Weight Control and Amino Acids

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Do you sometimes wonder if you are in control of your eating, or if the food is in control of you? Both physiological mechanisms and behavioral processes regulate eating. By learning how these interact, you should first understand how the messages from your brain behave. Even if you are faced with unexpected stress, you can do many things to overcome binge eating or eating too much. Stress is a problem that affects every American. Stress is non-discriminating, affecting all levels of society, and all ages. Close to sixty-four million people try to take a shortcut to alleviate stress and *obesity—there are no shortcuts!*

Obesity and related conditions are the second leading health risks in America and result in some 300,000 deaths each year. Each of us is an individual with our own particular biochemical makeup. You may get annoyed at some people who can eat all the time, yet never gain an ounce. Science has established that many people are just genetically predetermined to be heavy. However, even if you are genetically predisposed to easy weight gain you can learn to control your weight. It is often an ongoing battle with your metabolism, exercise, and your lifestyle. You generally feel better after you exercise, but getting off the couch and just starting to exercise is the first major hurdle.

Weight management is the key. Your goal is to alter your daily intake and exercise more so you do not gain weight. We are all busy and have difficulty finding time to exercise. You must understand how your body reacts to foods. Be aware of your metabolic activity. Your body's energy rate or metabolism is generally related to your activity and fitness rate.

Learn to maintain your weight all year round, holidays included. Do this by finding a good diet plan that you can live with three hundred sixty-five days of the year, and eat healthy. Increase the amount of vegetables, fruits, and fiber in your diet. Use whole grain, stone ground breads and flours. Watch your intake of breads if you are trying to reduce. Eat plenty of vegetables that are generally low in calories, high in fiber, and low in fat. Learn to enjoy crunching on some air popped popcorn, an apple or pear, and forget the cookies.

The main problem with dieting compared to healthy eating is that the body cannot distinguish between dieting and starving. When you diet and deprive your body of food, your body metabolism decreases. The less fat you eat, the more readily our body stores fat because your body produces more lipase, an enzyme that promotes fat storage. When you go off the diet, you have a tendency to gain back the weight you lost plus you gain more. Dieting upsets balance between the two hormones, glucagon and insulin so you put on more fat that is difficult to get rid of.

No great mystery exists as to why fat collects on our body. There is only so much room for fat storage within the body cavity, so the first area where fat collects is the waist, hips, buttocks, and thighs. Whether you are fat or thin all people have nearly the same number of fat cells—thirty billion give or take ten billion. Women have slightly more than men. The number of fat cells never increases, only their volume. A single fat cell can increase its volume by an astonishing one thousand times.

Contrary to popular opinion obesity does not come when you eat an extra piece of pie or an ice cream cone occasionally. It occurs when you cannot control your emotions and/or behavior, and stress causes irrational behavior. Realize your eating, drinking, or stress does not just happen. A variety of internal and external cues can trigger eating. The stress that you will deal with every day heavily influences your eating habits. Stress and emotional eating cause many to be overweight and at the same time nutrient deficient. If you are nutrient deficient, one of two things is happening: either your body is not converting the needed nutrients from the food, or you are not eating the correct foods containing the needed nutrients. You then need certain supplements and amino acids to assist your body in better absorption. Nutrition has a very large effect on the brain. The brain is one of the parts of our body that is the most sensitive to nutritional status. When we are sub optimally nourished or when our blood sugar is changing rapidly, the brain is less effectively able to generate its own energy. This inability causes psychological disturbances: dizziness, confusion, anxiety, depression, and a feeling of inability

to cope are common symptoms associated with poor nutritional support for your brain's metabolism.

If you are exhibiting any of these symptoms, and you have been to a doctor, and cannot find any pathology, then your nutritional status should be carefully evaluated. One of the best ways to evaluate your amino acids status is to run an amino acid analysis to determine how your body is handling proteins and utilizing amino acids. An amino acid analysis is done with a fasting blood draw or a 224-hour urine collection. Both are accurate and give you information to meet your body's needs.

