Dietary factors during pregnancy and atopic outcomes in childhood: a systematic review from the European Academy of Allergy and Clinical Immunology

Introduction

Background

Allergic diseases are an increasing public health concern and early life environment is critical to immune development. Maternal diet during pregnancy has been linked to offspring allergy risk and is a potentially modifiable factor, which could be targeted as an allergy prevention strategy. In this systematic review, we focused on maternal diet in pregnancy and related the amount of nutrients, foods or food patterns studied to the USA dietary guidelines.

Methods

We undertook a systematic review of studies investigating the association between maternal diet during pregnancy and allergic outcomes (asthma/wheeze, hay fever, allergic rhinitis, atopic dermatitis, food allergies and sensitization) in offspring. We searched the following databases: MEDLINE, EMBASE, and Web of Science up to February 26, 2019. Evidence was appraised using modified versions of the Cochrane Collaboration Risk of Bias tool and the National Institute for Clinical Excellence methodology checklist depending on the study. The most significant protective factors were Mediterranean diet, meat and fatty fish. The most significant factors associated with an increased risk were pasta and fish sticks.

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