

Your Nutrition - by Myla Garren

Dear Student Body,

Once again it is my pleasure to address you as fellow students regarding issues on nutrition. I regret to have only been able to write one other column—the one about the importance of iron. A handful of people have addressed me about the particular comment of women being “the weaker sex”—that it may be taken offensively as an opinionated comment. I would simply like to clarify that I was speaking in terms of physiology only. With a nutrition/exercise frame of mind, that tendency is a naturally occurring one. It is certainly proven that men perform better physiologically. In fact, research done on the most elite athletes reveals that in the best performances of both sexes, a margin of 10% can be measured successfully.

In that last issue I spoke of body chemistry, and how that chemistry can be negatively altered by a deficiency of a necessary nutrient. Even though many minerals are needed in small amounts, those amounts are significant to the overall metabolism of the body. Imagine, then, how an alteration of an element that is needed in far greater quantity would affect the body in a far greater fashion. That is exactly the case with hypoglycemia—low blood sugar. Before you cease to read the rest of this article because you think that low blood sugar is a rare case, I entreat you, please read further, because it has recently been considered by many victims and physicians as a 20th century epidemic.

Perhaps a list of the symptoms may strike a cord with you so that you might invest the time to read them:

- concentration problems
- irritability
- sleeping difficulties
- anxiety
- forgetfulness
- depression
- digestive problems
- heart palpitations
- mental confusion
- restlessness
- nervousness
- exhaustion
- temper outbursts
- negative thoughts and attitudes
- feeling of going mad, insane
- mood swings (Dr. Jekyll and Mr. Hyde)
- waking up tired and exhausted
- feel best after 7 PM

family history of diabetes or low blood sugar (LBS)

...actually there are many others, but those are the most significant ones. If you wish to learn the others, please see me about it.

To first give a general foundation of knowledge to go on, I first inform you that all the food you eat can be divided into four major groups. The first is carbohydrates, the second proteins, the third fats, and, lastly, a variety of many nutrients which are only needed in small quantities,

such as potassium, sodium, zinc, calcium, and the key ingredient discussed last time—iron. Ideally, carbohydrates (which, for you science majors remember are polymer chains of carbon, hydrogen, and oxygen atoms) should be taken in a 70% ratio in proportion to all ingredients. Obviously this is the largest ingredient, or food group, and next comes proteins and fats, which depend on the individual, but for the most part are taken in at either 20%:10%, or at 15%:15%. Unfortunately, the average American has a fat intake of about 45%, and a carbohydrate intake of about 30%, which besides lack of exercise is the best account for an obese population. As I mentioned before, those other ingredients combine to make-up 1-2% of the aggregate.

The issue I wish to address, however, is particularly the carbohydrate intake. There are two types of carbohydrates—simple and complex. The difference can be exemplified chemically, but for the sake of saving those with no tendencies to chemistry, I can summarize that the complex carbohydrates are found in their most vast quantities in vegetables, whole grains, and fruits. The simple carbohydrates, on the other hand refined sugars, found in the form of table sugar, but also hidden in many processed foods such as jello, white bread, cereal, and desserts.

Hypoglycemia, which is actually a condition that results in the body's inability to metabolize glucose, is caused from any one of the following: under or overactive adrenal glands, liver disorder, disorders of the pituitary gland or thyroid glands, tumor of the pancreas, trauma, or excessive amounts of refined carbohydrates in the diet. Obviously from the background information given on carbohydrates, I am going to concentrate on the cause of excessive amounts of refined carbohydrates.

Hypoglycemia results when the sugar level in the body (the amount of glucose sugar, which is the form sugar takes in your bloodstream) rises to a point where the insulin level, which helps regulate the blood sugar level, draws signals from the body to manufacture huge amounts so that it might accommodate for the glucose. The insulin then becomes so high that the blood sugar level (the ratio of glucose to blood) becomes very low or seems very low in proportion. Hence the name hypoglycemia, which, by the way, is of Greek origin, translated directly—LBS.

The real danger in an excessive intake of unrefined or “simple” sugars, is that they are highly refined, and as I have even heard said by some, in a “predigested form”. They are absorbed into the bloodstream much quicker, and produce a devastating effect when taken in vast quantities. The average American can handle this excessive sugar intake with no major complications—without really even noticing it, but many have suffered serious effects without even knowing they are suffering

from a physiological problem, much less the cure for it.