Hunger usually indicates a physical need for food whereas appetite is the psychological desire for foods. Hunger may also be associated with the neurotransmitter, serotonin. Low levels of serotonin in the brain are associated with feelings of hunger; conversely, high levels seem to coincide with feelings of fullness. Use 5-HTP supplements to manipulate the levels of serotonin in the brain and body. Serotonin influences our sleep, mood, carbohydrate cravings, and helps us feel calm, relaxed, and in control. When your serotonin level is low from stress, you feel extremely restless and uneasy, depressed, and more than likely at that point to binge. Obtaining the correct amount of 5-HTP is very important.

Consumption of carbohydrate rich foods increases the making of serotonin by an increased uptake in the brain of the precursor, 5-HTP. This, in turn, decreases the 'craving' for carbohydrates at the next meal. Recognizing and understanding the connection between carbohydrate intake, the making of serotonin, and mood swings is important in understanding the seating behavior of certain individuals. The 'cure' of overeating is not to take away the carbohydrate rich foods, anymore than removing water from a thirsty person. The key is moderation.

When you eat it takes about twenty to twenty-five minutes for your stomach to feel full. But when you are overweight, insulin takes longer to reach the *satiety* level in your spinal fluid that causes you to eat longer and consume more calories than you need. Satiety is the end of hunger, and the brain has turned off the hunger, and hence the eating behavior. Chromium, a trace mineral, is a vital component of the glucose tolerance factor (G.T.F.) Chromium promotes the action of insulin. Chromium helps with fat and cholesterol distribution. Chromium helps keep the blood sugar within normal levels. According to some sources craving sugar is an indication of a chromium deficiency. Chromium picolinate is the best form available. It is well tolerated and absorbed by most people. The usual dosage of chromium picolinate is 200-400 mcg per day.

Many overweight people tend to have lower than normal levels of serotonin, and their diet is usually high in fat and low in complex carbohydrates. Complex carbohydrates are carbohydrates that the body has to process in order to be absorbed into the body, thus it takes longer for the body to derive the energy. This results in slower absorption so the blood sugars remain in the normal range, and the demand for insulin is less. Complex carbohydrates are usually high in fiber so you become fuller more quickly and you eat less.

Another way to look at carbohydrates is by their *glycemic index.* Glycemic index is the rate that a food provokes an insulin response. Generally, simple sugars cause a rapid increase in blood sugar provoking an insulin response while; on the other hand, complex carbohydrates are absorbed more slowly so there is less of an insulin response. Keeping your blood sugar in check helps you control your appetite and hunger.

Emotions influence your weight and your eating. Sometimes emotions trigger eating because you unconsciously seek pleasure from an unpleasant situation, happening, or feelings of arousal. Eating is usually associated with pleasure of a social occasion that suggests celebration and happiness. When you have a problem dealing with stress, anxiety, anger, loneliness, tension, fatigue, or depression, your eating desire triggers to quiet your nervous system. Physical exercise is one of the best ways to release stress, but few people can exercise at the needed time.

Exercise is not a welcome activity if you are out of shape, but you would be surprised how quickly your body responds to an exercise program. You may be afraid to start an exercise program because of the soreness you will feel plus the secondary pain. *But the key is starting out* slowly. Instead of sitting down when you have a break go for a quick walk. This simple exercise will release some stress and burn extra calories too. Exercise provides thermogenesis. Thermogenesis is simply the production of heat. In every cell of the body a small amount of thermogenesis occurs as a byproduct of work done by the cell. Thermogenesis helps to burn brown adipose tissue. The burning of excessive fat accounts for the burning of calories. When you burn calories, you start to lose inches and pounds while you have more energy.

DHEA is the "mother of all hormones" is the most abundant hormone in humans and a key part of many

physiological functions. Oral supplementation of 25 to 50 milligrams per day in the morning can help you to have more energy and reduce body fat while increasing muscle mass, and lowering cholesterol. Generally, supplementation is not recommended unless you are over 40. Talk with your physician before starting DHEA on your own, and get a DHEA sulfate blood test to determine exactly what your DHEA level is. If you or your doctors are not familiar with DHEA, a quick, concise reference is Dr. N. Shealy's book, *DHEA, The Youth and Health Hormone.* Just a word of caution, if you do decide to supplement with DHEA, make sure the brand you are using is pure, pharmaceutical grade DHEA. Have your doctor recheck your DHEA sulfate blood level after three months of oral supplementation.

