



Ability to control weight varies among individuals

With the nation's focus on getting lean, too often it is assumed that we are all metabolically the same. There is a belief that losing excess weight should be a simple matter of eating less and moving more or just exercising some self-control.

QUESTION: Why isn't weight loss that simple?

ANSWER: One critical reason is that we really are not all the same. Genetic studies have identified dozens of gene variants that strongly predict an individual's leanness or fatness. Apparently there are many reasons why an individual is overweight or obese. Thinking that there should be one solution that will convert all obese people to a normal weight is overly simplistic and repeatedly has been demonstrated not to work.

Q: Why are some people successful at losing weight and keeping it off while others repeatedly fail?

A: Our body weight and ability to change it result from a complex interplay among genetic, dietary and physical activity factors. Positive changes in diet and exercise can improve the health of most anyone, but individual genetics can place powerful limits on how much body weight and body fat can change.

Genetic studies using both

animal models and people found that some genes make obesity virtually inevitable. For example, when experimental rats inherit an obesity gene from each of their normal-weight parents, they become obese even when fed and housed exactly the same as their lean siblings who received only one of the obesity genes.

The lean rat siblings can develop excess body fat if they consume excess calories and get little activity. They also can lose that excess body fat more readily than their obese brothers and sisters whose genetics protect their body fat. It appears to work much the same for people.

Canadian researcher Claude Bouchard has estimated that at least 5 percent of obese people can blame their condition completely on genetics. Those with this "genetic obesity" condition will be overly fat even when they live in an environment that would not lead to obesity in most people.

Bouchard's research also indicates that among the remaining 95 percent of the population, the chances of becoming obese range from a strong genetic predisposition to a slight predisposition, and some even have a genetic resistance to obesity.

Q: How can an overweight or obese person find an approach to

match his or her individual genetics?

A: The simple answer is that it may not be easy and might take some exploration and experimentation. However, health professionals who work in the realm of weight management often stress that having weight goals may not be a good idea for those with a strong genetic component to their obesity.

There is a growing trend toward promoting the concepts proposed by the Health at Every Size movement, which encourages people to focus on being physically active and eating a healthful diet instead of obsessing on body weight.

It is important to understand that extreme dietary approaches to weight management can lead to nutrient deficiencies that can harm health and adversely affect mental function and emotional balance. Even attempts to consume a more healthful diet can backfire by not providing enough protein to maintain healthy lean tissue while trying to lose fat.

Also, many overweight and obese people have an inadequate iron status, which is known to lead to physical and mental fatigue as well as depression and anxiety -- all of which damage day-to-day quality of life and make weight loss even more impossible.

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