QUOTE GM #43

2019-02-15

Title

Created

THE END OF A MYTH: BREAKFAST IS NOT MOST IMPORTANT MEAL!

BMJ, 2019 Jan 30;364:I42, doi: 10.1136/bmj.I42

Effect of breakfast on weight and energy intake: systematic review and meta-analysis of randomised controlled trials.

Sievert K1, Hussain SM1, Page MJ2, Wang Y1, Hughes HJ1, Malek M1, Cicuttini FM3.

Author information

Abstrac

OBJECTIVE: To examine the effect of regular breakfast consumption on weight change and energy intake in people living in high income countries.

DESIGN: Systematic review and meta-analysis.

DATA SOURCES: PubMed, Ovid Medline, and CINAHL were searched for randomised controlled trials published between January 1990 and January 2018 investigating the effect of breakfast on weight or energy intake. ClinicalTrials.gov and the World Health Organization's International Clinical Trials Registry Platform search portal were also searched in October 2018 to identify any registered yet unpublished or ongoing trials.

ELIGIBILITY CRITERIA FOR SELECTING STUDIES: Randomised controlled trials from high income countries in adults comparing breakfast consumption with no breakfast consumption that included a measure of body weight or energy intake. Two independent reviewers extracted the data and assessed the risk of bias of included studies. Random effects meta-analyses of the effect of breakfast consumption on weight and daily energy intake were performed.

RESULTS: Of 13 included trials, seven examined the effect of eating breakfast on weight change, and 10 examined the effect on energy intake. Metaanalysis of the results found a small difference in weight favouring participants who skipped breakfast (mean difference 0.44 kg, 95% confidence interval 0.07 to 0.82), but there was some inconsistency across trial results (I²=43%). Participants assigned to breakfast had a higher total daily energy intake than those assigned to skip breakfast (mean difference 259.79 kcal/day, 78.87 to 440.71; 1 kcal=4.18 kJ), despite substantial inconsistency across trial results (I²=80%). All of the included trials were at high or unclear risk of bias in at least one domain and had only short term follow-ups (mean period seven weeks for weight, two weeks for energy intake). As the quality of the included studies was mostly low, the findings should be interpreted with caution.

CONCLUSION: This study suggests that the addition of breakfast might not be a good strategy for weight loss, regardless of established breakfast habit. Caution is needed when recommending breakfast for weight loss in adults, as it could have the opposite effect. Further randomised controlled trials of high quality are needed to examine the role of breakfast eating in the approach to weight management.

STUDY REGISTRATION: PROSPERO registration number CRD42017057687.

Published by the BMJ Publishing Group Limited. For permission to use (where not already granted under a licence) please go to http://group.bmj.com/group/rights-licensing /permissions.

PMID: 30700403 DOI: 10.1136/bmj.I42

"RESULTS: Of 13 included trials, seven examined the effect of eating breakfast on weight change, and 10 examined the effect on energy intake. Meta-analysis of the results found a small difference in weight favouring participants who skipped breakfast (mean difference 0.44 kg, 95% confidence interval 0.07 to 0.82), but there was some inconsistency across trial results. Participants assigned to breakfast had a higher total daily energy intake than those assigned to skip breakfast (mean difference 259.79 kcal/day, 78.87 to 440.71), despite substantial inconsistency across trial results.

<u>CONCLUSION</u>: This study suggests that the addition of breakfast might not be a good strategy for weight loss, regardless of established breakfast habit. Caution is needed when recommending breakfast for weight loss in adults, as it could have the opposite effect."