

# The Wellness Family

Dr. Hinkle Keeps You Informed

## Family Metabolism Tortoise or Hare

Not all bodies are built the same. Within a family, you can have children that get a dominant gene from one parent, while other children won't get that same dominant gene and most genetic traits like height, hair color or eye color are not all that consequential. But when it comes to metabolism, this is the one trait where those genes can have a lifetime of effects.

### **What is Metabolism?**

The term "metabolism" refers to the body's chemical processes beginning with digestion of food and ending with the elimination of waste. Made up of catabolism and anabolism, metabolism is the process that takes food and turns it into either burned or stored energy.

Catabolism is a process that releases energy and consists of all reactions during which larger molecules are broken down into smaller ones. An example would be the digestion of protein, which is broken down into amino acids that a person's body can absorb and use through the metabolic process, storing glycogen in the liver for energy.

Anabolism consists of all reactions during which the assembly of small molecules creates larger ones and then stores them as energy in newly formed chemical bonds. For example, the assembly of amino acids into proteins and the subsequent synthesis of fat and glycogen for use as energy.

### **Feed Your Metabolism**

A good example of metabolism is to imagine that our bodies are like a big furnace. The food that we put into the furnace will either burn fast and then burn out, or will create a steady burn. Fast burning fuel will give a burst of energy but then it's gone and leaves our furnace to burn out. Slow burning fuel will keep our furnace burning steadily. When a furnace is used for warmth (energy) it is best to put on small amounts of slow burning fuel to get the most reliable source of warmth (energy).

If we go a long time without adding any fuel to the furnace then the fire starts to burn low. If we then dump a large amount of fuel on top of the remaining embers it can smother the fire completely.

We can encourage our metabolism to burn at a healthy rate by feeding our furnace slow burning fuels over a longer period of time. In other words, six small meals a day will always be better than three larger meals. Additionally, proteins and vegetables are the best sources of slow burning fuel.

### **Tortoise or Hare?**

With a basic understanding of metabolism, it's important now to consider how our metabolic rate is determined. Some people have a slow metabolism and others have a fast metabolism; the tortoise or the hare. Our metabolic rate can be affected by many factors including age, diet, activity level, hormone levels and weight, but genetics probably plays the biggest role.



*"It could be that one parent is a tortoise and the other is a hare. In this case, your children could be one or the other."*

Some families have inherited only one metabolism type and they're an entire family of tortoises or hares. However, it could be that in your family one parent is a tortoise and another is a hare. In this case, your children could be one or the other. It's important to understand both metabolisms when considering your lifestyle as a family.

### **The Wellness Adversary**

The Westernized lifestyle has worked against us for years. Since the 1950's the obesity rate has doubled and it's easy to understand why. As fast food franchises eager to offer a better value began to rise in the 60's and 70's, portion sizes rose with them. Some examples of this increase would be salty snacks (that increased by 93 calories), French fries (by 68 calories) and Mexican dishes (by 133 calories). Perhaps unnoticed but equally guilty was the expansion of the average dinner plate. What used to be 9" in the 1950's

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grew to 12" in diameter by the mid 70's; and 54% of adults will still obediently clean their plate, a lesson habitually taught to children.

Considering these facts it's not hard to understand why the average weight of a 10-year-old boy increased by 13% between 1963 and 2002; and 12% for a 10-year-old girl during the same time frame.

In just 30 years the childhood obesity rate has more than doubled for preschool children between 2 to 5 years of age and adolescents aged 12 to 19, and it has tripled for children ages 6 to 12. Currently there are an estimated 9 million children over the age of 6 considered obese.

The Westernized diet has also made way for foods that were once considered "treats" to be consumed on a daily basis. By 14 years of age, 32% of adolescent girls and 52% of adolescent boys will be consuming 3 or more sugary drinks per day. It's estimated that 25% of all calories consumed are from sweets, desserts and other sugary drinks and only 10% come from healthy vegetables or fruits.

### ***The Wellness Metabolic Diet***

If a family has a combination of tortoise and hare metabolisms, the majority of the meals should be designed for the tortoise side of the family. Prepare the meal for the tortoises then add an item or two for the hare side of the family.

The truth is that there are more negative results for the tortoise side of the family eating the hare diet than vice versa. Of course, everyone will prefer the hare diet; it's high in carbs and other fun foods and is typically considered better tasting, but nutritionally it's horrific. Unfortunately, because of this, any member of the family with a tortoise metabolism will likely feel punished because they can't eat that way.

One way to relieve this feeling is to allow the tortoise to periodically eat like a hare. Should the family be going out to lunch or dinner once a week, a meal that is not part of the normal routine is an opportunity for a family member with a tortoise metabolism to eat like a hare. A special family function could be another chance, knowing that their next meal is going to have to be the healthier diet for their metabolism.

### ***Recommendations for the Tortoise***

While mostly genetically determined, there are a few recommendations that can help boost a sluggish or tortoise metabolism.

*First, be active.* A great rule of thumb is to walk for 20 minutes after each meal. This will get the digestion process moving and can help the body efficiently use the fuel its just been provided. Not to mention that walking at least 60 minutes a day has proven to help with weight loss and lower blood sugar.

*Second, learn to graze.* Don't skip breakfast, and eat six small meals a day instead of three large meals. Eat something every 2 to 3 hours throughout the day and slowly feed the fire to keep it burning efficiently.

*Third, eat protein with every meal.* Since protein is a slow burning fuel, this increases lean muscle mass and subsequently increases metabolism.

*Finally, drink water and a lot of it.* It could be that drinking more water decreases the amount of sugary drinks being consumed, but it also means staying hydrated with spring water (not purified) and this will have a positive effect on overall health.

### ***In Conclusion***

Take some time to determine which metabolism you and your family have and then modify your lifestyle to support each other.

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*Dear Patient,*

*Dr. Hinkle is dedicated to providing you with the absolute best in family wellness care. So take a moment today to discuss with your Family Wellness Chiropractor any concerns you may have regarding your family's overall health and wellness.*

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