



Xtend-Life's Omega 3 Fish Oil Buyers' Guide



This guide will give you information about fish oil that is not usually available to consumers. It contains transparent facts that will help you make a more informed decision when considering which omega-3 fish oil to choose in order to optimize the health of you and family; regardless of which product you are currently using or considering buying.

It will advise you on what to look for in a fish oil and give you a better understanding of the differences.

You will also learn why Xtend-Life's Omega 3 / DHA Fish Oil is 'head and shoulders' above all other fish oils based on key parameters. But first, let us recap on why omega-3 fish oil is so good for you.

HEALTH BENEFITS FROM A SUPERIOR FISH OIL

Most scientists and health professionals agree that omega-3 fish oil contains an array of health benefits pertaining to areas of the body such as your:



“Omega-3 fatty acids benefit heart health. Whether you are in good shape, at risk, or suffering cardiovascular disease”.

(American Heart Association)

- ✓ **Heart**
By helping reduce the risk of arrhythmias and sudden death by a heart attack.
- ✓ **Brain**
Better brain function through more efficient neurotransmitters leading to improved concentration, memory, less likelihood of depression and reduced risk of ADHD in children.
- ✓ **Cholesterol & Triglycerides**
By lowering triglycerides and help balancing your cholesterol.
- ✓ **Joints and Arthritis**
Better joint function from reduced inflammation and a reduction in pain.
- ✓ **Skin and Beauty**
Improves the health and appearance of your skin, helps keep nails strong, as well as your hair healthy and shiny.

✓ **Immune system and cancer**

A stronger immune system, proven to be beneficial for the body's immune function, lowered risk of breast and prostate cancer.

✓ **Vision**

Improved focus, colour, perception and clarity of vision.

✓ **Digestive system**

By improving intestinal health and reducing inflammation assisting those with IBS or Crohn's Disease.

✓ **Allergies**

Omega-3 fatty acid intake by mothers during pregnancy may protect babies against the development of allergies. It may also help people with existing allergies.

✓ **Diabetes**

Fish oil enhances insulin secretion from beta cells in the pancreas, regulating blood sugar levels. DHA plays a protective role in diabetic neuropathy in all forms of diabetes.

For more information and supporting studies on these benefits please visit

<http://www.xtend-life.com/product/Omega 3 DHA Fish Oil/Benefits and Clinical Studies.aspx>

Xtend-Life – pure and natural from New Zealand



What is it about fish oil that gives rise to these health benefits?



Fish oil is packed with a variety of beneficial nutrients including omega-3 EFAs (essential fatty acids) ranging in complexity and functional properties for key parts of the body.

The body cannot readily produce these omega-3 EFAs on its own. They need to be introduced to the body through food and dietary supplements known to contain high levels of omega-3. We will be discussing these omega-3 EFAs and their key roles in more detail later on in this document. Xtend-Life's Omega 3 / DHA Fish Oil is arguably the most effective and most natural fish oil on the planet. It is also one of the purest and freshest products that the fish oil market has ever seen.

Xtend-Life Natural Products, a family-owned, integrated manufacturer and distributor of natural supplements and skin care products has been constantly raising the bar on standards pertaining to purity, freshness and the anti-inflammatory properties of omega-3 fish oils. For nearly 10 years, Xtend-Life has cemented itself as the preferred brand in the natural supplement industry.



The Xtend-Life Omega 3 / DHA Fish Oil is a product that is fast becoming a trusted health supplement among thousands of people who share our passion for health improvement and the many benefits associated with the daily intake of pure natural fish oil.

The following sections highlight the main reasons why you should choose Xtend-Life's Omega 3 / DHA Fish Oil as your preferred fish oil supplement. We give you all the transparency and facts that you need in order to establish your trust in not only our fish oil, but also our policy that each one of our products should be as natural as nature itself.

WHY IS FISH OIL SO IMPORTANT?



Every effect has a cause. One thing leads to another – it's a fact. In terms of aging and deteriorating health conditions, your body's main culprit is almost always inflammation – which fish oil helps fight.

What makes inflammation so deadly is that it sneaks up on you and over time, the cumulative effect is a chain reaction of various health conditions ranging from arthritis and chronic pain to more serious issues such as atherosclerosis, aneurisms, strokes, brain disorders and ultimately, death.

The key is to accept that everyone has a certain amount of inflammation in the body, but often with no symptoms. More often than not it is the underlying cause behind sudden unexpected fatal heart attacks.

