



PureSea® Natural, part of the PureSea® range, is a sustainable, nutrient-rich seaweed ingredient that supports six EFSA Health Claims. Harvested from Scotland's pristine Outer Hebrides and produced with proprietary techniques, each batch is DNA authenticated and independently certified for safety, quality and origin.



Image 1
PureSea® Health Benefits



PRODUCT PROFILE SHEET

The PureSea® Brand: Elevating Natural Wellness

PureSea® is the gold-standard seaweed brand. The PureSea® range offers unique, sustainable and natural solutions that can elevate your brands and products with:

- Science-backed benefits
- Six EFSA Health Claims
- Addressing major nutritional deficiencies
- Outstanding provenance and quality
- A unique story and proprietary production
- Proven as higher quality than other sources

PureSea® Natural is the core product in the range, being sustainably wild harvested in the pristine Scottish Outer Hebrides, and with proprietary drying and milling. PureSea® Natural delivers wholefood and rich natural and safe sources of iodine and provides numerous advantages, with ease of use in applications such as capsules and powder blends.

With a **global iodine deficiency** of 5 billion people¹ (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 that is vital for various aspects of health and wider wellness.

Why PureSea Natural®

- **PureSea® Natural offers numerous benefits**, across a wide diversity of markets and consumer demographics (Image 1). Iodine is essential at all life stages, being needed for fertility, during pregnancy, for child development, and all through adult life.

- **PureSea® Natural 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.

Product Advantages

- ✓ **Nutrient Dense**
Addressing major nutritional deficiencies
- ✓ **Six EFSA Claims Allowed**
With only a small inclusion
- ✓ **Sustained Release of Iodine**
- ✓ **Backed by Scientific Research**
- ✓ **Multiple Health Benefits**
For women's health and all life-stages and lifestyles
- ✓ **Clean Label**
- ✓ **Transparent Traceability**
- ✓ **Outstanding Provenance and Unique Story**
- ✓ **Proprietary Production**
- ✓ **Sustainable, Natural & Vegan**
- ✓ **Kosher Certified**

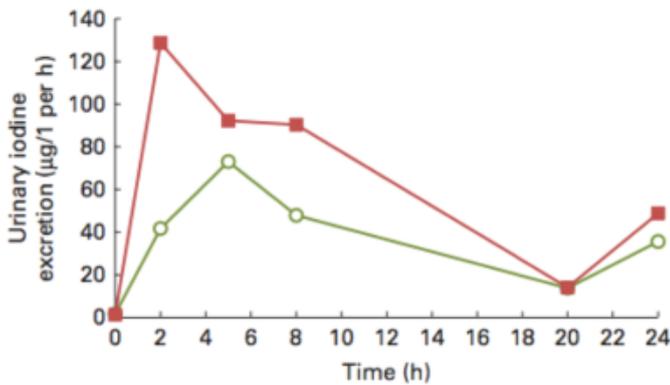


Research

Sustained Release of Iodine

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

Graphic 1
Iodine Release: PureSea[®] Natural vs Synthetic



The graphic displays urinary iodine levels (µg) over time (h) following consumption of PureSea[®] Natural species (green) and Potassium Iodide (red). More information is available in the **Natural is Best** paper, downloadable [here](#).

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 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.** More information can be found in the **Thyroid Health Review** Paper which can be downloaded [here](#).

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 **Review** paper [here](#).

Pregnancy

Iodine is required in higher amounts during pregnancy due to its critical role in foetal neurological development, as deficiency is associated with an increased risk of congenital anomalies, miscarriage and stillbirth.⁴ It is important for women of childbearing age, who are planning to conceive in the future, achieve iodine sufficiency as foetal neurological development commences very early in pregnancy.⁵ For more information, download our **Pregnancy 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 key for sports and training. As iodine is excreted in urine and sweat, the more people exercise and drink, the more iodine they lose.

A study⁶ 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 **Energy & Endurance 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.⁷ For more information, download our **Cognitive Review** paper [here](#).





Beauty-from-within

With insufficient iodine that can lead to low thyroid hormone levels, 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**.⁸

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, 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.⁹

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.¹⁰ In one study, 63% of people with hypothyroidism reported that they were suffering with **dry skin**.⁸ Learn more: download the **Inner Beauty Review** paper [here](#).

Menopause Support

The often-simultaneous transition into hypothyroidism and menopause has led researchers to conclude that there might be a connection between perimenopause and thyroid function.¹¹

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.¹²

These findings suggest that treating thyroid disorders should be first considered when attempting to manage menopause symptoms. Learn more 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.

Research¹³ has shown that low dietary iodine intake leads to higher oestrogen levels in women, which is known to cause excess growth of endometrial tissue outside the uterus. For more information, download our **Endometriosis Review** paper [here](#).

Metabolic Health

Metabolic health reflects the body's capacity to regulate energy production and utilization. A central regulator of these processes is the thyroid gland, through the hormones triiodothyronine (T3) and thyroxine (T4). These hormones modulate basal metabolic rate (BMR), oxygen consumption, thermogenesis, and carbohydrate and lipid metabolism at the cellular and systemic levels.^{14,15}

As iodine is an essential micronutrient required for the synthesis of T3 and T4, inadequate iodine intake impairs thyroid hormone production, leading to reduced metabolic efficiency. Even mild iodine deficiency can have an impact, and lead to conditions that may remain undiagnosed while still exerting measurable effects on metabolic rate and energy balance.^{16,17,18}

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. PureSea[®] Natural 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](#).

PureSea[®] is 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



Product Safety

Studies published in the British Journal of Nutrition² using the PureSea[®] seaweed species, along with batch testing and other independent studies, demonstrate the effectiveness, bioavailability and gold-standard safety of PureSea[®].

Product Range

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

Both grades are Organic Certified.

Product Applications

PureSea[®] Natural grades are suitable for capsules, green powder blends and natural superfood mixes.



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[®] range of ingredients.

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