

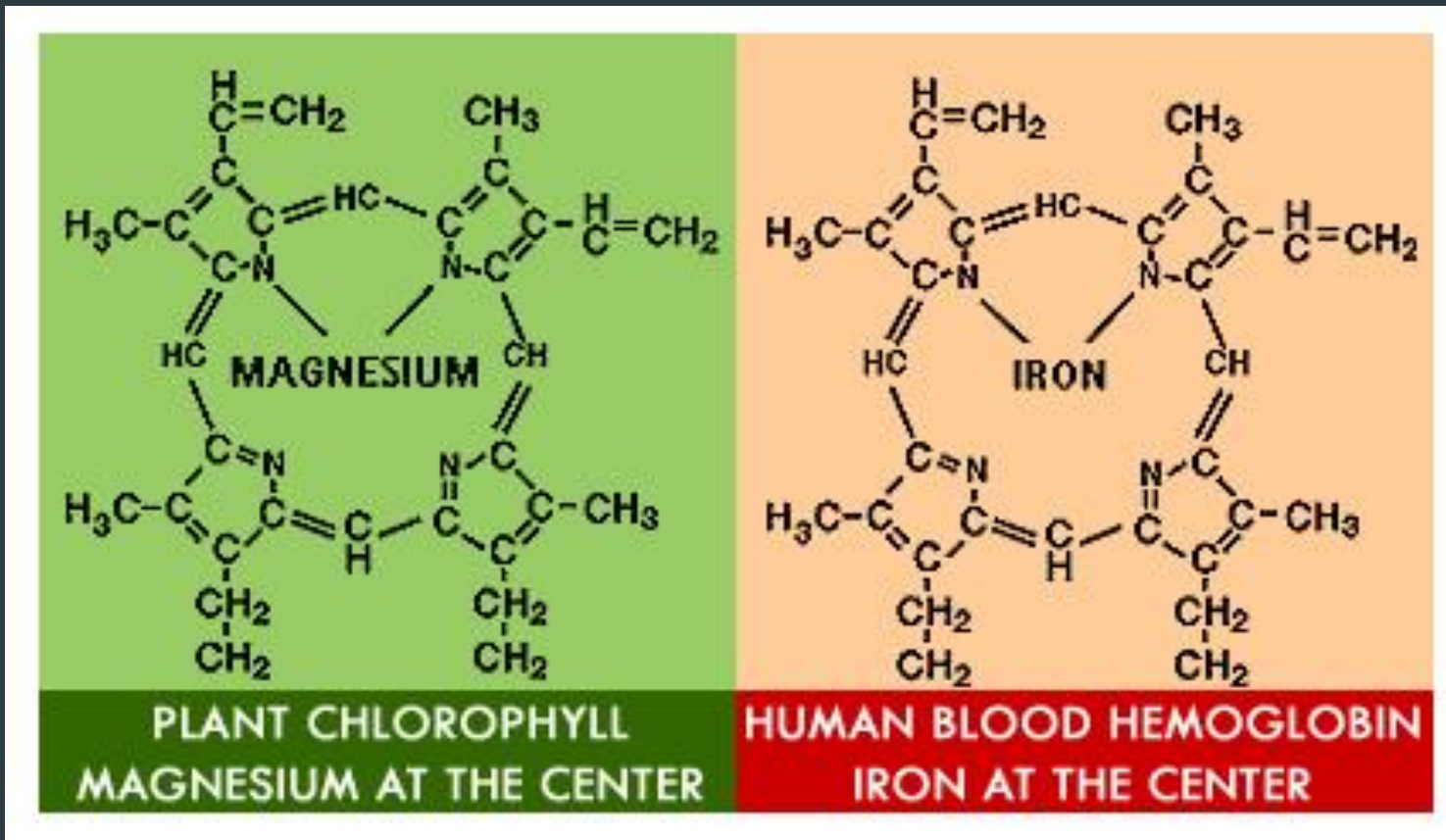


# Wheatgrass

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# What is Wheatgrass?

