Effects of dry-cured ham rich in bioactive peptides on cardiovascular health: A randomized controlled trial

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Highlights

- Biopeptides present in dry-cured ham can act as ACE inhibitors.
- The consumption of dry-cured ham did not affect sodium excretion nor blood pressure.
- Cholesterol and LDL levels only decreased after the interventional treatment.
- The intake of dry-cured ham might have a blood glucose regulatory capacity too.
- Bioactive compounds from dry-cured ham could contribute as nutritional therapy in CVD.

Abstract

Establishing health effects of bioactive compounds from dry-cured meat is an active area of clinical research. The present study aims to investigate whether consuming dry-cured ham with biopeptides, among other bioactive compounds, modifies blood pressure (BP) and improves other risk factors for cardiovascular disease in humans. This two-arm, cross-over,
Intake of 80 g dry-cured ham did not impair BP or 24 h sodium excretion. Total cholesterol, LDL and basal glucose levels dropped after dry-cured ham consumption (p = 0.00019, p = 0.021 and p = 0.014, respectively). Cooked ham did not affect any of the clinical and biochemical markers. Dry-cured ham components could exert a plethora of activities over the cardiovascular system including lipid and glucose metabolism. Additional studies are needed to confirm the effects of dry-cured meat biopeptides on diverse risk factors in pathological conditions.

Abbreviations

ACE, Angiotensin I Converting Enzyme; BMI, Body Mass Index; BP, Blood Pressure; CVD, Cardiovascular Disease; DBP, Diastolic Blood Pressure; HDL, High Density Lipoprotein; LDL, Low Density Lipoprotein; RCT, Randomized Controlled Trial; SBP, Systolic Blood pressure; UCAM, Catholic University of Murcia

Keywords

Dry-cured ham; Bioactive peptides; Hypertension; ACE inhibition; Cardiovascular risk factors