



## Nutrition & Exercise: A Winning Combo

In addition to good nutrition, exercise is a vital part of good health. A regular, active lifestyle reduces the risk of heart disease, stroke, diabetes, and high blood pressure, and it helps lower cholesterol and control your weight.

By staying active during your “prime,” you’ll be more likely to remain active and healthier as you age. Inactivity starts a domino effect that leads to decreased strength and muscle size, decreased bone mass and density, and less elastic tendons and ligaments. Good nutrition, combined with being active, can delay or even prevent some of these changes.

Reliv products contain high-quality nutrients that work synergistically to provide many benefits for joints and bones. Arthraffect®, for example, helps promote lifelong joint health. The formula combines the best of traditional Eastern herbal therapies with cutting-edge nutrients that have been clinically proven to help repair and rebuild joint tissues.

In addition, FibRestore®, Reliv Classic® and Reliv Now® all contain the enzymes bromelain and papain, which help reduce inflammation, plus a host of antioxidants and other nutrients that benefit joints and bones. And Pynogenol®, found in Reliv Now and GlucAffect®, is showing amazing benefits to joint health thanks to its anti-inflammatory properties.

Reliv products offer the ideal support for active lifestyles. I’m so impressed with the number of people who are getting moving through the Team Reliv initiative. This active lifestyle choice combined with Reliv nutrition makes for a winning combination!

