**Abstract instructions**

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**Word Limit:** The body of the abstract should **NOT** exceed **300** words.

**Please use the format below** (see example below):

**Abstract title**: Bold, font size 18

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**Affiliations:** Font size 10, bold. Each affiliation should be on a separate line with beginning with a superscript number to identify the author(s) above (see example below). Each affiliation should include: Department/School, Institution, Town, Country. Please note that this information is separated by commas. The email address of each author should be provided.

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Abstracts should contain a statement of the problem, methods, clear results and conclusion or significance of the findings. Abstracts will be reviewed and may be returned to the authors for clarification/modification.

Please do not include: references, tables or figures

Abstracts must include some data.

**Example**

**Prediction equations overestimate the energy requirements of obesity susceptible individuals**

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An evaluation of energy requirements is a necessary part of dietary counseling, particularly when weight reduction is the goal. In many instances rather than actually measuring resting metabolic rate (RMR), predictive equations are used to estimate the RMR of individuals in a clinical setting. Our objective was to compare the measured and predicted RMR of individuals who remain lean despite living in an obesogenic environment (obesity resistant individuals) with those who struggle to maintain a healthy body weight and report having to consume smaller amounts of food (obesity susceptible individuals).

Obesity resistant individuals (ORI) and obesity susceptible individuals (OSI) were identified using a simple 6-item screening tool. Measurement of RMR was undertaken in 31 ORI (14 females, 17 males) and 26 OSI (14 females, 12 males) 12 hours after an overnight fast, using indirect calorimetry and following standard procedures. Predicted RMR was calculated using the FAO/WHO/UNU (Food and Agricultural Organisation/World Health Organisation/United Nations University), Oxford and Miflin-St Jeor equations and compared to measured RMR.

Absolute RMR was significantly lower in ORI versus OSI (748 kJ.d-1, 95%CI: 52, 1443; P=0.036); however, relative RMR was significantly lower in OSI compared to ORI (-15 kJ.kgBM-1.d-1, 95%CI: -24, -6; P=0.001) and lower in female OSI compared to all other groups (all P≤0.001). The RMR of OSI and ORI females differed by 25.2 kJ.kg-1.d-1. Given the mean weight of OSI females was 85.5kg this equates to a difference of 2155 kJ.d-1. All three prediction equations over-estimated RMR to some extent in both ORI and OSI but this difference was significant for OSI females (1664, 1466 and 1422 kJ.d-1, FAO/WHO/UNU, Oxford and Miflin-St Jeor equations respectively).

The use of prediction equations may lead to an overestimation of RMR and subsequently energy requirements particularly in females who identify as being susceptible to obesity.