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Systematic review of flaxseed (Linum usitatissimum L.) extract and formulation in wound healing

[Revisión sistemática sobre extracto y formulación de linaza (Linum usitatissimum L.) en la cicatrización de heridas]

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Full text options

Abstract

Author keywords

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Abstract

Context: Flaxseed constituents provide to antioxidant, anti-inflammatory, antimicrobial and wound healing benefits. Aims: To systematically review the experimental evidence on the wound healing ability of flaxseed extracts and formulations. Methods: Comprehensive searches in six databases

(Scopus, Science Direct, Web of Science, PubMed, Google Scholar and Dimensions) were carried out from the beginning of databases until December 2020, according to Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) protocol. The terms used in searches were (Linum usitatissimum L., flaxseed , linseed, flax) AND (extract) AND (wound heal, heal, heal type, wound) for collection of articles, with only articles in English and research articles were included. Transgenic term were excluded. AXIS tool was chosen to assess the quality and risk of bias. The data were then categorised in term of extracts, laboratory formulation, and wound healing. Results: In total, 999 articles were collected and screened based on the pre-determined inclusion and exclusion criteria. Finally, 10 articles were included in the review . The majority of publications reported significant findings of flaxseed oil on wound healing regardless of extraction method and formulation. Healing parameters on excision, incision, and burn wound models were studied. Lack of laboratory formulation mentioned in the collected articles gave limitation impact on this study. Conclusions: Flaxseed oil formulation appears to exert a positive effect on wound healing. Therefore, extensive studies needed to evaluate the transportation of flaxseed phytochemicals into skin dermis by advanced drug formulation. © 2022 Journal of Pharmacy & Pharmacognosy Research

Author keywords

Extraction; Flaxseed ; Formulation; Linum usitatissimum L; Systematic review ; Wound healing

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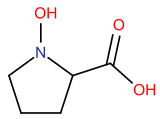

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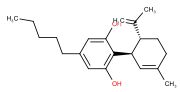

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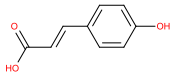

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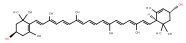

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