## CHAPTER 3

## THE DISAPPEARING SKINNY

Society is getting fatter and fatter, so much so that skinny is becoming extinct.

Yes, that's right. Skinny people, as defined as people with a normal body mass index (BMI 18.5–24.9), a reasonable definition in today's world, are becoming extinct! If you don't believe me, here are the stats. According to the Centers for Disease Control and Prevention National Center for Health Statistics (CDC), in 2013–2014, the percent of adults age twenty years and over who were obese was 37.9 percent (BMI 30 or >). Another 32.8 percent of adults were overweight (BMI 25–29.9). Only 29.3 percent had a normal BMI. It is frightening to think that 70.7 percent of the adult population is either overweight or obese. Putting this in round numbers, more than two-thirds of our population is either overweight or obese. Less than one-third is skinny, what we are calling people with normal BMI in this chapter. A whopping 40 percent (in round numbers) is obese, the largest segment of our population.

These numbers are getting worse over time. According to the CDC, the prevalence of obesity increased between 1999 and 2014, going from 30.5 percent to almost 38 percent.

But it's not only adults who are getting fat; obesity is prevalent in our children and adolescents as well. The older our children get, the greater the incidence of obesity has become. Here are the numbers for 2013–2014 from a CDC report:

- Percent of adolescents age 12–19 years with obesity: 20.6 percent
- Percent of children age 6–11 years with obesity: 17.4 percent
- Percent of children age 2–5 years with obesity: 9.4 percent

Imagine being five or six years old and being obese! How can that happen? But the facts show that about one in ten children two to five years of age is obese, as is one in five adolescents. Our modern way of life is not consistent with good health and

INSTEAD OF TRYING TO PUT OUT FIRES, WE SHOULD FOCUS ON PREVENTING THE FIRE FROM STARTING IN THE FIRST PLACE. wellness. No wonder we spend so much on healthcare. Rather than get at the root cause of illness, we spend our healthcare dollars on treating the symptoms.

The statistics look even worse if we look at the diabetic population, 95 percent of whom are type 2 diabetics. Type 2 diabetics do not respond to insulin. They make insulin, but their bodies are resistant to it. Type 2 diabetes is usually the result of poor diet

and lifestyle habits. In Type 1 diabetes, the body does not make enough insulin. It is believed to be caused by an autoimmune reaction where the body attacks its own insulin-producing cells in the pancreas. There is no known way to prevent or reverse type 1 diabetes. Type 2 diabetes is preventable and can be reversed with diet, weight loss, and proper lifestyle habits.

According to the CDC, nearly half of adult Americans have diabetes or prediabetes. The numbers are staggering. Thirty million Americans have diabetes, which represents 12.2 percent of all US adults. Of these, almost 25 percent do not even know they have it.

For prediabetes, the statistics are even worse. Eighty-four million adult Americans are prediabetic, which represents 34 percent of the adult population. Of these, 9 out of 10 don't know they are prediabetic. Combined, the incidence of diabetes and prediabetes is 46.1 percent or almost half of all adult Americans. Fifteen to 30 percent of people with prediabetes will develop type 2 diabetes within 5 years.

How would you know if you're prediabetic? The bad news is that many people don't. Many people ignore symptoms and keep on trudging through life until it's too late.

As the population ages, the incidence of diabetes gets even worse. Almost three-fourths of adults age 65 or greater are diabetic or prediabetic. (25.2 percent are diabetic and 48.3 percent are prediabetic.) This does not bode well for longevity because diabetics have a risk of death 50 percent higher than nondiabetics. Diabetes is the seventh-leading cause of death, but this number is probably understated, as diabetes is not always listed on death certificates.

From the economic perspective, diabetes is a drain on our wallets and our economy. Medical costs for diabetics are twice that of nondiabetics. The cost of diagnosed diabetics in the United States in 2012 was estimated at \$245 billion in both medical costs and lost work and wages. This number can easily double to almost half a trillion dollars if 30 percent of today's prediabetics go on to become diabetic, as the statistics suggest that 15–30 percent of prediabetics go on to become diabetic.

If we look at BMI in diabetics, skinny is becoming even more extinct in this population. According to a 2017 CDC report, 87.5 percent of diabetics are either obese or overweight. Only 12.5 percent have a normal BMI. The breakdown is as follows:

- 26.1 percent overweight (BMI 25–29.9)
- 43.5 percent obese (BMI 30–39.9)
- 17.8 percent severe obesity (BMI 40 & >)
- 12.5 percent normal BMI (BMI <25)

People ask me, "Why to do you want to be skinny and deprive yourself of all those wonderful sweets and sugary food?" And the answer is because it is healthier than being fat. If being fat was healthy there would nothing wrong with being fat. In fact, if being fat was healthier than being skinny, then I would be fat because I want to do everything that I can to stay as healthy as I can. But this is not the case. Obesity and being overweight are not good for your health. People who are overweight or obese are much more likely to get diabetes, cancer, and cardiovascular disease, including strokes and heart attacks, compared to normal-weight adults. Their mortality rates are increased. The higher your BMI, the greater your all-cause mortality rate.

When you look at the facts, it makes you pay attention.

A recent study showed that about one in five deaths is linked to people being overweight or obese (Ryan Masters PhD, et al., American Journal of Public Health, 8/15/13). In this study 18.2 percent of all deaths in adults ages 40 to 85 between 1986 and 2006 were associated with their being overweight or obese. The more recent their year of birth, the more likely obesity played a role. We are seeing obesity in younger and younger people, which exposes them to the deleterious effects of obesity (chronic diseases) for longer periods of time during their lifetime, thus affecting them more. The risk of obesity affecting mortality increases with increasing age. Obesity is threatening to reverse the steady increase in life expectancy we have seen over the past hundred years.

A large study was done by the Global BMI Mortality Collaboration comprised of five hundred investigators from three hundred worldwide institutions looking at the association between excess body weight as determined by BMI and premature death (*Lancet*  2016; 388:776–86). They analyzed 4 million adults who were followed for an average of 14 years. People with normal BMI had the lowest mortality risk. The risk of dying increased significantly as the BMI increased:

- BMI 26–<27.5: 7 percent higher risk of mortality
- BMI 27.5–<30: 20 percent higher risk of mortality
- BMI 30-<35.0: 45 percent higher risk of mortality
- BMI 35-<40.0: 94 percent higher risk of mortality
- BMI 40-<60.0: 292 percent higher risk of mortality

For every 5-unit increase in BMI above 25, there was about a 31 percent increased risk of dying.

When they looked at the specific causes of death, for each 5-unit increase in BMI above 25, there was a 49 percent increase in cardiovascular deaths, a 38 percent increase in respiratory disease—related deaths, and a 19 percent increase in cancer-related deaths.

Many studies have shown that increased BMI is associated with an increased prevalence of type 2 diabetes, high blood pressure, elevated cholesterol, and cancer. As our society gets fatter and fatter, we are getting sicker and sicker. The fatter we get, the shorter we live. We are at the point where our children's life expectancy may be less than ours if these trends continue because children are getting fatter at a younger age and thus exposed to chronic disease for a longer percentage of their lifetime than previous generations.