Glycine is a nonessential amino acid that helps reduce the sugar intake. Glycine is the third major inhibitory neurotransmitter in the brain. Glycine has a calming effect. Pure glycine powder is sweet, and can be used as a substitute for sugar in beverages or sprinkled over food to sweeten it.

Gymnema Sylvestre is an herb known as the *sugar eliminator or sugar blocker.* Research indicates this amazing herb has positive benefits on blood sugar levels. Recent research shows Gymnema Sylvestre (GS) supports repair, revitalizes, and regenerates the beta cells of the pancreas. GS is safe for children or adults with sugar intake into the brain.

Alan Gelenberg, M.D. at Harvard Medical School, researched tyrosine. He found tyrosine not only helps with depression, but suppresses the appetite as well. Nutritional researchers suggest 500 milligrams (850 mg, if over 150 pounds) about thirty minutes prior to meals. Do not use phenylalanine if you have hypertension, PKU, or if you have had a cancerous melanoma. If you have hypertension, take tyrosine with meals.

GABA (Gamma Amino Butyric Acid) is one of the most important amino acids. GABA has a positive effect on the brain and aids anxiety and stress sufferers. When you are under stress, your brain requires more of these important nutrients, and you get totally depleted and really hungry. GABA has specific receptor sites within the brain and keeps the limbic system from bombarding the cortex (the decision making part of the brain). The limbic system is called the feelings part of the brain. If you have anxiety, it is transferred from the limbic system to the cortex. If your receptor site is empty, you get a constant barrage of anxiety messages in the brain. GABA fills the receptor site, and therefore, blocks the anxiety-related messages from getting to the cortex. If you have anxiety, consider trying the pure GABA 750 mg or 375 mg to ease your tension and stress. Pure GABA is tasteless, odorless, colorless, and dissolves readily in water, and is absorbed into the body rapidly.

Anxiety Control® is a patented amino acid formula that assists in controlling stress and anxiety. All of us experience stress in our lives today. Anxiety Control contains three inhibitory amino acids, GABA, glycine, and glutamine plus herbs to replenish your body from the effects of stress and anxiety.

Mood Sync® is a special formula that fights depression and anxiety. Mood Sync contains 5-HTP (5-Hydroxytryptophan), Tyrosine, GABA, glutamine, taurine, and B6.

Do you overeat because you are depressed? Some people fight depression with food. Serotonin is found in the brain and body and controls eating, anger, mood, and 5-HTP elevates the serotonin levels. So if your serotonin is low, you have a tendency to eat more, have mood swings with depression, and feel more stressed. In the body tyrosine becomes norepinephrine and dopamine. Both of these brain chemicals play a roll with mood. Elevate your serotonin, norepinephrine, and dopamine levels with one or two **Mood Sync**, twice to three times daily. CAUTION: If you *are taking SSRI's (Selective Serotonin Reuptake Inhibitors such as Prozac, Serzone, Celexa, or Effexor), MAO or tricyclic antidepressants, PKU, or have had a cancerous melanoma, do not take Mood Sync. Consult your pharmacist, if you have any questions.*

Pyridoxine or Vitamin B6 is the most important vitamin for amino acid metabolism. Pyridoxal'5 Phosphate, the biological form of Vitamin B6, is a way to help make this important vitamin available to the body.

Other nutrients and minerals that help to control stress and assist with weight are magnesium and carnitine. **Carnitine** is an amino acid that determines how fat is utilized in the body. Carnitine plays an important role in converting stored body fat into energy, controlling hypoglycemia, energizing the heart, assisting in body's control of cholesterol and triglyceride levels. Carnitine helps increase the HDL cholesterol of good fats while lowering triglycerides and cholesterol.

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