Fish oil fights inflammation

Most scientists and health professionals believe that it is the anti-inflammatory properties of fish oil that enable it to provide so many health benefits particularly in areas of the: heart, brain, joints, skin, immune system, vision and, digestion.

However, like any nutritional product on the market today there are good and bad ones. Fish oil is no exception. With a bad one you may be unwittingly introducing substances into your body that you do not want, for example: mercury, PCBs or even increasing your load of free radicals. You may also only be getting minimal anti-inflammatory benefits - or even none at all.

You owe it to yourself to use only the purest, and thus the safest omega-3 fish oil available, plus it also has to be the **most effective** in order for you to receive the benefits above. If you and your family want the best product possible there are certain guidelines that you need to follow.

The Guidelines

- **Anti-inflammatory properties:** Does your current fish oil have the best possible anti-inflammatory properties?
- **Bio-availability:** It must be in its natural form NOT a synthetic triglyceride which many fish oils are.
- **High content of quality omega-3 and DHA:** Be reasonably high in omega-3 with the dominant essential fatty acid being DHA.
- **Purity:** The fish oil must be strictly tested for any contaminants with supporting evidence that proves the results.
- **Freshness:** This means low oxidation levels; once again with cold, hard evidence to back-up such claims.

Xtend-Life's Omega 3 / DHA Fish Oil complies with all of the above guidelines.

Anti-Inflammatory Properties Second To None - Proven!

The researchers at Xtend-Life have focused their expertise on improving the anti-inflammatory properties of the Omega 3 / DHA Fish Oil with amazing success – as it is a product that is now setting new standards for fish oil products across the world.

The Xtend-Life Omega 3 / DHA Fish Oil stands head and shoulders above all other fish oils. In fact, it is **two and half times better than most fish oils on the market**. In addition to this, we even have the results from a recently completed clinical study to prove it!

These results were established as part of a clinical study carried out in 2009 by Trinity Bioactives, part of the Wellington School of Medicine in New Zealand.

The study tested the inflammation inhibition properties of three fish oils while using aspirin as a dose-related control.

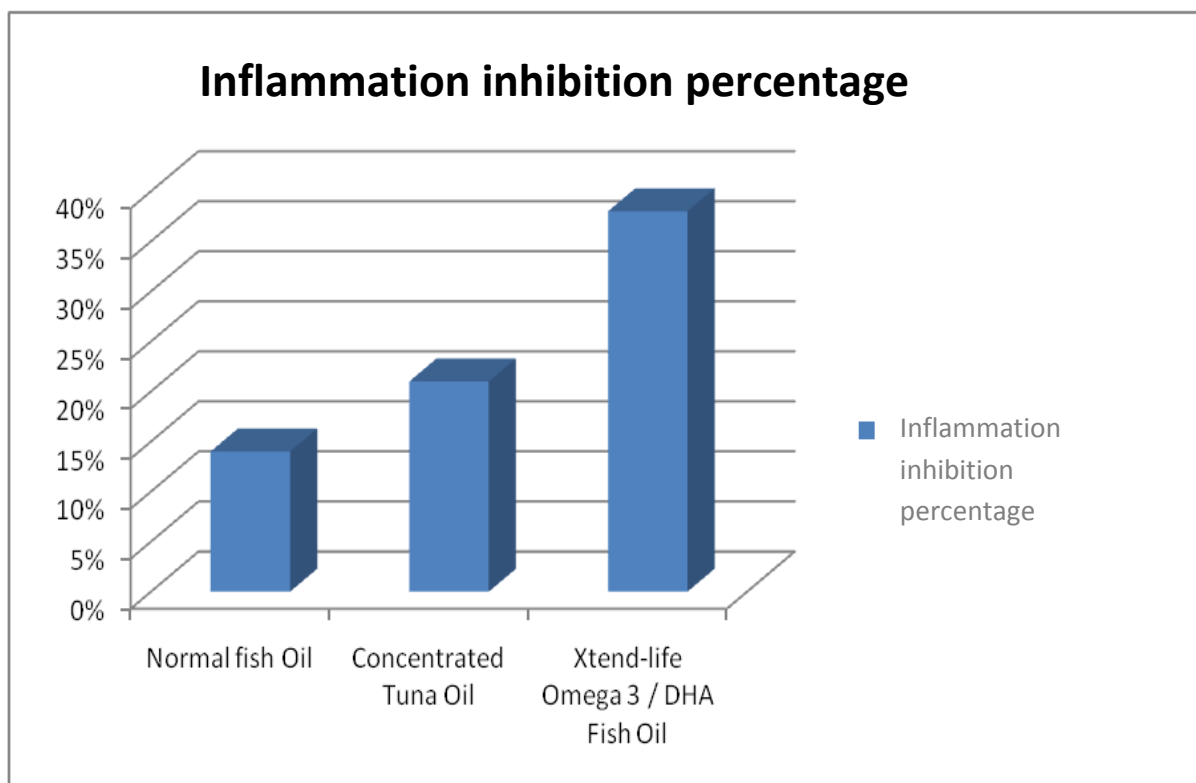
The three fish oils were:

