

Omega 3 pufas for the vascular component of age-related cognitive decline.

<https://www.neurodegenerationresearch.eu/survey/omega-3-pufas-for-the-vascular-component-of-age-related-cognitive-decline/>

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Country

USA

Title of project or programme

Omega 3 pufas for the vascular component of age-related cognitive decline.

Source of funding information

NIH (NIA)

Total sum awarded (Euro)

€ 2,729,494.50

Start date of award

01/09/2013

Total duration of award in years

4

The project/programme is most relevant to:

Alzheimer's disease & other dementias

Keywords

Acquired Cognitive Impairment... Aging... Alzheimer's Disease... Alzheimer's Disease including Alzheimer's Disease Related Dementias (AD/ADRD)... Behavioral and Social Science... Brain Disorders... Clinical Research... Clinical Research - Extramural... Clinical Trials and Supportive Activities... Complementary and Alternative Medicine... Dementia... Dietary Supplements... Neurodegenerative... Neurosciences... Nutrition... Prevention... Translational Research

Research Abstract

DESCRIPTION (provided by applicant): The main objective of this study is to determine if omega 3 polyunsaturated fatty acids (pufas) can slow the accumulation of brain MRI derived white matter hyperintensities (WMH) over 3 years in a population at risk for dementia by advanced age, evidence of WMH and lower pufa status. This pilot trial is designed to collect preliminary data on pufa effects on total WMH progression, plasma biomarkers of endothelial function and rate of cognitive change over time. The study is a randomized, double-blind, placebo-controlled trial. Non-demented elders age 80 and older with WMH burden and lower plasma pufas will be enrolled. One hundred and fifty subjects will be randomized, half to pufa supplementation, and half to placebo over a 3 year term. Aim 1 will assess the effects of this nutritional therapy on WMH progression. Our hypothesis is that those randomized to pufas will appreciate less WMH progression. Aim 2 will assess the pufa effects on biomarkers of endothelial function as a potential modulator of the effects on total WMH and cognitive change. We hypothesize that pufas improve biomarkers of endothelial function. Aim 3 will collect preliminary data on the change in executive function and processing skills to inform the more definitive prevention trials in the future. We hypothesize that pufas slow vascular pathology mediated cognitive aging.

Lay Summary

PUBLIC HEALTH RELEVANCE: This study will evaluate the ability of a fish oil extract in preventing vascular related risk factors for mental and thinking ability decline in a non-demented cohort of older adults. Because there are no current therapies that prevent age-related cognitive decline, including Alzheimer's disease and more vascular mediated cognitive impairment, it is imperative to scientifically evaluate this therapy as a promising preventative strategy to promote healthy cognitive aging.

Further information available at:

Types:

Investments > €500k

Member States:

United States of America

Diseases:

Alzheimer's disease & other dementias

Years:

2016

Database Categories:

N/A

Database Tags:

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