

# INPLASY PROTOCOL

To cite: Yao et al. Effects of polyunsaturated fatty acids on lung cancer: a systematic review and Meta-analysis. Inplasy protocol 202280079. doi: 10.37766/inplasy2022.8.0079

## Effects of polyunsaturated fatty acids on lung cancer: a systematic review and Meta-analysis

Yao, B<sup>1</sup>; Zhao, L<sup>2</sup>; Chen, Z<sup>3</sup>.

Received: 20 August 2022

Published: 21 August 2022

**Corresponding author:**  
yao bao

18118572382@163.com

**Author Affiliation:**  
Department of Thoracic Cardiovascular Surgery, The Sixth Hospital of Wuhan, Affiliated Hospital of Jiangnan University, Wuhan, Hubei, People's Republic of China.

**Support:** None.

**Review Stage at time of this submission:** Completed but not published.

**Conflicts of interest:**  
None declared.

**Review question / Objective:** This study aimed to evaluate the association between polyunsaturated fatty acids and lung cancer.

**Search strategy:** We searched PubMed, Embase, Cochrane Library, Web of Science databases from inception to June 1, 2022. The search terms were as follows: "Fatty Acids, Omega-3" or "Omega-3 Fatty Acid" or "n-3 Fatty Acids" or "n3 Polyunsaturated Fatty Acid" or "n-3 PUFA" and "Lung Neoplasms" and "Pulmonary Neoplasms" or "Lung Cancer" or "Pulmonary Cancer". We used the combination of subject words and free words to perform the search process, and logical symbols, wildcards, and Boolean logic operators to write the search expression. No language or geographic restrictions were applied.

**INPLASY registration number:** This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 21 August 2022 and was last updated on 21 August 2022 (registration number INPLASY202280079).

**Condition being studied:** Effects of polyunsaturated fatty acids on lung cancer.

## METHODS

## INTRODUCTION

**Review question / Objective:** This study aimed to evaluate the association between polyunsaturated fatty acids and lung cancer.

---

**Search strategy:** We searched PubMed, Embase, Cochrane Library, Web of Science databases from inception to June 1, 2022. The search terms were as follows: “Fatty Acids, Omega-3” or “Omega-3 Fatty Acid” or “n-3 Fatty Acids” or “n3 Polyunsaturated Fatty Acid” or “n-3 PUFA” and “Lung Neoplasms” and “Pulmonary Neoplasms” or “Lung Cancer” or “Pulmonary Cancer”, We used the combination of subject words and free words to perform the search process, and logical symbols, wildcards, and Boolean logic operators to write the search expression. No language or geographic restrictions were applied.

**Participant or population:** Patients with lung cancer.

**Intervention:** Take polyunsaturated fatty acids.

**Comparator:** Do not take polyunsaturated fatty acids

**Study designs to be included:** RCT.

**Eligibility criteria:** According to the guidelines.

**Information sources:** PubMed, Embase, Cochrane Library, Web of Science databases.

**Main outcome(s):** (1)Body weight; (2) BMI; (3)Muscle attenuation;(4) nutritional status such as DHA and EPA; (5) quality of life; (6) immune response such as CRP and albumin.

**Quality assessment / Risk of bias analysis:** Cochrane tool.

**Strategy of data synthesis:** The Cochrane tool was used to assess the methodological components of each study, and Stata 15.1 software to perform the Meta-analysis.

**Subgroup analysis:** No analysis is required.

**Sensitivity analysis:** No analysis is required.

**Country(ies) involved:** China.

**Keywords:** polyunsaturated fatty acids; lung cancer; meta-analysis.

**Contributions of each author:**

Author 1 - yao bao.

Author 2 - zhao liang.

Author 3 - chen zhuo.