PureSea®

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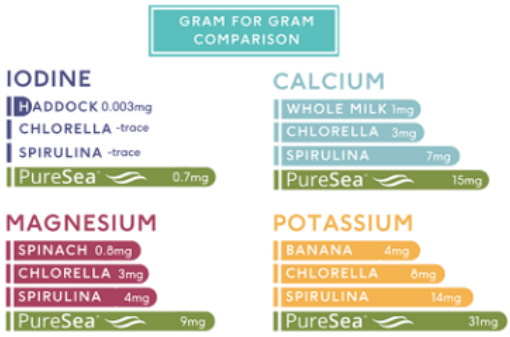
PureSea® is the gold-standard sustainable, nutritious, wholefood seaweed ingredient, enabling six EFSA Health Claims through the delivery of natural iodine. Sourced in the pristine Scottish Outer Hebrides and using proprietary processing, every batch of PureSea® is DNA authenticated & independently accredited for safety, quality and provenance.

PRODUCT PROFILE SHEET

With a global iodine deficiency of 5 billion people[1] (68% of the global population) and Europe considered an iodine deficient continent, there is a real need for seaweed as the only natural and plant-based source of this essential nutrient. Furthermore, with the rapid uptake of plant-based diets, there is an increased need for seaweed as a source of essential iodine from PureSea®.

Why PureSea®

- **PureSea® is incredibly nutrient-dense**, even when comparing to other super foods and sources of key minerals: it contains trace elements, minerals and bioactive compounds.



- **PureSea® enables six EFSA Approved Health Claims** relating to natural iodine source supporting normal **thyroid** function, **energy** yielding metabolism, **cognitive** health, **skin** maintenance, functioning of the **nervous** system and **growth in children**.
- Iodine is **essential at all life stages**, being needed for fertility, during pregnancy, for child development, and all through adult life.

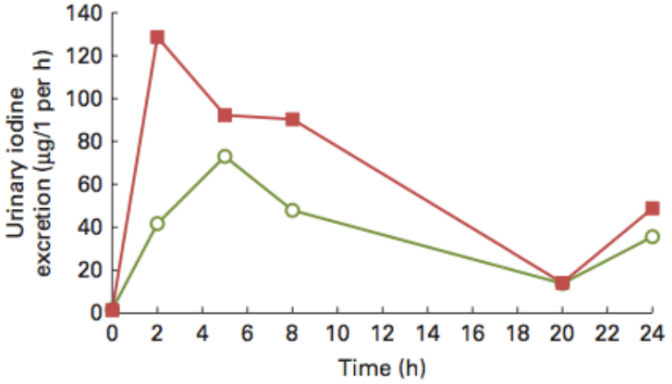
Product Advantages

- ✔ **Natural and Vegan**
- ✔ **Sustained Release of Iodine**
- ✔ **Six EFSA Claims allowed with only a small inclusion**
- ✔ **Backed by Scientific Research**
- ✔ **Multiple Health Benefits**
  Targeting different population and ages.
- ✔ **Sustainable**
- ✔ **Clean Label**
- ✔ **Transparent Traceability**
- ✔ **Provenance**
- ✔ **Proprietary Production**

Research

Sustained Release of Iodine

Independent research shows that PureSea® seaweed provides a slower and more sustained release of iodine compared to synthetic sources that are quickly absorbed and quickly excreted[2].



Urinary iodine output (µg) over time (h) after consuming PureSea® species (green) and Potassium Iodide (red)

Thyroid Health

When the thyroid fails to produce an adequate amount of hormones, often due to insufficient iodine, it results in a condition known as hypothyroidism or an underactive thyroid. Hypothyroidism can manifest with various symptoms, including unwanted weight gain, fatigue, depressive feelings, sensitivity to cold, muscle discomfort, dry

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skin, and brittle hair and nails[3]. **Iodine is an essential dietary nutrient crucial for maintaining proper thyroid function and the production of thyroid hormones**.

Fertility

Iodine helps in the synthesis and regulation of **sex hormones** like oestrogen and testosterone which are necessary for reproductive health in both men and women. In women, iodine deficiency can disrupt the **menstrual cycle**, leading to irregular periods or even amenorrhea (absence of menstruation). Iodine is also important for men's fertility. Adequate iodine levels can support healthy sperm production and function. For more information, download our pregnancy and fertility review paper here.

Energy & Sports Recovery

Thyroid impacts metabolism, which is the effectiveness of how food is turned into energy. Ensuring metabolism is working effectively is a key for sport and training. As iodine is excreted in urine and sweat, the more people exercise and drink, the more iodine they lose. A study[4] showed that, as iodine intake in the diet is not increased for most people when exercising, a group of footballers had lower iodine levels than sedentary people due to the loss of iodine in their urine and sweat. Learn more, download the review paper here.

