



Scientists have discovered obesity genes but they are still trying to crack the code. But we already know that obesity and a tendency to be overweight can be inherited or rooted in the behavior we learn from our families. If both parents are overweight, you will have to work a little harder to change your genetic predisposition.

For children, the statistics are even more alarming. According to the National Longitudinal Survey of Children and Youth, more than a third of Canadian children aged two to eleven are overweight, and half of those are obese. More boys than girls were found to be overweight, and preschoolers fared the worst, with one in four children between the ages of two and five being obese. The Report on America's Children, prepared by the U.S. National Institutes of Health and the U.S. Census Bureau, contains similar statistics. That is a lot of children suffering obesity, and they are not the ones buying the groceries or driving to fast-food restaurants.

We must change the way we feed our children. Aside from the health problems associated with being an overweight child, the emotional issues can be damaging. We know that overweight children are treated differently by teachers and classmates, resulting in lower

self-esteem, which further exacerbates the psychological aspects of eating. I know myself that being a chubby kid was torment. No parent wants this for his or her child.

If you know you have a family history of easy fat gain, type 2 diabetes, or heart disease, you will want to ensure that you don't eat the same way as your mom and dad. We know that it is not just our genetic makeup, the foods we choose, our hormones, or lack of exercise, but also our psychological and emotional programs, that can keep us trapped in patterns of behavior that increase our propensity to overeat and not exercise. And where do all these patterns begin?

### **Environment vs. Genetics**

Both the foods mom ate while you were still in the womb and the foods you were fed during early childhood have an effect on the likelihood of weight problems. If a woman develops gestational diabetes during pregnancy, or smokes, her baby is at higher risk of having an increased number of fat cells. This is one reason adopted children have been found to have similar body composition and weight-management concerns as their biological parents. Babies are less likely to be obese if breastfed for over three months. Feeding children more than they can burn off through activity, can lead to more fat cells being created. These excess fat cells make losing and maintaining a healthy weight harder in adulthood. Fat cells increase through childhood and adolescence, leveling off in adulthood. Once we have a set number of fat cells we cannot decrease our numbers, we can only shrink them.

The study most often quoted on genetic factors was led by Dr. Albert J. Stunkard, a prolific researcher on the subject of obesity. He looked at 540 Danish adults who had been adopted. A comparison of height and weight overwhelmingly demonstrated that the individuals studied were more likely to have the same body weight characteristics as their biological parents than those of their adopted family. A more recent study (2010) out of the University of Helsinki found that while environment did play a bigger role during mid childhood, once adolescence is reached and through adult hood, genetics play a larger role.

According to Harvard Medical School, over 400 different genes can contribute to weight gain. However few play a very strong role. These genes influence appetite, fullness levels when eating, how fat is distributed around the body, what foods we crave, and how fast the body's metabolism operates. The amount genes influence weight can be anywhere from 25 to 80 percent. While genetics can make weight loss harder for some people, it does not mean weight loss is not possible. However, for people whoes weight is strongly influenced by genes, professional weight loss support from a doctor, nutritionist, or fitness trainer may be required.

## **Passing on Your Eating Patterns**

Other studies have been conducted on the metabolic rate of children. Researchers found that children of overweight parents had a lower metabolism than did the children of parents who were not overweight. We know that when diets are predominantly made up of refined carbohydrates (processed cereals, white flour, white pasta, white sugar, white rice) and low protein, the metabolic rates will reset lower in those eaters then. It makes sense that if children eat the same types of foods as their parents, they will also have similar fat-burning rates. But being overweight has more at its core than having an increased number and size of fat cells and overweight parents. Psychologists point to the patterns of behavior that send people down the fat path.

## **Rewards, Love, and Fat Patterns**

Patterns of behavior in children are formed at an early age. Parents, other primary caregivers, and then teachers provide a framework for children about how to behave, and food is often one of the techniques used to reinforce or deter certain behaviors. Frequently children are rewarded with candies, cookies, and junk food for good behavior or to get them to stop a behavior that adults find annoying when food is used as a reward. A child looking for attention soon learns that along with that attention comes food.

