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Changing your diet is one of the quickest and most profound ways to influence your health. Dietary changes can improve your mood and energy, often within within days. To know how to make changes, it is important to have a good working understanding of the basic components in the food we eat. This week we review macronutrients.

We eat so that our body can get the energy it needs to function well (thinking, digesting, breathing, etc). To do this, our body gets energy from three major sources: carbohydrates, fats and protein. They are called macronutrients (derived from the greek word for long) because they are the major constituents in the foods we eat. There are also micronutrients (derived from the greek word for small) which refers to the vitamins and minerals that are in the food we eat.

Protein, it is more than just meat
Proteins that we eat become the basic building blocks (called amino acids) that are essential for building tissue and repair processes all over our body. Our body can make some of these amino acids but several can only come from the food we eat. We know meats are a good source of protein. There are many other foods that are high in protein as well such as: cheese, peanut butter, eggs, beans, nuts and tofu. Protein is broken down slowly so it provides a good sustained source of energy for several hours after eating.

Fats, the good and the bad and the necessary
Fats can be a very confusing issue but put simply, we need fat in our diet. There are essential fats that we must get from our food and that our body is not able to make and fat is needed to absorb certain essential vitamins. Fats are needed for cell functioning (especially in our brains) and for the health of your hair and skin. However, not all fats are created equal and some are to be avoided. There are three categories of fats: saturated, unsaturated and trans fats. Saturated fats include most fats derived from animal products, think butter and other whole fat dairy products, chicken grease, bacon grease, and lard. Unsaturated fats include vegetable oils like corn and canola oil, nut butters, olive oil, nuts, seeds and cold water fish (which are high in an important fat called omega-3s). Trans fats are the final category of fats. Most trans fats do not occur naturally but are made through chemical processing of cooking oils. Trans fats are bad for you and should be avoided. They are found in many prepared foods and commercial bakery products like cakes and pies and also in many commercial fried, prepared and fast foods.

Do you know a carbohydrate when you see it?
Carbohydrate containing foods include all bread, pasta and other flour containing products, fruits, vegetables and all sweets (candy, soda, juice etc). Carbohydrates are the major source of energy in most people's diets. Because many carbohydrates are rapidly digestible into sugars they can often have a rapid effect on blood sugar, causing it to rise and fall rather quickly (even if you are not a diabetic). These fluctuations in blood sugar can affect mood, energy and drive a cycle of overeating due to frequent snacking. A concept called the glycemic index is helpful in identifying carbohydrates that have less impact on blood sugar. Tables exist that show the glycemic index of foods and can be used to make food choices that affect blood sugar less (see my website for details). Do not forget that vegetables contain carbohydrates. Vegetable sources of carbohydrates are always a more healthful option than processed food choices.

Most of us go overboard with the carbohydrates eating them throughout the day as snacks and

as a prominent part of meals. In general, your starchy carbohydrate (e.g. potatoes, rice) should be less than 1/4 of your dinner plate. Some people find that eating less than this amount is helpful with weight loss and weight loss maintenance. Vegetables should make up 1/2 of your dinner plate.

Now the complex part - most foods contain more than one macronutrient
While some foods can be simply categorized as a protein, carbohydrate or fat, many of the foods we eat contain a mix of nutrients. For instance, dairy products (if not fat free) and nuts are a source of protein and some fat. Many processed foods are high in carbohydrates and fats. The carbohydrate and fat combination is a very common theme in our modern diet and can be very addictive. However, this article is not so much about what you should eat, but rather bringing full awareness to what you are eating. In becoming more aware, one often starts to make shifts towards more healthful choices. I would like to conclude with a few simple suggestions:

1. Try to categorize everything you eat into these three categories of macronutrients
2. Avoid trans fats. They are very bad for you. If you are not sure, don't eat it. In the end, you will end up eating less processed food and this is good for you.
3. Use olive oil often.
4. Eat some protein for breakfast and eat snacks that are high in protein (like nuts, cheese) it will help you to feel less hungry and to make better food choices
5. Pay attention to what type of carbohydrates you are eating. I will not go into the low carb diet debate here. Suffice it to say, many of us eat too many carbs. Consider cutting out the bread and choosing alternatives.

Know your macronutrients and start taking control of your health today.

The information contained herein should not be used as a substitute for the advice of an appropriately qualified and licensed health care provider. The information provided here is for educational and informational purposes only. In no way should it be considered as offering medical advice. Please check with a healthcare provider if you suspect you are ill.

Dr. Winbush is a family physician practicing at NorthPoint Health and Wellness Center. She has a strong interest in patient education to help individuals feel empowered to optimize their health and functioning. If you have a question, suggestion for future article or want to find additional resources and citations as mentioned in the article visit www.functionwellmedicine.com