

Summary of some research on wheatgrass benefits

Diabetes

- Diabetes mellitus is a group of metabolic diseases characterized by hyperglycemia resulting from defects in insulin secretion, insulin action, or both. The chronic hyperglycemia of diabetes is associated with long-term damage, dysfunction, and failure of various organs, especially the eyes, kidneys, nerves, heart, and blood vessels.¹ It was found that orally administered fresh juice of *Triticum aestivum* leaves showed appreciable hypolipidemic properties in normal rats.²
- Inclusion of wheatgrass in various food recipes resulted in a significant decrease in glycemic index in human subjects.³

Cancer

- In a study it was found that drinking wheatgrass juice helped produce healthier blood levels in cancer patients who were on chemotherapy, thus decreasing the need for blood building medications⁴. They also found that taking wheatgrass juice reduced the toxic side effects of chemotherapy without reducing the efficacy of the chemotherapy.
- In another *in vitro* study it was found that wheat sprout extract inhibited the metabolic activation of carcinogens and decreased their cancer causing ability by up to 99 percent.⁵
- Falcioni et al. demonstrated the inhibition effect of wheatgrass on oxidative DNA damage⁶. It has been shown that wheatgrass extracts contain significant amounts of phenolic compounds including flavonoids⁷. Phenolic compounds of plant products are mainly responsible for the antioxidant activity to reverse the effect of Reactive Oxygen Species (ROS) mechanism, and they have a potent effect to reduce incidence of cancer⁸. High levels of ROS cause oxidative damage. Oxidative stress is considered to be implicated in the pathophysiology of many diseases including cancers.

- In another study the effects and oxidant/antioxidant status of aqueous and ethanol extracts of wheatgrass were tested in human chronic myeloid leukemia CML (K562) cell line. Conclusion: Wheatgrass extract has an antioxidant activity, it inhibits proliferation of leukemia cells, and induces apoptosis; thus, this finding may represent a novel therapeutic approach for the treatment of this type of leukemia ⁹.

Blood disease

- Wheatgrass juice has the potential to lower blood transfusion requirements in β -thalassemia (blood disease) major. A beneficial effect of wheatgrass was defined as decrease in the requirement of packed red cell by 25% or more.¹⁰ Wheatgrass juice is also useful in adjuvant therapy in hemolytic anemia⁸.
- Aqueous extracts of wheatgrass are good sources of antioxidants. Significant antioxidant activity was demonstrated by *in vitro* studies.¹¹

Ulcerative colitis / Inflammatory Bowel Disease

- In a Randomized, double-blind, placebo-controlled study they found that wheatgrass juice improved the symptoms and bleeding in Irritable Bowl Disease patients¹². Barley grass proved to improve bleeding and nocturnal diarrhoea ¹³.

Obesity, anxiety and depression

- Magnesium, abundant in wheatgrass juice, is an essential mineral, which has been linked in medical research⁴ to prevention of stroke, obesity and improvement of memory. Scientists have also found that lack of magnesium can produce symptoms of anxiety and depression including insomnia¹⁴.

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