

THE BODY SHAPE SOLUTION TO WEIGHT LOSS AND WELLNESS

THE APPLES & PEARS APPROACH TO LOSING WEIGHT, LIVING LONGER, AND FEELING HEALTHIER

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☀ *What does it mean, to be apple-shaped? Pear-shaped?*

All women's bodies can be categorized as either "apple-shaped" or "pear-shaped," depending on where they are most likely to put on fat, even if they aren't currently overweight.

Women who tend to gain weight around their waists are said to have apple-shaped bodies because their weight collects around their middles.

The classic apple-shaped woman has slender and shapely legs, narrow hips, large breasts, and a relatively large waist. She probably owns few, if any, belts, but short skirts and men's-fit or slim-leg blue jeans look good on her.

Women who tend to add extra pounds around their hips, buttocks, and thighs are said to have pear-shaped bodies because they are widest at the bottom.

The classic pear-shaped woman has a relatively thin upper body, often with small breasts, a well-defined waist, and heavier lower body. A pear-shaped woman tends to put on weight around her bottom—hips, thighs, and buttocks.

☀ *How do you determine which shape you are? What about men?*

Figuring out your body shape is easy—all you need is a flexible tape measure and a calculator.

First, measure around your waist. If you have a visible waist, measure around the narrowest part. If you don't have a waist, measure around the widest part of your middle, usually about one inch above your navel. Stand up straight, but relaxed. Don't suck in your gut. That number is your *waist circumference*.

Next, measure around your hips—not where the bones of your pelvis jut out, but about three to four inches lower. This actually corresponds to the point where the top of your thigh bone—the

femur—meets the pelvis. You should be measuring around your buttocks, not above or below.

If you have any doubt, take the measurement at the widest point of your lower body, which may include your “saddlebags” if you are pear-shaped.

Divide your waist measurement by your hip measurement to get your *waist-to-hip ratio*, or *WHR*. If your WHR is 0.80 or lower, your body is classified as pear-shaped. If your WHR is higher than 0.80, your body is classified as apple-shaped.

Body shape matters to men too. A man whose WHR is over 0.9 is considered apple-shaped and therefore has greater health concerns.

✿ *What factors determine body shape?*

Body shape is not something we get to choose; we have very little control over our basic underlying proportions. Body shape is in large part genetic and is related to differences in our physical chemistry, hormone production and sensitivity, metabolism, and possibly even personality and mood.

✿ *What made you interested in body shape and health risks?*

I am one of eight children (I have three brothers and four sisters). Most of us girls have subtle variations of the pear shape—we always tended to have “small tops and big bottoms.” For as long as I can remember, whenever I shopped for new clothes, I always tried on the pants portion of a suit first because my bottom was the hardest part to fit. To this day I prefer to wear pants to cover my larger-than-I-like legs, instead of the short skirts that many apple-shaped women (with their typically beautiful legs) can wear.

Three of my four sisters had similar concerns. My fourth sister, Millie, had a much different experience, and a more serious problem. Unlike her four sisters, Millie has an apple-shaped body. True to her type, she has great legs, which always made the rest of us a little envious. But over the years, she has gained weight primarily around her middle. Although she must have had an apple shape her whole life, I didn't really notice until later in life when her mid-section became more rounded and she lost whatever waist she had in her youth. Millie now has a number of serious medical conditions, including type 2 diabetes, high blood pressure, abnormally high blood fats in a worrisome pattern, and osteoarthritis of her knees. Her diabetes has led to other complications, including nerve damage (neuropathy) in her feet, causing constant burning and pain. For years Millie had been told about her borderline blood sugar levels, but she was

never told how something as innocent-sounding as "blood sugar" could devastate her body. Nor was she ever told that it was within her power to avoid serious disease. In fact, Millie recently requested her old medical records from a previous physician, and discovered that she had had borderline blood glucose readings for many, many years, but her doctor never told her. After years of ignorance, she was ultimately diagnosed and treated for diabetes.