- A 'normal' consumer fish oil 18/12 consisting of 18% EPA and 12% DHA
- A concentrated tuna oil with 85% omega-3 content
- Xtend-Life's Omega 3 / DHA Fish Oil

Resultant Inhibition Properties (as illustrated in the graph below):

- 'Normal' consumer fish oil (consisting of 18% EPA and 12% DHA) – 14%
- Concentrated tuna oil – 20.6%
- Xtend-Life's Omega 3 / DHA Fish Oil – 38.1%

Xtend-Life's Omega 3 DHA Fish Oil had almost **double** anti-inflammatory properties compared with a highly concentrated oil and **two and a half times** more anti-inflammatory properties than a 'normal' fish oil.



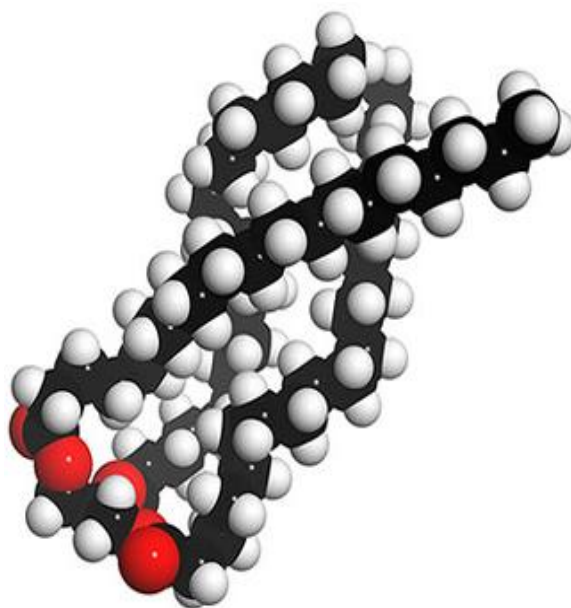
*Aspirin was used as a control and it had an inflammation inhibition percentage of 38.6%. The Xtend-Life Omega 3 / DHA Fish Oil blend was just as good as aspirin with an inflammation inhibition percentage of 38.1%. The concentrated tuna oil and normal fish oil scored 20.6% and 14% respectively. Xtend-Life cannot chart aspirin's percentages as direct comparisons to the fish oils as the drug is dose-related.

BIO-AVAILABILITY

(Ethyl Esters versus Triglyceride forms)

Your digestive system is probably the most efficient production line known to man, however it is as natural as nature itself. It converts food particles into natural molecules that the body recognises and therefore can easily absorb. The food particles are now said to be bio-available to the body.

Bio-availability is influenced by the molecular shape of fatty acids, sugars, proteins, and other nutrients that are easily absorbed by the body. When it comes to fish oil, the benefits associated with it can only start taking effect once the body has absorbed the nutrients contained within it. The more natural the molecular structure the better.



So, when assessing how 'natural' fish oil is, it is important to know about the different forms currently available on the market:

1. **Natural fish oil** comes in a triglyceride form. This is the oil that you get when you 'squeeze' the fish and extract the natural oil from it. The drawback from this particular form of fish oil is that it usually has low overall omega-3 content because it's not concentrated and generally has high levels of contaminants such as heavy metals, PCBs, dioxins etc.
2. **Ethyl ester oil** occurs when you take natural triglyceride oil and concentrate it whilst molecularly distilling the oil to eliminate impurities. The concentration process cannot take place until the natural triglycerides are converted to an ester form. The ester form is still theoretically in a natural state because it is the result of a process that naturally occurs in the body in order for your digestive system to absorb natural triglycerides.
3. **Synthetic triglyceride oil** is another form of fish oil that is very common and marketed as 'natural' when in fact it isn't. It is a triglyceride, but not a

natural one. It is produced after concentration. As mentioned above, the natural triglycerides are converted to ethyl esters for concentration. This is perfectly fine however; but some manufacturers then re-convert the esters back into triglycerides – a synthetic form which occurs as a result of this re-conversion process.

