# ogel"

GREEN APP

CONT. NET: 0.75 OZ

ogel®

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### **PRODUCT PROFILES**

who we are ...

### **Agel Vision**

The Global Leader in Suspension Gel Technology based Nutritional Products

### Agel Purpose

AGEL and our Product Profiles in Innovation, Research, Quality and Safety provide the necessary components for a confident, well-informed community of empowered team members through:

- Safe and beneficial products
- Clear and organized information
- Compliance to well-defined systems

### Marketing Summary

Improve your immune system\*

### Discover UMI, discover health

Fucoidan is one of the most exciting nutritional discoveries of the past decade. UMI is rich in this amazing ingredient derived from brown seaweed, which for centuries has been heralded by cultures with famously long life spans\*\*

#### Discover what many have known for centuries

In coastal and island cultures around the world, fucoidan-rich brown seaweed has been considered a staple of healthy nutrition for centuries\*\*. They were on to something. Their choice to include seaweed in their diet is now supported by science. There are hundreds of studies already published about the health benefits of fucoidan and many other health experts and scientists are now exploring the possibilities of this incredible nutrient.

#### Improve your immune system

Fucoidan has been shown to sustain and promote better overall health and vitality. It also helps promote the health of white blood cells and supports their production in the body. Healthy white blood cells are a critical part of your body's immune response\* UMI also supports healthy arteries, normal blood flow, and acts as an antioxidant in supporting the immune system responses down to the cellular level\*.

### Fucoidan is good for you

Each UMI packet delivers a concentrated extract of seaweed which contains 210 mg of fucoidan, iodine and other complementary phytonutrients formulated in Agel's suspension gel matrix delivery system.

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\*These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease. Products shown may not be available in every market and where available may be for personal use only.

### Research MONOGRAPH

### Product History & Traditional Use

Asian cultures have valued seaweed as an important source of nutrition throughout their history. It is a valuable element of their culture. Traditional uses include as a wrap for fish and rice, dried, as part of a salad or soup stock and even as candy or a treat.

The traditional wisdom surrounding seaweed has been passed down from generation to generation. Asians and other cultures continue to consume seaweed for food and nutritional benefits. In the Japanese language, UMI is translated to "sea".

UMI INGREDIENT	PHYTONUTRIENT	TRADITIONAL USE*	CURRENT USE**
Seaweed Extract (Brown Algae or Laminaria japonica	Fucoidan	Nutritional and health wellness	Immune Support**
lodine	lodine or iodide solid form	Trace essential mineral	Antioxidant, Goiter, Immune Support**
Apple Cider Vinegar	Organic acids Acetic acid	Home remedy and tonic	Flavor

### **Complementary Agel Products**

- UMI and REM: Getting adequate rest will help build the immune system. This is enhanced when combined with immune supporting ingredients such as fucoidan.
- OHM and VLT: Mental and physical energy provide focus, stress avoidance to support overall health and resistance.
- EXO and GRN: Daily intake of fruits and vegetables loaded with phytonutrients and antioxi dants can neutralize free radicals and support wellness and vitality.

\*Traditional use claims have not been verified by modern scientific research.

\*\*These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.

### Scientific Summary & CURRENT USE

MI contains a complex carbohydrate compound called fucoidan which is found in the Brown Seaweed, *Laminaria japonica*. Fucoidan is classified as a sulfur containing polysaccharide molecule.

Fucoidan is a bioactive plant compound that modulates a healthy immune system by signaling proteins, enzymes and other immune elements to react to foreign bacteria, germs, virus and other substances. Much of the research on fucoidan centers on cancer, antimicrobial, and other drug applications. Cancer and other medical claims cannot be made for UMI and Agel dietary supplements. The role of fucoidan as an ingredient in food or dietary supplements can be discussed by Agel Team Members. For example, fucoidan has been demonstrated to provide healthy (normal) cellular support, immune support and cellular regulation. Fucoidan has been demonstrated to detoxify the body and inhibit free radicals to support wellness.

The immune system is complex and multi-dimesional. To have an effective immune system over-all health and vitality are required. Multiple processes and structures are components of a normal immune system. The immune system includes physical barriers to prevent the entry of germs, bacteria, fungi, viral particles, and harmful chemicals

from entering the body. After a foreign substance has entered the body, the immune response can include killer cells, white blood cells, macrophage among others. Multiple defense mechanisms including the innate and adaptive immune systems are part of an effective immune system. An important element of the immune system is to distinguish the body's healthy normal cells from foreign substances and foreign cells. Although drugs and pharmaceutical prescriptions may be required by medical intervention to provide a defense against germs and related disease, there are non-drug strategies that can be used to support a healthy immune system.

