BETTER NUTRITION

By Sam Varner, C.S.C.S.

First In a Series

Athletes are made, not born. To build a better athlete, it takes the right kind of foods, otherwise all the sprinting, strength training, flexibility, etc. will not be fully realized. There are many diets, lots of supplements, and special eating routines that profess to enhance athletic performance. Whether or not these aids actually work really depends on the athlete's success.

However, the diet to get most out of athletic training is a balanced one. A balanced diet is one that meets all of the bodily needs in terms of nutrients and caloric requirements. In addition to water, food contains nutrients that are classified as minerals, vitamins, proteins, fats and carbohydrates.

Fats, proteins and carbohydrates are nutrients that provide a variety of important functions for the body. One of the most important functions is energy. The primary function of carbohydrates is to satisfy the continuous energy demands of the complex human machine. After carbohydrates are eaten, they are broken down into glucose is used right away for energy while the rest of the glucose is stored primarily in the muscle in the form of glycogen (stored glucose).

All muscle contractions require energy and the primary energy source is carbohydrates, mostly in the form of glucose or glycogen. However, this energy need depends on the type of muscle contraction that takes place. For example, a marathon runner's energy needs will be from the body's stores of glycogen or fat. Protein in the muscle will also be used if the two previous sources are insufficient. A football player's energy needs are primarily glucose or glycogen. However, when these reservoirs are lowered or depleted, the body will seek energy from other sources. One source is the protein from the muscle tissue. This is a very inefficient energy source as it diminishes the muscle mass. For athletes, the muscular components are the primary mechanisms for performance and when the energy demands start taxing this area, the athlete's training is counterproductive. The type of training can modify this but the best, most effective method for improving the efficient energy usage is a balanced diet.

This ideal nutritional balance for the high school strength and power athlete is a diet that contains 70% complex carbohydrates. A recent study shows that most high school students consume a diet that is less than 50% complex carbohydrates.

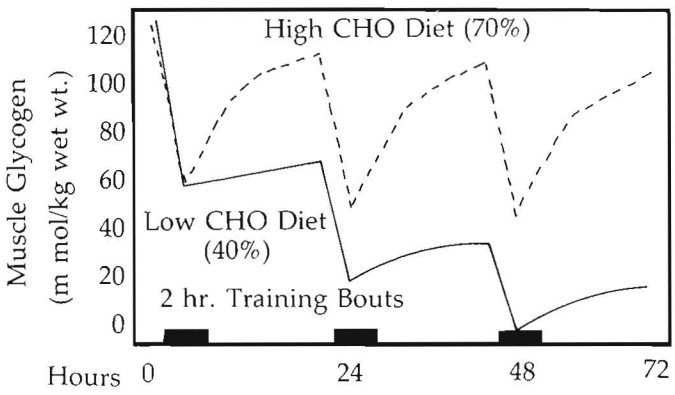
The carbohydrate graph shows how the body recovers from two hour daily workouts over a period of three days comparing a 70% and a 40% carbohydrate diet.

To summarize, athletic performance can be improved by the consumption of more complex carbohydrates. Potatoes, rice, cereal grains, whole wheat breads, fruits, etc. are the best sources for complex carbohydrates. Also there are some new supplements on the market that deliver complex carbohydrates in the form of easy to mix liquid carbohydrate drinks. Most of these are glucose polymers that are ideal for energy and carbohydrate loading.

Your diet is as important as your daily exercise routine and can definitely help athletic performance. Remember, a properly balanced diet can make a difference.

For further information on nutrition, please contact Samuel A. Varner, C.S.C.S. at 1-800-628-9737.

CARBOHYDRATE GRAPH



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GENERAL INFORMATION

The BFS Set-Rep System has been in existence for five years. I knew it was something special but it's surpassed my expectations. Jim Scandin of Menasha, Wisconsin writes, "The results have just been tremendous. Everyday, in the weight room and in other parts of the school, I hear: How many records did you break today? Hey Coach, I just broke this or that or broke this many records! It's just been great." Does your program give you this spirited response everyday?

It is becoming increasingly important to be very careful when selecting a Set-Rep program. I know of two Strength Coaches who have lost their jobs because of extreme negative feedback by the players. Obviously, a variety of reasons must have existed. However, one coach was doing one set of 8 to 12; the other 2 x 25 every workout; three to four times per week. The vast majority of players do not like these systems and will rebel. It is a moot point to say, "But physiologically it's sound." To me, it's like the off-tackle play. It's a great play but it would be disastrous to run it 30 times in a row. CAREFULLY PLANNED FREQUENT CHANGE IS AN ABSOLUTE MUST!

Computer programs will give you this change, if the input is correct. However, problems also exist with this plan. I went to a major college on the West Coast which has one of the top football teams annually. A lineman came into the office and said to the Strength Coach, "I just got 365 for 3 Reps on the Squat and it was easy. Can I go up? Please!" The Strength Coach kind of shook his head, tightened his lips and acted a little irritated. He wanted him to stick to the computer program! "How much do you want to go up?" the coach asked. "Only about 20 pounds," came the reply. "Well OK, go ahead," came the unenthused answer.

The BFS System is fun for both coach and athlete. It's exciting because progress comes more rapidly than any other system. And this progress comes every workout! The new video I did on Sets and Reps is priceless. It shows the amazing things you can do with your athletes to get them on fire with an intense desire to give Upper Limit efforts every workout.