



# The Nutrients of FuCoyDon

## Eight Essential Saccharides for Cellular Communication\*

**Research shows these 8 work in the body in the following ways:**

\*The typical diet yields only galactose and glucose.

### **MANNOSE**

- \* Prevents bacterial, viral, parasitic and fungal infections
- \* Eases inflammation in rheumatoid arthritis
- \* Lupus patients are deficient in this saccharide
- \* Lowers blood sugar and triglyceride levels in diabetic patients

### **FUCOSE (the most effective, diverse and powerful cell communicator through glycoproteins and glycolipids)**

- \* Increases growth factors IGF-1 & 2 identical to those found abundant in breast milk
- \* Influences brain development
- \* Induces production of immune factors interferon and interleukin in immunocytes
- \* Regulates immunomodulating activity
- \* Activates stem cells
- \* Creating hormonal anti-aging longevity factors
- \* Improves brain's ability to create long-term memories
- \* Inhibits tumor growth through apoptosis
- \* Metabolism of this saccharide is abnormal in cystic fibrosis, diabetes, and cancer and during episodes of shingles which is caused by the herpes virus
- \* Active against other herpes viruses, including herpes I and cytomegalovirus
- \* Guards against respiratory infections
- \* Inhibits allergic reactions by suppressing IgE
- \* Increases growth factors for muscle rebuilding
- \* Stimulates bone growth and repair
- \* Creates growth factors for skin, hair, lining of internal organs
- \* Acts directly with anti-inflammatory inhibitors
- \* Re-pigments graying hair
- \* Potent energy metabolism increase
- \* Natural high ORAC value protects eyes and major organs

### **GALACTOSE**

- \* Enhances wound healing
- \* Increases calcium absorption
- \* Triggers long-term memory formation

## **GLUCOSE**

- \* Potent fast-energy source
- \* Enhances memory
- \* Stimulates calcium absorption
- \* Too much or too little can be problematic
- \* Elderly Alzheimer's patients register much lower levels of this saccharide than those with organic brain disease from stroke or other vascular diseases
- \* Glucose metabolism disturbed in depression, manic-depression, anorexia and bulimia

## **N-ACETYL GALACTOSAMINE**

- \* Heart disease patients have lower-than-normal levels of this saccharide
- \* Inhibits spread of tumor
- \* Immune modulator with antitumor properties and activity against HIV

## **N-ACETYL GLUCOSAMINE**

- \* Vital to learning
- \* Glucosamine, a metabolic product of this saccharide
- \* Helps repair cartilage
- \* Decreases pain and inflammation
- \* Increases range of motion
- \* Help repair mucosal-lining defensive barrier implicated in Crohn's disease, ulcerative colitis and interstitial cystitis

## **N-ACETYL NEUROMINIC ACID**

- \* Important for brain development and learning
- \* Abundant in breast milk
- \* Repels bacteria, virus and other pathogens

## **XYLOSE**

- \* Antibacterial and antifungal
- \* May help prevent cancer of the digestive tract

## **Additional Saccharides – Glyconutrients (Essential Sugars)**

Alginic Acid  
L-Fuctose  
Uronic Acid

Block absorption of radioactive material and free radicals.  
Glyconutrients encourages natural killer cells to fight disease.  
These will enable the immune system to fight illness and

Xylose

degenerative disease.

### **Amino Acids (Building Blocks of Proteins)**

Alanine	These are the building blocks of life. They are involved in every metabolic process occurring in the body such as brain activity, hormone secretion and enzyme manufacture. Produces PYY hormone which is an appetite suppressant. Sends signals to the neurotransmitters that you are not hungry.
Arginine	
Asparagine	
Aspartic Acid	
Cysteine	
Glutamic Acid	
Glutamine	
Glycine	
Histidine	
Isoleucine	
Leucine	
Lysine	
Methionine	
Phenylalanine	
Proline	
Serine	
Threonine	
Tryptophan	
Tyrosine	
Valine	

### **Sterols**

24-Methylene-Cholesterol	Form part of the cellular membrane. These are non-Cholesterol. Increases anti-oxidant enzymes in the body.
Fuco-sterol	

### **Mucilage**

Chlorophyll	Laminarin, Anticlotting and Anticancer compound
	Satisfy hunger, strengthen hair, skin, nails. Nourishes red blood cells.

