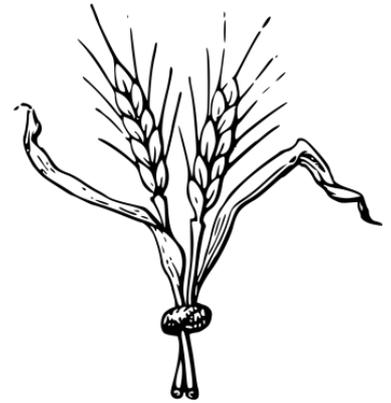




Superfoods Fact Sheet

Barley Grass (*Hordeum Bulgare*)



Parts Used: plant (not grain)

We don't tend to think of human beings eating grass, but one of the reasons other mammals eat grass is because it is highly nutritious – it contains all the nutrients needed to support mammalian life – and that includes us!

Barley is one of the most nutritious grasses on the planet, and is a powerhouse of nutrition that has been used by the human race for thousands of years, offering the perfect mixture of protein and nutrients.

History and Traditional Use

The first cultivation of barley has been dated back to 7,000 B.C., and there is proof that wild barley was in use a thousand years before that. All the evidence seems to show that it was the preferred grain throughout Asia Minor and the Middle East, including Egypt, Sumeria and Babylonia.

It is thought the grain originated from China, where it was considered one of the five sacred plants. During the time of the Indus Valley civilization it was part of everyday life, and Egypt, Sumeria and Babylon all used barley as a form of sustenance and even as a form of money.

Barley was given as a prize in some of the first games held in Ancient Greece, and in Ancient Rome gladiators used barley as a nutritional source of strength and stamina – in fact one of the names they were known by – *hordearii* – means 'barley men', and wherever the Romans marched and conquered they took barley with them.

Uses for barley started to multiply – Tibetan monks used it as their main ingredient in their porridge known as *tsampa*, barley malt was discovered -barley seeds soaked for a few days until sprouted, and the resulting malt was used to make alcohol by mixing it with warm water and yeast.

In Anglo Saxon England barley became a standard unit of measurement – three barleycorns made a ynce, which became the inch – and modern shoe sizes came from measure of barleycorns!

Amongst the many traditional health uses of barley grass are treating skin inflammation, liver problems and blood issues as well as being a good all-round tonic.

Nutritional Information

A veritable powerhouse, barley grass is excellent to use as a general supplement to build health. It has:

11 times the calcium of cow's milk

5 times the iron of spinach

7 times the Vitamin C of oranges

and is one of the few plant sources of Vitamin B12

It is also an excellent source of chlorophyll, which increases the oxygen carrying capacity of the blood, and prevents blood 'stickiness'.

It also is an excellent source of beta glucans, and excellent immune booster, which forms a part of cancer therapy in Japan. Barley grass also contains glutamic acid which helps to recharge antioxidants, methionine which helps with the synthesis of other amino acids and alpha-linoleic acid, another important antioxidant.

Other nutrients include Vitamins A, B1, B2, B3, B6, C, folate, E, K, as well as minerals such as magnesium, phosphorus, potassium, zinc, iron and calcium. It is also high in fibre and beneficial enzymes.

Health Benefits of Barley Grass

There are a wide range of benefits to having barley grass. It is considered to be a 'wonder tonic' which helps to protect DNA, improve the body's ability to deal with stress, act as a blood builder, help hormonal balance, improve immune strength, maintain normal bone metabolism, improve physical and mental fitness as well as having an overall tonifying effect on the entire body.



Heart Health

People who regularly consume barley grass could be providing a boost to their cardiovascular system researchers have discovered, reducing cholesterol levels and improving cardiac function.¹

Detoxification

The blood cleansing benefits of barley grass have already been mentioned, but it is also a wonderful all round detoxifier. It stimulates the elimination of waste, including mucous and crystallised acids, as well as strengthening the detoxification processes of the liver. It is even effective in helping to get rid of accumulated heavy metals in the body.

Studies have also shown that barley grass can help to degrade and neutralise pesticides, including organophosphates, and chemical additives in the body². This is exciting as protecting ourselves from the damage these do is essential for long term health.

¹ Diabetes & Metabolism (2002, Vol28 107-114)

Antioxidant

High in a variety of antioxidants it is particularly a good source of the critical enzyme superoxide dismutase. Its efficiency at protecting from free radical damage means that it helps to prevent the development of a wide variety of health issues.

