Cruciferous vegetables — the family that includes broccoli, cauliflower, Brussels sprouts, and collard greens — contain special phytonutrients that are not found in any other foods and may lower the risk of certain cancers, especially breast, prostate, and digestive tract cancers. The American Cancer Society recommends eating one serving of cruciferous vegetables every day, but most of us only eat one serving a week. Each Cruciferous Plus tablet provides the phytonutrient value of an optimal serving of a wide variety of cruciferous vegetables.

Why Cruciferous Vegetables?
• Research has shown a link between a high consumption of cruciferous vegetables and a low risk for developing certain cancers (breast, prostate, lining of the uterus, lung, colon and other digestive tract cancers).
• Cruciferous vegetables contain unique phytonutrients (plant nutrients) that are not found in any other foods, but are essential for good health.
• Cruciferous vegetables contain substances shown in research studies to help strengthen the body's defenses.
• The National Cancer Institute, the American Cancer Society, and the National Research Council all recommend consuming one serving of cruciferous vegetables each day.

“The National Cancer Institute recommends eating one serve of cruciferous vegetables every day, but most of us don’t eat any at all.”

Why GNLD Cruciferous Plus™?
• Broad-spectrum cruciferous vegetable supplementation. Each tablet provides the phytonutrient value of one optimal serving of a wide variety of cruciferous vegetables.
• GNLD's exclusive cruciferous blend contains broccoli, radish, kale, black mustard, brown mustard and watercress.
• Cruciferous Plus supplies other beneficial phytonutrients — limonene from oranges, chacones from licorice root, and isoflavones from soybeans — which research has shown can help maintain healthy cellular growth.
• Contains sulforaphane, an important phytonutrient in cruciferous vegetables that helps neutralise carcinogens (cancer-causing agents) and other toxins. Research shows that sulforaphane can help protect against the development of hormonally-mediated cancers.
• Whole-food ingredients provide several important phytonutrients with health benefits (neutralising toxins, lowering cholesterol, boosting immunity, influencing metabolism, reducing menopausal symptoms) in addition to regulating the growth of cells.
• 100% Natural. Cruciferous Plus™ contains no artificial colours, flavours, preservatives or sweeteners.
• Convenient serving - just one more way to help you meet the recommendations of the National Cancer Institute, the American Cancer Society and the National Research Council to consume one serving of cruciferous vegetables every day.

We should eat one serving of cruciferous vegetables every day, according to the National Cancer Institute, the American Cancer Society and the National Research Council. On average we only eat half a serve every day. In fact, on any day, only 25% of Australians eat cruciferous vegetables'.
PRODUCT FEATURES

- **Broad-spectrum phytonutrients.** Each tablet provides the phytonutrient value of an optimal serving of a wide variety of cruciferous vegetables.
- **Whole-food ingredients.** Contains broccoli, radish, kale, black mustard, brown mustard and watercress.
- **Other important phytonutrients** - limonene from oranges, chalcones from licorice root and isoflavones from soybeans.
- **Sulforaphane**, a key protective phytonutrient, especially abundant in broccoli, which helps neutralise cancer-causing agents and other toxins.
- **100% Natural.** Contains no artificial colours, flavours, preservatives or sweeteners.
- **Convenient serving** - just one more way to help you meet recommendations to consume one serving of cruciferous vegetables per day.

**THE CRUCIFEROUS GAP**

<table>
<thead>
<tr>
<th>SERVINGS OF CRUCIFEROUS VEGETABLES PER WEEK</th>
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</thead>
<tbody>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
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<td>4</td>
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<td>5</td>
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<tr>
<td>6</td>
</tr>
<tr>
<td>7</td>
</tr>
</tbody>
</table>

How much we actually eat* How much we should eat†

*According to the United States Department of Agriculture.
† According to the National Cancer Institute, The American Cancer Society, And the National Research Council.

