

Health Benefits of Sauerkraut

Sauerkraut can be an important part of diets designed for healing cancer. Sauerkraut is a German word that simply means *sour white cabbage*. Lacto-fermented cabbage has a long history of providing benefits for many different health conditions, and now it is proving to be beneficial for cancer. Cabbage, by itself, offers a number of health benefits, but the fermentation process increases the bioavailability of nutrients rendering sauerkraut even more nutritious than the original cabbage.

In 2005, a team of researchers from Poland and the United States observed a substantially higher rate of breast cancer among Polish women who immigrated to the United States. They compared Polish women who were living in and near Chicago and Detroit with women who were still living in Poland. They observed that the rate of breast cancer was three times higher for the Polish immigrants. They evaluated various factors and concluded that the consumption of lacto-fermented sauerkraut was a possible factor in the different cancer rates. Women in Poland ate an average of 30 pounds of raw sauerkraut each year, while the Polish women in the US were eating approximately 10 pounds per year.

What are the qualities of sauerkraut that would make it a super food for cancer prevention, and to be included as a part of diets designed to treat cancer? Let's take a look at some of the science.

Sauerkraut contains high levels of glucosinolates. These compounds have been shown to have anti-cancer activity in laboratory research.

Pathak, along with colleagues from Michigan State University and the National Food and Nutrition Institute of Warsaw, Poland, found that "Women who ate at least three servings a week of raw- or short-cooked cabbage and sauerkraut had a significantly reduced breast cancer risk compared with those who only ate one serving per week."

A study published in 2012 in the journal *Nutrition Cancer* showed that consumption of cabbage and sauerkraut is connected with significant reduction of breast cancer incidences. Oestrogens are considered a major breast cancer risk factor and their metabolism by P450 enzymes substantially contributes to carcinogenic activity.

The aim of this study was to investigate the effect of cabbage and sauerkraut juices on key enzymes involved with oestrogen metabolism in laboratory cell tissue. The 2012 study conducted by Hanna Szaefer, Et Al. showed that their research "supported the epidemiological observations and partly explain the mechanism of the chemo preventive activity of white cabbage products." In other words, their research supported the observation that the consumption of sauerkraut was a beneficial food for the prevention of breast cancer in women.

The preceding studies do not show that sauerkraut by itself is a cure for cancer. They do show that eating sauerkraut has various health benefits, among which is the prevention of cancer, and that eating raw sauerkraut can be part of a natural treatment program for certain cancers.

Raw Fermented Cabbage is Traditional Healthy Sauerkraut

Not all sauerkraut has health benefits. In order for sauerkraut to have a preventative effect for cancer, it needs to be raw. Raw naturally fermented sauerkraut contains lactic acid and the living probiotic microorganisms that are the agents of fermentation. Canned sauerkraut, pasteurized sauerkraut, or fully cooked sauerkraut does not have this healing power, because the microorganisms have been killed by extended exposure to high heat. Cooking and pasteurization also damages other cancer preventative properties.

Naturally fermented cabbage is normally made from finely shredded cabbage and salt. The salt preserves the cabbage for a few days while the probiotic bacteria begin to grow. These probiotic bacteria are highly beneficial to human digestion and are the mechanism that turns cabbage into a super nutritious food. Naturally fermented sauerkraut does not contain vinegar. The sour taste comes directly from the process of fermentation. The sugar in cabbage is converted into lactic acid, which gives the cabbage its characteristic sour flavour. The lactic acid also preserves the cabbage and prevents it from rotting. Properly fermented sauerkraut can be kept for years without refrigeration as long as it is stored at a cool temperature. Containers of sauerkraut and other types of fermented vegetables were often stored in root cellars, caves, and sometimes even buried in the ground for long-term cool storage.

It may seem strange to us that, in earlier times, people knew how to preserve vegetables for long periods without the use of freezers or canning machines. This was done through the process of lacto-fermentation. Lactic acid is a natural preservative that inhibits putrefying bacteria. Starches and sugars in vegetables and fruits are converted into lactic acid by the many species of lactic-acid-producing bacteria. These lactobacilli are ubiquitous, present on the surface of all living things and especially numerous on leaves and roots of plants growing in or near the ground.

Before the twentieth century, people throughout the world routinely fermented many types of foods to help with digestion and to preserve foods for long term storage. They had an awareness of how these foods could help them with specific health problems. For example, during long sea voyages, sailors used sauerkraut to prevent scurvy. Scurvy is a disease resulting from a deficiency of vitamin C, which is required for the synthesis of collagen in humans. Scurvy often presents itself initially as symptoms of malaise and lethargy, followed by formation of spots on the skin, spongy gums, and bleeding from the mucous membranes. Spots are most abundant on the thighs and legs, and a person with the ailment looks pale, feels depressed, and is partially immobilized. As scurvy advances, there can be open, suppurating wounds, loss of teeth, jaundice, fever, neuropathy and death. Sauerkraut contains enough vitamin C to prevent scurvy.

Other Health Benefits of Sauerkraut

Sauerkraut also has benefits for many other health conditions. Acne is not a life threatening disease, but for many young people, it is a source of extreme embarrassment and concern. Dr Thomas Cowan states:

A strategy for dealing with acne begins with effective "bowel cleansing" and healthy bowel flora (the normal lacto-bacteria that live in our intestines). This has always been considered the cornerstone of every natural acne treatment. The best remedy for this is for your teenager to eat about 1/4-1/2 cup of fresh, unpasteurized traditionally made sauerkraut every day and then take one teaspoon of Swedish Bitters in warm water before bed. Sauerkraut, however, should be the cornerstone of treatment as the high sulphur content of the cabbage is especially valuable in skin cleansing. (Cabbage juice is valued in Irish folk medicine for giving a beautiful complexion.)

This treatment recommendation is part of Dr Cowan's comprehensive acne treatment discussed in his article.

Acid Reflux can be an extremely painful condition, which can cause long term damage to the oesophagus. This condition can be healed naturally with sauerkraut juice. Dr Mercola states:

Sauerkraut or cabbage juice is one of the strongest stimulants for your body to produce acid. This is a good thing as many people have low stomach acid, which is the cause of their gut problems. Having a few teaspoons of cabbage juice before eating, or better yet, fermented cabbage juice from sauerkraut, will do wonders to improve your digestion.

Conclusion

Sauerkraut and other raw lactic acid fermented vegetable products such as kimchi offer a number of health benefits. Their probiotic content helps with digestion and helps to heal damage to the digestive tract. Raw sauerkraut is a traditional part of a healthy diet.

The refrigerator section of most health food stores should have some variety of raw unpasteurized sauerkraut. Be sure you read the label before you make your purchase. You do not want to see the word "pasteurized." The jar should have plenty of liquid so that the cabbage is completely submerged. It is fine if you see bubbles in the jar, this is proof that it contains living bacteria. The longer the sauerkraut ferments, the better the flavour. Some people say that the best flavour comes after about 6 month of storage.

When you open the jar, always use a clean utensil to remove the sauerkraut. You want to try and avoid introducing new bacteria into the jar. The sauerkraut should be crisp and feel clean. It should never feel slimy or smell rotten. Living sauerkraut has a distinctively fresh smell, which should remain the same down to the bottom of the jar.