#### Elements of supporting a healthy & vital Immune system

- 1 Adequate rest and deep sleep. Our immune system is strengthened and replenished as we sleep.
- 2 Avoid environmental exposure to germs, pollution, harmful chemicals.
- 3 Moderate exercise will enhance the immune system, but extreme exercise may have a deleterious impact to the immune system.
- 4 Avoid stress. Effectively manage stressful situations.
- 5 Agel UMI and complementary supplement use
- A healthy diet will help you stay fit
- 7 Positive belief and attitude

Modern science confirms that seaweed is a natural source of iodine, one of the minerals essential for growth and development. Agel ® UMI is a rich source, as it contains as much as 20% of US RDA of iodine in each packet. Iodine is an essential micronutrient that plays a role in multiple metabolic functions. Iodine is emerging in popularity as research continues to document many of the physiological impacts.

The iodine element naturally occurs as a gas. The iodine form that occurs in most foods and UMI occurs as a stable, solid salt (sodium or potassium iodide) which is a different form of iodine. For this reason, you may see the iodine in nutritionals referred to as iodide. A similar example of this chemical nomenclature occurs with chlorine. The element chlorine naturally occurs as a gas. When it combines with other elements to form a stable. solid salt, it is referred to as a "chloride". An example is sodium chloride, not sodium chlorine).

The United States Office of Dietary Supplements (ODS) has reported that iodine is necessary to support cognitive function during childhood and that "the effects of severe iodine deficiency on neurological development are well documented. Results from several studies suggest, for example, that chronic, moderateto-severe iodine deficiency, particularly in children, reduces IQ by about 12–13.5 points".

lodine is also important for proper fetal development. It is recommended that iodine intake be increased during pregnancy to 220 micrograms (mcg)/day for pregnant women and 290mcg/ day for lactating women. It would take 4-6 packets of Agel® UMI to provide this much iodine. We strongly recommend that pregnant and lactating women consult their healthcare professional prior to consuming UMI or any food supplement. Additionally, individuals should not exceed the recommended maximum daily dosage of four packets without consulting a healthcare professional.

lodine has been in the news of recent as a potential treatment to prevent negative impact from radiation exposure. lodine should only be used under the direction of a medical healthcare professional when considered for this application.

#### **Final Reminders**

We DO NOT suggest that the fucoidan-rich seaweed found in UMI is a cure all. We DO suggest that it is good for you and is an excellent complement to a healthy lifestyle. As we find ourselves continually exposed to challenges in today's environment (pollution, stress, new and aggressive germs and sickness, and an increasingly busy schedule) modern research has re-discovered and confirmed what Asians have known for centuries, that seaweed provides a nutritious option for anyone seeking to improve their diet as to foster vitality and an optimally operating immune system.



**Please Note** that this information is for educational purposes. It is not intended to represent a claim of cure or prevention of any medical or health condition. We remind all who are interested in good health that food supplements cannot replace a well balanced diet and exercise. Supplements as the name implies supplement the diet. We encourage all to learn as much as you can about the foods and supplements you eat and to consult a medical professional with questions. Supplements should not be used to replace the role of drugs.

### Product Label

Take one Agel UMI pack a day

Supplemen	<b>it Fa</b>	cts
Serving Size: 1 Packet (21g) Serv	ings Per Cor	ntainer: 30
Amount Per Serving		% Daily Value
Calories	10	
Total Carbohydrates	3 g	1%
Sugars	2 g	†
Fucoidan (from Seaweed Extract)	210 mg	†
Apple Cider Vinegar	25 mg	†
* Percent Daily Values are based or † Daily Value not established.	n a 2,000 cal	orie diet.

Other Ingredients: Water, Fructose, Malic Acid, Citric Acid, Xanthan Gum, Guar Gum, Natural Flavors, Green Coloring (Copper Chlorophyllin), Sodium Benzoate.

Agel UMI is a powerful punch of fucoidan. Found within brown seaweed, fucoidan has a wealth of benefits that are continuously being identified. UMI means "sea" and if there is such a thing as a sunken treasure- fucoidan is it. Forget fucoidan pills, gel suspension is here. Seaweed never tasted so good.

#### **Nutritional Supplement**

Patent Pending Suspension Gel Technology.



