

Table S1. Embase search syntax

Row number	Search term (February 2013 to February 2023)	Number of studies
1	child/	1944271
2	adolescent/	1672356
3	teen*.tw.	46584
4	(pediatric* or paediatric*).tw.	673321
5	adolescen*.tw.	434047
6	juvenile/	55237
7	child*.tw.	1944218
8	infant*.tw.	497304
9	youth*.tw.	113614
10	juvenile*.tw.	106873
11	1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10	4040869
12	feeding behavior/	84275
13	fasting/	20946
14	eating/	40463
15	meal/	21254
16	(eat* or feed* or fasting or meal*).tw.	975436
17	12 or 13 or 14 or 15 or 16	1021574
18	time factor/	45037
19	circadian rhythm/	91704
20	(time* or timing* or circadian or mealtime* or meal-time* or duration* or daily or nightly or intermittent).tw.	7365827
21	18 or 19 or 20	7407743
22	(feeding behavior/ or fasting/ or eating/ or meal/ or (eat* or feed* or fasting or meal*).tw.) adj2 (time factor/ or circadian rhythm/ or (time* or timing* or circadian or mealtime* or meal-time* or duration* or daily or nightly or intermittent).tw.)	47107
23	intermittent fasting/	994
24	time restricted feeding/	482
25	(chrononutrition or chrono-nutrition or time-restricted feeding or time restricted feeding).tw.	633
26	23 or 24 or 25	1695
27	22 or 26	47406
28	11 and 27	10069
29	(rat* or mice or mouse or drosophila).tw.	9763563
30	animal/	1464150
31	29 or 30	10748881
32	28 not 31	6916
33	exp eating disorder/	60283
34	(anorexia or avoidant restrictive food intake disorder or ARFID or binge-eating disorder or bulimia or orthorexia).tw.	53478
35	33 or 34	88073
36	32 not 35	6609
37	exp athlete/	73440

38	athlete*.tw.	75723
39	37 or 38	100428
40	36 not 39	6573
41	exp bariatric surgery/	55240
42	(bariatric surg* or gastric bypass* or gastric band* or gastric sleeve*).tw.	55749
43	41 or 42	70079
44	40 not 43	6556
45	malnutrition/	70265
46	(malnourished or malnutrition).tw.	68890
47	45 or 46	96231
48	44 not 47	6341
49	exp foreign body/	45390
50	foreign body ingestion.tw.	1369
51	button batter*.tw.	651
52	49 or 50 or 51	45709
53	48 not 52	6326
54	exp perioperative period/ or exp perioperative care/	1087442
55	(preoperative or pre-operative).tw.	458527
56	(perioperative or peri-operative).tw.	185011
57	(postoperative or post-operative).tw.	844694
58	54 or 55 or 56 or 57	1763091
59	53 not 58	5975
60	limit 59 to last 10 years	3757
61	limit 60 to english language	3661

Embase <1980 to 2023 Week 07>

Date searched: 20.02.2023

* Searches all words that begin with stem word.

Table S2. Medline search syntax

Row number	Search term (February 2013 to February 2023)	Number of studies
1	exp Child/ or exp Adolescent/	3331913
2	teen*.tw.	33952
3	(pediatric* or paediatric*).tw.	422959
4	adolescen*.tw.	330853
5	child*.tw.	1571926
6	infant*.tw.	445185
7	youth*.tw.	91321
8	juvenile*.tw.	91123
9	1 or 2 or 3 or 4 or 5 or 6 or 7 or 8	4226583
10	Feeding Behavior/	91931
11	Fasting/	38277
12	Eating/	58839
13	Meals/	4790
14	(eat* or feed* or fasting or meal*).tw.	771796
15	10 or 11 or 12 or 13 or 14	854680
16	Time Factors/	1229173
17	Circadian Rhythm/	76435
18	(time* or timing* or circadian or mealtime* or meal-time* or duration* or daily or nightly or intermittent).tw.	5442852
19	16 or 17 or 18	6223936
20	(Feeding Behavior/ or Fasting/ or Eating/ or exp Meals/ or (eat* or feed* or fasting or meal*).tw.) adj2 (Time Factors/ or Circadian Rhythm/ or (time* or timing* or circadian or mealtime* or meal-time* or duration* or daily or nightly or intermittent).tw.)	69583
21	(chrononutrition or chrono-nutrition or time-restricted feeding or time restricted feeding).tw.	503
22	20 or 21	69638
23	9 and 22	12837
24	Animals/	7236503
25	(rat* or mice or mouse or drosophila).tw.	7721720
26	24 or 25	11784489
27	23 not 26	8476
28	exp "Feeding and Eating Disorders"/	35628
29	(anorexia or avoidant restrictive food intake disorder or ARFID or binge-eating disorder or bulimia or orthorexia).tw.	38923
30	28 or 29	57585
31	27 not 30	8047
32	exp Athletes/	19625
33	athlete*.tw.	62935
34	32 or 33	66768
35	31 not 34	8003
36	exp Bariatric Surgery/	32588
37	(bariatric surg* or gastric bypass* or gastric band* or gastric sleeve*).tw.	30395

