



## Healthy Choices

Obesity is an epidemic in our country and is spreading world wide. It leads to diabetes, heart and respiratory diseases, orthopedic problems, increased risk of cancer, increased social pressures and a shorter life expectancy.

### What Metabolic Differences Cause Obesity?

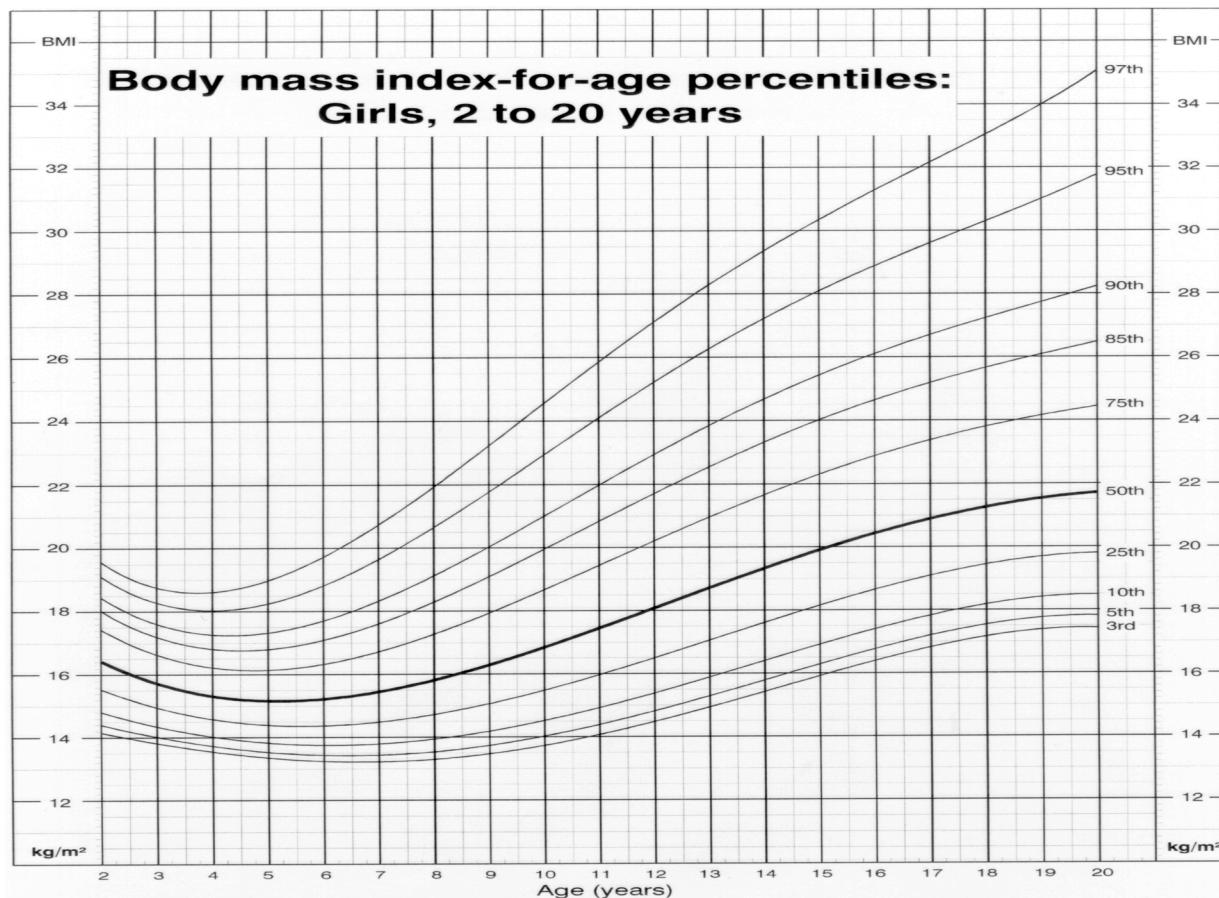
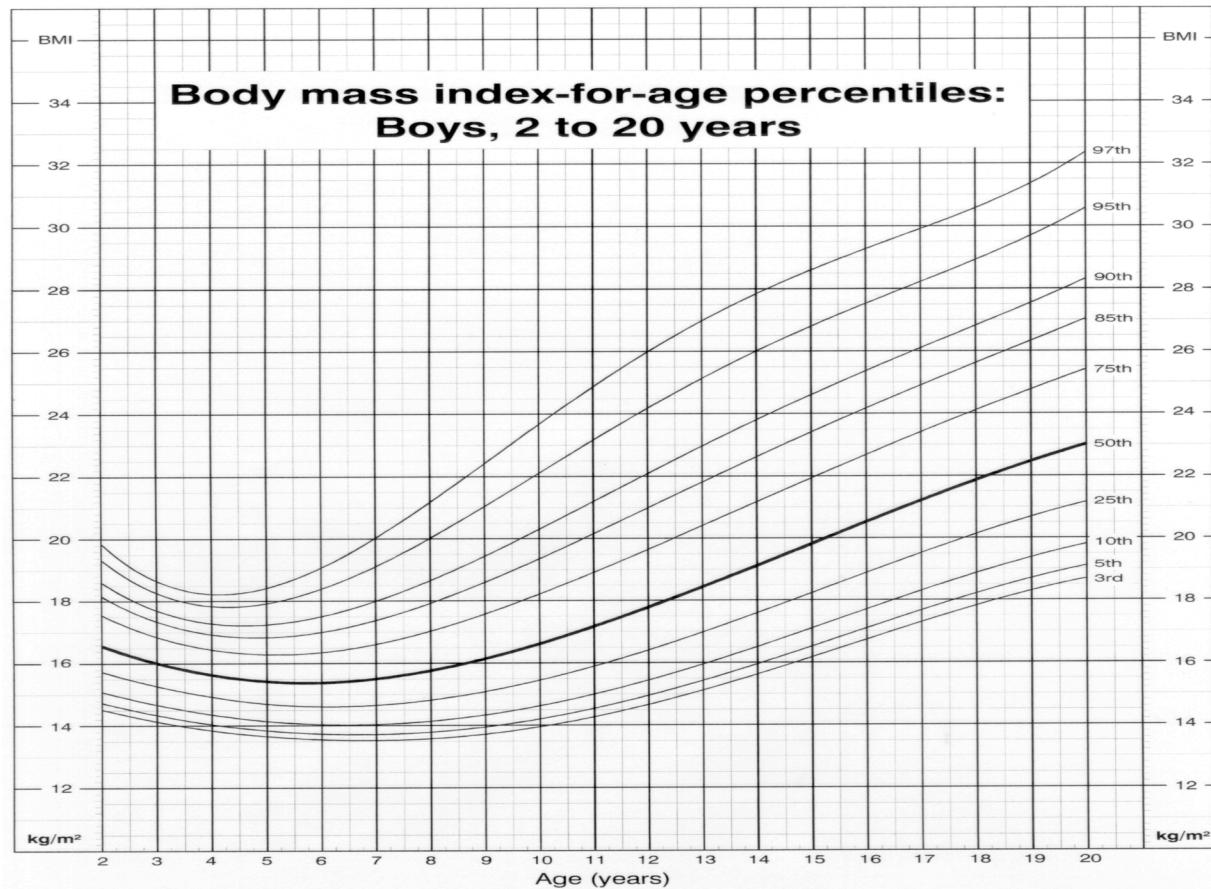
An obese person does not have a “slower metabolism” than a thin person. They have a higher insulin level. Insulin is the big troublemaker. It is the hormone of plenty. It instructs cells to store energy. Insulin is produced by specialized cells in the pancreas when blood sugar (glucose) rises. Insulin drives glucose into cells where it can be stored as lipid (fat.) The higher the insulin level the more glucose is converted to lipid (fat.)

