**Page 1 – Home**

**AstaDaily®**

Your New Health Solution

**All in One, One for All**

**OUR MISSION**

“To help everyone benefit from healthy, all-natural microalgae products and sustainable, innovative biotechnology.”

[THE COMPANY](link to http://www.iconthin.com/company)

[ASTAXANTHIN](link to http://www.iconthin.com/astaxanthin)

[OUR QUALITY](link to http://www.iconthin.com/material)

[ASTAXANTHIN]( link to http://www.iconthin.com/astaxanthin)

The Strongest Known Antioxidant

The only carotenoid that can cross the blood-brain barrier

**AstaDaily®**

FROM NATURE

Our astaxanthin comes from pristine Highland—1,900 meters above sea level with lots of clean water, fresh air and sunshine.

ALL IN ONE

By combining astaxanthin—the world’s strongest natural antioxidant—with 10+ carefully selected ingredients, we offer you the best professional health solution.

CERTIFICATION

Astadaily® is made in Canada and approved by the Health Canada.

**Page 2 – Our Motivation**

A PATH TO A SUSTAINABLE FUTURE

It’s no secret that the demand for sustainable energy is growing. To address worldwide energy and climate concerns, we need a diverse set of solutions.

Producing biofuels from microalgae is one of the most promising paths towards a sustainable future: It can serve as a clean energy source with carbon capture capabilities.

As the third-generation feedstock for biofuels, microalgae have these advantages:

* High Growth Rate
* Reduced Land Use
* No Direct Competition with Food

However, microalgae still face serious challenges regarding the following:

* Strain Selection
* Mass Cultivation
* Downstream Processing
* Conversion to Biofuel

Most current technologies for processing microalgae into biofuel were adapted from techniques used for standard, terrestrial plants. The results have been low efficiency and high costs. In order to compete with fossil fuels as a viable economic option, microalgae biofuel needs more research and development.

Iconthin Biotech is dedicated to developing innovative, sustainable microalgae biotechnology. Thanks to our world-class microfluidic platform and other advanced technologies, we can produce high-value products at industrial scale and for low cost. Through our work with microalgal products, we’re developing techniques for future applications without increasing the financial strain on the government. In this way, Iconthin is helping to build a sustainable future and a better world.

**Page 3 – Global Development Team (In Cooperation with the University of Toronto)**

**COMPANY**

COMPANY & TEAM

Innovation, passion and dignity are the three pillars of Iconthin. We’ve conducted extensive lab work on microalgae at the University of Toronto. This research has served as the foundation of our company.

By combining microfluidic technology, comprehensive knowledge and hands-on experience, Iconthin provides an advanced platform for researching and developing innovative biotech products. We are dedicated to helping everyone benefit from healthy, all-natural microalgae products and sustainable technology.

COMPANY NEWS

ICONTHIN AT CHFA WEST

Iconthin participated in the 2017 CHFA West trade show in beautiful Vancouver, BC. We met hundreds of natural health manufacturers, distributors, brokers and retailers, all of whom share our goal of delivering the best available health products. Feel free to contact us—we look forward to seeing you at the next trade show!

**Page 4 – Astaxanthin: The Most Powerful Antioxidant**

ASTAXANTHIN

Astaxanthin is the most powerful natural antioxidant known to man. Its unique molecular structure makes it one of the very few supplements that can cross the blood-brain barrier.

Astaxanthin’s antioxidant power is:

* **6,000 times stronger than Vitamin C**
* **550-1,000 times stronger than Vitamin E**
* **10 times stronger than beta-carotene**
* **60 times stronger than grape seeds**
* **200 times stronger than tea polyphenols**
* **150 times more effective than anthocyanin**
* **75 times more effective than lipoic acid**
* **800 times more effective than coenzyme Q10**
* **7 times more effective than lycopene**

This special compound is commonly found in red-colored marine inhabitants, including:

* Wild Salmon
* Trout
* Krill
* Shrimp
* Lobster
* Crab
* Algae

Microalgae cells have a much higher concentration of astaxanthin than animal cells do. *Haematococcus pluvialis*, is the primary industrial source of natural astaxanthin: This special type of microalgae produces large amounts of it to protect their cell DNA from UV radiation and free radicals.

