

## Understanding your Metabolism

Your caloric intake sends very specific messages to your body to speed up or slow down your metabolism! We want to send the message to your body that you will be getting food on a consistent basis. Our goal is to turn your metabolism up so that you are burning food as fuel rather than storing it as fat.

When you cut your calories, and specifically your carbs, below a certain point your body will go into starvation survival mode. This is a disaster for your diet! In starvation mode, you have just told your body not to burn stored fat until it is absolutely necessary. Instead it burns your lean muscle tissue, which requires more calories to support!

A pound of muscle takes approximately fifty calories a day to maintain whereas a pound of fat takes two. In starvation mode, muscle becomes a luxury the body can no longer afford to maintain. So, your body reduces its' caloric needs by getting rid of it. If you cut your calories so much that your body has a starvation response, it is now doing just the opposite of what you intended - it holds on to fat and gets rid of the muscle that would normally burn more calories.

Just as your body becomes a fat storing machine as a result of a reduced calorie diet, you can just as easily instruct it to become a **fat burning machine** by adding more calories each day. Along this journey we will be taking your food up slowly, reteaching your body to **burn**. In the first few months we will be setting the stage for the fat burning phase that follows. So eat your food with confidence that you are building a great foundation for your fat loss goals.

## Understanding the Hormone ~ Insulin

**Hormone/Insulin Info** Schwarzbein (1999) *The Schwarzbein Principle* states:

**Hormones** are the chemical communicators between all cells. All hormones *depend* on each other to do their job. For the body to function in a 'balanced' manner, we must strive to keep all hormones at a 'normal' level. The hormone **Insulin's** major function is to regulate blood-sugar levels and protect the brain from receiving too much sugar after you eat. Insulin accomplishes this in two ways: First the presence of insulin alerts the liver to incoming high amounts of sugar so that the liver does not let this high sugar pass through to the brain. Second, insulin stows away sugar into cells which then decreases blood-sugar levels. When sugar is stowed, insulin levels *normalize*.

**"Insulin resistance"** means that the cells will not allow insulin to upload sugar from the blood stream. Because the cells do not respond to insulin, the pancreas reacts by secreting even more insulin in an attempt to open up the closed cells. Insulin resistance is acquired through poor eating and lifestyle habits. Another vicious cycle leading to insulin resistance occurs when the body is deprived of the **proteins** and **fats** necessary to build muscle. Muscle is filled with cells that have insulin receptor doors. Less muscle mass equals fewer insulin receptor doors, which contributes to insulin resistance. Schwarzbein calls the *midsection* the '**insulin meter**' because this is an area of the body where insulin first deposits extra fat.

Other causes of prolonged **high insulin levels** include: eating a low-fat, high-carbohydrate diet, stress, dieting, caffeine, alcohol, aspartame, tobacco, steroids, stimulant and other recreational drugs, lack of exercise, excessive and/or unnecessary thyroid replacement therapy, and all over-the-counter and prescription drugs.

# Understanding Serotonin

## Understanding the Food Sources of Nutrients

### **Calories:**

The measure of heat or energy contained in a food. One Calorie is the amount of heat required to raise the temperature of one liter of water by one degree Celsius.

### **Protein:**

All animal proteins (meats, fish, poultry, milk, eggs) are "complete", meaning that they contain all the essential amino acids. Vegetarian diets must combine different plant products (like beans and rice) to include all the essential amino acids.

### **Carbohydrates:**

Complex carbohydrates are found in grains such as breads, rice, pasta and vegetables such as potatoes and beans. Learn to build your meals with a protein source combined with both a complex and fibrous carbohydrate. That combination will provide the highest thermogenic burning within the body.

### **Sugar:**

Sugars, in their pure form, may be called fructose, galactose, mannose and glucose. They may also be identified by their sources, such as maple syrup or honey. A complete listing can be found under the Nutrition tab on the [www.coachnadine.com](http://www.coachnadine.com) website. Of course, sugar is also found in soft drinks and sweets. Sugar occurs naturally in fruits, vegetables and dairy products.

### **Fat:**

Fats play an important role in many processes including primary energy reserves, membrane constituents, hormones, fat-soluble vitamins, thermal insulators and biological regulators. For these reasons fats are absolutely essential in your diet. "Good fats" come from fish, nuts, seeds, oils and some animal fats. Essential Fatty Acids' (EFA's) will play a huge role in your program.

### **Fiber:**

Get all your fiber each and every day! Fiber is a major contributor to long-term health. It binds lipids and can lower blood cholesterol. It absorbs water thus softening stools & preventing constipation. It speeds foods through the digestive tract reducing calorie absorption and exposure of tissues to cancer-causing agents in foods. Good sources of fiber include whole grains, nuts, fruits and vegetables. Great goal is 40-70 grams of Fiber each Day!

### **B Vitamins:**

B Vitamins play an important role in **serotonin** production and are found in brown rice, chicken, corn, eggs, green leafy vegetables, legumes, meat, nuts, peas, poultry, salmon, shrimp, soybeans, spinach, sunflower seeds and tuna.

### **Calcium:**

Contrary to popular belief, the best sources of calcium are not dairy products, but rather *whole* foods like green leafy vegetables, dark green veggies (asparagus, broccoli, dandelion greens etc), sea vegetables (dulse, kelp etc), soy foods (tofu, tempeh), blackstrap molasses, salmon (with bones), sardines, seafood, dried fruits, and nuts and seeds.

### **Iron:**

Good sources of iron are lean meats, fish poultry, organ meats (liver, kidney, and heart), legumes (dried beans and peas), nuts and seeds, whole grains, dark molasses and green leafy vegetables.

### **Magnesium**

Magnesium tends to follow protein and phosphorus in foods. Good sources include *whole* grains (NOT processed), legumes, nuts and seeds, chocolate, green vegetables, some seafood and poultry, avocados, bananas and some berries.

### **Phosphorus:**

Phosphorus is present in nearly all foods. Good sources are protein-rich foods (meats, poultry, fish, milk, and milk products), eggs, grains and legumes.

### **Potassium:**

Potassium is widely distributed in foods and should be easily obtained in the diet. Good sources include fruits, vegetables, whole grains and most meats and dairy products. The less fat that is in the food, the more potassium.

### **Sodium:**

Most of the sodium in our diet (75%) is from salt added during processing and manufacturing. Studies have found

that only 10% of the salt we consume comes from the natural content of foods, and 15% comes from salt added at the table or during cooking.

**Tryptophan:**

**talk about serotonin.** Tryptophan is found in almonds, cottage cheese, peanut butter, peanuts, shellfish, soy foods (tofu, tempeh, etc), tuna and turkey

The **Nutrition** tab under the [www.coachnadine.com](http://www.coachnadine.com) website is loaded with more information. Also take a look at the **Articles** tab for great reads.

**~Coach Nadine**

*Creating Lifestyle Changes to Last Your Lifetime*

NADINE is a *Certified Nutrition Specialist* with over 24years experience in the Health and Fitness Industry and teaches her clients the *Art* of maintaining lean muscle tissue as they drop body fat in a unique program designed for them. Nadine has coached all levels and genre of people and has taught a variety of programs including but not limited to Personal and Sports Nutrition, Sports Psychology, and Weight Lifting/Bodybuilding. Nadine is available for seminars and workshops based on availability.