Note to Distributors Concerning Cochrane Review on Evening Primrose Oil and Atopic Eczema – Bamford et al. 2013

A recent meta-analysis of clinical studies to assess the effects of evening primrose oil (EPO) and borage oil (BO) to treat the symptoms of atopic eczema has reported no significant improvement in global eczema scores as measured by both the participants and their doctors[1]. Published in the Cochrane Library, such meta-analyses are generally considered to produce the most rigorous data since they combine many small studies to achieve the power of a much larger study. However, broad and inaccurate conclusions are often drawn from such studies and reported by the authors owing to the diverse nature of the data included in such analyses, and these incorrect conclusions are further disseminated by the media.

This study reportedly included all randomized, controlled trials with parallel or cross-over design, investigating oral intake of EPO or BO for diagnosed eczema and related synonyms in children and adults published up to August 29, 2012. The primary outcomes of the meta-analysis were:

1. Global Score (degree of improvement in symptoms and signs) as rated by the participant and the doctor
2. Improvement in quality of life

The report stated that the meta-analyses included 27 studies with 1596 participants and measured no significant improvement in Global Score and that it was not possible to measure improvements in the quality of life due to lack of available data. These details were picked up and reported by the media without consideration of the following details:

1. Although the researchers looked at 27 studies only 19 of these were EPO studies, the remaining 8 used BO as the active treatment and these should not be classed as the same.

2. There were only 19 EPO studies considered as part of the literature review, although at least 26 EPO studies were available in the literature up to 2006[2]. Furthermore although there were 19 EPO studies considered, for various reasons only 7 of them were included in the meta-analysis for a total of only 176 subjects, not the 1596 claimed.

2. This study did not look at individual symptoms of eczema but rather only the coarse measure of a 'global score', so a more accurate conclusion would be that from a small and diverse study group of 176 patients using a coarse measure of severity no significant improvement could be detected.

A more insightful report into this subject is the meta-analysis by Morse and Clough[2] which described the results of a meta-analysis of 26 clinical studies comprising 1200 patients and all using EPO as the active ingredient. This analysis did show a significant improvement is specific symptoms of eczema (itch, crusting, oedema and redness) and furthermore showed the effects to be more pronounced in the absence of topical steroid cream usage, the confounding effects of which the authors of the Cochrane review were unable to identify.

Efamol® Evening Primrose Oil achieved licensed approval for treatment of atopic eczema in Canada on April 17, 2009 following a thorough 5 year examination of the evidence by Health Canada's Natural Health Products Directorate (NHPD). The license was issued through the NHPD by the Canadian Minister of Health under the authority of section 7 of the Natural Health Products Regulations and the Food and Drugs Act. The license approved claim that is permissible for use on product packaging and promotional materials is, "For the treatment of dry itchy skin caused by Atopic Eczema (dermatitis)". This claim is exclusive to the Efamol brand and can never be used in association with competitor brand EPOs.

References

1. Bamford JTM, Sujoy R, Musekiwa A, van Gool C, Humphreys R, Ernst E. Oral evening primrose oil and borage oil for eczema. The Cochrane Library April 30, 2013. doi: 10.1002/14651858.CD004416.pub2.
2. Morse NL and Clough PM. A Meta-Analysis of Randomized, Placebo-Controlled Clinical Trials of Efamol® Evening Primrose Oil in Eczema. Where do we go from here in light of more recent discoveries? Current Pharmaceutical Biotechnology 2006:7(6):503-24.