
## Q. WHAT MAKES THE EFAMOL BRAND UNIQUE FROM COMPETITOR BRANDS?

**A.**

- All the Efamol products are based on sound scientific rationale.
- The quantity and type of ingredients that are included in each formulation are there for a reason – because they work.
- The Efamol company consists of fatty acid experts and specialists, and our product focus is strictly on improving health through fatty acid supplementation.
- Our fatty acid range has more clinical research support than any other.
- There is nearly 30 years of heritage and credibility behind the brand.

## Q. WHY SHOULD WE SELL (RETAILER) OR BUY (CONSUMER) EFAMOL PRODUCTS WHEN THEY COST MORE THAN COMPETITOR BRANDS?

**A.**

- Efamol® EPO is a unique oil extracted from proprietary seed varieties using a specially designed process
- Efamol® EPO has a proven safety and efficacy profile
- Oils otherwise manufactured may differ
  - Composition - Quality
  - Safety - Efficacy
- Most of the Efamol® products include Efamol® EPO
- All Efamol® products are specially formulated to target specific health concerns and are clinically tested to confirm that they work.
- Selling/Buying Efamol® products guarantees success!
- For retailers, a premium selling price means premium cash margin.

## Q. WILL FLAX OIL DO THE SAME THING AS FISH OIL?

**A.** The answer to that question really depends on your health and why you are using the product. If you are perfectly healthy and you just want to make sure you're getting enough essential fatty acids (EFAs) in your diet, then flax oil is a good choice. It makes a good salad oil and can form a foundation to obtain EFAs in a healthy diet. It is a rich source of the two EFAs, LA & ALA.


A healthy body is able to use the EFAs like those found in flax seed oil to make long chain polyunsaturated fatty acids (LC-PUFAs),although this process is very inefficient. These LC-PUFAs are responsible for reducing the symptoms of fatty acid deficiency. The EFAs do not provide this affect themselves. But in an unhealthy body (for example in people with atopic eczema, PMS, arthritis or learning disorders) this conversion process is even further compromised. Therefore, you need to take an awful lot of flax oil to provide only a modest, if any improvement. Just as an example, in a study where breast feeding mothers were given 25 g of Flax oil per day, there was no change in milk DHA content, whereas a few grams of fish oil will produce significant increases in milk DHA.

1. Francois CA et al. Supplementing lactating women with flaxseed oil does not increase DHA in their milk. *Am J Clin Nutr* 2003 Jan;77(1):226-
2. Bowen R and Clandinin M. LIPIDS 2000;35:389-94.

The specific benefits obtained from EPA and DHA supplementation e.g. in the fields of cardiovascular disease, learning and behaviour disorders, inflammation, and maternal/infant nutrition have simply not been demonstrated in trials using flaxseed oil. Results obtained using fish oils or long chain Omega-3 fatty acids should not be extrapolated to flaxseed oil or alpha linolenic acid.

## Q. DOES EPO PROMOTE BREAST CANCER GROWTH?

**A.** Some scientific studies have suggested a link between intake of certain fatty acids and either cancer promotion or cancer inhibition. Most of the evidence comes from either epidemiological data or in vitro studies and the general consensus of opinion is that the actual research findings have been inconclusive in both respects. Some believe that a very high Omega 6 fatty acid intake (specifically linoleic acid)may enhance tumour formation in animals and that diets high in n-3 fatty acids such as EPA and DHA may diminish it. There are however no definitive studies which confirm this link. The most prevalent n-6 fatty acid in the diet is linoleic acid from sunflower, corn, rapeseed and similar vegetable oils.

Efamol EPO, although it contains primarily omega-6 fatty acids, has been extensively tested in formal toxicity tests without any indication that it increases risk of tumor development. In addition, work completed at the Efamol Research Institute in the late 1980s was instrumental in identifying the selective cancer killing effects of GLA, the active ingredient in EPO. This research showed that in cell culture, GLA could kill cancer cells without harming normal cells – a unique and beneficial feature for an anti-cancer agent[1]. Other researchers in subsequent years have shown that GLA sensitises breast cancer cells thereby enhancing effects of chemotherapy drugs including Taxol, Taxotere and Navelbine, and anti-oestrogen drugs such as Tamoxifen and Faslodex[2-6].


1. Begin ME, Ells G, Das UN, Horrobin DF. Differential killing of human carcinoma cells supplemented with n-3 and n-6 polyunsaturated fatty acids. J. Natl Cancer Inst 1986;77:1053-62.
2. Menendez JA et al. Effects of gamma-linolenic acid and oleic acid on paclitaxel cytotoxicity in human breast cancer cell. Eur J Cancer 2001;37:402-13.
3. Menendez JA et al. Synergistic interaction between vinorelbine and gamma-linolenic acid in breast cancer cells. Breast Cancer Res Treat 002:72:203-19.
4. Menendez JA et al. Omega-6 polyunsaturated fatty acid gamma-linolenic acid enhances docetaxel cytotoxicity in human breast carcinoma cells. Oncol Rep 2004:11:1241-52.
5. Menendez JA et al. Omega-6 polyunsaturated fatty acid gamma-linolenic acid is a selective estrogen-rsponse modulator in human breast cancer cels: gamma-linolenic acid antagonizes estrogen receptor-dependent transcriptional activity., transcriptionally represses estrogen receptor expression and synergistically enhances tamoxifen and ICI 182,780 (Faslodex) efficacy in humn breast cancer cels Int J Canc=er 2004;109:949-54.
6. Kenny FS et al. Gamma-linolenic acid with tamoxifen as primary therapy in breast cancer Int J Cancer 2000;85:643-48.