The original position of the triglyceride's carbon bonds change and the molecule's overall structure is altered. Part of it becomes foreign to what the body is used to - negatively impacting the bio-availability of the fish oil. Why do they do it? Because they can state that it is a triglyceride form and infers to the customer that it is natural – when in actual fact, it's not.



Xtend-Life's Omega 3 / DHA Fish Oil is the perfect blend of 50% exceptionally pure, natural hoki fish triglyceride oil and 50% highly purified molecularly distilled ethyl ester tuna oil.

XTEND-LIFE HAS THE 'X-FACTOR'

Xtend-Life's natural hoki fish oil seems to have a synergistic effect when combined with the highly purified tuna oil that creates this remarkable increase in anti-inflammatory effects. We call it the 'x-factor'.

Even though the total amount of omega-3 in our blend is lower than the concentrate (because we combine it with the natural non-concentrated hoki oil), the anti-inflammatory properties have actually doubled! For now, the 'x-factor' has to remain one of the mysteries of nature. We say 'nature' because it is something in the natural component of the hoki oil that is giving these benefits.

This is one of those rare situations in which we are able to get the best of both worlds – oil that is 100% natural and 100% safe with a subtle touch of mystery from Mother Nature herself.



PRISTINE AND PURE

Unbeaten Purity - Proven

Purity is measured by the amount of heavy metals, PCBs and dioxins present. One simply has to look at the locations where most fish oils come from to get a clear idea of why so many omega-3 fish oil products are tainted with toxins. They are often in the middle of major shipping routes and surrounded by large, heavily populated land masses, where pollution and waste is the inevitable outcome. Other fish oil areas are shared by deep sea oil rigs, hardly the sort of purity perceptions you would want as a customer.

The Southern Ocean is known for its rugged beauty, geographic isolation and unspoiled waters. Located in the 'roaring 40s' and 'raging 50s', this body of water off the coast of New Zealand is one of the most remote and purest oceans on earth with nothing but open water separating it from South America (over 9 000kms to the east) and Africa (10 000kms to the west) - ensuring that it experiences minimal 'ship traffic'. The entire population of New Zealand is also only a fraction of one major US city – have a look on your atlas to fully appreciate how remote New Zealand really is to the rest of the world.



When measuring the purity of fish oil products, four international standards are generally used. Interestingly enough, we at Xtend-Life have set our own specification standards because we don't think that the normal standards are good enough as they have been set with the fish oil industry in mind rather than the wellbeing of the consumer.

You can view the tough standards we set by going to our website at www.xtend-life.com and going to Omega 3 / DHA Fish Oil and clicking on the purity tab.

There you will find that:

- Our levels for mercury are 10 times lower than the standards set by international organisations.
- Our PCB level is set at 18 times lower than the US CRN. In Europe they don't even set a minimum level.
- The dioxin levels are also set at a level four times lower.



Below is a table which sets out the various international standards for purity

Component	Xtend-Life Specifications	International Fish Oil Standards (IFOS)	Council for Responsible Nutrition (CRN)	European Pharmacopoeia	Norwegian Medicinal Standard
Arsenic (ppb)	<50	100	100	100	100
Cadmium (ppb)	<10	100	100	100	100
Mercury (ppb)	<10	100	100	100	100
Lead (ppb)	<50	100	100	100	100
Total PCBs (ppb)	<5	45	90	N/A	N/A
Total Dioxins & Furans (ppt)	<0.5	1*	2	2	2

Notes:

*N/A means 'Not Available'

* < means less than the indicated Xtend-Life Specifications which are the minimal levels of detection for standard testing equipment.

* ppb means part per billion / ppt means part per trillion

* IFOS although included in the table is not a recognised entity. It is a private organisation and it is claimed by some 'observers' that it was established for the benefit of a few marketers of fish oil.

If you look at the column containing the Xtend-Life Specifications, it's important to remember that these figures are the minimum levels of detection for standard testing equipment.

Even at these low levels none of these contaminants are detected in our oil (hence the '<' symbol) – and we can prove it! Have a look at our current Certificate of Analysis which is on our website. We have the independent government-approved laboratory data on file.

WHAT MAKES XTEND-LIFE'S OMEGA 3 / DHA FISH OIL SO FRESH?