Astaxanthin has several essential biological benefits, including:

* Protection against oxidation of essential polyunsaturated fatty acids
* Protection against UV light effects
* Immune response
* Pigmentation
* Communication
* Improved reproduction

HEALTH BENEFITS

ANTIOXIDANT EFFECTS

Free radicals can damage DNA, proteins and lipid membranes. Astaxanthin provides cell membranes with potent protection against free radicals and other threats. Its unique chemical structure keeps lipid membranes from degrading and prevents damage to other molecules and tissues.

ANTI-INFLAMMATORY

Chronic inflammation is considered the cause of most degenerative conditions and lifestyle-related diseases. Astaxanthin has reportedly had anti-inflammatory effects—it can significantly lower the concentration of biomarkers of systemic inflammation. It has also relieved many chronic inflammatory conditions like Crohn’s disease and ulcer disease

VISION AND EYE

Astaxanthin has numerous benefits for vision. It can improve visual sharpness, relieve eye fatigue and mitigate AMD (age-related macular degeneration). It can also reduce the risk for nuclear cataracts and AMD.

IMMUNE SYSTEM BENEFITS

Immune system cells are very sensitive to damage from free radicals. Astaxanthin offers great protection against free radical damage and helps preserve your immune system. It has greater immune-modulating capacity than b-carotene and canthaxanthin do. Astaxanthin has significantly improved immune function in both animals and humans.

[CLICK FOR MORE HEALTH BENEFITS](link to http://www.iconthin.com/astaxanthin-health-benefits)

HOW DOES ASTAXANTHIN WORK?

Astaxanthin (3,3’-dihydroxy-beta,beta-carotene-4,4’-dione) belongs to the xanthophylls subclass of carotenoids. The astaxanthin molecule has an extended shape with a polar structure at both ends and a nonpolar zone in the middle. The two polar structures are ionone rings, which can quench free radicals and other oxidants. It works best in water but can possibly work without it.

The astaxanthin molecule’s polar-nonpolar-polar layout also allows it to take a transmembrane orientation, which makes it fit precisely into the cell membrane. Its nonpolar middle segment is a series of carbon-carbon double bonds, which alternate with carbon-carbon single bonds (this is called “conjugated”). These conjugated double bonds give the molecule an extra antioxidant dimension, allowing it to remove high-energy electrons from free radicals and “delocalize” their electric energy. Basically, it’s like a molecular lightning rod.

SYNTHETIC VS. NATURAL ASTAXANTHIN

Almost all commercially available natural astaxanthin comes in the all-trans geometric form 3S,3S’ Astaxanthin (as it occurs in the microalgae *H. pluvialis*). Synthetic astaxanthin, on the other hand, is not certified as a dietary supplement due to different chemical compositions and safety concerns.

**HEALTH BENEFITS**

1. ANTIOXIDANT EFFECTS

The body produces free radicals and highly reactive forms of oxygen during normal metabolism. They can also be caused by physiological stress, air pollution, tobacco smoke and exposure to chemicals or UV light.

Free radicals can damage DNA, proteins and lipid membranes. Oxidative damage has been linked to aging, atherogenesis, ischemia-reperfusion injury, infant retinopathy, age-related macular degeneration (AMD) and carcinogenesis.

Astaxanthin is one of the strongest known antioxidants. Its unique structure allows it to span biological membranes and reduce and stabilize free radicals. Several experimental studies have confirmed astaxanthin’s capacity to neutralize free radical and other oxidant activity both in the nonpolar (“hydrophobic”) zones of phospholipid aggregates and along their polar (“hydrophilic”) boundary zones.

2. ANTI-AGING EFFECTS

The deterioration of cells from aging is caused largely by cumulative oxidative damage to mitochondria. Astaxanthin reduces the production of oxygen radicals, which protects the mitochondria from damage. Not only can astaxanthin help in the fight against aging, it can also increase activity in cells by boosting oxygen consumption without generating reactive oxygen species.