For example, take two people who both need 2,000 calories to perform their daily metabolic functions. Both people eat 2,000 calories. The first person has a normal insulin level, burns 2,000 calories and has a stable weight. The second person has a much higher insulin level than the first. The higher insulin level instructs his body to immediately store 500 of those calories as fat. They still need to do 2,000 calories of work, so the satiety center in their brain tells them to eat another 500 calories. Immediately 125 of those calories are stored as fat, and so on.

Your insulin level is set by three factors, what you eat, how much you exercise, and your parents’ insulin levels.

### Is My Child Over Weight?

Calculate their body mass index to answer that question. BMI is weight divided by surface area. If you are shaped like a stick your BMI is low, shaped like a ball, your BMI is high. The formula is:  $\text{Wt (lbs)} \div \text{Ht (in)} \div \text{Ht (in)} \times 703$  (conversion factor) = BMI ( $\text{kg/m}^2$ ) Calculate their BMI and plot it on the vertical axis, then find their age on the horizontal axis. If they are 85% to 95% they are at risk for obesity. If they are over 95% they are obese.



## How Can Your Children Avoid Obesity?

Drink as few calories as possible. Fruit juices are evil for obese people. They are sugar and water. They cause your blood glucose to rise quickly and the insulin level with it. If you want orange juice, eat the whole orange. The fiber of the orange slows the absorption of the sugar from your intestines and keeps the blood sugar and insulin level lower. Orange juice is nature's way of making the fiber you need taste good. Don't mess with a good system. If you want extra vitamin C, take a pill.

Soft drink makers are a close second to tobacco companies in getting you to consume more of their product. Soda drinks have sodium bicarbonate, baking soda, which has a salty taste. It is balanced by the huge amount of sugar. The caffeine acts as a diuretic to make you pee out more water. Increasing the amount of sodium in less water makes you thirsty, so you drink more. And the bottles have grown from 10 oz to half gallon. If soda is a necessary evil for you, drink diet soda in moderation.

"Milk does a body good," the commercial tells you. That is partly true. The protein, vitamin D and calcium are good. The fat content is false advertising though. 2% low fat milk is not a low fat drink. Whole milk is 4% fat (not 100%). Read the label, there are lots of calories in low fat milk, so drink non fat milk. That might seem difficult to do all at once, so dilute the fatty milk you drink now with leaner milk and continue the process until you are drinking non fat milk. If you switch the containers your child will not notice.

