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Facts about Fitness and Fat
By: James L. Holly, MD

Sometimes, in the quest for the "ideal" body shape or size, we forget that ultimately the value of weight loss is health, not just "what we look like." To refocus our attention on the health advantages of weight loss, we need to recognize that health benefits are not achieved when we reach our target and/or ideal body weight. They begin almost immediately when we began to be responsible for what we eat and when we begin to lose weight.

Here are some realities:

1. You can be fat and fit! Just because you are overweight does not mean that you are deconditioned in your cardiovascular function. Conversely, just because you are thin, or at your ideal body weight as measured by BMI or Body Fat Percent, does not mean that you are aerobically fit.
2. This knowledge does not encourage you to be overweight and it should not discourage you from losing weight, but it should encourage you that modest weight loss and exercise will benefit your heath, whether you reach your ideal weight or not.
3. Some studies are showing that even with excessive body weight or belly fat, the physically fit stay healthy, even when compared to those who are not fat but who do not exercise.
4. I know many very strong, physically fit people who can outwork, out play and out produce any of their colleagues, but they are fat. If you have to make a choice between being fat or fit, choose fit, but that isn't the choice we have to make. Is it?

The Surgeon General includes weight control as one of the ten leading indicators of the nation's health. The National Institutes of Health characterizes obesity as an independent risk factor for premature death and for numerous diseases including hypertension, coronary heart disease, stroke, osteoarthritis, and endometrial, breast, prostate, and colon cancer. The Centers for Disease Control and Prevention (CDC) has begun encouraging physicians to identify weight problems in children as well as adults.

With more than 50% of overweight Americans trying to slim down, recent studies indicate that regular exercise and a sound diet may significantly offset the risks associated with excess fat, **whether or not they result in weight loss**. Some researchers have even suggested that inactivity -- not obesity -- is the true risk factor for premature death.

Is lifestyle or fat to blame?

Researchers who argue that poor health habits pose a greater threat than obesity point to findings from the Cooper Institute in Dallas. For decades, scientists there have put tens of thousands of people through treadmill tests to measure their cardio-respiratory fitness levels and then tracked those subjects' long-term health. Numerous studies based on that data indicate that no matter what your body weight, being physically fit significantly protects against premature death.

In a study involving more than 25,000 men, for example, Cooper researchers reported in the *Journal of the American Medical Association* that obese individuals who were fit had only one-third as much risk of premature death as their heavy but unfit counterparts -- and roughly the same risk as fit, lean men. Obese, fit men did have a 60 percent higher death risk from cardiovascular disease than thinner fit men. However, for reasons that are not yet clear, the overall risk of premature death was about the same for all fit men, no matter what their weight. Earlier research that included women suggested similar results.

Obesity is defined as a body-mass index (BMI) -- a measure of how heavy you are for your height--of 30 or over; a BMI of 25-29 is considered overweight.

Cooper researchers also published the first study that investigated the health impact of fitness in combination with abdominal fat. Previous observational studies have linked excess belly fat (defined as a waist circumference that exceeds 40 inches in men, and 35 inches in women) with an increased risk of hypertension, coronary disease, diabetes, and certain cancers. Many studies have found that a big belly may pose greater risks than does an elevated BMI.

In this study, however, which involved more than 20,000 men, fit males with big bellies had no higher risk of death during the study from all causes than fit, thinner-waist men. Among the unfit, the death rate was doubled for normal-waist men -- and even higher for big-bellied men. "I take this as incredibly good news that you don't have to normalize your weight if you just become fit," says Glenn Gaesser, Ph.D., a professor of exercise physiology and obesity researcher at the University of Virginia.

In another recent study, which focused on muscle strength rather than aerobic capacity, U.S. and European researchers found that fitness rather than fatness again proved to be the key determiner of longevity. That study relied on information from the Honolulu Heart Program, which collected and tracked health data -- including grip strength, an indicator of physical activity -- from 8,000 Hawaiian men of Japanese ancestry. Of the men who were healthy when first evaluated in the 1960s, those with the strongest grip

had the lowest risk of death from all causes over the next 30 years, regardless of their BMI.

In addition, many studies have shown that exercise -- even when unaccompanied by weight loss -- can help improve blood pressure, cholesterol, and glucose levels, and lower the risk of cardiovascular disease and diabetes. Moreover, nutritional factors can also offset the risks associated with obesity. In particular, studies have shown that a diet rich in fruits and vegetables, whole grains, and low-fat dairy products helps control hypertension and markedly reduces the risk of cardiovascular disease and cancer -- findings that persist even after controlling for body weight.

Fat: more than an innocent bystander?

Though there's no dispute about sound health habits being protective at any weight, many experts firmly believe that overweight people would gain even more protection if they lost some pounds. "Fit and fat is better than unfit and fat, but it's not as good as fit and lean," says JoAnn Manson, M.D., Dr.P.H., chief of preventive medicine at Brigham and Women's Hospital in Boston.