Exceptional Freshness Guaranteed



Professional product management and control is the answer. We handle our raw ingredients with the utmost care – from the boat to the bottle – ensuring that freshness is maintained throughout the manufacturing process. This is particularly crucial for our hoki oil and we are probably the only company in this industry that has full traceability for our hoki; which is critical as we use it in its natural form.

Unlike most fish which are caught by large factory ships and frozen at sea, our hoki fish are caught by smaller vessels fishing within seven hours travelling from the hoki fishing grounds. The catch is able to be kept fresh in ice and processed immediately upon arrival back on shore. Our hoki are only caught in the height of the season and there is no by-catch mixed into the oil.



At Xtend-Life, we endeavour to give you the freshest products possible. We are very proud of our 'fresh, pure and natural' policy and strive to maintain our exceptionally high standards. The fish oil remains fresh in the capsule because of a natural rosemary extract which is a very powerful anti-oxidant combined with a broad spectrum natural vitamin E oil.

Put us to the smell test

We are so confident that our fish oil is the freshest in the world, we encourage you to cut open a soft gel of Omega 3 / DHA Fish Oil and smell it. You should only smell a faint oceanic aroma – if anything at all. We don't add masking flavours or fragrances unlike other fish oil companies.

No rancidity = no repeating

Our Omega 3 / DHA Fish Oil is so fresh that we guarantee no repeating or 'burping'. If you don't have any digestive ailments which could compromise your system, we can definitely assure you that no 'fishy' repeats will occur. If you have experienced this rather unpleasant case of 'burping' due to a rancid product, we will be glad to introduce you to ours – the freshest fish oil in the world. We will even give you a refund on the return of the partially opened bottle should you not be entirely convinced.

How to determine the freshness of your fish oil

Freshness is measured by oxidation. Always look out for the total oxidation (TOTOX) value on the supplier's COA – it is made up of two components:

- Anisidine value
- Peroxide value

Some manufacturers in Europe do not publish their anisidine values and although the peroxide values may be reasonable, the overall TOTOX value can be very high.

Interestingly, some of them do their testing just for the peroxide value (conveniently after encapsulation and after an elapsed period of time). The peroxide values in a soft gel actually go down over time but the anisidine values go up, therefore pushing the TOTOX value up as well.

It is a trick of the trade that some manufacturers use. Although the 'N/A' indication on the COA may mean 'Not Available', it should really mean 'Not Acceptable' – don't be fooled.

Freshness facts

- Our Omega 3 / DHA Fish Oil has oxidation specifications that are significantly lower than any international standard (the lower the better). However, the actual results of the oil are always better than the specification. Please refer to the COA for the actual values.

- When compared to the oxidation specifications set by a US-based monograph, **our standards are nearly double the freshness levels – from the peroxide to TOTOX values, including the all important anisidine value.**
- Our peroxide specifications are **four times better** than those set by the European Pharmacopoeia and Norwegian Medicinal Standard, while our anisidine and TOTOX values cannot even be compared to these organisations as they all list their respective values as N/A – and we all know what that means.

As an extra measure to ensure that freshness is maintained across the spectrum, each and every batch of the Omega 3 / DHA Fish Oil is comprehensively tested by independent government certified laboratories. The laboratory used depends on the test being carried out. Xtend-Life uses two labs, namely: [Cawthron Laboratories](#) and [AsureQuality](#).

The following is a table that shows comparative oxidation specifications between acceptable international standards and Xtend-Life standards. All of the indicated values are absolute minimum standards.

Oxidation Specifications

Component	Xtend-Life Specifications	International Fish Oil Standards (IFOS)	Council for Responsible Nutrition (CRN)	European Pharmacopoeia	Norwegian Medicinal Standard
Peroxide Value (mEq/kg)	2.5	3.75	5	10	10
Anisidine Value	12	15	20	N/A	N/A
Total Oxidation (TOTOX)	17	19.5	26	N/A	N/A

Notes:

>> N/A means 'Not Available'

>> IFOS although included in the table is not a recognised entity. It is a private organisation and it is claimed by some 'observers' that it was established for the benefit of a few marketers of fish oil

