

**Supplementary Materials:**

**Table S1.** Food frequency questionnaire and coding instructions.

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**Table S1.** Food frequency questionnaire and coding instructions

## EATING HABITS

The following questionnaires ask you about your child's eating habits and frequency of food consumption.

### A) Eating habits

Choose the answer according to your child's habits:

|  |                 |                                    |                          |
|--|-----------------|------------------------------------|--------------------------|
| 1. What kind of milk or vegetable drink do you usually drink?  | 1. Cow milk     | 2. Soy drink                       | 3. Other<br>(which one)  |
| 2. What kind of cow's milk do you usually drink?   | 1. Whole milk   | 2. Semi-skimmed milk               | 3. Skimmed milk          |
| 3. Which kind of yogurt do you usually eat?  | 1. Whole yogurt | 2. Semi-skimmed yogurt             | 3. Skimmed yogurt        |
| 4. Do you usually sweeten the food (yogurt, milk, fruit...) with sugar, honey, sweetener...? Do you add sugary cocoa like <i>Nesquik</i> ? | 1. No           | 2. Yes (number of servings) _____  |                          |
| 5. What kind of bread do you eat?  | 1. White bread  | 2. Whole grain bread               | 3. Other<br>(which one)  |
| 6. What kind of oil do you use to dress salads?  | 1. Olive oil    | 2. Seed oil (sunflower, corn, ...) | 3. olive oil or seed oil |
| 7. What kind of oil do you use for cooking?  | 1. Olive oil    | 2. Seed oil (sunflower, corn, ...) | 3. olive oil or seed oil |
| 8. How much oil do you use to cook?  | 1. Plenty       | 2. Moderate                        | 3. Little                |
| 9. At the eating moment, do you add more oil to your dishes (example: salads, ...)?  | 1. Usually      | 2. Sometimes                       | 3. Occasionally          |
| 10. Do you add to bread or sandwiches?   | 1. Usually      | 2. Sometimes                       | 3. Occasionally          |
| 11. Do you add butter to bread or sandwiches?  | 1. Usually      | 2. Sometimes                       | 3. Occasionally          |

## B) Food frequency questionnaire

The following questionnaire asks about the frequency in which your child consumes. **The frequency of consumption must be specified in the boxes found on the right side of each food.**

For each food item in the list, you should write down the number of times your child consumes it:

- If your child eats it every day of the week (once a day), put a 7 in the WEEKLY column.
- If your child consumes it once a week, put the times: 1-2-3-4-5 or 6 in the column WEEKLY.

Always think about adding up the consumption of all the meals of the day (breakfast, lunch, snack, dinner, others ...)

For example:

- If your child drinks milk for breakfast every morning and occasionally before go to bed too: 7 +

3 = 10 times a week.

- If your child takes meat 4 times for lunch and 2 times for dinner: 4 +2

=6 times a week.

| FOODS LIST | HOW MANY TIMES...? |         |
|------------|--------------------|---------|
|            | WEEKLY             | MONTHLY |
| Milk       | 11                 |         |
| Muffin     | 7                  |         |
| ...        |                    |         |
| Fish       |                    | 3       |

Only check one box for each food (WEEKLY or MONTHLY)

- If your child consumes food ones a month, write down how many times. 1-2-3 ... in the MONTHLY column
- If your child never or almost never, leave the blank box, without putting anything in it.

*Example: If your child usually drinks milk for breakfast (7 times a week) and muffins (7 times a week) and sometimes drinks milk before going to bed (4 times). Moreover, if your child eats 3 times a month (3 times).*