In other words, the child discovers that love and feeling good are associated with eating. Most of us have experienced this, but probably never thought about it. When we are young, a warm chocolate chip cookie is often given to soothe a bad day at school. Cookies are high in sugar, which wreaks havoc on blood sugar balance and serotonin levels. When you eat sugar, your serotonin (the feel-good hormone) increases, and you feel better. Thus there is a vicious cycle of cravings and weight gain. When your mood drops, you suddenly start craving sugar-laden foods. Eating these foods causes your serotonin to increase, and you feel good, but when the serotonin level drops, you crave these foods again. Balancing your moods and maintaining normal serotonin levels can reduce food cravings and binge eating.

## **An Active Model**

Not only do children pick up on your eating habits, they are also influenced by how active or sedentary you are. Children of active parents are more likely to be active themselves. A study done by Boston University School of Medicine “Influence of parents’ physical activity levels on activity levels of young children” concluded that children with an active mother were 2.0 times as likely to be active, children with an active father were 3.5 times as likely, and when both are active, children were 5.8 times as likely to be active.

A 2008 study out of the University at Albany School of Public Health, found that girls were more physically active if at least one parent logistically supported their daughters activities, such as attending and enrolling them in sporting events, or at least one parent set an active or athletic example.

### **Home Alone Syndrome**

Often, both parents work and children are left to fend for themselves before and after school. In an average week most adults spend forty to fifty hours at work, fifty-six hours sleeping, thirty hours doing house-work, and twenty-one to thirty hours watching television or searching the Internet. Children between the ages of two and eleven average nineteen hours watching television, and children older than eleven spend twenty-one hours or more on average per week in front of the television. Even families with very low incomes may have on average two televisions.

What's worse, the television sends thousands of negative messages about food. A Saturday morning T.V. stint provides dozens of different types of fattening, toxic, fast foods and negative food messages. Advertisers are encouraging our kids to eat foods that will cause heart disease, diabetes, and cancer. And these advertisers are slick. It can be hard for parents of young children to say no to determined kids who want a McDonald's Happy Meal™ with the hot toy of the week.

Remember, you, the parent purchases the groceries and you drive the car. Your children can't eat junk food if you refuse to buy it. The food you keep in the house should be the food the entire family is encouraged to eat. If you have a cupboard with snacks aka 'treats' that you, the parents, sneaks food from, or tell your children it is only as a reward. You are then setting up your kids to have an unhealthy relationship with food. You could even be encouraging closet eating or worse shame towards the types of foods consumed.

### **Healthy Eating Tips for Families with Children**

- Remember, you purchase the groceries and you drive the car. Your children can't eat junk food if you refuse to buy it.
- Purchase washed and cut veggies so they are ready to use when you come home from work or when you are putting lunches together. They will also be ready for kids to eat when you aren't home.
- Don't buy snack cakes and cookies. Instead bake healthier versions at home if possible - [Almond Butter Cookies](#)
- No soda pop or sugar-laden, artificially flavored and colored water.

- Buy a SodaStream to make fizzy water at home or start juicing at home
- On Sunday, bake lots of chicken (skinless) or boil eggs so they're ready to eat for the next few days. Then it will be easy for you to make lunches with good, clean protein, not bologna and processed meats.
- Limit television and video games to a certain number of hours per day and certain days per week. I know parents who unplug the television before they leave for work. Others put video games under lock and key.
- Sit down with the entire family to eat supper and talk to your kids. If you can't do this every night, then pick a couple nights a week that are mandatory family nights. Too many families are so busy that they fail to teach their children about proper eating habits.
- Play with your children—dance in your living room, go for walks, throw a ball, ride a bike, or just have fun. Spending time with your children in fun activities will stop the negative pattern of television and food consumption that most families have adopted.
- Be physically active and support your children's activities.
- Encourage and support hobbies and interests
- Say loving words to your children every day. Tell them, "Have I told you how much I love you today?" or, "You are so smart." And start early—most children learn patterns by five years of age. Good self-esteem is essential to a child's psychological eating habits.