

# PlusEPA® secures its position as antidepressant: “Comparison of therapeutic effects of omega-3 fatty acid eicosapentaenoic acid and fluoxetine, separately and in combination, in major depressive disorder.”

Shima Jazayeri\*, Mehdi Tehrani-Doost\*\*, Seyed A Keshavarz\*, Mostafa Hosseini\*\*\*, Abolghassem Djazayeri\*, Homayoun Amini\*\*, Mahmoud Jalali\*, Malcolm Peet\*\*\*\*; (\*) Roozbeh Psychiatry Hospital, (\*\*) Dep. of Nutrition and Biochemistry, (\*\*\*) Dep. of Epidemiology and Biostatistics, Tehran University of Medical Sciences, Iran, (\*\*\*\*) Swallownest Court Hospital, Sheffield, UK.

Published in Australian and New Zealand Journal of Psychiatry 2008 Mar; 42(3):192-8 (<http://dx.doi.org/10.1080/00048670701827275>).

## RESEARCH QUESTIONS

1. Do major depressive patients benefit from EPA monotherapy?
2. If patients with major depression respond to EPA treatment, how does this antidepressant effect compares to that of an antidepressant such as fluoxetine?
3. Does EPA treatment in addition to treatment with an antidepressant (fluoxetine) have an added value compared to a single treatment with the antidepressant?

## MATERIALS AND METHODS

Sixty patients (20-59 years of age) participated in this 8 week balanced randomised, double-blind study. They were diagnosed with moderately severe major depression making the inclusion of a placebo-only group unethical.

The researchers compared the therapeutic effect of EPA (1 g/day) with that of the antidepressant fluoxetine (20 mg/day) on their combination (EPA + fluoxetine). Forty-eight participants were eligible for response analysis (16 in each study group).

A positive response was defined as a  $\geq 50\%$  decrease in the Hamilton Depression Rating Scale (HDRS, 17 items). The response was compared across the three study groups at week 8 by using the ANCOVA analysis of covariance for HDRS.



## CONFOUNDERS

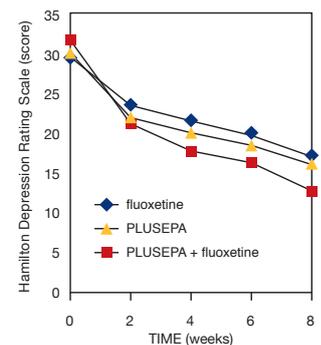
Depressive symptom scores were adjusted for baseline scores, age of onset of the first depressive episode and number of previous depressive episodes.

## ADVERSE EVENTS

The Fisher's exact test showed significant differences among groups in frequency of anxiety and loss of appetite ( $p=0.009$  and  $p=0.002$  respectively). Anxiety was reported by nine patients in the fluoxetine group, one patient in the EPA group and three patients in the combined group. It was limited to the first weeks for all subjects who reported it. Decreased appetite was only reported by six patients in the fluoxetine group.

## RESULTS

- ✓ EPA was equally as effective as fluoxetine in controlling depressive symptoms.
- ✓ The EPA+fluoxetine combination was significantly better than either fluoxetine or EPA alone ( $p = 0,005$  and  $p = 0,009$ , respectively). Treatment was effective from the fourth week onward.
- ✓ Response rates were 50%, 56% and 81% in the fluoxetine, EPA and EPA+fluoxetine groups, respectively



## CONCLUSION

According to what the physician considers most relevant for each individual patient EPA (PLUSEPA®) can be used either as a single intervention or as an adjunct to the usual antidepressants. Because EPA is a dietary supplement PLUSEPA® may be more acceptable to patients than antidepressants.

When explaining why PLUSEPA® provides unprecedented bioavailability and benefit, it is necessary to realize what it is comprised of and how this compares to the typical omega-3 supplements that most consumers are used to purchasing...

## PLUSEPA® from Minami Nutrition is an exceptional omega 3 supplement for mental health that physicians around the world are identifying with as a “first” for the following reasons:

- Highest concentrated omega-3 supplement currently available on the market.
- 90% EPA with NO DHA, nor superfluous unsaturated or saturated fatty acids.
- Unprecedented level of purity that can be proven at [www.neurogenics.com](http://www.neurogenics.com).

### The reality of these product traits is simple:

- Specific dosing and readily identifiable benefit.
- EPA can be metabolized and function in the brain without potential interference from other fatty acids (e.g., GLA, arachidonic acid and DHA).
- Reduced risk of exposing patients to unnecessary and undesirable impurities (e.g., methyl mercury)
- The pure EPA is allowed to fully metabolize and underpin the greatest health outcome possible through omega-3 therapy.

### This benefit is starting to be realized through science:

Two recent clinical trials are showing PLUSEPA®'s efficacy in the treatment of depression (compared with fluoxetine) as well as for ADHD in children age 7-12 with oppositional behavior and/or attention problems. There are further trials under way which highlight the role of a high EPA supplement in the treatment of

neurodegenerative conditions (e.g., Parkinson, Huntington, and Alzheimer diseases) as well as cardio-protection.

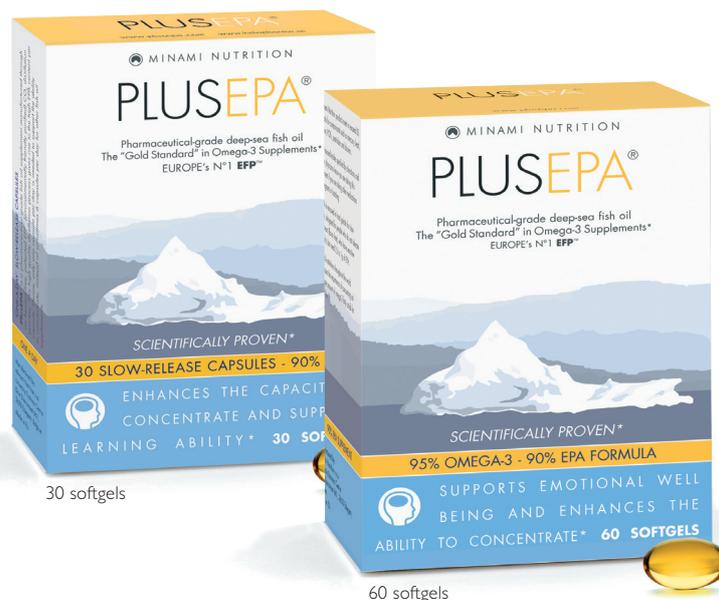
### Minami Nutrition makes PLUSEPA® by the use of a patented extraction process:

- The production plant applies 'Good Manufacturing Practice' (GMP) guidelines and is EMAS certified (a European standard for environmental management).
- The extraction process results in Environmentally Friendly Purification Certification – your assurance of the “gold standard” omega-3 supplement with the smallest environmental footprint.

The absence of flavourings and the gastro-resistant capsule makes PlusEPA suitable for individuals who are allergic to flavours and/or have a sensitive stomach.

## Scientifically proven

- ✓ No fishy aftertaste thanks to the gastroresistent softgels
- ✓ 90% pure EPA per softgel (no DHA, no other fatty acids)
- ✓ 1 softgel per day (500 mg EPA)



- ✓ Environmentally Purified natural Product (EFP® logo)
- ✓ 2 softgels per day (1000 mg EPA)