**NUTRITIONALS Nature • Science**

**DAILY CRUCIFEROUS PLUS**

*From an Optimal Serving of Cruciferous Vegetables*

60 TABLETS

**Nutrition Information**

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>Per Serving</th>
<th>Per 100 g</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy (kJ)</td>
<td>15</td>
<td>1697</td>
</tr>
<tr>
<td>Protein (g)</td>
<td>0.12</td>
<td>1.3</td>
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<tr>
<td>Fat (g)</td>
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<td>0.2</td>
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<tr>
<td>Carbohydrate</td>
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<tr>
<td>Sugars (g)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Sodium (mg)</td>
<td>7.5</td>
<td>81.4</td>
</tr>
</tbody>
</table>

**Ingredients:** Cruciferous Plus Blend (Broccoli, Kale, and Radish Extracts, Orange Oil Powder, Yellow Mustard Flour, Mustard Oil Powder, Liquorice Root, Watercress Powder, Broccoli Powder, Calcium Carbonate, Gelatin, Natural Flavours, Natural colours (caramel, Riboflavin, natural and artificial colours)).

**Use By:**

- New Zealand product illustrated
- Australian product illustrated
A Mountain Of Research Supports The Benefits Of Cruciferous Vegetables

Scientists often disagree amongst themselves, debating the latest theories in journal articles and at research conferences. But fruits and vegetables seem to be one area where the research is so compelling and convincing that it would be hard to find anyone willing to take the “con” side of the debate. Thousands of scientific studies document the health benefits of diets rich in fruits and vegetables, and hundreds link these diets with lower risks of developing cancer. Among this mountain of research, some of the strongest evidence correlates lower cancer rates with increased consumption of cruciferous vegetables, named for their cross-shaped flower petals. Members of this pungent family include:

- bok choy (Chinese cabbage)
- broccoli
- Brussels sprouts
- cabbage
- calabrese (sprouting broccoli)
- cauliflower
- collard greens
- horseradish
- kale
- kohlrabi
- mustard
- mustard greens
- radish
- rutabaga
- turnips
- turnip greens
- watercress

The first study reporting the benefits of cruciferous vegetables was published in 1978. Since then, the beneficial properties of cruciferous vegetables have been so well documented that the National Cancer Institute, the American Cancer Society and the National Research Council all recommend consuming at least one serving of cruciferous vegetables per day. Now a unique product from GNLD, Cruciferous Plus™ supplies bioactive phytonutrients from cruciferous vegetables and other plants (oranges, licorice root, soybeans) shown to help protect health.

The Best Offense is good defence.

What’s in cruciferous vegetables that helps protect your health? Besides having lots of vitamins, minerals, and fibre, cruciferous vegetables are chock-full of other vital plant nutrients called phytonutrients. Some of the first healthful phytonutrients to be identified by scientists were the carotenoids and flavonoids, families of colourful pigments from fruits and vegetables that help protect the lipid- and water-soluble portions of cells, respectively, from oxidative damage.

The phytonutrients in cruciferous vegetables, however, help protect your cells in different ways. Research has shown that the special protection afforded by cruciferous phytonutrients can lessen our risk of developing what scientists call “hormonally mediated” cancers (breast, prostate, lining of the uterus), as well as other cancers (lung, colon and other digestive tract cancers). How cruciferous vegetables and other plants can help prevent cancer is not yet fully understood, but it is likely that they:

- boost production of enzymes that detoxify cancer-causing agents (carcinogens) and flush them out of the body;\(^3\)\(^4\)
- prevent the conversion of “good” oestrogen (a hormone correlated with a lower risk for breast cancer) to “bad” oestrogen (correlated with a higher risk);\(^5\)\(^6\)
- defend cells from infiltration of “bad” oestrogen by blocking its entry sites on the cell membrane;\(^7\)\(^8\)
- inhibit the formation of carcinogens by preventing activation of their precursors (toxins and mutagens);\(^3\)\(^4\)

In addition to reducing cancer risks, compounds in cruciferous vegetables have been shown to:

- neutralise toxins
- lower cholesterol
- regulate the immune system
- influence metabolism
Cruciferous Plus’s Risk-Reduction Team

We wanted to create the most complete, technologically advanced product on the market to harness the healthful properties of cruciferous vegetables. To achieve this goal we first examined almost two decades of research correlating crucifers with reduced cancer risks and identified key protector nutrients. Then, in formulating our exclusive Cruciferous Plus blend, we used all-natural foods as sources of these vital phyttonutrients, derived from a wide variety of cruciferous vegetables to ensure broad-spectrum supplementation:

- broccoli
- radish
- kale
- black mustard
- brown mustard
- watercress

These cruciferous vegetables contain two main phyttonutrients that science has shown may lower your risk of developing cancer:

