



## Reliv is Your Fitness Partner

It's spring and everyone is eager to get back outside in the fresh air and sunshine. But as you begin moving again, remember that no fitness program is complete without proper nutrition.

Reliv nutritional formulas are an excellent source of the nutrients necessary for energy, performance and injury prevention. Our essential nutrition products, Reliv Now® and

Reliv Classic®, provide the ideal starting point for optimizing fitness levels, and our targeted solutions provide added support for increased physical activity.

The patented formula in Optain!® features ingredients like ChromeMate® and OptiZinc®, the most readily absorbed forms of chromium and zinc available. Plus, Innergize! contains vitamins, minerals, amino acids and carbohydrates to provide added energy, promote oxygen absorption and boost the immune system.

ProVantage® soy-based performance enhancer supplies a balance of nutrients formulated to improve performance, endurance, recovery and repair. It's packed with 13 grams of muscle-building soy protein, and a host of advanced ingredients, like Tonalin®, MCTs, Creatine, CoQ10 and amino acids.

Patented A·affect® joint support formula helps repair and rebuild joint tissues with over 20 ingredients hailed by researches worldwide for their benefits.

Support your body with building blocks it needs to keep you performing at your peak. You'll find it easier to get fit — and stay fit — when you feel good from the start.

To Your Health,



**Dr. Carl W. Hastings**  
Reliv Vice Chairman and Chief Scientific Officer



## Fitness Facts

- With regular exercise, fitness levels start to improve after 2 to 3 weeks, with measurable improvement after 4 to 6 weeks.
- Most people feel better mentally after only doing a little exercise.
- For aerobic conditioning, your exercise should be "FIT":
  - Frequency – at least 3 times per week
  - Intensity – working within your target heart range
  - Time – at least 20 minutes without stopping
- If you skip exercising for a while after being in shape, you will lose some benefits of your program.
- Exercise not only improves your body but also improves mental function and clarity.
- Exercise releases stress. It also helps elevate your mood and reduces the risk of depression.
- To lose weight and keep it off, you should exercise a total of at least 60 minutes a day. But 30 minutes a day is all you need to gain the health benefits of exercise.
- Sneaking in two or three chunks of 15 or 20 minutes of activity is just as effective as doing it all at once.
- Exercise makes the heart pump more efficiently so everything you do is easier.

These statements have not been evaluated by the Food and Drug Administration. Reliv products are not intended to diagnose, treat, cure or prevent any disease.



## Nutrition's Role in Fitness and Exercise

Whether you want to prep for strength training, walking around the neighborhood or a marathon, the proper nutrients can improve your stamina, endurance and recovery and help protect you from injury.

When you're active, your body's need for micronutrients, such as vitamins and minerals, increases, along with the need for energy to fuel your activity, protein to build and repair muscle tissue and additional fluids to replenish those lost through sweating,

### Iron

Iron can significantly improve endurance levels. Iron is a component of hemoglobin, which carries oxygen from the lungs to muscle cells via the blood. Many women, vegetarians and some athletes don't get enough iron in their diet. Symptoms of iron deficiency are fatigue, lack of energy and a high exercise heart rate. Low iron also can lead to more frequent injuries and slower recovery time after exercise.

### Antioxidants

Strenuous exercise can increase the number of free radicals your body produces. Free radicals can damage cells, leading to tissue damage, slower recovery time and lower energy production. As a group, antioxidants help protect against free radical damage and maintain iron levels. A new study says an antioxidant combo of vitamin E, beta-carotene and vitamin C may help athletic performance.

Vitamin C helps manufacture collagen, a connective tissue protein, and aids in manufacturing thyroxin, an energy-controlling hormone. Vitamin C also enhances iron absorption and helps the body resist infection.

In addition, coenzyme Q10 (CoQ10), vitamins A and E, zinc, and beta-carotene can protect muscle cells from free radical damage. CoQ10 is important in maintaining intense muscular activity and is a potent antioxidant, which can help protect against heart disease, cancer and hypertension. Research has shown that athletes have less cell damage when they consume more vitamin E.

### B Vitamins

The B vitamins work together in energy metabolism and muscle function. These vitamins include B-1 (thiamin), B-2 (riboflavin), niacin, B-6, and biotin.

### Potassium

Potassium aids in muscle contraction and balances fluids and minerals when you sweat.

### Zinc

Zinc helps regulate metabolism. Exercise increases zinc loss from the body. A zinc deficiency can reduce muscle function.

### Calcium

The average adult consumes only half the recommended daily intake of 1,000-1,300 mg of calcium each day. When you're calcium deficient, your bones weaken, which increases the risk of stress fractures, especially if you run or do other impact activities. Calcium is critical for bone formation and strength, nerve impulse transmission, muscle contraction, blood clotting and blood pressure control.

### Protein

Protein is not only used as a source of energy but is also necessary to repair tissue, build muscles, and produce enzymes and hormones. It's important to consume high-quality protein, such as soy protein.

### Enzymes

For muscle recovery, protein-digesting enzymes such as bromelain and papain are ideal to help reduce inflammation. Bromelain, for example, has been shown to reduce swelling, bruising, healing time and pain following physical injuries. It also reduces inflammation associated with tendinitis, sprains and strains, and other minor muscle injuries.

### Sources:

For a complete list of references for this issue, please view the special addendum posted on the *Science & Health Today* web page, [www.reliv.com](http://www.reliv.com) >> The Products >> articles & research >> Science & Health Today.