

## ***BarleyLife® Traditional Powder & Vegetarian Capsules***

BarleyLife is an all-natural, green barley grass juice powder concentrate that helps to provide the daily nutrition that you need to develop a strong foundation for good health. Barley grass contains a wide spectrum of vitamins, minerals, amino acids, enzymes, phytochemicals and chlorophyll.

Research in the late 20<sup>th</sup> century revealed that young barley grass is the most nutritious of all the green grasses. Japanese researchers discovered that young, green barley grass was an incredibly complete source of nutrition. They also discovered that young barley is at its nutritional best just before the beginning of the reproductive cycle; when the plant channels nutrition to the seed heads. When harvested at this stage, young barley leaves have a different chemical makeup from their adult counterparts.

Since it was further discovered that humans cannot break down the fibre in the barley grass and therefore cannot utilize the nutrients, it was decided to juice the barley leaves and remove the fibre. This unlocked the nutrients, but caused instability, as the nutrients in the liquid state are quite fragile and must be consumed within a very short space of time. To provide a longer shelf-life, it was decided to dry the juice.

This process requires advanced technology as it has to prevent the nutrients in the barley from being oxidized and thereby losing their potency. In order to achieve dried barley juice with all its nutrients intact, it must be juiced (not milled) and then spray-dried using a special low-temperature process. This preserves the delicate balance of nutrients and phytochemicals.

### **1. Composition and Key Ingredients:**

Barley grass juice powder  
Corn maltodextrin  
Whole brown rice powder

### **2. Other Ingredients:**

The vegetarian capsules are manufactured using hydroxypropyl methylcellulose (HPMC), a cellulose derivative from pine bark. They also contain stearic acid (a fatty acid derived from vegetable oil) which improves the flow of the powder during the encapsulation process. Silicon Dioxide is used to resist the transfer of moisture from the capsule or the air surrounding it into the powder within.

### **3. Chemistry and Metabolism of Ingredients:**

Dried barley grass juice has a wide variety of nutrients but there are some that require special mention:

#### ***Lutonarin and Saponarin***

These are two extremely powerful anti-oxidants that are both found in dried barley juice. Lutonarin is in greater concentrations than saponarin. Research has shown that the lutonarin and saponarin content in barley leaves increases with UV exposure. This indicates that these

two anti-oxidants may provide protection against environmental stresses such as exposure to pollution and other toxins (Dr. Ken Markham of Industrial Research, Ltd., New Zealand).

### ***Vitamin K***

All green leafy plants have high concentrations of vitamin K and barley leaves are no exception. The primary function of vitamin K in the body is to maintain proper blood clotting mechanisms. Recent research has also indicated that vitamin K is involved in the maintenance of bone density. A study at the Hebrew Rehabilitation Center for the Aged found that a healthy diet containing ample amounts of vitamin K may help to ensure adequate bone density.

### ***Chlorophyll***

Chlorophyll has been found to have benefits regarding tissue growth and stimulating red blood cells in connection with oxygen supply. A remarkable similarity has been found between the red pigment in the blood and chlorophyll.

According to an article in the Journal of the National Cancer Institute, chlorophyll fed to laboratory animals reduced the absorption of three dietary carcinogens, namely heterocyclic amines (found in cooked muscle meat), polycyclic hydrocarbons (found in smoked and barbecued foods) and aflatoxin (a mould that commonly occurs on peanuts and some other crops). The chlorophyll formed complex compounds with the carcinogens whilst they were in the digestive tract, limiting their bioavailability.

Chlorophyll also removes both carbon dioxide and carbon monoxide and has been found to reduce fecal, urinary and body odour. In addition, it has anti-inflammatory and anti-oxidant properties.

### ***Superoxide Dismutase (SOD)***

The enzyme superoxide dismutase is a powerful anti-oxidant thought to slow the rate of cell destruction by providing a defense of free radicals, especially the most prolific free radical, superoxide. The latter are thought to be responsible for the breakdown of synovial fluid that leads to the inflammatory response in joints. Much of the current clinical research on SOD is focused on arthritis, bursitis and gout. Low levels of SOD are associated with cataracts and other degenerative diseases. In addition, it is believed to help the body utilize zinc, copper and manganese more effectively.

### ***Vitamin A***

Vitamin A is a fat-soluble vitamin and plays an important role in vision, growth and development, immune function, red blood cell production, reproduction and the development and maintenance of healthy skin, hair and mucous membranes. In the vitamin A family, beta-carotene, which is found in dried barley juice, is the most efficient of the carotenoids for conversion of vitamin A in the body.