- Isothiocyanates. One potent member of this family of protector nutrients is sulforaphane, a component of broccoli and other crucifers that has been shown to inhibit tumours of the lung, oesophagus, stomach, small intestine, colon, breast, liver, and bladder in rats and mice. Sulforaphane can prevent chemicals from becoming active carcinogens in the first place, stimulate enzymes that detoxify them, block their interaction with DNA, and facilitate their excretion. Its potential for preventing cancer is the subject of current human clinical trials.3

- Indole carbinols. These compounds encourage oestrogen to follow a metabolic pathway that is associated with a reduced risk of breast cancer. Indole carbinols also can defuse cancer-promoting oestrogen byproducts and facilitate their excretion.5,6

Cruciferous Plus also contains antioxidants from oranges, licorice root, and soybeans that help protect your cells in different ways:

- Terpenes. D-Limonene, a terpene (plant oil) in citrus fruits, can boost levels of enzymes that break down carcinogens, stimulate cancer-killing immune cells, and inhibit oncogenes (genes capable of causing cancer). It has been shown to inhibit breast cancer at all stages in animal studies and has even been shown to cause regression of breast cancer in rats.10 Human trials are now in progress in the United Kingdom and the United States to investigate its ability to prevent breast cancer.

- Chalcones. A sweet substance in licorice root, chalcones have been shown to prevent the formation of a byproduct of testosterone that spurs the growth of prostate cancer. Relatives of antioxidant flavonoids, they can also prevent the DNA damage that often precedes cancer.11

- Isoflavones. Research has shown that isoflavones such as genistein in soybeans can inhibit cancer by hindering the growth of the capillaries that supply tumours, blocking the entry of oestrogen into cells, and deterring the proliferation of cancer cells. Genistein is currently under investigation as an agent to prevent cancer in humans.11

“On any given day, 75% of Australians DO NOT eat cruciferous vegetables.”

Consume Six A Day And Make One Cruciferous

Population studies show that people who consume the most fruits and vegetables have better health than those who eat the least.9

As many as 35% of all cancer deaths may be prevented simply by eating right, according to the American Cancer Society. That organisation, the National Cancer Institute (United States), National Research Council (United States), and the CSIRO (Australia) all recommend consuming at least five servings of fruits and vegetables per day, including one of cruciferous vegetables, as a means of preventing cancer.
Fruit And Vegetable Consumption: Almost Everyone Falls Short

Yet people worldwide fall profoundly short of meeting the six-serving recommendations. Research shows that only a small proportion of the population consumes the recommended minimum of six servings of fruit and vegetables per day. The average Australian is missing one third of recommended fruit and vegetables. More than one third of Australians eat NO fruit on any day and 10% of Australians eat NO vegetables on any given day.1

Even if you think you’re eating enough of the right stuff, you could be fooling yourself. A study commissioned by the United Fresh Fruit and Vegetable Association revealed that consumers overestimated the amounts of fruit and vegetables they ate by 33%. Examination of food diaries from 2000 households showed that study participants actually ate 13% fewer vegetable and 56% fruit servings than they reported.

The Cruciferous Vegetable Gap

Cruciferous vegetables are particularly unpopular; 75% of Australians DO NOT eat cruciferous vegetables on any given day, with intake averaging out to half a serve daily (instead of 1 per day as recommended).1 The Japanese, who enjoy some of the world’s lowest cancer rates, especially for hormonally mediated cancers, meet the cruciferous challenge by eating eight servings per week.12 The bottom line is that most of the world’s people, even in developed nations, aren’t eating anywhere near the amount of crucifers recommended by public health authorities.

In addition, people aren’t getting enough of other beneficial phytonutrients. Non-Asian diets frequently miss out on the benefits of soy products, and licorice root, which provides chalcones, is hardly a dietary staple. D-Limonene is removed from oranges and lemons during juice production to curb rancidity problems. The result? We’re not getting the full protection that Mother Nature can offer.

Cruciferous Plus™ Bridges The Gap

While eating a serving of Brussels sprouts, cabbage or broccoli each day is easier said than done, getting the phytonutrients you need is now easier than ever. In a convenient tablet, GNLD’s Cruciferous Plus™ provides the nutrient density and diversity of phytonutrients found in one optimal serving of a combination of cruciferous vegetables. Based in Nature and Backed by Science, Cruciferous Plus™ offers an excellent means of bridging dietary gaps and supplying unique phytonutrients.

References