### **Approved Claims**

### Key Ingredients

Brown Seaweed extract standardized for Fucoidan 210 mg/per packet, Natural Source of Iodine

APPROVED	NOT APPROVED	
Asian cultures have traditionally consumed seaweed as a source of micro-nutrients, for health and regularity of the bowels and internal body systems, healthy hair, healthy blood flow. These traditional uses have not been proven by scientific studies or modern research.	Modern science proves that seaweed (or fucoidan) gives you strong, shiny hair and that it regulates your digestive and other internal body systems.	
Supports the immune system (fucoidan)	Prevents cancer, heart disease, colds, flu	
Provides phytonutrients to support overall health and vitality.	Prevents aging and disease	
Natural source of iodine, supplying more than 20% of the US Recommended Daily Intake. Iodine rich, high in iodine or an excellent source of iodine are allowable.	Provides 100% of recommended daily intake of iodine and other nutrients.	

 $Note \ {\rm claims \ in \ the \ Not \ Approved \ column \ cannot \ be \ used}.$ 



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### Safety Cautions

### & ASSESSMENT

- Pregnant or lactating women (or those planning pregnancy) should consult their physician prior to using this product.
- Seek medical advice if you are taking medications for thyroid disease or other medical conditions or if have an existing medical condition.
- If you are planning a surgery, disclose use of Agel UMI and all other dietary supplements to your physician.
- A dosage of 1-2 UMI packets a day can be safely used by most people.
- UMI is not intended for use in young children and infants. Consult with your healthcare professional prior to using in young children or infants.
- UMI should not be used as a preventative measure in the event of an exposure to a radiation event or radiation emergency without consulting your medical healthcare professional. Iodine and other sources of iodine (UMI, supplements) have been regarded by some as treatments for radiation exposure.
- Apple Cider Vinegar is considered GRAS (Generally Regarded as Safe).

### Key Ingredients

Brown Algae (Laminaria japonica) standardized for 210mg Fucoidan Naturally occurring lodine

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## Age Guidelines

AGE GROUP CLASS	APPROXIMATE AGE	USE RECOMMENDATION
Newborn	Birth to one month of age	Not recommended for use
Infant	One month to 2 years	Not recommended for use
Child	2 years to 12 years	Check physician before use
Adolescent	12 years to 17 years	1 packet daily
Adult	17 years and older	1-2 packets daily or as needed

### Agel Guidelines

- Individual conditions should be considered when considering use, including weight, sex, pre-existing medical conditions, sensitivity or allergic reactions to ingredients, use of prescription medication or other drugs.
- 2 The adult use recommendation for adults UMI is 1-2 packets daily or as needed. The term "or as needed" denotes that individuals may select more than 2 packets daily based on individual need, however, the daily maximum dosage recommended is 4 packets daily.
- **3** Individuals should begin Agel product use with one Agel product at the lowest dosage and increase dosage and add other complementary Agel products as needed.

#### **Product Shelf Life**

Agel UMI has a shelf life of 24 months when stored under ambient conditions

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### Glossary

Antioxidant A chemical compound that inhibits oxidation and free radicals.

**Complementary** Something that makes a thing complete. Serving to fill out or complete as in mutually supplying each other's lack. Not the same as complimentary which is to express a favorable expression or flattering remark.

**Fucoidan** A complex carbohydrate classified as a sulfated polysaccharide by chemists.

**Immune System** A complex system of biological processes that protects against disease. An immune system must detect a wide array of agents, from germs and viral particles to parasites and distinguish them from the organism's own healthy cells as to prevent the spread of disease.

**IOCINE** A naturally occurring trace element found in some foods and available as a dietary supplement. Iodine occurs naturally as a gas. Iodine can combine with sodium or potassium to form a solid salt or iodide form. Iodine is an essential part of the thyroid hormones thyroxine and triiodothyronine. Thyroid hormones regulate important biochemical reactions, including protein synthesis and enzymatic activity, and are critical determinants of metabolic activity in the human body.

Laminaria japonica A specific type of perennial kelp highly regarded for its fucoidan content and nutritional use.

Macrophage A large phagocyte or cell that engulfs foreign material that enters the body.

#### Office of DietarySupplements

(ODS) The Dietary Health and Education Act (1994) established the ODS in 1995 to strengthen knowledge and understanding of dietary supplements. The ODS is a government group and along with the National Institute of Health (NIH) are within the department of Health and Human Services.