### **Minerals**

Boron	Works with other nutrients for optimum function
Calcium	Strong teeth & bones, muscle & nerve function
Organic Chlorides	Essential for stomach acid production
Chromium	Cell nourishment and energy
Copper	Essential for all life
Iodine	Optimal thyroid health and metabolism
Magnesium	Fights depression

Phosphorus	Bone and tooth health
Potassium	Essential for nerve and heart function
Selenium	Protects against cancer, thyroid function
Sodium	Essential for nerve function
Zinc	Optimal thyroid health, wound healing

## **Vitamins**

A	Vision, cell division, reproduction, immunity
B1 (Thiamine)	Regulates mood
B2 (Riboflavin)	Regulates mood
B3 (Niacin)	Nerves, skin, digestive system
B5 (Pantothenic Acid)	Anti-stress and fat metabolism
B6	Needed for enzymes and protein metabolism
B9 (Folic Acid)	Used to make new cells
B12	Regulates mood
Beta Carotene	Cancer prevention and bone health
C	Wound healing, Limu has more than oranges
D	Maintains normal calcium levels in the blood
E	Anti-oxidant, anti-coagulant, cell development
Lecithin	Breaks down fatty deposits under the skin
Biotin	Cell growth, fat metabolism

## **Essential Fatty Acids**

Omega 3	Good fat, prevents cardiovascular disease, reduces inflammation
Omega 6	Works with omega 3 for optimal health
Laminarin	Anti-clotting and anti-cancer compound
Polyphenols	Anti-oxidants, prevents heavy metal buildup
Fiber	Aids digestion, promotes feeling of fullness

## **FUCOIDAN**

- To view over 1000 independent scientific studies, visit the National Institute Library of Medicine at [www.pubmed.gov](http://www.pubmed.gov) - Search for: Fucoidan
- If the language in the studies is difficult to understand, Breakthroughs in Health magazines and Rita Elkin's book are excellent resources.
- Also known as Fucans and Fucoidans
- A large sugar molecule called a polysaccharide, found in the cell wall of the limu moui plant. When bonded with sulphate groups, becomes more beneficial to health and immunity.
- Fucoidan is a cell signaler.
- It stimulates stem cell growth.
- It is anti Cancer, anti viral, anti bacterial, and a massive anti-inflammatory property.

*Scientists are excited about its potential use against:*

- Cancer Blood flow to the cancerous cells is blocked thereby inhibiting cell growth.
- Promotes apoptosis, or cell death, of cancer cells.
- Enhances the effectiveness of natural killer cells so that our immune system can detect and destroy cancer cells.
- Stops cell division of the cancer cells.
- Heart Disease - Cellular Inflammation is a key indicator of heart disease, Fucoidan reduces Inflammation (Cellular and in the Joints) in the body.
- Inhibits the activation of smooth muscle cells, which has a role in plaque formation in blood vessels.
- Acts as an anti-coagulant, preventing stroke and thrombosis.
- Lowers blood cholesterol, lowering the risk of clogged vessels.
- Controls blood pressure.
- Anti-viral & antibacterial Blocks the adhesion of the bacteria that causes ulcers.
- Boosts the immune system by 400% in the first week to fight viruses and bacteria.
- Diabetes - Stabilizes blood sugar levels and prevents excessive insulin responses.
- Alzheimer's - Blocks toxicity caused by amyloid plaque formation in the brain.
- Allergies - Suppresses the production of Immunoglobulin E which causes allergic reactions.
- Increases T helper cells to fight allergic inflammation
- Skin problems - Stimulates skin cell replacement by increasing the body's production of Integrin, collagen, and elastin builders.
- Bone and Joint problems - Reduces inflammation seen in arthritis.
- Promotes production of fibronectin and synovial fluid which keeps joints lubricated and healthy
- Rebuilds bone marrow tissue.
- JUST TO NAME A FEW!!!

### ***Fucoidan and Human Breast Milk?***

A Japanese doctor concluded that Fucoidan is similar to human breast milk in structure and function.

It is a complex sugar molecule, just like that present in breast milk and gives our bodies immunity against viruses and bacteria, much the same way that breast milk does for nursing infants. An American study compared human milk molecules (Oligosaccharides) to those of Fucoidan (low molecular weight carbohydrate). Both were found to mature the immune system and prevent allergies. These findings have positive implications for those women who are unable or choose not to nurse or in older children and in adults.

Sisel's FuCoyDon has 20 international and national patents pending. The following are three of the 20:

1. In nature, One out of seven or eight molecules has a Sulfated bond that creates the biological functions that we are after. Sisel has Sulfated all the molecules so we have eight of the eight molecules with the bond which makes our product Intensified or eight times more potent than the competition.
2. Sisel removes all toxins (heavy metals, arsenic) allowing us to concentrate the Fucoidan in Sisel's FuCoyDon product. The government allows only so many ppm (parts per million) of arsenic. The competition gives you between 1.62% -1.84% Fucoidan in their product, whereas Sisel gives you over 1500% more due to no arsenic in the solution.

3. Sisel uses an enzymatic patented process to divide the molecular structure into individual molecules for better absorption.

Furthermore, Sisel's Fucoïdan is from Tonga, which has a greater yield percentage wise (21% yield). Sisel's Fucoïdan also has all three types of Fucoïdan, U, F, and G, whereas the competition has just the U form. The Tongan waters are pristine with no pollutants coming from manufacturing waste being dumped into the sea or Military bases with fuels deposited into the ocean from ships.