38	36 or 37	40188
39	35 not 38	7975
40	Malnutrition/	18578
41	(malnourished or malnutrition).tw.	51638
42	40 or 41	58458
43	39 not 42	7815
44	Foreign Bodies/	30672
45	foreign body ingestion.tw.	879
46	button batter*.tw.	449
47	44 or 45 or 46	31113
48	43 not 47	7761
49	exp Perioperative Care/ or exp Perioperative Period/	254002
50	(preoperative or pre-operative).tw.	324978
51	(perioperative or peri-operative).tw.	121747
52	(postoperative or post-operative).tw.	612612
53	49 or 50 or 51 or 52	970765
54	48 not 53	7426
55	limit 54 to last 10 years	3448
56	limit 55 to english language	3340

Ovid MEDLINE(R) <1946 to present>

Date searched: 20.02.2023

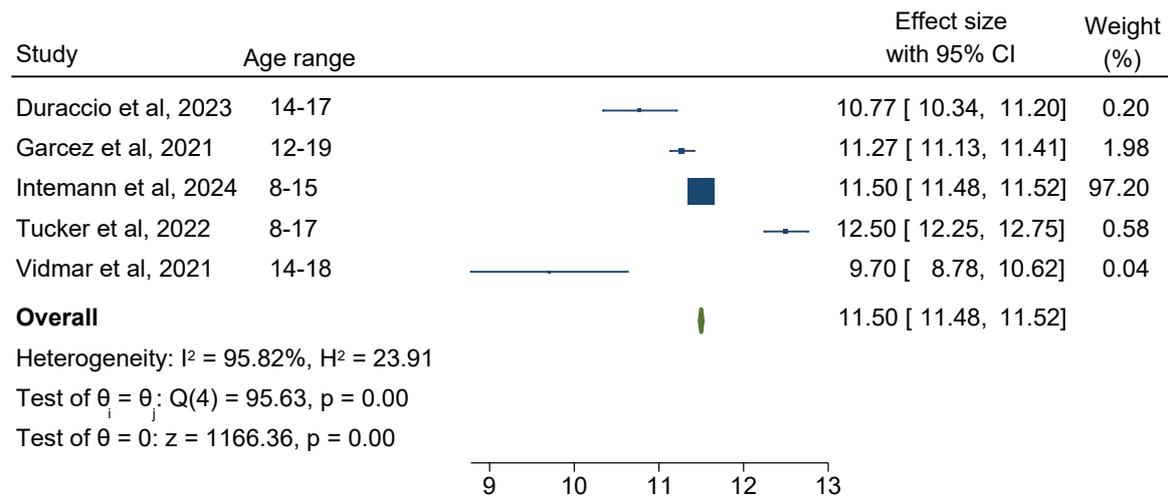
* Searches all words that begin with stem word.

