

A PLAN FOR GAINING MUSCLE

SMART TRAINING

- ✓ Develop a sound strength training workout program, including weight lifting and other resistance exercises.

SMART EATING

- ✓ Eat *before* you workout to fuel your muscles so they can grow and so you can lift more.
 - Eat an energy bar that contains both protein and carbohydrate
 - Drink a smoothie made of fruit and yogurt
 - Drink 2 glasses of fat-free milk or chocolate milk
 - Eat a container of fruit-flavored yogurt
 - Eat carbs before you workout to recover fast and build muscle
- ✓ Eat within 15 to 30 minutes *after* you workout to replenish glycogen stores in muscle and repair muscle.
 - Eat carbohydrates with a high glycemic effect to provide the quickest replenishment.
Examples: 8 ounces of orange juice and a medium bagel; 16 ounces of cranberry juice; an 8 ounce fruit yogurt; a bowl of cereal with milk and a banana; high carb sports drinks.
 - Eat protein to enhance glycogen replacement, stimulate insulin and enhance building and repairing muscle.
Examples: milk with cereal; turkey on a bagel; lean meat in spaghetti sauce; energy bar; chocolate milk;

COMBINING CARBOHYDRATES AND PROTEIN BEFORE AND AFTER LIFTING WEIGHTS
IS THE MOST EFFECTIVE WAY TO BUILD MUSCLE

- ✓ Eat more calories!
 - Muscles need fuel to grow
 - You need 2500 extra calories to build one pound of muscle
 - You burn 300-500 calories during every hour that you lift weights
 - Eat about 500 EXTRA calories per day
 - Drink high-calorie liquids: juice, milk, smoothies, lemonade, milkshakes
 - Eat three meals and between meal snacks

PRE-PLAN. PRE-PLAN. PRE-PLAN. BRING EASY-TO-PACK PORTABLE SNACKS LIKE
SPORTS BARS, FRUIT, JUICES, TRAIL MIX, CHEESE AND CRACKERS, GRANOLA BARS.

✓ Eat more protein!

- Weight lifting boosts protein needs. Your body uses the extra protein to build and repair muscle tissue and burns some for fuel
- To build muscle you must synthesize more protein than your body breaks down
- You need about 0.55 grams of protein per pound of body
- Eat fish, lean meats, soy, beans, eggs, and dairy products for protein
- Protein supplements can give you more protein than your body needs and can tax your kidneys

✓ Eat more carbohydrates!

- Training to build muscle requires a lot of fuel in the form of muscle glycogen
- Carbohydrate is the only nutrient that replenishes glycogen stores
- If you don't eat enough carbs or train with low levels of muscle glycogen, your body will breakdown your protein and make your muscles smaller
- High glycemic carbs have an insulinogenic effect. Insulin synthesizes protein and builds muscle by bringing amino acids to your muscles.

**MAKE TIME FOR BREAKFAST:
A PEANUT BUTTER AND BANANA SANDWICH, A BAGEL WITH CREAM CHEESE,
SPORTS BAR WITH FRUIT JUICE OR MILK.**

SMART SUPPLEMENTS AND VITAMINS

✓ A Word about Creatine Supplementation

- The body needs creatine phosphate for fuel
- The benefit of taking creatine supplements is controversial

Some studies show a positive effect on muscle mass and others do not. Long-term safety has not been measured, nor has the effect on the body's ability to produce its own creatine once supplementation has started or stopped.

✓ What about Vitamin and Mineral Supplements?

- Take a MV/M supplement daily
- There is a higher demand for multivitamins and minerals with muscle building
- Exercise increases the production of free radicals that cause muscle damage and dampen the immune system. Antioxidants from vitamin supplements as well as foods such as fruits and vegetables prevent free radical damage.

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