

Wheatgrass Immune Booster

Wheatgrass - Background

At the turn of the last century, the U.S. National Centre for Complementary and Alternative Medicine of National Institutes of Health began funding clinical trials about the effectiveness of herbal medicines. In 2010, a survey of 1000 plants were conducted, 356 plants having clinical trials published evaluating their pharmacological activities & therapeutic applications. One of these plants, Wheatgrass, has been shown to have remarkable healing properties.



Scientific name

Scientifically known as Triticum aestivum, it belongs to a family of plants including:

Agopyron cristatum, Bambusa textilis, cynodon dactylon, Poa annua, Zea mays, Aristida purpurea, etc.

What major boosting properties are locked inside Wheatgrass?

Wheatgrass is believed to have the following properties:

- 1. Anti-inflammatory
- 2. Antioxidant
- 3. Anticarcinogenic
- 4. Immunomodulatory
- 5. Laxative
- 6. Astringent
- 7. Diuretic
- 8. Antibacterial and anti-aging properties.



Its use in combatting acidity, colitis, kidney malfunctions, atherosclerosis and swelling has been shown to be efficacious.

Wheatgrass juice helps in building red blood cells and stimulates healthy tissue cell growth.

100g of high-quality wheatgrass powder is equal to 23kg of fresh vegetables.



When to achieve the maximum benefit of Wheatgrass

Ideally, wheatgrass juice should be taken about 30 minutes prior to eating, to allow the body to fully metabolize it without competing with other foods, and it may also curb hunger. Taking wheatgrass juice first thing in the morning is a great time for a 'green' energy boost.



What is Wheatgrass?

Wheatgrass is a vegetable which packs a nutritional punch including: (per 3.5 grams)

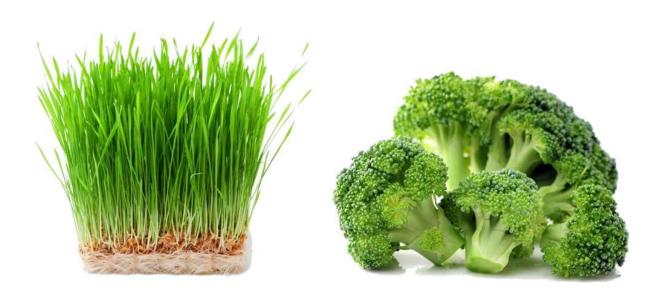
- √ 860 mg protein
- √ 18.5 mg chlorophyll
- √ 15 mg calcium
- ✓ 38 mg lysine
- ✓ 7.5 mg vitamin C and an abundance of micronutrients such as:
 - B complex vitamins and amino acids.

Drink your way to a healthy you...

Phytochemical constituents of wheatgrass include alkaloids, carbohydrates, saponins, gum and mucilage. Its water-soluble extractive value is found to be greater than its alcohol soluble extractive value. This is because of the chlorophyll content of wheatgrass, which is about 70% water soluble.

Wheat grass juice is high in vitamin K, which is a bloodclotting agent. People taking blood-thinning medications or people with wheat-related allergies shouldn't drink wheat grass juice without consulting their doctor.

Ben et al (2002), DeVogel et al (2005), Ferruzia and
Blakesleeb (2007) have reported that regular ingestion of wheatgrass leaf extract improves
the digestive system and promotes general well-being and immunity. *It has higher nutritive value than broccoli and spinach.*



Wheatgrass is promoted to treat several conditions including the common cold, cough, bronchitis, fever, infections, inflamed mouth and throat, and skin disorders like haemorrhoids, psoriasis, eczema, burns and thalassemia.

Drink your way to a healthy you...

A study done by Ben et al (2002) has found that patients who were given the extract of wheatgrass showed significant improvement in rectal bleeding and abdominal pain associated with ulcerative colitis, a type of inflammatory bowel disease. The authors gave theories that the flavenoids, anti-inflammatory agents- apigenin and agropyrene contained in wheatgrass, played a role in alleviating symptoms.

Another flavenoid present in wheatgrass is Indole, which helps in synthesis of enzymes and deactivating carcinogens in the liver.

The vitamins A, C, E, which are present in wheatgrass, are examples of natural antioxidants. Wheatgrass contains all of the essential amino acids, mainly alanine, aspartic acid, glutamic acid, arginine, serine which are helpful in providing a sufficient amount of protein in the body.

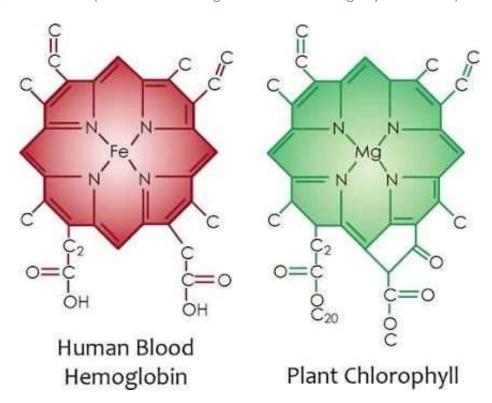
More benefits of Wheatgrass...

Other benefits of wheatgrass are removal of toxins from the body, improvement of blood sugar balance, prevention of tooth decay, maintenance of healthy hair, aiding digestion, and reducing high blood pressure levels.

Why Wheatgrass as a SUPERFOOD can change your life.

Haemoglobin and Chlorophyll

Haemoglobin and Chlorophyll Wheatgrass is rich in chlorophyll and enzymes. The chlorophyll molecule in wheatgrass is almost identical to the haemoglobin in human blood. The only difference is that the central element in chlorophyll is magnesium whereas in haemoglobin it is iron (See molecular diagrams below showing key similarities).



The molecular structure of chlorophyll and haemoglobin are similar, and because of this wheatgrass has been called 'Green Blood'.

A 70-83% increase in red blood cells and haemoglobin concentration was noted within 10-16 days of regular administration of chlorophyll derivatives. Drink your way to a healthy you...

Chlorophyll is soluble in fat particles, which are absorbed directly into blood via the lymphatic system. In other words, when the blood of plants is absorbed in humans it is transformed into human blood, which transports nutrients to every cell of the body. The chlorophyll present in wheatgrass can protect us from carcinogens; it strengthens the cells, detoxifies the liver and blood stream, and chemically neutralizes the polluting elements.



The information I have presented above is largely thanks to the work of Professor Satyavati Rana, writing for Functional Foods in Health and Disease (2011). The internet is littered with articles extolling the benefits of wheatgrass and listing immunity boosting as one of its properties, but it is rare to find an explanation of how immunity is actually boosted through wheatgrass consumption. It is my belief that wheatgrass's immunity boosting properties hale from the phytochemical elements that work on cleansing our liver of oxidative

stress, such that it can function effectively in its role of key immunological organ. I once read that it is practically impossible to catch a cold with a 100% functioning liver, and certainly since I started consuming my own wheatgrass juice six years ago, I haven't had a cold in all that time!!

Thanks for reading,

Warren Adams