Table S3. PRISMA checklist

Section and Topic	Item #	Checklist item	Location where item is reported
TITLE			
Title	1	Identify the report as a systematic review.	Page 1
ABSTRACT			
Abstract	2	See the PRISMA 2020 for Abstracts checklist.	
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of existing knowledge.	Page 2, section 1
Objectives	4	Provide an explicit statement of the objective(s) or question(s) the review addresses.	Page 2, section 1
METHODS			
Eligibility criteria	5	Specify the inclusion and exclusion criteria for the review and how studies were grouped for the syntheses.	Page 3, section 2.1
Information sources	6	Specify all databases, registers, websites, organisations, reference lists and other sources searched or consulted to identify studies. Specify the date when each source was last searched or consulted.	Page 3, section 2.2
Search strategy	7	Present the full search strategies for all databases, registers and websites, including any filters and limits used.	Supplementary materials. Tables S1 and S2
Selection process	8	Specify the methods used to decide whether a study met the inclusion criteria of the review, including how many reviewers screened each record and each report retrieved, whether they worked independently, and if applicable, details of automation tools used in the process.	Page 3, section 2.3
Data collection process	9	Specify the methods used to collect data from reports, including how many reviewers collected data from each report, whether they worked independently, any processes for obtaining or confirming data from study investigators, and if applicable, details of automation tools used in the process.	Page 3, section 2.3
Data items	10a	List and define all outcomes for which data were sought. Specify whether all results that were compatible with each outcome domain in each study were sought (e.g. for all measures, time points, analyses), and if not, the methods used to decide which results to collect.	Page 3, section 2.3
	10b	List and define all other variables for which data were sought (e.g. participant and intervention characteristics, funding sources). Describe any assumptions made about any missing or unclear information.	Page 3, section 2.3

Section and Topic	Item #	Checklist item	Location where item is reported
Study risk of bias assessment	11	Specify the methods used to assess risk of bias in the included studies, including details of the tool(s) used, how many reviewers assessed each study and whether they worked independently, and if applicable, details of automation tools used in the process.	Page 4, section 2.4
Effect measures	12	Specify for each outcome the effect measure(s) (e.g. risk ratio, mean difference) used in the synthesis or presentation of results.	Page 4, section 2.5
Synthesis methods	13a	Describe the processes used to decide which studies were eligible for each synthesis (e.g. tabulating the study intervention characteristics and comparing against the planned groups for each synthesis (item #5)).	Page 4, section 2.5
	13b	Describe any methods required to prepare the data for presentation or synthesis, such as handling of missing summary statistics, or data conversions.	Page 4, section 2.5
	13c	Describe any methods used to tabulate or visually display results of individual studies and syntheses.	Page 4, section 2.4
	13d	Describe any methods used to synthesize results and provide a rationale for the choice(s). If meta-analysis was performed, describe the model(s), method(s) to identify the presence and extent of statistical heterogeneity, and software package(s) used.	Page 4, section 2.5
	13e	Describe any methods used to explore possible causes of heterogeneity among study results (e.g. subgroup analysis, meta-regression).	N/A
	13f	Describe any sensitivity analyses conducted to assess robustness of the synthesized results.	Page 4, section 2.6
Reporting bias assessment	14	Describe any methods used to assess risk of bias due to missing results in a synthesis (arising from reporting biases).	N/A
Certainty assessment	15	Describe any methods used to assess certainty (or confidence) in the body of evidence for an outcome.	N/A
RESULTS			
Study selection	16a	Describe the results of the search and selection process, from the number of records identified in the search to the number of studies included in the review, ideally using a flow diagram.	Page 5, Figure 1
	16b	Cite studies that might appear to meet the inclusion criteria, but which were excluded, and explain why they were excluded.	N/A
Study characteristics	17	Cite each included study and present its characteristics.	Page 8, Table 1
Risk of bias in studies	18	Present assessments of risk of bias for each included study.	Page 15, Table 3
Results of individual studies	19	For all outcomes, present, for each study: (a) summary statistics for each group (where appropriate) and (b) an effect estimate and its precision (e.g. confidence/credible interval), ideally using structured tables or plots.	Page 11, Table 2
Results of syntheses	20a	For each synthesis, briefly summarise the characteristics and risk of bias among contributing studies.	Page 13, section 3.4

