

Supplementary file

Table S1: Full search strategies for electronic databases

Database	PUBMED (Medline)	
Date	29.06.2022	
Search strategy		Results
#1	(HOSPITAL AND FOOD) OR (MEAL AND SERVICE) OR (HOSPITAL AND MEALS) OR (HOSPITAL AND CATERING)	146,086
#2	(FOOD AND WASTE) OR (PLATE AND WASTE) OR (PROTEIN AND INTAKE) OR (ENERGY AND INTAKE)	24,252
#3	#1 AND #2	862
Database	WEB OF SCIENCE	
Date	29.06.2022	
Search strategy		Results
#1	(HOSPITAL AND FOOD) OR (MEAL AND SERVICE) OR (HOSPITAL AND MEALS) OR (HOSPITAL AND CATERING)	17,880
#2	(FOOD AND WASTE) OR (PLATE AND WASTE) OR (PROTEIN AND INTAKE) OR (ENERGY AND INTAKE)	42,087
#3	#1 AND #2	847
Database	SCOPUS	
Date	29.06.2022	
Search strategy		Results
#1	(HOSPITAL AND FOOD) OR (MEAL AND SERVICE) OR (HOSPITAL AND MEALS) OR (HOSPITAL AND CATERING)	52,087
#2	(FOOD AND WASTE) OR (PLATE AND WASTE) OR (PROTEIN AND INTAKE) OR (ENERGY AND INTAKE)	45,170
#3	#1 AND #2	1324

Table S2. Quality assessment of the observational studies according to the Newcastle-Ottawa Scale

	Selection				Comparability	Outcome			
First author, publication year	1) Representativeness of the exposed cohort	2) Selection of the non-exposed cohort	3) Ascertainment of exposure	4) Demonstration that outcome of interest was not present at start of study	5) Comparability of cohorts on the basis of the design or analysis controlled for confounders	6) Assessment of outcome	7) Was follow-up long enough for outcomes to occur?	8) Adequacy of follow-up of cohorts	9) Quality score
Hartwell, 2003	*	*	*	*	**	*	*	*	Good
Edwards, 2006	Reduced sample size	*	*	*	**	*	*	*	Good
Hickson, 2007	Reduced sample size	*	*	*	**	*	*	*	Good
Hickson, 2011	*	*	*	*	**	*	*	*	Good
Manning, 2012	Reduced sample size	*	*	*	**	*	*		Good
Young, 2012	*	*	Pre - post study design	*	**	-estimation of the energy requirements of individual participants rather than measurement using indirect calorimetry -assessment of food intake on only one day of hospital admission	*	*	Good

	Selection				Comparability	Outcome			
Maunder, 2015	*	*	*	*	**	*	*	*	Good
Collins, 2016	Reduced sample size (pilot study)	*	*	*	**	*	*	*	Good
Navarro, 2016	*	*	*	*	**	*	*	*	Good
Farrer, 2016	reduced sample size (high withdrawal rate due to patients not meeting the inclusion criteria)	*	*	*	* confounders to consider: age, gender, reasons for purea diet	responses mostly collected verbally from patients or their relatives by the investigator	*	high withdrawal rate due to patients not meeting the inclusion criteria	Fair
Strotmann, 2017	*	*	Pre - post study design	*	*	*	*	the reference and control measurements took place in different seasons	Good
Barrington, 2018	*	*	*	*	**	*	*	*	Good
McCray, 2018a	*	*	*	*	* cohort different in terms of age, weight and medical classification	*	*	retrospective analysis of quality audit data over a 2.5-year period	Good

	Selection				Comparability	Outcome			
Mc Cray, 2018b	*	*	*	*	confounders to consider: age, medical classification	*	*	*	Good
Neaves, 2021	*	*	*	*	age statistically different between thaw-retherm and room service groups	*	*	*	Good
Razalli, 2021	*	*	*	*	**	*	*	*	Good
Berardy, 2022	*	*	*	*	*	no measurement s of initial food weights	*	*	Good

Abbreviations: “*” means one star; “” means two stars; ND, not determined**

Good quality: 3 or 4 stars in the selection domain AND 1 or 2 stars in the comparability domain AND 2 or 3 stars in the outcome domain

Fair quality: 2 stars in the selection domain AND 1 or 2 stars in the comparability domain AND 2 or 3 stars in the outcome domain

Poor quality: 0 or 1 star in the selection domain OR 0 stars in the comparability domain OR 0 or 1 star in the outcome/exposure domain

Table S3. Quality assessment of two randomized controlled trials according to the Cochrane Risk of Bias tool from Cochrane Handbook for Systematic Reviews of Interventions

First author, publication year	Random sequence generation	Allocation concealment	Blinding of participants and personnel	Blinding of outcome assessment	Incomplete outcome data addressed	Selective reporting	Other potential biases
Rufenacht, 2010	-	-	+ due to the nature of intervention	?	-	-	?
Porter, 2017	-	-	+	?	-	-	-

-, low risk of bias; ?, unclear ; +, high risk of bias