- ▶ Essentially, it is a grass from the wheat family that is filled with lots of nutrients such as vitamin A, C, & E, iron, calcium, magnesium, and some amino acids
- ▶ It is available to buy as a product in tablet form or capsule; however, I recommend homemade wheatgrass juice because it is more fresh and organic
- ▶ Research shows that chlorophyll, which is a huge component of wheatgrass, has a similar structure to hemoglobin, the substance in red blood cells, so this is most probably the reason for the many benefits of wheatgrass.



Wheat grass is sometimes referred to as green blood.

# Benefits and Uses of Wheatgrass

- ▶ Contains many antioxidants, so detoxification is a common use for wheatgrass
- ▶ Also, it is very effective in increasing red blood cell count
- ▶ It lowers blood pressure and cholesterol
- ▶ Slows aging
- ▶ Contains chemicals that have anti-inflammatory properties
- ▶ Many nutrients
- ▶ Contains more than half of the 118 elements on the periodic table

Though there isn't enough scientific evidence to prove it yet, it has been known to heal certain diseases such as inflammatory bowel disease, ulcer, a certain blood disorder, etc. However, I will tell you that I know someone personally who has had something close to an ulcer that could've even turned into stomach cancer if neglected that got healed by drinking wheat grass juice.



# Ways to Consume Wheatgrass

- ▶ Buy the tablets or powders commonly sold online and eat that
- ▶ You can always just eat grass by itself-straight from nature ☺
- ▶ Recommended: The healthiest and most efficient way is to grow wheatgrass at home and make juice from it
  - ▶ To make the taste better, you can even make a smoothie with many ingredients so you can't taste the grass



# Wheatgrass Juice and Side Effects

- ▶ Now, I'm not going to lie, but the taste of wheatgrass juice is not very pleasant-it tastes exactly how grass should (of course the advantages outweigh the disadvantages).
- ▶ Possible side effects include nausea, appetite loss and constipation.
- ▶ However, based on personal experience, I've only ever experienced nausea because of the strong aroma, but if consumed every day (even a few tablespoons should do the trick), the nausea eventually disappears.



# Bibliography

## ▶ Pictures

- ▶ <https://thrivemarket.com/blog/wheatgrass-benefits>
- ▶ <https://www.chosenmeds.com/products/organic-whole-food-wheatgrass-powder>
- ▶ <http://www.gnc.com/superfood-green-blends>
- ▶ <https://www.amazon.com/Certified-Organic-Wheat-Grass-Powder/dp/B00HSCER4S>
- ▶ <https://www.healthline.com/health/food-nutrition/wheatgrass-benefits#superfood2>
- ▶ <https://www.healthyjuicer.com/product/wheatgrass-growing-kit>
- ▶ <https://www.amchara.com/tips-and-recipes/the-health-benefits-of-wheatgrass/>

## ▶ Information

- ▶ <https://www.webmd.com/vitamins-supplements/ingredientmono-1073-wheatgrass.aspx>
- ▶ <https://www.mayoclinic.org/healthy-lifestyle/nutrition-and-healthy-eating/expert-answers/wheatgrass/faq-20058018>

# Here's the Idea: The Wheatgrass Patch

Wheatgrass is very effective in blood loss related health problems such as anemia, blood cancer, etc. (like I've mentioned in the earlier slides)

However, a main problem faced by wheatgrass drinkers is nausea because of the unpleasant grassy taste of it.

To forgo these problems, a transdermal patch could be used to bring wheatgrass's key nutrients into the bloodstream through skin absorption without the side effects.

Although the wheatgrass needs to be tweaked chemically in order to fit the drug necessary for this patch, it is a potential solution to blood loss because wheatgrass itself is known as green blood.

There have been many cases in which wheatgrass helped blood cancer patients (specifically) recover.



The transdermal patch consists of the liner, drug solution, adhesive, membrane, backing, permeation enhancer, and matrix filler.

Using the main type which is a single layer adhesive transdermal patch, the chemically modified wheat grass solution could be used. This would allow the main components to be absorbed through the skin.

Although this wouldn't be recommended for everyone because the effects of transdermal patches still aren't researched thoroughly enough, this would still be hugely beneficial to cancer patients and others who are suffering from similar illnesses. This new wheatgrass patch would bypass the side effects and effectively deliver the needed components of wheatgrass directly into the bloodstream.

<https://studentnurselaura.wordpress.com/2009/10/29/transdermal-patches-and-mris/> (source for picture to right)