To Your Health,

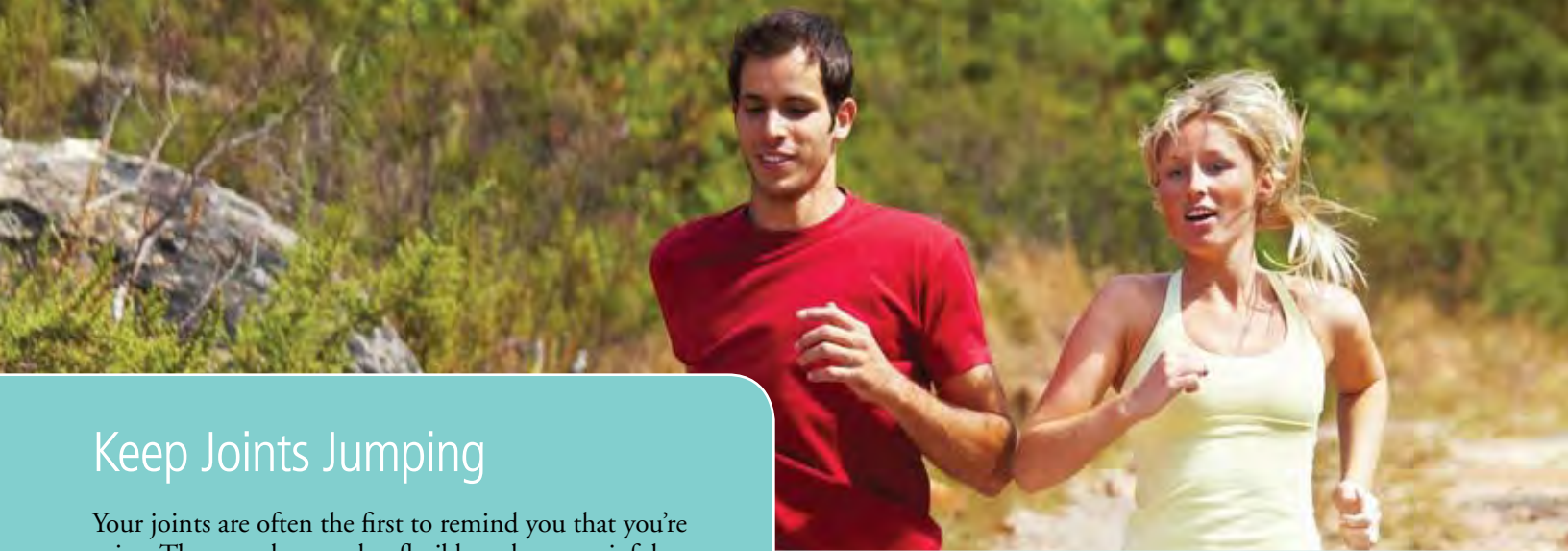


**Dr. Carl W. Hastings**  
Reliv Vice Chairman and Chief Scientific Officer

## Get Moving for Healthier Joints and Bones



- Osteoporosis is a condition in which the bones weaken and lose density, becoming thin, brittle, and susceptible to fractures.
- Exercise can help slow the progress of osteoporosis and build strong bone. According to the American Academy of Orthopaedic Surgeons, a program of moderate, regular exercise (three to four times a week) is effective in the prevention and management of osteoporosis.
- In osteoarthritis, cartilage that normally cushions the joints becomes soft and breaks down, causing bone to rub against bone. The disease most commonly affects hands and weight-bearing joints such as the knees, hips, feet and back.
- Rheumatoid arthritis is a long-term degenerative disease that results from the body attacking its own joint tissue. Symptoms may include morning stiffness, joint pain or tenderness, and swelling of the joints.
- Regular exercise can improve the symptoms of back and knee problems by increasing muscle strength and flexibility, as well as reduce the excess body weight that can aggravate bone and joint conditions.
- Exercise is very important if you have arthritis because it keeps the joints flexible; the muscles around the joints strong; bone and cartilage tissue strong and healthy; and reduces pain.



## Keep Joints Jumping

Your joints are often the first to remind you that you're aging. They may become less flexible and more painful. But continuing the right exercises combined with good nutrition can make a significant impact on your joint health — no matter what your age or activity level. Nutritional therapy can also relieve arthritis pain, reduce inflammation and swelling, improve function, and sometimes even repair damage.

Collagen is an essential nutrient in joint health. Collagen is the part of cartilage that gives it shape, flexibility and strength. As we age, we lose the ability to make collagen, which is why we often have stiffness and decreased flexibility in the joints. A key ingredient in Reliv's Arthraffect is Arthred<sup>®</sup>, a patented, predigested collagen powder that aids in manufacturing and repairing connective tissue.

A study at Penn State University found collagen hydrolysate improved joint pain, mobility and inflammation in athletes. In addition, vitamin C helps manufacture collagen, a connective tissue protein.

Arthritis causes inflammation around cartilage and joint structures. Several anti-inflammatory ingredients can ease the pain, swelling and stiffness of arthritis. These include Boswellia, a well-known herb used in Eastern medicine to help with arthritic and muscle swelling; Ashwagandha, which reduces inflammation and relieves pain; Borage Oil, a powerful anti-inflammatory; and Bioperine, a unique nutrient that helps the body better absorb and use other nutrients. These ingredients can all be found in Arthraffect.

Another powerful nutrient that helps joint pain is Pycnogenol, which can be found in Reliv Now and GlucAffect. A study published in the April 2008 edition of *Phytotherapy Research* shows Pycnogenol reduced osteoarthritis symptoms by 56 percent over three months. Relief was measured in joint pain, stiffness and physical function. Stiffness was reduced by 53 percent and physical function was improved dramatically. Ankle and foot swelling decreased in 79 percent of people taking Pycnogenol.

More amazingly, the benefits of Pycnogenol continue even after people stop taking it. A study in the August 2008 edition of *Phytotherapy Research* showed no relapse in symptoms even after Pycnogenol was discontinued for two weeks. This suggests that Pycnogenol's anti-inflammatory properties may actually help joints recover.

## Bone Up on Bone Health

Keeping your bones strong is a lifelong endeavor. A new study from Canada found postmenopausal women receiving a combination of the antioxidants vitamins C and E, along with resistance exercise, didn't have any bone loss during a six-month period, while women receiving a placebo did experience detrimental bone loss.

Another way to strengthen bones is with 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.

According to a pooled analysis of study data published in the *British Medical Journal*, daily supplements that combine vitamin D and calcium significantly reduced fractures by 8 percent and hip fractures by 16 percent. This positive effect benefits both men and women of all ages. The nutrients act synergistically: The calcium supports bone formation and repair while vitamin D helps the body absorb calcium.

Reliv Now and Reliv Classic each contain 100% of the RDI of calcium and vitamin D. Other Reliv products, including the new Relivables™ Fortified Soy Milk, are also an excellent source of these nutrients.

### 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.