

Protein Powders

Are They Worth the Price?



The truth about protein

Are protein supplements necessary or can protein requirements be met through whole foods? With the current protein powder craze, you may have wondered whether or not protein powders will help you “bulk up.”

Protein is required for movement, muscle regeneration and survival, but is it necessary to supplement? The International Olympic Committee states that “a varied diet that meets energy needs will generally provide protein *in excess of requirements*”.

Canada’s Food Guide to Healthy Eating recommends we consume 2-3 servings of meat and alternatives each day. An example of a serving includes: 100g meat, 1/2-1 cup beans, 1/3-2/3 can of tuna or 1-2 eggs.

These sources of protein combined with other dietary sources including milk, cheese and bread provide adequate protein for all levels of athletes without the need to supplement. There is little advantage to eating excess protein; our bodies cannot store any significant amount of protein and any excess will be broken down and stored as fat in our bodies.

Does protein help people “bulk up?”

Having been bombarded with advertisements claiming that protein powder will make you gain muscle and “bulk up,” what are we supposed to believe? Is it the weights helping you gain muscle size or the extra protein consumed?

Lifting weights or doing any form of resistance training will indeed help

The Power of Protein

Whether you’re an endurance athlete, a regular gym goer or a weekend jogger, you’ve probably heard the word: protein is essential for building and repairing muscle.

Everywhere you look you find information on dietary sources of protein as well as protein bars and powders. There are hundreds of these products and nearly as many salesmen, coaches and trainers touting the use of these mysterious gimmicks that promise “full striated muscle” and “incredible performance.”

What is the truth? Do you need these pricey products to produce bulging biceps? How much protein is enough? And what are the best sources? Read on to learn the facts.

increase overall strength and eventually muscle size. Load-bearing exercises performed on a regular basis will also help increase bone density and assist in the prevention of osteoporosis.

Protein is a necessary building block for muscles; however, resistance exercises are the main component for increasing strength. Protein is used in our bodies to repair muscle after a workout but the amount of protein consumed is not necessarily related to the amount of muscle in our body. Eating more protein will not miraculously increase your muscle size or strength.

Pricey protein powders

You might think that protein powders are simply more convenient than a balanced diet. For starving students, is it worth the extra cost? Sure it may seem easier to grab a protein bar or shake when you're on the run compared to cooking up some eggs, but the difference in price might make you think twice.

Supplements are extremely costly and in truth they really don't taste that good. A protein enriched "Power Bar" costs around \$3 and contains 24g of protein. 100g of cheddar cheese, 2 eggs, or 100g of tuna contains the same amount of protein for under a dollar. A glass of milk or a serving of yogurt contains the same amount of protein as a regular Power Bar. The difference is that the milk and yogurt cost under \$0.50 whereas the Power Bar costs \$1.99. A tub of protein powder will cost you a minimum of \$16.

For the average person or athlete, protein supplements are a waste of money. Not only can you easily consume the same amount of protein through whole foods, but you also benefit from other vitamins and minerals found in that food. These nutrients are also important for sport performance. Calcium, which is found in large amounts in milk and dairy products, is important for muscle contraction and bone health. Similarly iron, found in red meat, lentils and enriched grain products, is important for oxygen delivery to the muscles.

It takes a lot more than protein to build strong bones and muscles, which is another reason why consuming whole foods is important. Successful performance in sports depends on overall health, strength and stamina. Whole foods can provide the protein, energy and other nutrients to support optimal performance in all these areas.

Take home message: For the extra money spent on protein supplements and the courage it takes to tolerate their taste, they are not worth buying.

Did you Know...

- The majority of Canadians consume *more* protein per day than is recommended by Canada's Food Guide to Healthy Eating.
- Drinking a glass of milk instead of eating a protein bar will give you the same amount of protein PLUS calcium and vitamin D at fraction of the cost.

Whole Foods vs Supplements		
Compare:	milk	Power Bar
1 serving	1 cup	61 grams
cost	\$0.26	\$1.99
Nutrient content	8.0 g protein PLUS calcium and vitamin D	8.6 g protein
Compare:	tuna	Power Bar Protein (with additional protein)
1 serving	1 can (120g)	78 grams
cost	\$0.99	\$2.99
Nutrient content	23 g protein PLUS Omega-3 fatty acids	24 g protein



Good Sources of Protein

- cheese
- yogurt
- cottage cheese
- meat, fish, poultry
- beans and lentils
- tofu

For more information

Student Health Resource Centre
 2-300 SUB
www.ualberta.ca/healthinfo