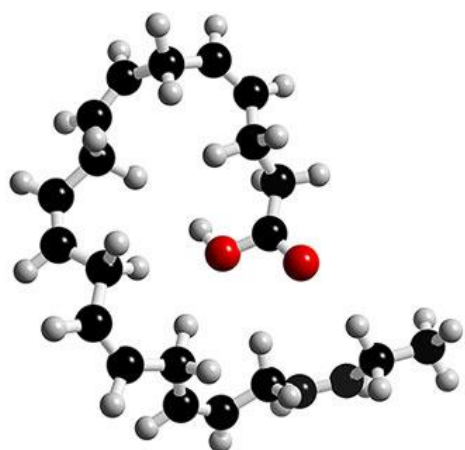
SERIOUS ABOUT SUSTAINABILITY

Our hoki fishery in New Zealand is controlled by the New Zealand government and is considered to be the best managed and sustainable fish resource in the world. The total allowable catch set for New Zealand is constantly reviewed by scientists at the various New Zealand fisheries every year. The hoki fishery is in such good shape that the government is considering raising the quota levels for the 2009 season.

The raw tuna oil which we use in our Omega 3 / DHA Fish Oil is sourced only from trusted suppliers. The tuna oil does not have any impact on tuna stocks as it is a by-product of the tuna caught for food. We put it through a proprietary purification process in addition to the molecular distillation and concentration system. This results in levels of purity not achieved by other 'normal' purification processes.



MORE ABOUT DHA AND EPA



DHA (Docosahexaenoic acid) is without a doubt the most complex and beneficial fatty acid (that has been isolated and studied) as far as the human body is concerned (more so than EPA) as it is a 22 carbon chain bond with six (cis) double bonds. DHA is essential for the growth and functional development of the brain in infants. It is also required for maintenance of normal brain function in adults.

The inclusion of plentiful DHA in the diet improves learning ability, whereas deficiencies of DHA are associated with deficits in learning. DHA is taken up by the brain more readily than any other fatty acid.

Other omega-3 fatty acids follow DHA in order of complexity, number of carbon chain bonds and overall efficacy for your body. They are:

- EPA (Eicosapentaenoic acid) has 20 carbon bonds. It is difficult for the body to convert EPA to DHA because it has to add two carbon bonds. On the other hand the body only has to 'drop off' two carbon bonds from DHA to create EPA.
- ALA (alpha linolenic acid) - commonly found in flaxseed oil, this omega-3 fatty acid only has 18 carbon bonds, making it almost impossible for the body to manufacture DHA from.
- A special mention must be made with regards to another omega-3 fatty acid – DPA (Docosapentaenoic acid). It acts as the 'sidekick' for both DHA and EPA. There has not been a lot of research carried out on DPA; however, it does appear that there are some real benefits associated with DPA because – like DHA - it has 22 carbon bonds.

WHAT MAKES XTEND-LIFE'S OMEGA 3 / DHA FISH OIL SO UNIQUE?

There are two important reasons why it cannot be copied or duplicated by others:

1. Xtend-Life has an agreement with New Zealand's largest fishing company to acquire all the oil extracted from freshly caught hoki. Other hoki oil from other sources has been frozen and is handled differently with different levels of purity and freshness.
2. The tuna oil we use goes through a proprietary purification process prior to molecular distillation and concentration. This process removes impurities such as PCBs and dioxins to a level not possible by molecular distillation alone.

There are other points of difference as well; all of which - when combined with the above - make Xtend-Life's Omega 3 / DHA Fish Oil a product that cannot be matched or bettered.

A WORD FROM WARREN, CHAIRMAN OF XTEND-LIFE



"The search for a better and purer natural fish oil has been an ongoing 'labour of love' of mine for almost nine years. My family, our staff, friends and myself all rely on our Omega 3 / DHA Fish Oil to contribute to our overall general health. We make NO compromises. If you take it every day like we do, your body will thank you for it and you will feel the benefits".

To keep up to date with general health developments you may wish to subscribe to the Xtend-Life blog at <http://www.xtend-life.com/Blog.aspx>

In good health,

WM Matthews

Warren Matthews



Xtend-Life Natural Products (Intl) Ltd.

4 Settlers Crescent, Ferrymead, Christchurch, 8023, New Zealand.

New Zealand Ph: (64) 3 384 2116 / USA and Canada Ph: Toll Free 1 800 224 4808

www.xtend-life.com

Asian regional office - Xtend-Life Natural Products (Thailand) Ltd.

2nd Floor, M Thai Tower, 87 Wireless Road, Kwaeng Lumpini, Pathumwan, Bangkok 10330

Ph: 02 685 3877 Fax: 02 685 3889

www.xtend-life.co.th

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and longevity*