3. VISION AND EYE HEALTH

Research has shown that Astaxanthin improves visual sharpness, relieves eye fatigue and mitigates AMD. It also protects the eyes from UV light and reduces the risk of AMD and cataracts.

4. ANTI-INFLAMMATORY EFFECTS

Chronic inflammation lies at the heart of most degenerative conditions and lifestyle-related illnesses. Astaxanthin can dramatically lower the concentration of systemic inflammation biomarkers. It can also relieve numerous chronic inflammatory conditions such as ulcer disease and Crohn’s disease.

5. IMMUNE SYSTEM BENEFITS

Because of their high percentage of polyunsaturated fatty acids, immune cells are particularly sensitive to oxidative stress. Astaxanthin protects these cells from free radical damage and helps preserve the immune system. Its immunomodulating capacity surpasses that of B-carotene and canthaxanthin. Astanxanthin has improved immune function in both humans and animals.

6. CARDIOVASCULAR BENEFITS

High blood levels of low-density lipoprotein (LDL)-cholesterol (i.e. the “bad” cholesterol) are associated with an increased risk of atherosclerosis. On the other hand, increased high-density lipoprotein (HDL) blood levels indicate protection against atherosclerosis.

Research on human subjects has shown that astaxanthin keeps LDL-cholesterol levels from rising. Not only that, it has increased blood levels of HDL in an animal model study. This indicates that astaxanthin can benefit cardiovascular health. In addition to this, it reduces the risk of damage to red blood cells (RBCs) from oxidative stress, preserving their ability to carry oxygen. Astaxanthin has also improved the blood flow capacity of healthy men and could potentially improve microcirculation.

7. MEMORY AND BRAIN FUNCTIONS

Oxidative stress can lead to major neurodegenerative diseases (Alzheimer’s, Huntington’s, Parkinson’s, ALS). Astaxanthin and its antioxidant benefits can cross the blood-brain barrier in mammals and improve reaction time, attention, and working memory.

8. MUSCLE PERFORMANCE AND ENDURANCE

Astaxanthin can significantly lower serum lactic acid concentration in adults and improve muscle strength and endurance. It can relieve muscle fatigue, which gives it potential sports performance benefits. Astaxanthin has been shown to improve speed and endurance in athletes.

9. MALE FERTILITY AND REPRODUCTION BENEFITS

Astaxanthin can improve semen quality, pregnancy rate and sperm velocity. At the same time, it can reduce idiopathic infertility and semen oxygen radical generation.

10. SAFETY

Numerous human clinical trials have demonstrated the safety of Astaxanthin. Animal experiments with astaxanthin levels exceeding 120 mg/day have not caused any apparent harm. Astaxanthin’s safety has been confirmed by extensive test, including acute toxicity, mutagenicity, teratogenitiy, embryotoxicity and reproductive toxicity.

**Page 5 – Raw Material**

**HAEMATOCOCCUS PLUVIALIS: ORGANIC MATERIAL FROM A PRISTINE HIGHLAND**

WORLD-CLASS PRODUCTION FACILITY

Employing a holistic production line and the highest quality standards, Iconthin produces 100% natural astaxanthin from *H. pluvialis*. We cultivate microalgae biomass in closed, tubular photobioreactors with highly purified water and CO2 to guarantee a contamination-free environment. We’re dedicated to producing the world’s highest quality astaxanthin for human consumption through cutting-edge technologies and extensive experience with microalgae products.

**World’s Highest Quality Astaxanthin Producer**

Our world-class 88,000 m² astaxanthin facility is located in a pristine mountainous area. It’s surrounded by lots of fresh air, clean water and sunshine.

88000 m microalgae cultivation facility

10+ tons *Haematococcus pluvialis* annual production

Up to 7% astaxanthin concentration in microalgae powder

**A Sunny Paradise for Microalgae**

Microalgae cultivation depends greatly on their growing environment. We’ve chosen a uniquely suitable place for microalgae, which allows us to save energy while making the highest quality of products.

