Energy intake and expenditure in obese older adults with and without type 2 diabetes
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WITH AND WITHOUT TYPE 2 DIABETES

ENERGY INTAKE AND EXPENDITURE IN OBESE OLDER ADULTS WITH AND WITHOUT TYPE 2 DIABETES

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Rationale: Obesity is a risk factor for type 2 diabetes (DM2), however not all obese people develop DM2. We explored differences in energy intake and expenditure between obese older adults with and without DM2. Subjects were randomly allocated to the treatment order of 7 days sodium nitrate ingestion (8 mmol per day) and 7 days placebo (NaCl solution), separated by one week washout. Before (day 1) and after (day 7) both intervention periods placebo treatment. Systolic and diastolic blood pressure did not change following nitrate ingestion. Furthermore, no differences were observed in mechanical efficiency during submaximal exercise and no changes were observed in Hs-TNT, NT-proBNP and creatinine kinase (CK) and blood pressure were measured.

Results: Plasma nitrate and nitrite concentrations increased at day 1 (7-fold and 2-fold, respectively) and day 7 (8-fold and 2-fold, respectively) after sodium nitrate compared with placebo ingestion. Systolic and diastolic blood pressure did not change following nitrate ingestion. Furthermore, no differences were observed in mechanical efficiency during submaximal exercise and no changes were observed in Hs-TNT, CK and NT-proBNP concentrations between the nitrate and placebo treatment.

Conclusion: Acute as well as 7-days of dietary nitrate supplementation does not increase mechanical efficiency or improve cardiometabolic risk profile in mild-to-moderate COPD patients.

Disclosure of Interest: None declared.