Today, Millie manages her blood sugar, blood pressure, and blood fats with a combination of medications and major changes in her lifestyle. Even the pain of her neuropathy is better now that she is controlling her diabetes. But if only she could turn back the clock, she could have avoided many of the health problems that plague her now. Millie was born to be apple-shaped. Throughout her adolescence, into adulthood, and past menopause, her body followed a pattern that made her more likely to develop particular diseases. If we knew then what we know now, she could have prevented much of the damage that has already been done. That's what this book is all about—recognizing the risk, then taking action to stop the process of disease and decline.

✿ *What motivated you to write this book?*

My passion to write this book comes from my family stories...and the stories of countless other women I have cared for and treated over the years. It is with the clarity of hindsight that I see that I could have made an even bigger difference in my patients' health if only I had recognized sooner the diagnostic importance of body shape. But back then, I didn't have the *language of body shape* to begin the conversation. It is difficult to take the first step to speak up and interfere with someone else's health choices; talking about body shape would have provided an easy transition into a discussion of weight, lifestyle, and disease risk. I could have told them that, through no fault of their own, body shape had put their health in danger. The good news is that we know now.

✿ *Tell me more about the different kinds of fat?*

Fat comes in two main varieties: *subcutaneous*, which means "under the skin", and *visceral* which means "pertaining to the soft organs in the abdomen". Subcutaneous fat is the stuff that jiggles, the stuff we hate to see on our bodies. Visceral fat, on the other hand, is not always visible from the outside. It packs itself around the inner organs of the abdomen and sometimes even inside the liver. We all have some visceral fat because it protects our internal organs, acting both as shock absorber in case of trauma, and as insulator to help us conserve body heat.

Fat is actually living, breathing, hormone-producing, metabolically active tissue. It is critical for survival, and not just because it provides storage for energy. Fat

helps regulate body functions through the give-and-take of chemical communications with the central nervous system. People who have too little body fat are just as unhealthy as people with too much body fat, but in a different way. In fact, try not to think of body fat as *fat*. Try to think of fat as a gland, as active and important as any other gland in the body.

Adipose tissues make and release a variety of compounds, including enzymes, hormones (such as leptin, which helps regulate appetite), and inflammation-related chemicals called cytokines. Although visceral fat and subcutaneous fat are in the same general category, they are totally different.

✿ *What diseases are associated with apple-shape?*

Apple-shaped women have more visceral fat, which is more metabolically active than subcutaneous fat, and most of what it does is harmful to the body. Visceral fat decreases insulin sensitivity (making diabetes more likely), increases triglycerides, decreases levels of HDL cholesterol, creates more inflammation, and raises blood pressure—all of which increase the risk of heart disease. Visceral fat releases more of its free fatty acids into the blood stream, further increasing the risk of both diabetes and heart disease. The overall effect of excess visceral fat is that it creates a physical environment that is primed for heart disease and stroke, and greatly increases the risk for certain cancers such as breast and endometrial cancer. The more abdominal fat, the greater the waist circumference, and the higher the WHR, the more dangerous the situation becomes.

✿ *What diseases are associated with pear-shape?*

Fat in the pear zone is subcutaneous fat which traps and stores dietary fat (trapped fatty acids are then stored as triglycerides). In our image-conscious society, fat thighs and large buttocks are mocked. Even gorgeous, pear-shaped Jennifer Lopez has had to endure years of negative commentary about her figure. Young pear-shaped women who internalize the rail-thin ideal of fashion models end up struggling with body image problems and suffer from eating disorders more often than apple-shaped women do. What they don't know is that losing weight will not change the overall shape of their bodies—it will only make them smaller pears. Many of the health problems caused by obesity is because excess visceral fat is the problem, not pear-zone fat.

After menopause, pear-shaped women of all sizes lose their estrogen advantage, and can therefore start to experience many of the same health problems as apple-shaped women—especially increased risks of heart disease and diabetes.