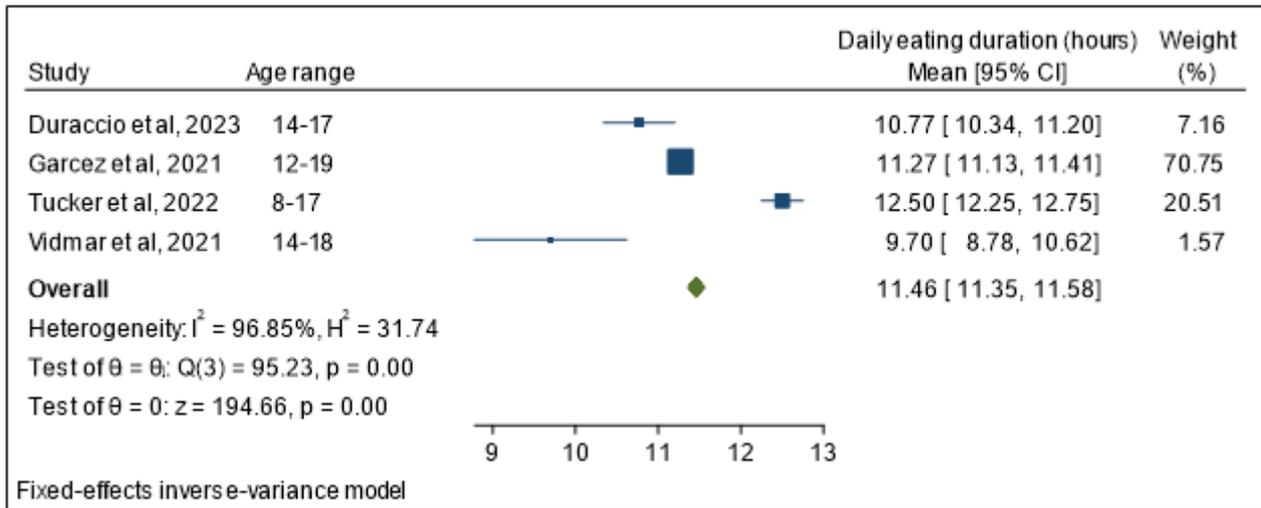
Section and Topic	Item #	Checklist item	Location where item is reported
	20b	Present results of all statistical syntheses conducted. If meta-analysis was done, present for each the summary estimate and its precision (e.g. confidence/credible interval) and measures of statistical heterogeneity. If comparing groups, describe the direction of the effect.	Page 13, Figure 2
	20c	Present results of all investigations of possible causes of heterogeneity among study results.	Page 16
	20d	Present results of all sensitivity analyses conducted to assess the robustness of the synthesized results.	Page 14, section 3.6
Reporting biases	21	Present assessments of risk of bias due to missing results (arising from reporting biases) for each synthesis assessed.	N/A
Certainty of evidence	22	Present assessments of certainty (or confidence) in the body of evidence for each outcome assessed.	N/A
DISCUSSION			
Discussion	23a	Provide a general interpretation of the results in the context of other evidence.	Page 16
	23b	Discuss any limitations of the evidence included in the review.	Page 16
	23c	Discuss any limitations of the review processes used.	Page 17
	23d	Discuss implications of the results for practice, policy, and future research.	Page 17
OTHER INFORMATION			
Registration and protocol	24a	Provide registration information for the review, including register name and registration number, or state that the review was not registered.	Page 2, section 2
	24b	Indicate where the review protocol can be accessed, or state that a protocol was not prepared.	Page 2, section 2
	24c	Describe and explain any amendments to information provided at registration or in the protocol.	N/A
Support	25	Describe sources of financial or non-financial support for the review, and the role of the funders or sponsors in the review.	N/A
Competing interests	26	Declare any competing interests of review authors.	Page 18
Availability of data, code and other materials	27	Report which of the following are publicly available and where they can be found: template data collection forms; data extracted from included studies; data used for all analyses; analytic code; any other materials used in the review.	



Fixed-effects inverse-variance model

Figure S1: Sensitivity analysis. Fixed-effects meta-analysis of the daily eating window of children and adolescents, aged 8-19 years, within a 24-hour period [33-35, 15, 16]

