

Nutritics

March 2019

1 Partial dataset

Data description:

- 94 subjects;
- 4 visits for each subject;
- 93 variables in total;
- 18 food groups.

Food groups:

1. Grains, Rice, Pasta and Savouries;
2. Bread and Rolls;
3. Breakfast Cereals;
4. Biscuits, Cakes and Pastries;
5. Milk and Yogurt;
6. Creams, Ice-cream and Chilled Desserts;
7. Cheeses;
8. Butter, Spreading Fats and Oils;
9. Eggs and Egg Dishes;
10. Potato and Potato Products;
11. Vegetables and Vegetable Dishes;
12. Fruit and Fruit Dishes;
13. Fish and Fish Dishes;
14. Meat and Meat Products;

15. Beverages;
16. Sugars, Confectionary and Preserves;
17. Soups, Sauces and Miscellaneous Foods;
18. Nutritional Supplements.

Variables description:

- 1 – 6: Subject-specific information:

1 **Subject ID**;

2 **Visit** (values 1-4);

3 **Gender** (1=male,2=female). There are 29 males and 65 females;

4 **Age** (range 18-60);

5 **Under Reporter** (1=yes, 2=no).

There are 114 under reporting entries and 250 non-under reporting entries. The under reporting entries correspond to 57 different subjects (22 on only 1 visit, 18 on 2 visits, 12 on 3 visits and 5 on all 4 visits).

Under reporters are defined as these subjects that report an energy intake (Total Energy kcal) lower than the estimated one (Estimated Energy Requirement). The Estimated Energy Requirement is calculated assuming a **pal** (physical activity level) of (1.1);

6 **BMI** (Body Mass Index)(range 17.2-30.6)(kg/m²).

In the dataset, the BMI is assumed constant across all the visit, because the software used for data recording did not allow to variate it with the visit. However, weights data for each visit are available in a different file, we may want to incorporate it and recompute variables 6 – 8 (BMI, BMR, EER).

- 7 – 9: Energies:

7 **BMR** (Basal Metabolic Rate)(range 1161-2120)(kcal);

8 **EER** (Estimated Energy Requirement)(range 1278-2331)(EER/TDE, with TDEE as Total Daily Energy Expenditure)(kcal);

9 **Total Energy kcal** (range 325.4781-4699.4559)(12 NAs, corresponding to 8 subjects on visits 1,3,4)(kcal).

- 10 – 19: **Nutrients intake**: [10] Total Carbohydrate (g), [11] Total Protein (g), [12] Total Fat (g), [13] Total Saturated Fat (g), [14] Total Monounsaturated Fat (g), [15] Total Polyunsaturated Fat (g), [16] Total NSP (non-starch polysaccharides)(g), [17] Total Fibre (g), [18] Total Vitamin D (ug), [19] Total Vitamin C (mg).

- 20 – 37 **Food groups intake:** [20] FG1 Quantity (g), [21] FG2 Quantity (g), [22] FG3 Quantity (g), [23] FG4 Quantity (g), [24] FG5 Quantity (g), [25] FG6 Quantity (g), [26] FG7 Quantity (g), [27] FG8 Quantity (g), [28] FG9 Quantity (g), [29] FG10 Quantity (g), [30] FG11 Quantity (g), [31] FG12 Quantity (g), [32] FG13 Quantity (g), [33] FG14 Quantity (g), [34] FG15 Quantity (g), [35] FG16 Quantity (g), [36] FG17 Quantity (g), [37] FG18 Quantity (g).
- 38 – 55 **Food groups energy:** [38] FG1 Energy (kcal), [39] FG2 Energy (kcal), [40] FG3 Energy (kcal), [41] FG4 Energy (kcal), [42] FG5 Energy (kcal), [43] FG6 Energy (kcal), [44] FG7 Energy (kcal), [45] FG8 Energy (kcal), [46] FG9 Energy (kcal), [47] FG10 Energy (kcal), [48] FG11 Energy (kcal), [49] FG12 Energy (kcal), [50] FG13 Energy (kcal), [51] FG14 Energy (kcal), [52] FG15 Energy (kcal), [53] FG16 Energy (kcal), [54] FG17 Energy (kcal), [55] FG18 Energy (kcal).
- 56 – 73 **Food groups Percentage Energy Contribution:** [56] FG1 Percentage Energy Contribution, [57] FG2 Percentage Energy Contribution, [58] FG3 Percentage Energy Contribution, [59] FG4 Percentage Energy Contribution, [60] FG5 Percentage Energy Contribution, [61] FG6 Percentage Energy Contribution, [62] FG7 Percentage Energy Contribution, [63] FG8 Percentage Energy Contribution, [64] FG9 Percentage Energy Contribution, [65] FG10 Percentage Energy Contribution, [66] FG11 Percentage Energy Contribution, [67] FG12 Percentage Energy Contribution, [68] FG13 Percentage Energy Contribution, [69] FG14 Percentage Energy Contribution, [70] FG15 Percentage Energy Contribution, [71] FG16 Percentage Energy Contribution, [72] FG17 Percentage Energy Contribution, [73] FG18 Percentage Energy Contribution.
These percentages are computed as the ratio between each food group energy (variables 38 – 55) and the Total Energy (variable 9). They have been computed removing food group 18 (which has 4 non-zero entries), but without changing the Total energy values. We may want to recompute them.
- 74 – 93 These variables have been created by Orla with SPSS to perform k-means cluster analysis, we don't need them.

EXTRAs:

- Orla and Lorraine have removed under reporters from their analysis..what should we do?
- There are 2 subjects which have not been classified as under reporters, but that on a visit reported extreme consumption of certain food groups. In correspondence of such food groups, they have inserted NAs. These subjects are: subject ADC 553 on visit 3 (entry 234) and subject ADC 907 on visit 4 (entry 369);

- Originally there were 33 different food groups, they have collapsed to 18 (literature-based) to avoid too many zero entries;
- A single food may be split into different food groups. For example, a lasagna falls under cheese + red meat + pasta + etc.