## Nutritional advice



A person who stands 6'8" and weighs 200 lbs. can still be considered as normal based on his or her BMI. Gaining 25-35 more pounds would generally mean that the player would have to exceed the normal BMI range of 18. 5-24. 9 in order to be considered for the college basketball scholarship (WHO). In principle, the BMI classification is created as a guide in determining the range in which a person can be considered as having low probability of health complications (WHO). The case of the athlete then should be viewed and dealt with in such a manner that is free from BMI limitations. BMI cannot be used for people with a high percentage of muscle mass. This implies that in order to stay healthy, the athlete can increase his or her weight above the normal BMI range provided that the mass that is gained come mostly from muscle gain instead of fat.

Given all these, it can be easily deduced that the principle behind the athlete's nutrition program would be to prevent muscle wasting from intensive cardiovascular physical activity by providing energy sources that would spare the muscles, the body's protein from being utilized for energy; and to provide just enough energy for the body to build muscles without gaining much fat. Such is not as easy as it sounds. In order to be successful in gaining muscles, all the three energy sources must be critically controlled: Carbohydrate intake must be controlled only to the extent that all can be utilized for energy and not converted to fat; protein intake must only be limited to the needs of the body to prevent fat synthesis as well as body system complications that might arise (e. g. kidney failure); fat intake must be limited only to the needs of the body but not so much as to affect its other functions such as the synthesis of other body components (e. g. cholesterol and hormones) and the solution of the fat-soluble vitamins, A, D,

E and K (Whitney, Cataldo, et. al. 92-196). In addition, weight gain must not be drastic, to prevent possible long-term complications such as diabetes and/or obesity.

Proper weight gain for the athlete includes the assessment of the current caloric intake. The current caloric intake must then increased by 500-1000 in order to gain 1-2 pounds of weight, ideally from muscles. 1-2 pounds of weight change is said to be the safe rate of gain. Given the athlete's height and type of physical activity, the caloric intake could reach 3600-5000 everyday. As a rule, athletes who are in endurance sports, in this case, basketball, have higher energy needs compared to non-athletes and even those who engage in non-endurance sports such as sprint, weight-lifting and high jump (Escott-Stump and Mahar 616-640).

Since the goal is to increase the athlete's weight by gaining more muscles, the body's available protein must not be utilized for energy. This is the purpose of what the field of nutrition calls the protein sparers: carbohydrates and fat. For carbohydrates to spare the body's protein reserves, the athlete must take from 50 to as much as 70 percent of his or her caloric intake from carbohydrates (Escott-Stump and Mahar 616-640). Still, it must be remembered that there is more to carbohydrates than simply allowing the most percentage in the caloric intake. It is critical that this huge amount of carbohydrate be spread throughout the day and not taken in just one or two meals. Such huge percentage, if not spread throughout the day, although may prevent the mobilization of protein reserves, could induce the release of much insulin and thus induce the production of more fat. Complex carbohydrates such as vegetables, fruits and potatoes are advised over other forms such as simple sugars.

Fat intake should comprise less than 30% of the daily caloric intake (Escott-Stump and Mahar 616-640). This obviously should be done to prevent unwanted or excess fat synthesis that could be detrimental since the athlete would be bulking up to above the normal BMI range. Fats include those added to foods while cooking such as cooking oil and butter, and those inherently available in foods such as in meat and milk.

Lastly, it is again, the athlete's height and type of physical activity that is considered when estimating the safe and proper protein allowance. The nature of basketball allows the athlete more need for protein compared to those in strength -training because of greater utilization of branched-chain amino acids as well as the increased breakdown of muscles during physical exertion (Escott-Stump and Mahar 616-640). The athlete could have as much as 20-25% of his or her protein intake from protein sources such as meat, eggs, milk, soy and beans (Escott-Stump and Mahar 616-640).

## Works Cited

Escott-Stump S. and Mahar K. Krause's Food, Nutrition and Diet Therapy, 11th ed. US: Elsevier Health Sciences 2003

Whitney EN, Cataldo CB and Rolfes SR. Understanding Normal and Clinical Nutrition, 6th ed. Belmont, CA: Wadsworth/Thomson Learnong, 2002. WHO. 2007. World Health Organization. 21 April 2007.