It would be totally wrong to promote EPO or GLA as any form of cancer 'treatment' however these findings certainly indicate no 'adverse' effects or increase in risk.

## Q. DOES EPO CAUSE EPILEPSY?

**A.** Concerns about EPO causing epilepsy arose from trials in patients with schizophrenia who were also taking standard anti-schizophrenic drugs called phenothiazines[1]. Schizophrenics have a higher than normal risk of experiencing epileptic attacks when in the untreated state. Moreover, the phenothiazine drugs are known to precipitate epilepsy. Consequently, schizophrenics taking phenothiazines are much more at risk of epilepsy than are normal individuals.

In two trials treating psychiatric patients with EPO no epileptic attacks occurred.[1,2] In another trial, three epileptic attacked occurred, one while the patient was on placebo and two others while the patient was on EPO.[3] The attack in the placebo treated patient could obviously not be attributed to EPO. The two patients who did have attacks while on EPO were subsequently found to have had epileptic attacks previously, prior to ever being treated with EPO. Almost certainly these attacks were the result of combined use of phenothiazines within schizophrenic's and were unrelated to EPO.supplementation. A review of the available data by a leading Professor of Neurology who is a world authority on drug induced convulsions. concluded: "In assessing all this evidence I find no convincing scientific evidence that consumption of EPO carries with it any clinically significant risk of provoking seizures. In fact, the available evidence is compatible with an anti-epileptic effect of EPO".


Over the years, thousands of patients with various conditions have participated in clinical trials using Efamol EPO and no specific epilepsy adverse event has been attributed to Efamol EPO. So there is no report of an epileptic attack in a non-schizophrenic person that has been attributed to Efamol EPO.

1. Vaddadi KS et al. A double-blind trial of essential fatty acid supplementation in patients with tardive dyskinesia. Psychiatry Res 1989;27:313-323.
2. Soulairac A et al. Schizophrenie at prostaglandines effets therapeutiques de precurseurs de leur synthese sous la forme de l-huile d'onagre (oenothere). Ann Med-Psychol (Paris) 1983;8:883-890.
3. Holman CP et al. A trial of evening primrose oil in the treatment of chronic schizophrenia. J Orthomolec Psychiatry 1983;12:302-304.

## Q. ARE THE FATTY ACIDS IN EFAMOL PRODUCTS 'STANDARDIZED'? HOW DOES EFAMOL ENSURE A CONSTANT CONCENTRATION OF N-3'S IN THEIR FISH OILS?

**A.** Every batch of raw material oil and finished product capsules is tested by gas chromatography to ensure that the relevant fatty acids are present within a certain range. That range is specified in the Product Specification. Only if the oil composition agrees with the specification is it released for sale by our QA Manager.

## Q. WHAT TYPES OF FISH OILS ARE INCLUDED IN EFAMOL PRODUCT FORMULATIONS?

**A.** Tuna oil is included in all Efalex formulations and in Efanatal. Efamarine, Efacal and Efamax contain oil from cold water fish such as sardines and mackerel.

## Q. IS THE PATENT ON RIGEL EVENING PRIMROSE SEED STILL CURRENT? IF SO, FOR HOW MUCH LONGER WILL IT APPLY?

**A.** The Rigel seed 'patent' is actually called a "Plant Variety Right". These run indefinitely so the seed variety will always remain applicable only for use by Efamol.


### Q. DOES THE CHEMICAL FORM (I.E. TRIGLYCERIDE, PHOSPHOLIPIDS, ETHYL ESTER) OF AN OIL DICTATE HOW WELL IT WORKS? SOME COMPETITORS CLAIM FOR EXAMPLE THAT BECAUSE THEIR PRODUCT PROVIDES THE FREE FATTY ACID FORM, IT IS MORE EASILY ABSORBED BY THE BODY, OR THAT PHOSPHOLIPIDS ARE BETTER DIGESTED THAN TRIGLYCERIDES BECAUSE "PHOSPHOLIPIDS DON'T REQUIRE GALL FOR DIGESTION IN THE SAME WAY AS TRIGLYCERIDES DO." ARE EFAMOL FATTY ACIDS PROVIDED IN THE MOST USEABLE FORM?

**A.** There is still much debate about the most useable form of fatty acids and indeed there might be advantages of one over another depending on the uniqueness of both the consumer and the health condition concerned. However, this discussion is largely irrelevant because we have clinical trial data to show that our products work for their intended purpose at the recommended dosages. (Note: Digestion of dietary fat actually begins in the stomach where pancreatic enzymes (lipases) are introduced to break fatty acids off of the glycerol backbone - from both triglyceride and phospholipids molecules. This process occurs before the food is transferred to the small intestine. The gallbladder releases bile salts into the small intestine. These act as detergents to help mix the partially digested fats obtained from the diet with watery components of the diet, making it easier for the fatty acids to be absorbed. So any negative impact on fat digestion as a result of a faulty or absent gall bladder would be relevant to both triglyceride and phospholipid digestion. Therefore, consuming phospholipids rather than triglycerides would be of no advantage to someone with a malfunctioning gallbladder.)

What is important is that supplements are taken with food as the bioavailability of any form is reduced when taken on an empty stomach.

### Q. WHAT TYPE OF GELATINE IS USED IN THE CAPSULES? IF BOVINE, CAN YOU PROVIDE ANY DOCUMENTS WHICH GUARANTEE IT IS FREE OF BOVINE SPONGIFORM ENCEPHALOMYELITIS (BSE) CONTAMINANTS?

**A.** Gelatine used to manufacture Efamol capsules is derived from bovine source and is certified BSE free. Certificates from the encapsulator can be supplied upon request from our Quality Assurance Manager.