A



B

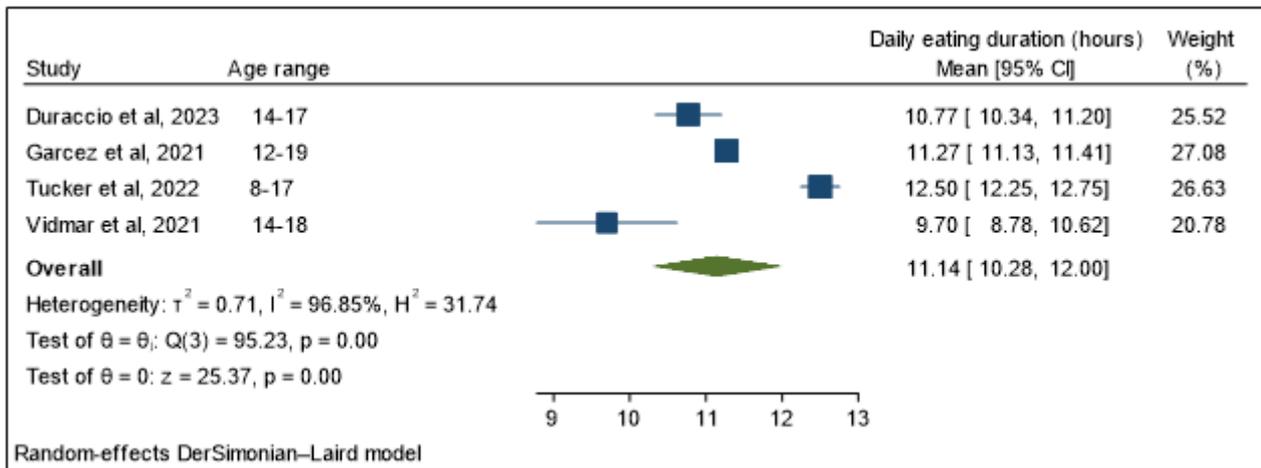


Figure S2. Sensitivity analysis. **A.** Fixed-effects meta-analysis of the daily eating window of children and adolescents aged 8-19 years, excluding Intemann et al study. **B.** Random-effects meta-analysis of the daily eating window of children and adolescents aged 8-19 years, excluding Intemann et al study. [33, 34, 15, 16]

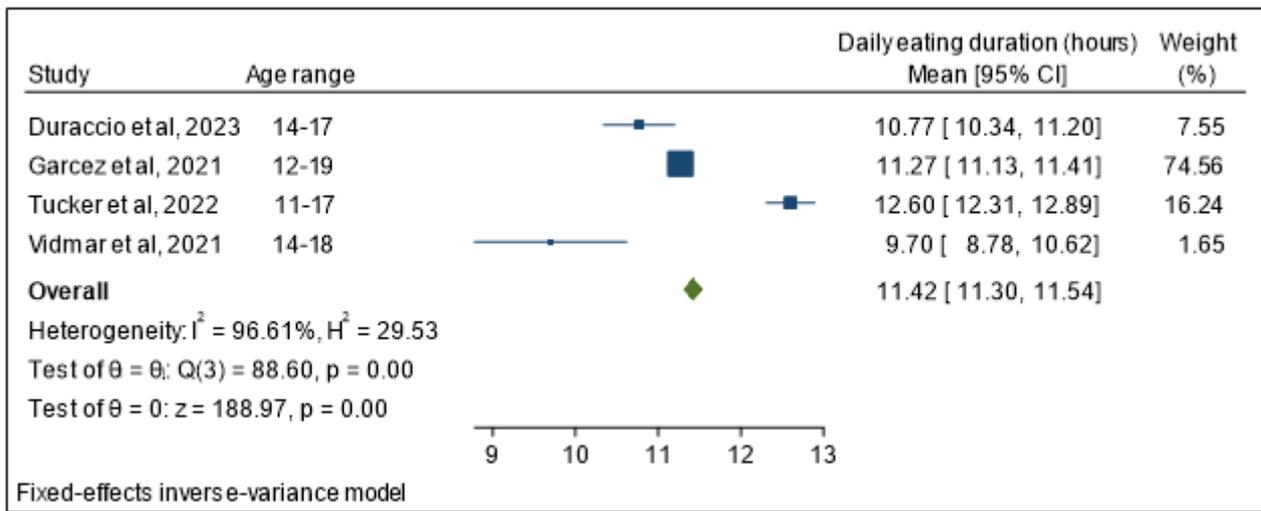


Figure S3. Subgroup sensitivity analysis. Fixed-effects meta-analysis of the daily eating window of adolescents aged 11-19 years. [33, 34, 15, 16]