Figure 1: Flow chart illustrating the preliminary literature search and study selection of systematic reviews (published prior to 17 January 2021) Embase (n = 4181) PubMed (3847) Records after duplicates removed (n = 6419)Records excluded by reading title and abstract (n = 5607) Hand Full-text articles assessed Full-text articles search for eligibility (n =) excluded with (n=)following reasons: Studies included in qualitative synthesis (n =)

Table 1 | PRISMA-P (preferred reporting items for systematic review and meta-analysis protocols) 2015 checklist: recommended items to address in a systematic review protocol

Section and topic	Item No	Checklist item	Information reported	
ADMINISTRATIVE INFORMATION				No
Title:				
Identification	1a	Identify the report as a protocol of a systematic review	Х	
Update	1b	If the protocol is for an update of a previous systematic review, identify as such		N/A a new protocol
Registration	2	If registered, provide the name of the registry (such as PROSPERO) and registration number	Х	
Authors:				
Contact	3a	Provide name, institutional affiliation, e-mail address of all protocol authors; provide physical mailing address of corresponding author	X	
Contributions	3b	Describe contributions of protocol authors and identify the guarantor of the review	Х	
Amendments	4	If the protocol represents an amendment of a previously completed or published protocol, identify as such and list changes; otherwise, state plan for documenting important protocol amendments		N/A a new protocol

Support:				
Sources	5a	Indicate sources of financial or other support for the review	Х	
Sponsor	5b	Provide name for the review funder and/or sponsor		There are no funders
Role of sponsor or funder	5c	Describe roles of funder(s), sponsor(s), and/or institution(s), if any, in developing the protocol		There are no funders
INTRODUCTION				
Rationale	6	Describe the rationale for the review in the context of what is already known	Х	
Objectives	7	Provide an explicit statement of the question(s) the review will address with reference to participants, interventions, comparators, and outcomes (PICO)	Х	
METHODS				
Eligibility criteria	8	Specify the study characteristics (such as PICO, study design, setting, time frame) and report characteristics (such as years considered, language, publication status) to be used as criteria for eligibility for the review	X	
Information sources	9	Describe all intended information sources (such as electronic databases, contact with study authors, trial registers or other grey literature sources) with planned dates of coverage	X	
Search strategy	10	Present draft of search strategy to be used for at least one electronic database, including planned limits, such that it could be repeated	Х	
Study records:				
Data management	11a	Describe the mechanism(s) that will be used to manage records and data throughout the review	Х	
Selection process	11b	State the process that will be used for selecting studies (such as two independent reviewers) through each phase of the review (that is, screening, eligibility and inclusion in meta-analysis)	Х	
Data collection process	11c	Describe planned method of extracting data from reports (such as piloting forms, done independently, in duplicate), any processes for obtaining and confirming data from investigators	X	
Data items	12	List and define all variables for which data will be sought (such as PICO items, funding sources), any	Х	

		pre-planned data assumptions and simplifications		
Outcomes and prioritization	13	List and define all outcomes for which data will be sought, including prioritization of main and additional outcomes, with rationale	Х	
Risk of bias in individual studies	14	Describe anticipated methods for assessing risk of bias of individual studies, including whether this will be done at the outcome or study level, or both; state how this information will be used in data synthesis	Х	
Data synthesis	15a	Describe criteria under which study data will be quantitatively synthesised	Х	
	15b	If data are appropriate for quantitative synthesis, describe planned summary measures, methods of handling data and methods of combining data from studies, including any planned exploration of consistency (such as I^2 , Kendall's τ)	Х	
	15c	Describe any proposed additional analyses (such as sensitivity or subgroup analyses, meta-regression)	Х	
	15d	If quantitative synthesis is not appropriate, describe the type of summary planned	Х	
Meta-bias(es)	16	Specify any planned assessment of meta-bias(es) (such as publication bias across studies, selective reporting within studies)	Х	
Confidence in cumulative evidence	17	Describe how the strength of the body of evidence will be assessed (such as GRADE)	Х	

Table 2:search strategy for PUBMED

#1	anthropometry OR 'fat mass' OR bmi OR 'body mass index' OR 'waist			
	circumference' OR 'waist circumferences' OR 'body fat' OR 'waist-to-hip ratio'			
	OR 'waist hip ratio' OR weight OR anthropometric OR 'index, body mass' OR			
	'body fatness'			
#2	'diet' OR diets OR dietary OR oil OR food OR foods OR fish OR fishes OR meat			
	OR meats OR fruit OR berries OR berry OR legume OR pods OR 'pods, legume'			
	OR vegetable OR vegetables OR beverages OR beverage OR soy OR sugars OR			
	sugar OR egg OR eggs OR macronutrient OR macronutrients OR micronutrients			
	OR micronutrient OR whole grain OR refined grain OR cereal OR pasta OR rice			
	OR potato OR bean OR dairy OR dairies OR milk OR yogurt OR cheese OR fish OR			
	seafood OR meat OR processed meat OR sugar sweetened beverage			
#3	metanalys*[tw] OR meta-analys*[tw]			
#4	"randomized controlled trial" OR "clinical trial" OR RCT OR "Clinical Trials"			
	OR "controlled trial" OR "Intervention Study" OR "Intervention Studies" OR			
	randomized OR "randomized controlled trial" or random			

#5	#1 AND #2 AND #3 AND #4
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Table 3: search strategy for EMBASE

#1	anthropometry OR 'fat mass' OR bmi OR 'body mass index' OR 'waist
	circumference' OR 'waist circumferences' OR 'body fat' OR 'waist-to-hip ratio'
	OR 'waist hip ratio' OR weight OR anthropometric OR 'index, body mass' OR
	'body fatness'
#2	'diet' OR diets OR dietary OR oil OR food OR foods OR fish OR fishes OR
	meat OR meats OR fruit OR berries OR berry OR legume OR pods OR 'pods,
	legume' OR vegetable OR vegetables OR beverages OR beverage OR soy OR
	sugars OR sugar OR egg OR eggs OR macronutrient OR macronutrients OR
	micronutrients OR micronutrient OR 'whole grain' OR 'refined grain' OR cereal
	OR pasta OR rice OR potato OR bean OR dairy OR dairies OR milk OR yogurt
	OR cheese OR fish OR seafood OR meat OR 'processed meat' OR 'sugar
	sweetened beverage'
#3	('meta analys*' OR 'metanalys*'):ti,ab,kw
#4	"randomized controlled trial" OR "clinical trial" OR RCT OR "Clinical Trials"
	OR "controlled trial" OR "Intervention Study" OR "Intervention Studies" OR
	randomized OR "randomized controlled trial" or random
#5	#1 AND #2 AND #3 AND #4