Pear-shaped women are also more susceptible to osteoporosis, cellulite and varicose veins.

✿ *Do different ethnic groups have different body shapes?*

Different ethnic groups have different body shapes and different health risks that require different waist circumference guidelines. For all ethnic and racial groups, the higher the waist circumference, the higher the disease risks. What we know so far is:

Chinese and Asian Indian women develop metabolic problems and heart disease at lower waist circumferences than do Caucasian women, so the guidelines for their optimal waist size are smaller. How much smaller is not yet known, but a cut-off of 32 inches has been suggested, with a possible optimal measurement of 28 inches.

Hispanic and Mexican women experience greater risk of diabetes and hypertension at lower waist circumferences than Caucasian women, and therefore need a lower cut-off. More research needs to be done before appropriate guidelines can be offered.

African-American women have about twice the rate of obesity compared with Caucasian women and studies have shown that African-American women tend to have less visceral fat and more subcutaneous fat compared with Caucasian women at the same total body weight. It has been suggested that African-American women might have a greater sensitivity to the effects of visceral fat compared with Caucasian women, so that even lesser amounts of visceral fat equate to worse risk outcomes for African-American women. Still, it is clear that visceral fat is harmful to the health of African-American women, and they should be encouraged to reduce waist size.

✿ *What are the hormone differences between apple-shaped and pear-shaped women?*

Pear-shaped women have a body chemistry that is dominated by estrogen. In medical circles, the pear shape is known as "gynoid," which derives from the Greek word for *woman*, as if all women were meant to be pear-shaped.

The apple shape is medically called "android," which derives from the Greek word for *man*. In women, this means that their body chemistry is dominated by androgen, the typically male hormone. All women produce androgens in their ovaries and adrenal glands, but apple-shaped women produce more of them. They also produce estrogen but there is a predominance of androgen. The effect is that women with an apple shape have bodies that are shaped more like men's bodies—less curvy, more angular, and with less fat around the lower body. They often have relatively large breasts, usually because of weight gain above the waist.

✿ *What happens to our body shape as we age?*

All children start out apple-shaped, and boys stay apple-shaped. But once the hormones of adolescence hit, girls can either remain apple-shaped or become pear-shaped. Studies have shown that women who have never been pregnant have lower waist-to-hip ratios (making them more pear-shaped) than women who have had one or more children. And when researchers looked at individual women, taking their measurements before and after pregnancy, they found that weight gained or retained after pregnancy seems to be mainly visceral fat. Menopause seems to want to make "apples" of us all, mainly because of our plunging estrogen levels.

✿ *What happens to our body shape after menopause?*

After menopause, pear-shaped women of all sizes lose their estrogen advantage, and can therefore start to experience many of the same health problems as apple-shaped women—especially increased risks of heart disease and diabetes. When they gain weight after menopause, the tendency is to put on visceral fat instead of gynoid fat because of declining estrogen; if enough visceral fat is acquired, body shape can transform from pear into apple. HT will help preserve the pear shape by adding back the missing estrogen, and therefore reducing the tendency to put on visceral fat after menopause. HT will help pear-shaped women manage their hot flashes, prevent osteoporosis, improve blood lipids, and maybe even reduce the risk of heart disease and Alzheimer's disease if taken shortly after menopause. Pear-shaped women can safely take the pill or patch form of estrogen.

☀ *Can apple-shaped women take hormones after menopause?*

Overweight apple-shaped women should not take hormones after menopause. In general, apple-shaped women have fewer hormone-related problems after menopause than do pear-shaped women. The same extra androgens that gave them their apple shapes are still around after menopause, and androgens are converted to estrogen. And because apple-shaped women have more visceral fat, the estrogen that is made is the more powerful estradiol. Therefore apple-shaped women tend to have a much easier menopause transition than pear-shaped women, with fewer hot flashes and other symptoms. Plus, they have a much, much lower risk of osteoporosis. If they do require hormones to control hot flashes, they should use the patch form of estrogen.