The reason I am stressing this condition is not merely for the sake of impacting your life from an intellectual standpoint, but because you or a loved one could be suffering the effects of LBS without even knowing it. For 8 consecutive months out of this calendar year I have lived with a person suffering from this condition, and have been appalled to find the same personality traits resulting from a physiological condition in both sufferers, and even have other family members whose conditions provide enough evidence to conclude that a family history of diabetes and low blood sugar is definitely my case.

Anyway, with regard to the physiology of LBS...The reason that the aforementioned symptoms are things which involve mind and well as body is because of the compound glucose. Glucose happens to be the only form of energy that the brain can use to function properly. It relies on a steady intake of glucose through the blood for its thinking process. The thinking process not only involves concentration on academic or intellectual undertakings, but also the memory bank, the power of reasoning, and mental and emotional discipline on behavior patterns.

A book on hypoglycemia written by Edward and Patricia Krimmel under the advice of a physician, Harvey M. Ross provides simply stated medical information and sympathetic practical information on how to handle this condition. The purpose of writing the book was to share knowledge and insight as well as sympathy and understanding for the sufferer or the sufferer's loved one. Mr. Krimmel is a sufferer of LBS, and was diagnosed as having everything and anything but LBS. Many doctors, such as the first doctors who diagnosed Krimmel have “passed it off” and diagnosed it as stress, schizophrenia, depression, neurosis, nerves, alcoholism, menopause, and esp. psychosomatic. Until he found out what was really wrong, he thought he was going to go insane, and yet the doctors wish to treat the condition with nothing or with drugs such as valium, which compound the effect. The problem is that many physicians need no nutritional background for their degree, and are often unaware or skeptical about the importance of nutrition in treating physiological and psychological disorders. The truth is that the only way to stop the continuous destructive cycle of hypoglycemia is by a modification in diet. Exercise will also produce an effect, but most importantly and almost solely is a reconstruction of the diet of the individual.

Fortunately, when your body is suffering from a nutritional disorder, it sends signals that express its condition in the form of a food craving, or any of the above symptoms. Unfortunately, though, most often when a hypoglycemic

individual receives signals, they chose to suppress or mitigate those symptoms temporarily by the use of a drug or an excessive sugar intake instead of by the proper nutrition. They might say to themselves, “I would love to sit down and eat a whole chocolate cake right now,” or, “I really need a cup of coffee. It's the only thing that could get me going.” This will also happen with a non-hypoglycemic person who simply feels the effects of temporary low blood sugar. The role of insulin (triggered by the glandular system, which, remember, can also be a cause of LBS) in blood sugar level, remember, is to help regulate by contrasting to glucose. The brain's message to the gland, however, is that which activates insulin production. Drugs such as caffeine, alcohol, and nicotine do as well. Sometimes, then, when a LBS person receives those “body chemistry signals”, he/she responds by choosing a drug's effect instead of a nutritive effect. This explains the reason why excessive smoking, caffeine consumption, or alcoholism become characteristic of the hypoglycemic. The sad story is that it only makes the situation worse, and gives the victim a greater feeling of helplessness and disillusion. I have seen this firsthand, folks, and it is not a pretty sight.

The first step to change is acknowledging the problem. Mr. Krimmel and his wife discuss in their handbook the fact that his physiological condition nearly ruined his life—particularly his marriage. This was largely due to his ignorance about the whole problem. He testifies that with the patience of his wife in understanding the situation and with her cooperation is his attempt to make changes in his lifestyle is what changed him from his depression and helplessness.

It is also insightful to realize that we live in an industrial society—no longer primarily and agricultural one, although we do, of course, rely on agriculture. This industrial society is just beginning to suffer the effects of widespread consumption of highly refined and unnatural foods. The best advice to follow if you want to keep from acquiring such a disorder is to try as much as possible to eat foods which are not processed and left intact. If you know you are, think you might be, know that someone you really care about, or even strongly suspect that someone you care about has hypoglycemia, I would be glad to entertain questions and provide information on foods available. Basically the treatment is to increase intake of protein and fat, which can, if absolutely necessary, be chemically changed into glucose, and to do so frequently (like every 2 or 3 hours in small quantities) throughout the day. Of course it would be necessary to cut down on simple sugars—preferably altogether, but at least considerably and gradually to let your body adjust and recover.