INPLASY PROTOCOL

Corresponding author:
Azizah Ugusman

dr.azizah@ppukm.ukm.edu.my

Author Affiliation:
Universiti Kebangsaan Malaysia.

Review Stage at time of this submission: Completed but not published.

Conflicts of interest:
None declared.

Role of Honey in Obesity Management: A Systematic Review

Ugusman, A[1]; Mokhtar, MH[2]; Salamt, N[3].

Review question / Objective: This study will provide comprehensive information on the role of honey in the management of obesity.

Condition being studied: Obesity is a metabolic disorder that has become critically prevalent throughout the world. Obesity has been linked to other chronic diseases such as diabetes mellitus, cardiovascular diseases and cancer. Natural products such as honey have been investigated for their potential effect on obesity. Hence, this study systematically reviewed the recent literature concerning the effects of honey on obesity in obese animal models and in people with obesity.

INTRODUCTION

Review question / Objective: This study will provide comprehensive information on the role of honey in the management of obesity.

Condition being studied: Obesity is a metabolic disorder that has become critically prevalent throughout the world. Obesity has been linked to other chronic diseases such as diabetes mellitus, cardiovascular diseases and cancer. Natural products such as honey have been investigated for their potential effect on obesity. Hence, this study systematically reviewed the recent literature concerning the effects of honey on obesity in obese animal models and in people with obesity.

METHODS

Participant or population: Subjects with obesity or overweight as well as animal

models of obesity, regardless of animal species, are included.

Intervention: Honey as an intervention in the experimental group.

Comparator: The comparator groups received either no intervention or were treated with relevant conventional drug.

Study designs to be included: Clinical (randomized controlled trial) and preclinical (in vivo) studies.

Eligibility criteria: Any clinical (randomized controlled trial) and preclinical (in vivo) studies reporting the effect of any type of honey on body weight control in obese animal models or people with overweight or obesity, regardless of the route of administration, dose, and duration of intervention.

Information sources: PubMed, Scopus, Ovid MEDLINE, Web of Science and Google Scholar databases will be searched with the following set of keywords: Honey AND obesity OR overweight OR body weight OR BW OR body mass index OR BMI OR fat mass OR FM OR lean mass OR LM OR waist circumference OR WC OR leptin OR adiponectin OR waist-hip ratio OR WHR.

Main outcome(s): Changes in body weight, BMI, waist circumference, waist-hip ratio, body fat mass and percentage.

Quality assessment / Risk of bias analysis: The methodological quality of each eligible study will be assessed independently by two reviewers (M.H.M. and A.U.) using Systematic Review Center for Laboratory Animal Experimentation (SYRCLE) risk of bias tool. The main components of this item are as follows: (1) Selection bias: random sequence generation, baseline characteristics, allocation concealment; (2) Detection bias: random housing, blinding, random outcome assessment; (3) Attrition bias: incomplete outcome data; (4) Reporting bias: selective reporting; (5) Others bias.

Strategy of data synthesis: Two reviewers (M.H.M. and A.U.) will independently extract the data from the included studies based on the predefined, standardized form of data collection. Any disagreement will be resolved through discussion with the third reviewer (N.S.) A data spreadsheet will be created using Microsoft Excel to collect relevant information and data. The following data will be extracted: author, publication time, article title, country where the study is conducted, study design, intervention, time and dose of treatment, comparators, type of honey, source of honey, and the outcomes. The risk of bias will be summarized and reported narratively.

Subgroup analysis: Where possible, we plan to evaluate the phytochemical content of the different types of honey.

Sensitivity analysis: Sensitivity analysis will be performed only if meta-analysis is involved.

Language: English.

Country(ies) involved: Malaysia.

Keywords: adipose tissue; body mass index; body weight; honey; obesity.

Contributions of each author:
Author 1 - Azizah Ugusman.
Author 2 - Mohd Helmy Mokhtar.
Author 3 - Norizam Salamt.