of a complex genetic picture that contributes to the obesity epidemic, says Hertzl Gerstein, director of endocrinology and metabolism at McMaster University in Hamilton, Canada. The interaction between any one person’s predisposition and the calorie-dense Western smorgasbord is still not well understood.

“People are looking for an explanation,” he says. “The thrifty gene hypothesis might be a piece of an explanation. However, if you accept it too uncritically, you close your mind and thinking to possibly better explanations.”

**Read the full, original story: [Ancient famine-fighting genes can’t explain obesity](#)**