

# Can Antioxidants Help Fight Osteoporosis?

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# Osteoporosis and Antioxidants

Here's an interesting fact, information published by Osteoporosis Canada reveals that fractures caused by osteoporosis are more common than heart attacks, strokes and breast cancer combined.

The organization also confirms that 80% of all fractures across the country, which occur in people over the age of 50, are caused by osteoporosis.

Even more alarming are the gender-related statistics, with one in three women and one in five men predicted to suffer from at least one osteoporotic fracture during their lifetime.

Improving what we eat, while it may not be able to cure the condition, can most certainly help us to counteract the damage being caused.

Most people would probably be able to guess that calcium plays a huge role in the development and strengthening of bone mass, but fewer people are probably aware of the benefits to be had from vitamin D, omega-3 fatty acids and, in particular, antioxidants in the fight against osteoporosis.

#### What is Oxidative Stress?

When your body is particularly low in antioxidants, it can develop a condition called oxidative stress which, in turn, can trigger the development of other serious health concerns, including osteoporosis.

Unstable molecules, known as free radicals, are given free reign to move around our bodies, latch themselves onto our cells and cause as much damage as possible. One way of building a defense against free radicals and oxidative stress is to increase the amount of antioxidants we have in our bodies.

#### How Can We Increase Our Antioxidant Levels?

Most antioxidants come from the food that we eat, but some are made inside our bodies. Glutathione, also known as the master antioxidant, is one such example constructed out of three separate amino acids: cysteine, glutamic acid, and glycine.

As it's the most important of all the antioxidants produced within the body, it's also one of the best for combating free radicals and keeping oxidative stress at bay.

Therefore, an osteoporosis diet rich in dairy products, fish, meat, and cheese is important as these products will help your body maintain sufficient levels of cysteine, glutamic acid, and glycine and give you what you need to generate and benefit from glutathione.

## **Osteoporosis and Antioxidants**

Interestingly enough, studies reveal that antioxidant-rich vitamins and minerals can potentially aid the body in its fight against bone destruction.

One particular human study, carried out by the University of Toronto, focused on postmenopausal women. Participants were divided into two groups, and for eight weeks, one group was given a leading green food supplement that contained a mixture of antioxidants, calcium, and vitamins C and D3.

By the end of the eight weeks, it was this group that experienced a decrease in oxidative stress, a major factor in bone destruction.

### A Balanced Approach

In light of this research, anyone suffering from osteoporosis or who fears that they might be at risk of developing the condition.

Who is at risk of developing osteoporosis?

- People over 65 years of age
- Osteoporosis runs in the family
- Menopausal women

The above groups would most likely benefit from a conscious increase of calcium, vitamin D, and antioxidants as part of their regular diet.