Seaweed A plant growing in the sea. A kelp, marine algae or related plants.

Synergistic Cooperative action among distinct parts such that the total effect is greater than the additive sum of the parts taken independently.

**UMI** A nutritional dietary supplement product from Agel. In the Japanese language, Umi means "sea".

### References

- Zimmermann MB., Iodine deficiency in pregnancy and the effects of maternal iodine supplementation on the offspring: a review. Am J Clin Nutr. 2009 Feb; 89(2):668S-672S.
- Melse-Boonstra A, Jaiswal N., lodine deficiency in pregnancy, infancy and childhood and its consequences for brain development.
   Best Pract Res Clin Endocrinol Metab. 2010 Feb;24(1):29-38.
- Institute of Medicine, Food and Nutrition
  Board. Dietary Reference Intakes for Vitamin A, Vitamin K, Arsenic, Boron, Chromium, Copper, Iodine, Iron, Manganese, Molybdenum, Nickel, Silicon, Vanadium and Zinc. Washington, DC: National Academy Press, 2001.
- World Health Organization. United Nations Children's Fund & International Council for the Control of Iodine Deficiency Disorders. Assessment of Iodine Deficiency disorders and monitoring their elimination. 3rd ed. Geneva, Switzerland: WHO, 2007.

- Deax, J-F, et al., Low Molecular Weight Fucoidan Prevents Neointimal Hyperplasia in Rabbit Iliac Artery In-Stenty Restenosis Model. Arterioscler Thromb Vasc Biol. 2002 22:1604-1609.
- Sweenea EA, et al., Sulfated polysaccharides increase plasma levels of SDF-1 in monkeys and mice: involvement in mobilization of stem / progenitor cells. Blood, 2002 Jan: 99(1): 44-51.
- Itoh H, et al., Antitumor activity and immunological properties of marine algal polysaccharides, especially fucoidan, prepared from Sargassum thunbergii of Phaeophycae.
   Anticancer Res. 1993 Nov-Dec; 13(6A): 2045-52
- Yamamoto L., et al., Antitumor activity of edible marine algae. Effect of crude fucoidan fractions prepared from edible brown seaweeds against L-1210 leukemia. Proc. International Seaweed Symposium, (1984) 11: 145-148.
- Furusawa E, Furusawa S & Chou SC., Antileukemic activity of Viva Natural, a dietary seaweed extract, on Rausher murine leukemia in comparison with anti-HIV agents, azidothimidine, dextran sulphate and pentosan polysulphate. Cancer Letters (1991), 56: 197-205

- Ellouali M., et al., Antitumor activity of low molecular weight fucan extracted from brown seaweed. Ascophylllum nodosum. Anticancer Research (1993), 13: 2011-2019.
- Related information on fucoidan: http://www.fucoidanwellness.com http://kfucoidan.com.hk http://fucoidanfacts.com/science/
- Jellin JM, Gregory PJ, et al. Pharmacist's Letter/Prescriber's Letter Natural Medicines Comprehensive Database. 11th Edition. Stockton, CA: Therapeutic Research Facility. 2009
- Woolley, Cole. Ageless Nutrition 2nd Edition.
  Orem UT: Nutritional Sciences LLC. 2005.
- If you would like to review associated publications in more detail we suggest you use PubMed, the information portal provided by the US National Library of Medicine and the National Institutes of Health. PubMed is a service of the U.S. National Library of Medicine that includes over 17 million citations from MEDLINE and other life science journals for biomedical articles back to the 1950s.

To find a reference on PubMed, copy the reference for the article you want to read from the Agel Bibliography page and paste it in the "Search PubMed for" entry box on the following web page:

http://www.pubmed.gov

Some studies are subject to copyright or are otherwise not available to the general public. The following sites may allow access to a portion of these studies and other related information:

Pub Med database:

http://www.pubmed.gov US Office of Dietary Supplements: http://www.ods.od.nih.gov

#### **Additional Resources**

Agel Product Profiles and Organization Agel Suspension Gel Technology FAQ US Regulatory Requirements European (EU) Regulatory Requirements Agel Primary Use for All Agel Products Responsible Use of Agel Nutritional Supplements Agel Compliant Claim Guidelines for All Products Agel Product Shelf Life (All Products) Agel Quality (QA/QC 2011) Product Profiles Listing of Item Numbers and Release Dates Product Certification (Halal and Kosher Lists) Agel Glossary (All Products) Agel Product Shelf Life Agel Quality (QA/QA 2011)

