

Is weight gain inevitable as you grow older?

written by Dr. Ronald Hoffman | September 19, 2019



Most people steadily gain weight as they advance in age from young adulthood into middle age. Between ages 29 and 39, women typically gain about 7 pounds, and men put on an additional 15 pounds, according to the U.S. Department of Health and Human Services.

Some of this weight gain is purely a matter of thermodynamics. While our bodies are evolutionarily hard-wired to withstand periodic caloric deprivation, the ever-present cornucopia of modern food opportunities outstrips the output that our aging musculature can maintain.

Additionally, many women experience pregnancy, which adds a few additional pounds for each birth that can be hard to shake; “Dad-bod” similarly affects men when their jobs and child-rearing responsibilities preclude trips to the gym.

Then there’s the slow-down that takes place as people progress into their 50s and 60s. That was made abundantly clear to me when I recently attended my 50th high school reunion. The majority of people had gained weight from earlier reunions. But some had maintained their slim body habitus, and a tiny minority had actually shrunk (were they sick?).

Weight gain is not just about over-eating or the wrong food choices. It’s dependent on genetic factors, some of which we can identify by means of analysis of saliva samples. Sarcopenia take its toll on our muscle reserves, enabling fat to displace lean tissue. Overweight also relates to hormonal influences (thyroid, testosterone, cortisol, estrogen, leptin, insulin), microbiome imbalances, even the effects of environmental obesogens. (See my article 10 Reasons Why It’s Not Your Fault You’re Fat)

Teleologically, the body strives to maintain and even to continually augment its fat reserves as a hedge against famine—a state that routinely afflicted our paleolithic forebears but that is seldom involuntarily replicated in modern times. There are multiple, redundant hard-wired impediments to loss of that survival insurance—to paraphrase Simon and Garfunkel “There are 50 Ways to Keep Your Blubber”!

Now, researchers have added a new perspective on why we tend to gain weight as we age. Scientists at Sweden's Karolinska Institute have discovered that adipose cells become less responsive as the years progress. Even with stringent dieting, they are less likely to relinquish their fat stores. This decline in fat turnover makes the pounds stick.

Anybody over 40 who has tried to diet could've told you that. Patients frequently lament to me: "It's like my metabolism has slowed to a crawl". These research findings seem to simply buttress their fatalistic realization.

Will this discovery lead to a practical solution? Can scientists eventually unravel the precise mechanism by which adipose cells become less responsive with age, and develop a drug that targets receptors to restore egress of fat? So far, a safe effective weight loss pill has been the elusive Holy Grail of pharmaceutical research: Billions expended, and dozens of drug recalls later, with no quick fix in sight.

But one salient fact emerged from the Karolinska Institute research: Those who exercised intensively could preserve—at least to some extent—the suppleness of their adipose storage dynamics. In other words, the fat cells of older exercisers more closely resembled those of younger individuals than those of non-exercisers of comparable age.

The point was vividly illustrated for me a while back when I visited the American Museum of Natural History. I was in the Amazon section, and a little documentary film was looping in one of the side alcoves. It depicted a young indigenous boy hunting in the forest with his father.

The father was teaching his son how to use a blow gun with paralyzing darts to bring down a monkey high up in the tree canopy. The boy was inexperienced and his first dart only managed to wound the monkey. A second dart expertly fired by the father hit its mark, but the monkey's limp carcass was hung up on a branch high overhead.

What to do? The father tied some vines around his ankles and shimmied quickly up a tree to retrieve the monkey—a feat that even the most athletic Westerner in their prime would find challenging. It was only then that the narrator revealed that the man was not the boy's father, but actually—his grandfather!

There was no clue from the man's appearance, which was muscularly "shredded" and revealed not a trace of superfluous body fat. Even with a generous estimate of how quickly this man could have produced two generations of progeny, he had to have been at least 45, perhaps 50 or older.

But here's a surprising finding: It's getting more difficult to lose weight in industrialized societies. According to a new study, even individuals as young as 25 are now having a harder time than did their parents at a comparable age.

The researchers report: "We observe that for a given amount of self-reported food intake, people will be about 10 percent heavier in 2008 than in 1971, and about five percent heavier for a given amount of physical activity level

in 2006 than 1988.”

The inevitable conclusion is that there’s something happening beyond just diet and exercise that influences weight loss or retention. And the fact that a sort of metabolic ball and chain has grown heavier in just a generation suggests it’s something about our modern environments or lifestyles.

Could it be widespread sleep deprivation? That food is now more processed? The pervasiveness of environmental pollutants that poison our fat-burning machinery? Increased stress? Over-dependence on medications like acid-blockers and antibiotics that damage the microbiome? Ubiquitous antidepressant use? Peering into electronic devices that upset our circadian rhythms? Abandonment of traditional mealtimes and incessant snacking? All of the above?

Clearly, staving off weight loss as you age is challenging. In my experience, it is predicated on a lifetime commitment to clean, moderate eating and regular exercise. What set most of my lean Class of ‘69 classmates apart from their overweight peers was that they remained in the fast lane, even as they approached their 70s, using every opportunity to stay active with a variety of challenging physical activities. And some of the gals from the cheerleading squad sure could still dance to Creedence Clearwater!