In a study published in *The New England Journal of Medicine*, for example, researchers tracked more than 1 million U.S. adults who had filled out an extensive health questionnaire in the early 1980s. Even after adjustments for exercise habits, vegetable intake, and other lifestyle factors, the rate of death from cardiovascular disease, cancer, and all causes increased for heavier individuals at all ages. In this study, individuals who were moderately overweight had premature-death rates that were just slightly higher than their normal-weight counterparts. By contrast, the death rate was as much as 40 percent higher for the most severely obese.

Dozens of clinical trials have demonstrated that losing weight, like exercise, can help reduce three major risk factors -- high blood pressure, high cholesterol, and high blood-sugar levels. Moreover, exercise alone may not be as beneficial as exercise plus weight loss. In a newly published trial involving more than 100 people with hypertension, those who did aerobic exercise several times a week for six months lost about 4 pounds and reduced their blood pressure by about 4 points. Another group assigned to an exercise plus weight-loss regimen shed an average of 17 pounds and reduced their blood pressure several more points.

So far, no clinical trials have looked at the larger question of whether slimming down translates into longer lives. The better observational studies suggest that losing weight can prolong life -- but only for individuals who have at least one weight-related risk factor or disease, such as hypertension or diabetes.

Seeking common ground

Though experts debate the health impact of obesity, there's a surprising amount of agreement on several key points:

- Overweight and obese individuals who boost their exercise habits and start eating more sensibly will likely lose at least some fat -- including harmful belly fat.

- You don't have to get down to a "normal" weight to reduce major risk factors. Losing just 5 to 10 percent of body weight -- that's 10 to 20 pounds for a 200-pound individual -- can often bring blood pressure, cholesterol, and blood-sugar levels under control. "And you'll probably get a double bang if you get more active and lose some weight than if you just do one or the other," says David Williamson, Ph.D., an obesity researcher and senior biomedical research scientist with the CDC.

To shed pounds, cut your calorie intake by 300 to 500 calories a day and exercise four times a week for at least 45 to 60 minutes each time. That should melt off about 1 to 1 1/2 pounds a week.

Some experts feel that focusing specifically on your weight leads to relapses. When you make weight loss the marker for success, exercise and diet become a means to an end. And if you don't reach that end, you may view the means as ineffective or a failure -- and quit the program. Instead, focus on regular, enjoyable physical activity and sound, nutritious eating.

There's no clear proof that moderately overweight individuals without risk factors will be any healthier if they lose weight. For those individuals, regular exercise and a sound diet may be enough to maintain good health. "They shouldn't gain any more weight, but they don't need to make a huge effort to lose the weight they have," says F. Xavier Pi-Sunyer, M.D., M.P.H., an obesity researcher at St. Luke's-Roosevelt Hospital in New York, who chaired the National Institutes of Health's Obesity Education Initiative. But he does advocate a 10 percent weight reduction for overweight individuals who have risk factors, and for those who are severely overweight.

Summing up

The latest research makes a powerful case that regular exercise and a healthy diet can dramatically reduce the dangers associated with excess fat. Evidence that obese individuals with large amounts of belly fat or weight-related risk factors need to lose some weight remains persuasive. The benefits of weight loss are less clear for moderately overweight people without risk factors or bulging bellies. But those individuals should certainly try to avoid gaining additional weight as they age by exercising regularly and choosing a balanced, nutritious diet.

More comfortable ways to get fit

Aside from the usual inertia that often keeps people from exercising regularly, obese individuals have to confront an additional barrier: feeling self-conscious about their appearance while working out. At health clubs especially, it's easy to feel intimidated when surrounded by a roomful of trim athletes.

Here are some ways to stay physically active without feeling as if you're on display:

- Join a health club that caters to heavy individuals. These facilities--which downplay the mirrored walls and other bodybuilder trappings -- are cropping up across the U. S.

- Opt for home-exercise equipment. Consider using a treadmill, rowing machine, or stationary bike for aerobic conditioning and a set of weights for strength training. (Large people may find a recumbent stationary bike easier to ride than the upright version.)

- Find ways to work physical activity into your day. Walk rather than drive as much as possible when running errands. Take the stairs rather than the elevator. Instead of communicating with colleagues by e-mail or phone, walk across the building to deliver your message in person. Several shorter exercise sessions sprinkled throughout your day offer health benefits comparable to one longer session.

- If you have osteoarthritis, try swimming or water aerobics. Besides being refreshing and rigorous, these workouts allow you to exercise without putting stress on weight-bearing joints.

Hefty and healthy? It is possible. Don't get comfortable with being overweight, but don't get depressed either. Do take the steps to get yourself fit. Get started on a sustainable aerobic and strengthening exercise program. Remember, it is your life and it is your health.