Immune Health

High in beta glucans and other immune supportive nutrients barley grass helps to boost the immune defences of the body. Higher in Vitamin C than oranges, it can help to stop us coming down with colds, and boost resistance to seasonal bugs.

Digestion and Ulcerative Colitis

Barley grass has been shown to take down levels of inflammation in the gut, as well as stimulate levels of 'good' bacteria which help to keep the gut in balance. It is useful for those suffering from ulcerative colitis as it helps to reduce the levels of provocative chemicals in the bowel that trigger this. The fibre it contains is helpful in maintaining regular bowel function.

Cancer

The levels of superoxide dismutase in barley grass help it have a preventative action against cancer. Catalase enzymes present in barley grass aid the decomposition and neutralizing of toxic hydrogen peroxide and suppresses the proliferation of cancer cells.

Radiation Protection

UV radiation has a destructive effect against cells and barley grass has been shown to be protective against this, even renewing damaged cells, as well as therapeutic to existing damaged cells, owing to superoxide dismutase. This is particularly important for those in urban areas and cities who are more prone to this exposure.

pH Balance

Naturally alkaline barley grass helps to offset excess acidity levels in the body, bringing it back into a healthier state of balance.

Rejuvenation

From the cells outwards barley grass is proving to help with regenerating and rejuvenating. It can repair DNA, stimulates the regeneration of cells, supports the creation of white and red blood cells, helps prevent the signs of ageing, and



² Hagiwara, Y. Study on green juice powder of young barley (*Hordeum vulgare* L) leaves II: Effect on several food additives, agricultural chemicals, and a carcinogen. Presented at the 98th National Meeting of the Japanese Society of Pharmaceutical Science (1978).
Durham, J., Ogata, J., Nakajima, S., Hagiwara, Y., and Shibamoto, T. Degradation of organophosphorus pesticides in aqueous extracts of young green barley leaves (*Hordeum vulgare* L). 1999, *J. of the Science of Food and Agriculture*, Vol. 79: 1311-1314.

improves skin health and elasticity, as well as acting as a rejuvenating tonic for the whole body.

Weight Loss

Barley grass has been shown to be beneficial as part of a weight loss regime, helping you to feel satiated, as well as helping to control blood sugar levels and craving.

Asthma

The high levels of antioxidants, including Vitamin C and E, are thought to be why barley grass helps reduce the occurrence of asthma attacks and alleviate its symptoms

Blood Sugar Imbalances/Diabetes

Several studies have shown that barley grass can help to improve insulin resistance, lowering blood glucose levels and improving diabetic and pre-diabetic pictures.

Osteoporosis

Barley grass is very rich in calcium, and is very bioavailable and easy for the body to uptake. It therefore is excellent at helping to improve bone density, or speed the healing of a broken bone.

Addictions

Due to the presence of glutamic acid in barley grass it helps inhibit cravings for things such as alcohol, coffee, nicotine, drugs and even sugar!

Mental Health

Barley grass has the ability to boost levels of neurotransmitters, allowing it to help the brain safeguard against senility, while boosting concentration and lessening the effects of learning disorders.

How To Use Barley Grass

The two most common ways of using barley grass are

- As a dried powder – the grass is cut and dried
- As a juice extracted from sprouted grass –the barley grass is cut and then cold pressed and either taken as a shot, or dried and made into a powder. This is a more expensive way to buy it, but enthusiasts of this claim it retains more nutrients.

A scoop of the powder can be added to juices and smoothies, or made into a simple drink with water.

Note: Barley grass is NOT the same as barley grain. Barley grass does not contain gluten as it is cut before gluten begins to form in the grain.

Culinary Usage

In the kitchen you can use barley grass in the preparation of soups, salads, stews and for making barley bread. You can produce sprouts from the grain to use in salads and smoothies.

Barley is also used to produce malted products such as beer, malted milk and wine.

It is also used for hay and fodder for animals.

Barley grass: word of caution

Although safe for most people, occasionally sensitive individuals may have a reaction including vomiting, itching, burning sensation in the throat and mouth. And whilst it should be safe for those with coeliac disease as it is cut before gluten is formed, coeliacs should proceed with caution.

