Descriptions of the Model Spreadsheet Files

Below is a description of the spreadsheet files. **Follow the instructions provided at the top of each spreadsheet to make model calculations.**

(1) *Predict_Intake_Change_(body fat known).xls*

This file predicts the change in dietary energy intake required to maintain a specified change in body weight. This version is particularly useful when the initial body fat mass is known and the model parameters are input directly.

(2) *Predict_Intake_Change_(body fat unknown).xls*

This file also predicts the change in dietary energy intake required to maintain a specified change in body weight. However, it uses regression equations to calculate initial body composition at the beginning of the weight change period, and does not require the user to calculate the values of $\delta_{initial}$ and $\Delta\delta$. Instead, the user is asked to estimate the physical activity level (PAL) at the beginning and the end of the weight change period according to a table of values provided in the spreadsheet.

(3) *Predict_BW_Change_(body fat known).xls*

This file is similar to (1), except that the model predicts the steady-state change in body weight that is expected from a specified change in dietary energy intake and physical activity.

(4) *Predict_BW_Change_(body fat unkown).xls*

This file is similar to (2), except that the model predicts the steady-state change in body weight that is expected from a specified change in dietary energy intake and physical activity and uses regression equations to calculate initial body composition at the beginning of the weight change period.

Users are advised not to change the values in the blue cells unless they wish to examine the model prediction sensitivity for changes of the parameters of the energy expenditure model.

REFERENCES (referred to in the spreadsheets)

Heymsfield SB et al., Obes Rev. 2006 Nov;7(4):361-70.

Jackson et al., Int J Obes Relat Metab Disord. 2002 Jun;26(6):789-96.

Mifflin MD et al., Am J Clin Nutr. 1990 Feb;51(2):241-7.