### ***Folic Acid***

Folic acid is a water-soluble vitamin that occurs naturally in food. Folic acid is often in supplements and some foods in the form of folate. Folic acid helps in the reproduction and maintenance of new cells. This is especially important during periods of rapid cell division and growth such as infancy and pregnancy. Folic acid deficiency prior to pregnancy can cause diseases such as spina bifida in babies. Folic acid is also required to manufacture RNA and

## **Doctor's Notes:**

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DNA, which are the fundamental components of genetic material. Research has shown that women who take folic acid before and during pregnancy have a 70% reduction in the incidence of spina bifida and other neural tube defects. Folic acid may also prevent changes to DNA that may lead to cancer. Folic acid is required on a daily basis in order to keep up the normal production of red blood cells and prevent iron deficiency syndromes.

#### **4. Indications:**

BarleyLife boasts a wide spectrum of nutrients for optimal health, including vitamins, minerals, powerful antioxidant enzymes, chlorophyll, phytochemicals and amino acids. Regular consumption can help to maintain whole body health and a healthy immune system. BarleyLife provides all the benefits of juicing without the hassle and mess, and one serving delivers 2 – 3 times more nutrients than one typical serving of green vegetables.

#### **5. Contraindications:**

BarleyLife is a whole food concentrate, so as long as a qualified health practitioner has not forbidden you to eat salads or green vegetables, you can use BarleyLife. However, anyone who is on medication to prevent blood clotting, such as Warfarin, should not be taking BarleyLife, unless recommended by a qualified health practitioner.

BarleyLife may initiate a detoxifying process, so people who have not taken BarleyLife before may feel worse before they start feeling better. This is just the results of detoxifying and symptoms of detoxification will disappear with continued use of the product. Detoxifying symptoms may include fatigue, rashes and headaches.

#### **6. Dosage:**

- Take 2 teaspoons or 6 capsules 2-3 times per day. It is advised to start off slowly – take 1 tsp or 3 capsules and work up to the full dose over a period of 2 weeks. Young children can begin with ¼ teaspoon per day and work up to a dose of ½ teaspoon or 2 capsules per day.
- Athletes and anyone who is experiencing severe levels of stress can take larger amounts, as many as 6-9 teaspoons or 18-26 capsules per day.
- Since mixing BarleyLife with water activates the ingredients, drink immediately.
- BarleyLife delivers the greatest benefits when taken on an empty stomach, 30 minutes before or 2 hours after a meal.
- Since heat and acidity will affect the enzymatic activity present in BarleyLife, it is recommended that this product should not be taken with prune juice, carbonated beverages or hot drinks.
- Many people take BarleyLife together with other AIM products. However, it is recommended that Herbal FiberBlend should be taken either 1 hour before or 30 minutes after taking BarleyLife.

#### **7. Scientific Research & Suggested Reading:**

Research has indicated that if an individual's diet is modified to include more healthy choices, the benefits are far greater than just by supplementing with vitamins and minerals alone. There are individuals who will be more vulnerable to deficiencies and accompanying symptoms than others – these include vegans, vegetarians and those people who live on fast food and microwave meals. In these situations, the Garden Trio have incredible benefits as they can

provide the entire daily quota of vegetable intake in a single dose, without the hassle of shopping and preparation.

***ORAC Values***

Oxygen Radical Absorbance Capacity (ORAC) is a revolutionary new test value analysis for calculating the anti-oxidant power of foods and other chemical substances. By measuring a substance's ability to protect against the attack of free radicals – to act as an anti-oxidant – ORAC can give quantitative value to the anti-oxidant activity. The higher the ORAC value, the higher the anti-oxidant power. BarleyLife has a higher ORAC rating than prunes, which received one of the highest ORAC ratings among whole foods.

***Nutrients found in AIM BarleyLife include the following:***

<b><u>VITAMINS</u></b>	<b><u>MINERALS</u></b>	<b><u>ENZYMES</u></b>	<b><u>ANTI-OXIDANTS</u></b>	<b><u>AMINO ACIDS</u></b>
vitamin B1	boron	Superoxide Dismutase	lutanarin	alanine
vitamin B2		(SOD)		
vitamin B5	calcium	peroxidase	saponarin	arginine
vitamin B6	chromium			aspartic acid
vitamin B12	cobalt		chlorophyll	cystine
vitamin C	copper		lutein	glutamic acid
vitamin K	iodine			glycine
folic acid	iron			histidine
niacin	magnesium			isoleucine
	manganese			leucine
	molybdenum			lysine
	nickel			methionine
	phosphorous			phenylalanine
	zinc			proline
				serine
				threonine
				tryptophan
				tyrosine
				valine