Flax and flaxseed oil (Linum usitatissimum): a review by the Natural Standard Research Collaboration.


Source

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Abstract

The objective of this study was to evaluate the scientific evidence on flaxseed, including expert opinion, folkloric precedent, history, pharmacology, kinetics/dynamics, interactions, adverse effects, toxicology, and dosing. Electronic searches were conducted in 9 databases, 20 additional journals (not indexed in common databases), and bibliographies from 50 selected secondary references. No restrictions were placed on the language or quality of the publications. All literature collected pertained to efficacy in humans, dosing, precautions, adverse effects, use in pregnancy/lactation, interactions, alteration of laboratory assays, and mechanisms of action. Standardized inclusion/exclusion criteria are used for selection. Grades were assigned using an evidence-based grading rationale. A review of the literature on flaxseed yielded 13 categories for which flaxseed had been studied in humans, including constipation/laxative, attention-deficit hyperactivity disorder, hyperlipidemia, atherosclerosis/coronary artery disease, breast cancer, cyclic mastalgia (breast pain), menopausal symptoms, hyperglycemia/diabetes, hypertension, lupus nephritis, human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS), and prostate cancer. Most of the available evidence investigates the efficacy of alpha-linoleic acid found in flaxseed compared with fish oil, and almost all of the available studies are poor quality. Although flaxseed and flaxseed oil have several promising future uses, the available literature does not support recommendation for any condition at this time.

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