

PERFORMANCE PLAYBOOK



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Nutrition for Muscle Mass

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Many high school athletes ask how they can “bulk up” to gain a competitive advantage against bigger and stronger members of their own team or the competition. The basis for gaining muscle begins with a sound strength-training program. In addition, sensible nutrition is needed to fuel vigorous workouts and promote recovery. Empower your athletes with knowledge about the critical components for muscle gain – strength-training and calories.

Adding Calories to Add Muscle

If the ultimate goal is enhanced muscle size, athletes need to push themselves with a challenging strength-training program and to “top off” their daily food intake with an additional 500 calories. Increasing calories from all three macronutrients (carbohydrates, protein, and fat), allows protein to be used by the body to build muscle. If athletes don’t eat enough total calories, muscle gain is limited.

Contrary to what many athletes believe, the extra calories needed for lean muscle mass do not have to come from protein exclusively.

Timing Can Make a Difference

Research continues to show that eating carbohydrate and protein within 30 minutes of a workout is an effective way to restore amino acids and carbohydrate in the muscles, preparing athletes for the next workout. Taking advantage of this “window of recovery” by adding a snack can add the additional calories needed daily for a muscle-building program.

Protein Is Only Part of the Power

Amino acids are the building blocks of protein. Although protein provides amino acids for promoting muscle growth and recovery from strength-training, carbohydrate is an equally important macronutrient for strength-training. Eating adequate carbohydrate fuels the

body with the right kind of energy for tough workouts and saves amino acids for muscle-building and recovery. Athletes have protein needs that are slightly higher than nonathletes; however, research shows that most athletes can eat enough protein without using additional supplements or following a high-protein diet.

Protein is found in meat, poultry, fish, dairy products, eggs, nuts, and dried beans. Foods like turkey sandwiches, crackers and cheese, or an energy bar containing 7 to 14 grams of protein are good choices.

HIGH-PROTEIN DIETS AND PROTEIN SUPPLEMENTS

Protein supplements or switching to a high-protein diet is not effective for athletes who already get enough calories and eat protein foods two to three times daily. Here’s why:

- Athletes can get enough protein for muscle growth and repair in an average mixed diet.
- Protein from a food or a protein supplement acts the same in the body.
- Extra protein not needed by the body is either burned for energy or stored as fat.