Mental Health

The brain is highly sensitive to the slightest fluctuations of thyroid hormone, therefore leading to weakness, headaches, fatigue, memory lapses and concentration problems. It is important to maintain optimal levels of Iodine to maximise cognitive potential and boost brain energy. More broadly an underactive thyroid may lead to symptoms of depression and anxiety.[5]

Inner Beauty Health

When thyroid hormone levels are low, the rate at which hair grows can be reduced and even stop completely. People who have suffered from iodine deficiency disorders have also experienced hair loss. In a study of 700 participants, it was found that 30% of those that presented with low thyroid hormone levels had experienced some form of **hair loss**.[6]

Nail health can also be impacted by thyroid issues, with one reason being that a reduced metabolic rate impacts the amount of sweat produced by the body. Sweat plays a role in maintaining the moisture of the skin and nails and, in its absence, it can cause them to become dry and brittle. In more extreme cases, a condition known as onycholysis can occur – a condition where the nail becomes separated from the nail bed.[7]

Another common symptom of iodine deficiency is dry, flaky skin. This has been attributed to a lowered rate of skin cell regeneration because of lower thyroid hormone levels.[8] In one study, 63% of people with hypothyroidism reported that they were suffering with **dry skin**.[6] Discover more - download the inner beauty review paper here.

Menopause Support

Despite evidence thus far being unclear, the often simultaneous transition into hypothyroidism and menopause has led researchers to conclude that there might be a connection between perimenopause and thyroid function[9]. Research carried out on menopausal women with thyroid dysfunction found that there was a marked improvement in the menopause-related symptoms once the thyroid disorder had been treated[10]. These findings suggest that treating thyroid disorders should be first considered when attempting to manage menopause symptoms. There is more to explore by downloading the menopause review paper here.

Endometriosis Support

It is estimated that approximately 10% of women between 14 and 45 have endometriosis and it goes largely undiagnosed in younger years. Genetics are thought to play a role, as well as weight and the age at which women start their period. However, nutrition undoubtedly plays a role, and particularly when it comes to iodine. Research[11] has shown that low dietary iodine intake leads to higher oestrogen levels in women, and which is known to cause excess growth of endometrial tissue outside.

Blood Sugar & Weight Management Support

Research demonstrates that PureSea®'s specific polyphenols may inhibit enzymes, slowing sugar release in the blood. This works particularly well when taken as a supplement alongside carbohydrates. Research also demonstrates it may aid weight management by increasing satiety[12].

Furthermore, in an in-vitro comparison between a branded white kidney bean extract and PureSea® seaweed, the rate of amylase inhibition of PureSea® was found to be over 5 times higher than that of white kidney bean extract, demonstrating that PureSea® is significantly more effective at inhibiting amylase[13].

Manufacturing Process

Sourced in pristine Scottish waters, the sustainable wild harvesting is undertaken by carefully selecting the best sites and cutting the seaweed using specialist vessels and techniques. The seaweed is then dried and further processed in dedicated and proprietary food grade facilities.

Quality Assurance

Gold Standard Seaweed

Every batch is tested for safety, quality & nutrition. An on-line transparent traceability is available for customers to discover where each batch was harvested, with photographs and maps, certification, and unique DNA Authentication.

Click here to see an example or access the Portal here.

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PureSea®

PureSea® shown to be higher on key levels of quality (polyphenols and antioxidant levels) as compared to the same species (independent assessment) and consistently lower in contaminants. Download our PureSea® vs others PDF document in our resource section.

Certifications

KLBD

GB-ORG-04
EU/Non EU Agriculture

DNA AUTHENTICATED SEAWEED SOURCE

ORGANIC FOOD FEDERATION

Vegan

Product Safety

Studies published in the British Journal of Nutrition[2] using the PureSea® seaweed species, along with batch testing, demonstrate the effectiveness, bioavailability and safety of PureSea®.

Product Range

Ingredient	Iodine Content	Grade	Mesh Size
PureSea	650-980 mg/kg	Fine Granules	>95% thru 400 micron sieve
PureSea	650-980 mg/kg	Medium Granules	>95% between 400 to 1500 microns

Product Applications

PureSea® grades are suitable for capsules and green powdered blends.

About

SEAWEED & Co.

Seaweed & Co. is the company behind PureSea®. Founded by marine biologist, Dr Craig Rose (aka Doctor Seaweed®), with a highly experienced board and panel of independent experts that have developed the research driven and accredited PureSea® ingredients.

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