| **Do I need extra protein to gain muscle mass, strength, and power?** | **No! Extra protein does not build muscle bulk; heavy weight training does.**  
- To fuel this type of training, your body needs adequate calories and plenty of carbohydrates.  
- Only carbohydrates can be stored in your muscles and used for energy during high intensity, anaerobic exercise.  
  
**While extra protein is not helpful, adequate protein is essential.**  
- To build muscle, you need 0.8 g of protein per pound of body weight (compared to 0.4 g per pound for sedentary individuals).  
- This amount of protein can easily be consumed with a normal mixed diet (15–20% of your total calories from protein).  
  
**Excessive protein (>1 g/lb.) cannot be used or stored in your body, and it can be detrimental to your health!** |
| --- | --- |
| **If I eat high fat foods, will I gain fat instead of muscle?** | **No! Eating fat does not make you fat.**  
- Fat can be burned for energy just like carbohydrates and protein.  
- You only store body fat when you eat more calories than you need (it doesn’t matter if the calories come from fat, carbs, or protein).  
- Since you’re burning a lot of calories with your training program, you can be sure that those extra fat calories are fueling your performance, not adding to your waist line.  
  
**About 20–35% of your calories can come from fat.** |
| **Does heavy weight training increase my vitamin needs?** | **No! Exercise burns calories, not vitamins.**  
- Vitamin supplements will only boost your performance if you have a vitamin deficiency to begin with.  
- Since you eat more than the average person, you automatically take in extra vitamins with the larger amount of food you eat. |
| **Are andro and other pro-hormone supplements safe alternatives to anabolic steroids?** | **Absolutely not!**  
- We still don’t know whether or not androstendione increases levels of testosterone in the body.  
- It may increase levels of other hormones instead, causing undesirable side effects (such as breast and prostate enlargement, fat deposition, acne, and hair loss).  
- If it does increase testosterone levels, then you can expect to see the same negative effects as taking anabolic steroids. |
### Should I be taking creatine supplements?

**Maybe. If you have low muscle creatine stores, your performance may improve with a supplement.**

- Creatine is a naturally occurring compound produced by your body and found in beef, poultry, and fish.
- If you don’t consume these foods, your muscle creatine stores may be low.
- Maximal muscle creatine stores allow you to complete repeated sets of hard weight training at a higher intensity. More intense training sessions lead to more muscle gains.

**Caution! Short term studies show that creatine is safe, but we don’t know the long term health effects.**

- If you decide to try it, don’t take more than the recommended dose, increase fluid intake, and monitor your individual side effects.

### How much weight can I expect to gain over time?

**In theory, you will gain 1 pound per week by eating 3500 extra calories per week (or 500 extra calories per day).**

**In practice, weight gain is not that simple.**

- At the start of your weight training program, you’ll have greater gains (up to 3 lb. of muscle per month).
- After 3 months, the gains will be smaller.
- If you keep up with a high intensity weight training program and a high calorie diet, you may produce gains of 20 pounds in a year.

**Keep in mind, once you reach your genetic size potential, you cannot get any bigger.**

- There is an upper limit to how much pure muscle your body can acquire (naturally) without further gains in fat mass too.

### So what’s the bottom line?

- The key to building muscle is heavy resistance training (high weight, low reps).
- Make sure you consume adequate calories and carbohydrate to fuel your training program.
- Be sure to consume adequate (but not excessive) protein from a variety of healthy sources (lean meats, skinless poultry, fish, egg whites, fat free milk, yogurt, and cottage cheese, beans, nuts, and tofu).
- If you’re on the go and don’t have time to eat protein-rich foods, a high protein beverage or bar (with 20-30 g protein per serving) can come in quite handy. Just be sure that it is low in saturated fat and hydrogenated oils.
- If you insist on adding a protein supplement to your diet, save your money and buy nonfat dried milk powder at the grocery store. Add the powder to beverages, soups, sauces, and hot cereals for a good boost of calories and high quality protein.