

Health News from 3Care Therapeutics

New study support DHA benefit for eye health

Doses of 0.32 and 0.64 percent DHA led to improvements in eye health of infants, compared to infants fed non-supplemented formula, according to new results published in the prestigious American Journal of Clinical Nutrition.

“The DHA Intake and Measurement of Neural Development (DIAMOND) is the first double-blind, randomized, controlled, parallel-group, prospective, dose-response study of DHA in term infant formula,” wrote the researchers, led by Eileen Birch from the Texas-based Retina Foundation of the Southwest.

Infant formula is a highly emotive area, with watchdogs keeping a close eye on companies' marketing tactics to prevent them from drifting towards taking the position that their products as preferable to breast-feeding. Mother's milk is high in omega-3 fatty acids, particularly DHA.

While it is agreed that breastfeeding is the best way to ensure an infant receives the nutrients it needs in its first months, formulas are indispensable in cases where mothers are unable to feed their children - be it for health or logistical reasons. Health experts agree that effective infant formulas must contain significant levels of omega-3 essential fatty acids.

European food safety authority to expand health statements for DHA

The study follows recent modifications of permissible language backed by the European Food Safety Authority (EFSA) for DHA-related brain and eye health claims for infants. Further, the study further validates this oversight body's decision to liberalize DHA health claims.

EFSA's Panel on Dietetic Products, Nutrition and Allergies (NDA) said DHA levels of 100mg of per day were appropriate for 7-24 month-old infants along with 200mg per day for pregnant and lactating women. Many specialists feel that women should take significantly higher levels if they are pregnant, are breast feeding, or plan on becoming pregnant in the near future.

The DHA claims relating to eye health stated: “DHA intake can contribute to normal development of the eye of the foetus, infant and young children”, and “DHA intake can contribute to the visual development of the infant”.

Study details

Birch and her co-workers enrolled 244 healthy formula-fed infants between one and nine days of age, and born in Kansas and Dallas. The infants were randomly assigned them to one of four groups. When the infants reached 12 months of age, measures of the clarity of the infants' vision showed that those fed a DHA-supplemented formula had significantly better vision than infants fed the control formula.

“Our data speak directly to the safety and tolerance profiles of DHA levels as high as 0.96% of fatty acids in infant formula,” report the researchers. “The safety and tolerance of these higher DHA concentrations

was expected, because they are within the range of DHA concentrations found in human milk worldwide.”

Source: American Journal of Clinical Nutrition

Published online ahead of print, doi: 10.3945/ajcn.2009.28557

“The DIAMOND (DHA Intake And Measurement Of Neural Development) Study: a double-masked, randomized controlled clinical trial of the maturation of infant visual acuity as a function of the dietary level of docosahexaenoic acid”

DHA supplements may improve outcomes for breast cancer patients undergoing chemotherapy

A daily dose of 1.8 grams of DHA supported chemotherapy patients and produced no adverse effects, according to a new study published in the British Journal of Cancer.

“Our data show for the first time that a dietary intervention targeted on DHA is a feasible approach that has potential to substantially increase survival in metastatic breast cancer patients treated with chemotherapy,” wrote the researchers, led by Dr Philippe Bougnoux from the French Institut National de la Santé Et de la Recherche Médicale (INSERM) U921 in Tours.

Being a phase II clinical trial, the research represents an “incentive to set up a prospective-controlled randomised trial aimed at identifying the place of dietary DHA in breast cancer treatments”, added the researchers.

Every year about 1.3 million women are diagnosed with breast cancer around the world, with just fewer than half a million deaths associated with the disease, according to the American Cancer Society.

While the incidence of the disease has increased by about 30 per cent over the last 25 years in the west, death rates have declined due to improved detection and treatments, said the ACS.

The new study, if supported by additional research, suggests that DHA may help improve survival by sensitising tumours to chemotherapy, said Dr Bougnoux and his co-workers.

Study details

The Tours-based researchers recruited 25 women with breast cancer to participate in their open-label single-arm phase II study. As part of their anthracycline-based chemotherapy regimen women were given additional DHA (1.8 grams per day) for between 2 and 96 months.

After an average of 31 months, Dr Bougnoux and his co-workers found that the overall survival of women was 22 months, and reached 34 months in women with the highest DHA levels in their blood.

“Although the median time to progression (6 months) and overall survival (22 months) in our study were within the frame of published data, it should be stressed that our patient population had a particularly poor prognosis, as 68 per cent had liver metastases in addition to other sites of metastases,” stated the researchers. “The median overall survival of patients having liver metastases was reported to be 14 months.”

Source: British Journal of Cancer

Volume 101, Pages 1978–1985, doi:10.1038/sj.bjc.6605441

"Improving outcome of chemotherapy of metastatic breast cancer by docosahexaenoic acid: a phase II trial"
Authors: P. Bognoux, N. Hajjaji, M.N. Ferrasson, B. Giraudeau, C. Couet, O. Le Floch

Volume #25 February 12, 2010 3Care Therapeutics