It is best to drink water. It has no calories and keeps you well hydrated. It is good to drink water before snacks and meals; it may help you eat less. Your brain can confuse thirst and hunger signals. Many times you may eat a snack when really you were thirsty.

### Wait before a second helping

Notice how the waiter passed the dessert menu to you as soon as your main course was cleared? You ordered a dessert that sounded good. When it arrived you were not hungry. Hormones produced in your stomach and small intestine feedback to your satiety center in your brain and say: "you have had enough to eat!" However, it can take 20 minutes for this feedback loop to occur. You can eat a lot of calories in 20 minutes. So wait 20 minutes before you eat a second helping or dessert.

### Do not let children eat while they watch TV

Children's television has more advertising for junk food than toys. It is a conspiracy. It is also very easy to loose track of how much you are eating while you watch TV. So eat at the dinner table as a family and turn off the TV.

### Eat the right stuff

It is not difficult to figure out what foods promote good health. Whole grains, fruits, vegetables, fish, lean meats and beans are all good choices. Brown rice and whole grain breads have a lot more fiber and keep your blood glucose and insulin levels lower than eating their processed white counter parts. Read and compare the nutrition labels on the foods as you shop. Buy the healthiest foods for your family. Young children do not buy high calorie sweet fatty foods all by themselves. Their parents do. So buy them lots of fresh fruit to satisfy their "sweet tooth." If that is all there is to eat, they will eat it. Yes they will whine when they can not find the corn dogs, coke and chips. Remind yourself that you are the parent and have veto power.

### If it is a special occasion, treat yourself

Nobody wants to eat brown rice all the time. So when you go to Benihana order the fried rice. Sure it tastes better than what you make at home. It has a big dollop of garlic butter and eggs. Eat it.

Enjoy it! Just make good decisions for the rest of the week. That is what special is, once a week.

Try eating smaller portions of the foods that are not good for you. You don't need to eat the 20 oz Porterhouse Steak just because you are craving meat. Split the tiny filet with someone. It just might be all the meat you needed.

### Do not eat out so often

Restaurants are in business to make a buck. They want their food to taste great, so you will come again. How do they make their vegetables taste so good? Well it is not canola oil. Have you ever tried to order non-fat milk in a restaurant? Of course not, they do not have any. They are not interested in how long you live. So cook at home with foods that are good for you. Do you need recipes? Buy a cook book that promotes good nutrition. Try surfing the net for recipes. Meet with a nutritionist to help with menu planning.

### Eat breakfast

There are two good reasons to eat breakfast. Your brain can only burn glucose. So get your metabolism off to a good start, eat breakfast and you will think more clearly. It is best to eat at home first thing in the morning, where you can make good food choices. People who skip breakfast get very hungry later in the morning when they are at work or school. Doughnuts are the obvious choice.

### Chipotle Burrito & the Stairmaster

You made the mistake of going "on line" and discovering that the Chipotle burrito you ate for lunch had 1000 calories. The guilt was unbearable. So you went to the Monterey Sports Center and set the Stairmaster on a speedy setting. After 30 minutes of exercising as hard as you could, the reading on the console said you only burned 100 calories! Are you doomed to have those 900 calories stored as fat forever? No. The exercise you did was more effective at lowering

your insulin level than it was at burning the calories from the burrito. The same is true for children.

### Play (What You Call Exercise)

Children need to play outside to burn the optimum number of calories and keep their insulin levels low. Movement is natural for children, they are little calorie burning machines. However, as a child gets more and more over weight, movement becomes more difficult. Then the child will choose more sedentary play. This adds to their obesity. The solution is to go outside and play. Turn off the television. Throw away the video games, Game Boys, Game Cubes, X Boxes and Play Stations. These rot mind and body. If a child is inside they should be reading. It is best to get the whole family involved. Go for family walks after dinner. Walk briskly, swing your arms. This also encourages you to eat dinner in moderation, since you know you will be exercising right after. (You do not want to do the dishes right away.) Reward yourself with a fresh fruit dessert when you get home. Best of all, exercise lowers your insulin level, so you store fewer calories as fat.

### Children usually do not need to lose weight

Children are growing taller. So if they can stay at the same weight for a long time it is the same as if they lost weight. For example, if a 9 year old boy, who weighs 100 lbs, stayed at the same weight for one year it would be the same as if he lost 11 lbs. In reality it would be far better, because it would mean he did a fine job of mastering the last topic of this subject.

### Lifestyle changes and choices

It is important to make an honest assessment of your child's lifestyle. If your 5 year old weighs 60 lbs they are not getting the calories out of thin air. They do not drive themselves to McDonald's after school for a little snack. They do not buy Captain Crunch. You do all that for them. So teach them to make good choices that will help them live longer healthier lives.

Teach them to take the stairs. Do not drive around a parking lot for five minutes looking for the closest parking place. Park as far away as you can and walk. Make their after school snack an apple and a bottle of water. Burger King and your child will be disappointed, but it is the right thing to do. Be the adult you want your children to become. Exercise and eat the right foods yourself. You would not teach your children to smoke, so do not teach them to be obese.

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