22ᵒC average temperature (best for microalgae cultivation)

1900 m altitude with fresh air and water

2,450 hours annual sunlight with minimum variation

**Page 6 – AstaDaily**

**AstaDaily®**

Astaxanthin Soft Capsules

**All in One, One for All**

**AstaDaily®**

ASTAXANTHIN SOFT CAPSULE

AstaDaily® from Iconthin offers the best professional health solution: Astaxanthin, the world’s strongest natural antioxidant. Our unique all-in-one-formula contains more than 10 different ingredients to maximize its health benefits.

AstaDaily® is a reliable source of natural antioxidant and omega-3 fatty acids for maintaining good health:

* It maintains your eyesight and prevents cataracts and AMD
* It keeps your hair, nails, mucous membranes and skin healthy
* It prevents biotin deficiency
* It maintains and supports cardiovascular health

MEDICINAL INGREDIENTS

Astaxanthin 6 mg

Lutein esters 10 mg

Blueberry 40 mg

Resveratrol 4 mg

Biotin 30 mcg

Vitamin C (Ascorbic Acid) 30 mg

Vitamin E (d-alpha Tocopherol) 10 IU

Zinc (Zinc citrate) 15 mg

Fish Oil (Engraulidae-whole) 333 mg

Docosahexaenoic acie (DHA) 40 mg

Eicosapentaenoic acid (EPA) 60 mg

ANTI-AGING EFFECTS

Astaxanthin not only preserves but increases mitochondrial functions, which helps reduce the effects of aging.

ANTI-INFLAMMATION EFFECTS

Astaxanthin’s anti-inflammatory effects helps reduce your risk of degenerative conditions and lifestyle-related diseases.

VISION AND EYE HEALTH

Astaxanthin relieves eye fatigue, improves visual sharpness and mitigates cataracts and AMD.

IMMUNE SYSTEM BENEFITS

Astaxanthin can enhance in vitro antibody production and partially restore immune responses.

**QUESTIONS**

1. HOW IS ASTADAILY DIFFERENT FROM OTHER ASTAXANTHIN SOFTGELS?

* Our all-in-one formula delivers far greater health benefits than those of other softgels.
* Our holistic production line—which includes strain selection, cell cultivation, astaxanthin extraction and product formulation—guarantees the highest possible quality.
* Our products by the Health Canada and meet the highest standards.

2. WHY ARE THERE SO FEW CLAIMS ABOUT ASTAXANTHIN HEALTH BENEFITS?

Astaxanthin is the most powerful antioxidant known to science. However, it’s very hard to extract it from microalgae, which is why nutraceutical companies don’t widely promote it.

Until recently, only a few companies in the world could industrially produce astaxanthin form microalgae. Iconthin’s cutting-edge technologies and research have made us one of the best.

3. WHO SHOULD TAKE ASTADAILY?

People of all ages need antioxidants, but only a lucky few can get all the necessary antioxidants in their regular diet. Anyone can take AstaDaily®, but there’s no data available yet on the suitability of astaxanthin for people under the age of 20.

4. WHAT’S THE BEST WAY TO TAKE ASTAXANTHIN?

You should take astaxanthin with food that has at least some fat content. The fat enhances the bioavailability of the nutrient. Good examples include whole milk products, boiled eggs, meat, nuts, seeds and chocolate.

5. WHY DOES THE ASTADAILY CAPSULE CONTAIN OIL?

Like beta-carotene and other carotenoids, astaxanthin is fat soluble. As we mentioned above, you can consume it better with fat.

6. CAN YOU BE ALLERGIC TO ASTAXANTHIN?

To date, there have been no reports of people having allergic reactions to astaxanthin.

7. CAN I TAKE ASTAXANTHIN WHILE I’M PREGNANT OR BREASTFEEDING?

Numerous human clinical trials have demonstrated the safety of Astaxanthin. However, we don’t recommend taking it during such sensitive periods.

8. HOW DOES ASTAXANTHIN INTERACT WITH OTHER MEDICATIONS?

Astaxanthin can lower blood sugar and pressure. If you’re currently taking medications, please consult your doctor before taking astaxanthin.