

Supplementary Table 1. Search strategy terms.

Database	Search Strategy	Number of publications
MEDLINE PubMed (Original search)	((("metabolomics"[MeSH Terms] OR "metabolome"[MeSH Terms] OR "lipidomics"[MeSH Terms] OR "lipidomic"[All Fields]) AND ("dietary pattern"[All Fields] OR "food group"[All Fields] OR "food groups"[All Fields] OR "food"[MeSH Major Topic] OR "diet"[All Fields]) AND ("infant"[MeSH Terms] OR "child"[MeSH Terms] OR "adolescent"[MeSH Terms])) AND (allchild[Filter]))	309
MEDLINE PubMed (Updated search)	Same above search strategy from 2023/11/13 - 2024/09/02	25
Embase (Original search)	('metabolomic' OR 'metabolome'/mj OR 'metabolomics'/mj OR 'metabolomes' OR 'lipidomics'/mj) AND ('dietary pattern' OR 'food group' OR 'food groups' OR 'food'/mj OR 'diet') AND ([adolescent]/lim OR [child]/lim OR [infant]/lim OR [newborn]/lim OR [preschool]/lim OR [school]/lim) AND ([embase]/lim NOT ([embase]/lim AND [medline]/lim)).	278
Embase (Updated search)	Same above search strategy from 2023/11/13 - 2024/09/02	32
Cochrane CENTRAL	MeSH descriptor: [Metabolomics] in all MeSH products OR (metabolome) OR (metabolomic) OR (metabolomes) OR (lipidomics) AND (dietary pattern) OR (food group) OR (food groups) OR MeSH descriptor: [Food] explode all trees OR (diet). <i>(Excluded records already indexed in: PubMed, Embase, CT.gov and ICTRP)</i>	10
Cochrane CENTRAL (Updated search)	Same above search strategy from 2023/11/13 - 2024/09/02	0

