



Transforming seaweed into the supernatural



Using our bespoke process and novel technologies we extract valuable components from seaweed transforming them into products the market is hungry for.

From nutraceuticals to food and drink, our unique products provide health benefits for both people and the planet.

Seaweed is the best kept secret of the sea.

**Regenerative
Sustainable
Nourishing
Healthy**



Our Products

Thalivra Fucoidan



Thalivra Fucoidan



BIOMARA

Fucoidan is a seaweed-derived bioactive soluble fibre, which has demonstrated a wide range of biological activities, including antioxidant, immunoregulatory, antiviral, anti-inflammatory and prebiotic properties.



Fucoidan is found in the cell walls of brown seaweeds for protection from stress and damage. It is crucial for their survival and health.

Our Fucoidan is extracted without the use of harsh chemicals and is:

- Natural ocean-farmed source
- Food-grade
- Traceable

Designed for formulation with other ingredients in proprietary blends or delivery systems.

Product Information

Origin	Sustainably ocean harvested seaweed
Sensory	Water soluble light brown powder
Purity	>75%
Botanical name	<i>Fucus vesiculosus</i> / <i>Alaria esculenta</i> (UK/EU)
Recommended dosage	Depending on application
Testing	<i>In vitro and in vivo</i> safety & efficacy testing
Formulation	To be added into dry blend for capsules, aqueous solution or gels/gummies
Certification	Novel foods, GRAS, FSA, HACCP Vegan/Vegetarian
Health benefits	Antioxidant, immunomodulation, prebiotic, anti-inflammatory effects and others
Remaining compounds	Beta-glucans, minerals, alginates

Thalivra Fucoidan is a unique bioactive extract with specific health benefits for nutraceutical, food and drink applications.



Regulatory

Fucoidan extract from seaweed
Fucus Vesiculosus

- Recommended daily dose is 250mg (EU/UK/USA).
- Approved Novel Food.
- Generally Recognised as Safe (GRAS).
- Food Standards Authority approved.
- Food safety certified, HACCP

Spec sheet available
on request

Product Details

Designed for formulation with other ingredients in proprietary blends or delivery systems.

- Unique characteristics and composition.
- Clinical efficacy trial data collection.
- Human trials underway.
- Safety testing in accredited labs.

Thalivra supply

- Customisable pack sizes.
- Verified HACCP procedures in place in food grade production facilities.
- Origin UK & EU.

Option to supply two seaweed species, fucoidan from *Fucus vesiculosus* and *Alaria esculenta*.

Thalivra integrates into proprietary formulations and has global regulatory acceptance. Backed by ongoing research partnerships, Thalivra provides a natural, science-backed solution that offers a competitive edge for our customers.



Thalivra tested in human trials demonstrates how it solves our customers challenges.

Suggested applications



Nutraceutical products

Immune support

- Supporting immune defenses due to high levels of antioxidant, reducing free radicals in the body.

Joint Health

- Replacement or addition to curcumin/turmeric supplements.
- Anti Inflammatory.
- Plant-based applications.

Gut & Digestive Health

- Gut brain axis and gut skin applications.
- Improved gut microbiome.
- Prebiotic for probiotics and postbiotic applications.

Sports; energy & performance enhancers.

- Studied to show cardiovascular output improvement and increased mitochondrial activity.

Supplements for hypoglycemic health.

Delivery format

- Suitable for soft gel/ hard gel capsules, directly compressible tablets, sachets, syrups, gummies, powdered beverage and RTD.

Food and beverage products

Prebiotic inclusion into gut health shots.

- Trending category with bio-actives being used in health shot RTDs sold online and instore.

Superfood powder beverage

- Aiding in fortification, antioxidant content and health benefits: e.g. AG1.

Beauty from within drinks

- Fortification of collagen type powdered drink applications or RTD.

Sports nutrition with added gut prebiotics.

- Trending for gut health and protein breakdown or bioavailability.

Dairy applications.

- RTD yoghurt/plant based drinks - prebiotic addition

Functional RTDs.

- Soda's with functional actives addition, prebiotic addition and antioxidant.

Our Research In-vitro



Gut health: Human trials and consumer interest



A blind randomised, parallel study in progress where volunteers (F/M balanced, young adults, 18-35 yrs) are consuming different dosages of spray dried fucoidan in vegan capsules over 28-day period.

Reporting

- Consumer feedback collated and reported to ascertain in-vivo impact of fucoidan on GI symptoms, health and wellbeing, and associated diet.



Gut health: Prebiotic



The in vitro and in vivo results assessed the effect on probiotic bacterial strains with different carbon sources.

- Study assessed potential as a prebiotic substance on probiotic *Lactobacillus* spp. strains.
- Different fucoidan fractions confer specific prebiotic activity; the same fucoidan doesn't have the same response to all *Lactobacillus* therefore, it is specific for each target bacteria.

External studies

Gut health



Fucoidan studies on the benefits in the gut microbiome findings;

- Has a prebiotic effect on the development and metabolism of probiotics at optimal concentrations.
- Has endotoxin detoxification.
- Has been shown to induce favourable microbiota alterations.
- can regulate the microbiota and inhibit the binding of pathogenic microorganisms.
- May facilitate an enhanced recovery from dysbiosis and *P. aeruginosa* decolonization from the gut.
- Was shown to control probiotics proliferation, metabolism, shape, and antibacterial activity.
- Fucoidan may therefore act as a probiotics' modulator or a prebiotic of marine origin, providing new vision into the prebiotic possible bio-applications such as promoting tissue repair and regeneration, preventing tissue infections, and enhancing the normal gastrointestinal microbiota.

Iwakil, B. H., Hamed, M. T., & Keshav Raj Paudel. (2023) & 'Sullivan, L., Murphy, B., McLoughlin, P., Duggan, P., Lawlor, P. G., Hughes, H., & Gardiner, G. E. (2010)

Fucoidan alleviates colitis and metabolic disorder by protecting the intestinal barrier, suppressing the MAPK/NF-κB pathways, and regulating the gut microbiota.

Findings:

- Protection of the intestinal barrier.
- Suppression of inflammatory pathways.
- Regulation of gut microbiota.
- Alleviation of metabolic disorders.

Tang, S., Wang, M., Shi, C., Li, N., & Ai, C. (2024)

Fucoidan attenuates chronic colitis and behavioral deficits by reshaping gut microbiota-brain axis balance.

Findings:

- Reduction in disease activity and depressive behaviors.
- Modulation of gut microbiota.
- Enhancement of colonic barrier Integrity.
- Suppression of inflammatory pathways.
- Reduction of peripheral inflammation and stress hormones.
- Decrease in neuroinflammation.

Ye, Z.-W., Yuan, Z.-Y., Wang, J., Li, H., Xu, G.-H., & Yi, L.-T. (2024)

Natural solution for specific health issues

Research backed bioactive with applications in multiple markets.

Marketing advantages

- Vegan with novel plant origin.
- Marine-sourced bioactive.
- Sustainability and ocean regeneration story.
- Community development story.
- 'New' discovery of Eastern medicine.
- Fucoidan or species name back of label listing.
- Inline with strong marketing trends.
- Low inclusion rates so no price premium.
- Species input different from competition.
- Safety testing by accredited labs.
- European supply chain and manufacturing, local to customers.



Naturally-sourced ingredients
dominate the nutraceutical
marketplace

73%

The Trend

The 'next big thing'...





Join the regenerative revolution

BIOMARA

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