☀ *What can apple-shaped women do to prevent or even reverse disease?*

First concentrate on losing just two inches off your waist. *Every inch* of abdominal fat you lose will significantly decrease your risk of diabetes, heart disease and even breast and endometrial cancer and very possibly add years to your life. The good news is that when women of any shape lose weight, the fat around the middle is the first to go. That's because visceral fat is metabolically easier to access compared to subcutaneous fat. Visceral fat is the easier location for the body to go to when it needs fat to burn, so when you lose weight, your waist tends to shrink first. In fact, it is extremely difficult for pear-shaped women to lose weight from their hips and thighs. So a pear is a pear, until she becomes an apple—but she can always transform back again with the right combination of diet and exercise.

☀ *You recommend the 25 percent solution for everyone trying to lose weight. What do you mean by the 25 percent solution?*

According to the best research, if you want to lose weight and *keep the weight off* without slowing your metabolism, you need to do moderate exercise and restrict calories by *no more than 25 percent*. That means that by eliminating just one-quarter of everything you already eat (also called portion control), you will be losing weight in a healthier way than if you started measuring out half-cups of rice or ounces of cereal. Cutting back more will take weight off faster, but you'll just put it back on relatively quickly. I call this the *25-percent solution*, and it is your best bet for breaking out of diet hell. If you diligently apply the 25-percent solution, you can't help but lose weight and inches. When you reduce the total number of calories you eat each day by a manageable proportion, your body will start dipping into its fat stores for energy, and your waistline will gradually decrease. The 25-percent solution works slowly, but it works. It allows your body

to adjust to a new amount of food without drastically cutting calories. This is the simplest, most fundamental way to lose the inches, something anyone can do, even if you have minimal motivation. Ideally, you'll pair this with exercise so that you hold onto as much lean body mass as possible.

✿ *What type of foods do you recommend for apple-shaped women?*

The best choices are foods I call *elite* Carbs, *elite* Fats, or *elite* Proteins. *Elite* foods help protect against disease, promote general wellness, and improve your odds of shedding visceral fat. The worst choices are foods I call Wasted Carbs, Wasted Fats, or Wasted Proteins. *Wasted* foods improve your odds of gaining weight, increase your waist size, may act to harm your health, and have no redeeming nutritional value. These are the foods that you may have heard others call "junk food" or "empty calories." I prefer the term "Wasted" because eating them means that you wasted an opportunity to improve your health, and you chose instead to eat something that will contribute to a larger *waist*. Foods that fall somewhere in between—neither *elite* nor *Wasted* – are healthy enough for a start. You can eat as many *elite* Carbs and *elite* Proteins as you want.

✿ *What are the basics of the Pear Shape Diet?*

Pear-shaped women can eat as many healthy and helpful foods, I call Slim foods, as they want. Slim foods are naturally low in fat, low in sodium, and many are high in calcium. To lose weight and inches faster they should also apply the 25-percent solution. They should avoid all foods I refer to as "*Zoned-out*" foods. These are fatty, salty, or osteoporosis-causing foods—all the foods that worsen pear-zone problems such as weight gain, bone loss, cellulite and fluid retention.

✿ *What role does exercise play in your program?*

Exercise is more effective than dieting at helping women lose weight and keep weight off. Dieting lowers metabolism, which means that weight will eventually creep back on, even if you keep dieting. Exercise helps maintain the lean body tissue that revs up metabolism, so you'll lose weight without the same diet-induced metabolism problem.

Women lose more subcutaneous and visceral fat when they do both aerobic and anaerobic exercise than when they do just one type. Plus, the general health effects are improved with both exercise types—when women walk and do strength training, their insulin sensitivity increases even more than if they only walk. It is the combination of both kinds of exercise that allow apple-shaped women to lose inches from their waists and to decrease their disease risk factors. Pear-shaped women will want to do aerobic exercise to lose fat, and to do strength training to help build metabolism and strengthen bones.