



Wheat Grass - nature's most outstanding natural medicine?

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Nutrients in wheatgrass juice, over 100 micronutrients

A year ago I came across wheat grass juice, a great natural source of vitamins which I found out based on health research.

Wheat Grass Juice is a 'live' and raw (untreated) "super food" that contains over 100 natural nutrients. When wheat grass is consumed as juice (either frozen or freshly squeezed) it contains all the vitamins (except vitamin D, which we get from the sun); 91 of the 102 existing nutrient minerals, 18 amino acids (out of 21 possible) and more than 80 important enzymes. Wheat Grass Juice is also one of the richest sources of chlorophyll in the world.

Wheat grass is not a 'fad' health solution

I delved a little deeper to understand the background and scope of health research on wheat grass. It turns out that wheat grass was discovered as early as 1940 by an American chemist Dr. Schnabel, who worked and researched in agricultural products. Based on his research and collaboration with laboratories belonging to Quaker Oats, wheat grass powder was so widespread and accepted in America that it could be found in most natural foods stores.

It even went as far as bakeries selling green wheat grass bread and the American Medical Association recognized his wheat grass powder and other grasses as an important 'Vitamin Sourced Food'.

During the war, and the years after, wheat grass was forgotten in favour of synthetic vitamin supplements, which at that time was perceived modern and popular. It was not until 1960 that wheat grass again became popular in connection with Ann Wigmore, who healed herself from "gangrene" (deep inflammation in both legs) by drinking pure wheat grass juice. In doing so, she avoided having both her legs amputated. Ann also found out how she could squeeze the juice out of the grass by using a special juicer. She soon founded the renowned "Hippocrates Health Institute" in Florida which specializes in helping cancer patients through the use and intake of wheat grass juice and herbs.

Medical research on the health and healing benefits of wheat grass

It turns out that some medical research exists around the health and healing benefits of wheat grass and barley grass. For example:

- Wheat grass juice has been shown to help reduce the side effects of chemotherapy for women with breast cancer¹
- Scientists have found increased levels of antioxidants (by high concentrations of vitamin E, A, and an enzyme, Super Oxide Desmutase (SOD)) in a study in which 30 patients received wheat grass juice. These antioxidant properties can support our immunity against many different diseases²
- Wheat grass juice helped improve symptoms and stopped bleeding in patients suffering from colitis (ulcerative colitis)³
- Researchers have found that wheat grass can oxygenate the blood, and clean red blood cells, thereby reducing the need for blood transfusions in 30% of patients with blood Thalassaemia disease⁴.
- Wheatgrass can also help lower the glycaemic index and the conclusion of the experiment was that wheat grass can be used effectively to keep diabetes under control (diabetes mellitus)⁵

An Israeli research team concluded from a study of 60 patients with breast cancer¹ that the side effects (myelotoxicity), which is associated with chemotherapy were reduced by consuming wheat grass juice, and patients could better tolerate chemo treatment - without wheat grass impacting the effectiveness of the actual chemo treatment. They also concluded that it was an early result, and this should be investigated further.

Wheatgrass also contains enzymes such as Super Oxide Desmutase (SOD)⁶ as has been studied in cancer control in some experiments with wheat grass and other green vegetables. Because wheat grass is raw and untreated, and not boiled as we do with other vegetables, the juice contains large quantities of this particular enzyme. Wheat grass is also known to make the pH in the blood more alkaline, which further improves health.

The importance of vitamin E for protection and health

Vitamin E antioxidant has a protective effect in the body, which is important to our immune system. They protect our fat- and cell membranes from attack by free radicals. Vitamin E is particularly important for the heart- and vascular system, they strengthen blood vessel elasticity and can provide an increased supply of oxygen to our cells and tissues.

You get vitamin E, when you eat whole wheat grains, wheat bran, vegetables and nuts. The richest source of natural vitamin E is wheat grass juice, especially as vitamin E is delicate and easily destroyed by cooking too much and too harshly, whereas wheat grass is raw and untreated.

Vitamin E is composed of a whole family of nutrients (called Tocopherols and

tokotrienoles). There are eight different types, all of which are important. The dominant tocopherol in the body's tissues is gamma-tocopherol, but all Tocopherols and tokotrienoles are of significance. Some German scientists have recently found that gamma-tokotrienol may have beneficial effects in relation to cancer treatment. By drinking a small glass of organic wheat grass juice every day, adding a natural oil such as Udo's Choice, flaxseed or hemp seed oil you get a natural and organic source of all tocopherols and tokotrienoles.

Where can you get fresh wheat grass juice?

It can be difficult and very time consuming to grow and juice wheat grass yourself. Thus, I was relieved when I found that it is now possible to get organic frozen wheat grass juice. If the wheatgrass is grown outside on organic fields, the chlorophyll content is up to 50% higher and antioxidants up to 28% higher than indoor grown and the juice does not contain unnecessary sugar nor mould.



Research Articles:

- 1 Wheat Grass Juice May Improve hematological Toxicity Related to Chemotherapy in Breast Cancer Patients: A Pilot Study. Bar-Gil Sela et al. *Nutrition and Cancer*, 58 (1), 43-48. 2007
- 2 Wheat grass supplementation decreases oxidative stress in healthy emner: A comparative study with spirulina. Radhey Shyam et al. *The Journal of Alternative and Complementary Medicine*. Volume 13, Number 8, p 789-791.2007
- 3 Wheat grass juice in the treatment of active distal ulcerative colitis: a randomized double-blind placebo-controlled trial. Ben-Arye E, Goldin E, Wengrower D, Stamper A, Kohn R, and Berry E: *Scand J Gastroenterol* 4, 444-449. The 2002nd
- 4 Effect of Wheat Grass Tablets on the Frequency of Blood transfusion in Thalassemia Major. Karnail Singh et al. *Indian Journal of Pediatrics*, Volume 77- January, 2010
- 5 Glycemic and lipemic response of wheatgrass Incorporated recipes. Uma Iyer et al. *Journal of Herbal Medicine and Toxicology* 4 (1) 161-164. 2010th
- 6 Antiproliferative, apoptotic and antioxidant aktiviteter of wheatgrass (*Triticum aestivum* L.) extract on CML (K562) cell line. Turk, J. *Med Sci*. 41 (4): 657-663. 2011