## Food frequency questionnaire – FFQ

| HOW MANY TIMES DO YOU EAT/DRINK---  |        |         |
|---|--------|---------|
|   | WEEKLY | MONTHLY |
| Milk  |        |         |
| Yogurt  |        |         |
| Chocolate: chocolate bar, <i>Kit-Kat</i> , <i>Mars Chocolate Brands...</i>            |        |         |
| Breakfast Puffed Cereals ( <i>Corn-Flakes</i> , <i>Kellogg's</i> , <i>Quaker...</i> ) |        |         |
| “Maria” Cookies   |        |         |
| Chocolate cookies, cream cookies...   |        |         |
| Muffins, soft cakes, biscuits   |        |         |
| <i>Ensaïmada</i> or spiral-shaped pastry, Donut, Croissant                            |        |         |
|   |        |         |
| Salad: lettuce, tomatoes, curly endive....  |        |         |
| Green bean, chard, spinach...   |        |         |
| Garnish Vegetables: eggplant, zucchini, mushroom...                                   |        |         |
| Potatoes: baked, fried or boiled  |        |         |
| Legumes: lentils, peas, chickpeas, beans...   |        |         |
| White rice, paella  |        |         |
| Pasta: noodles, macaroni, spaghetti...  |        |         |
| Soups and creams  |        |         |
|   |        |         |
| Eggs  |        |         |
| Chicken or turkey   |        |         |
| Beef, pork, lamb (steak, battered...)   |        |         |
| Minced meat: pork sausage, hamburger, meatballs...                                    |        |         |
| White fish: hake, grouper...  |        |         |
| Blue fish: sardine, tuna, salmon....  |        |         |
| Seafood: mussels, prawn, octopus, squid...  |        |         |
| Croquettes, small pasty, pizza  |        |         |
| Bread (sandwich, bread consumed at meals )  |        |         |
|   |        |         |
| Serrano ham, ham, cold meat   |        |         |
| White or fresh cheese ( <i>Burgos</i> ,...) or low fat cheese                         |        |         |
| Other cheeses cured or semi-cured, creamy...  |        |         |
|   |        |         |
| Citrus fruit: orange, mandarin orange...  |        |         |
| Other fruits: Apple, pear, peach, apricot, banana...                                  |        |         |

|   |  |  |
|---|--|--|
| Canned fruit (in syrup)                                       |  |  |
| Natural fruit juice   |  |  |
| Commercial fruit juices                                       |  |  |
| Nuts: peanuts, hazelnuts, almonds...                          |  |  |
| Dairy desserts: custard, crème caramel, junket,...            |  |  |
| Cream and chocolate cakes                                     |  |  |
| Snack bags (chips, <i>Cheetos</i> , fries...)                 |  |  |
| Candies: candies, jelly beans...                              |  |  |
| Ice creams: in summer/ in winter                              |  |  |
|   |  |  |
| Sugary drinks ( <i>Coca-Cola</i> , <i>Fanta</i> , Ice tea...) |  |  |
| Low calorie drinks ( <i>Coca-Cola</i> light, zero...)         |  |  |

Table S2. Mean daily energy and nutrient intake during pregnancy

|                          | Comparison intake first trimester versus second trimester |                               |                      | Comparison intake second trimester versus third trimester |                              |                      |
|--------------------------|---|-------------------------------|----------------------|---|------------------------------|----------------------|
|                          | First trimester <sup>a</sup>                              | Second trimester <sup>b</sup> | p-value              | Second trimester <sup>b</sup>                             | Third trimester <sup>c</sup> | p-value              |
|                          | n=513   | n=513                         | between <sup>b</sup> | n=426   | n=426                        | between <sup>c</sup> |
|                          | Mean (SD)   | Mean (SD)                     |                      | Mean (SD)   | Mean (SD)                    |                      |
| Energy (Kcal/d)          | 1794.5<br>(414.9)   | 1787.9<br>(389.6)             | 0.819                | 1788.5<br>(382.2)   | 1740.9<br>(372.5)            | 0.003                |
| Proteins (g/d)           | 57.9 (17.2)   | 57.9 (15.4)                   | 0.862                | 58 (15.7)   | 56.5 (15.9)                  | 0.029                |
| Carbohydrates (g/d)      | 177.2 (65.7)  | 173.9 (63.2)                  | 0.362                | 173.9 (60.5)  | 165.9 (59.6)                 | 0.002                |
| Natural Sugars (g/d)     | 21.5 (9.7)  | 20.8 (9.4)                    | 0.265                | 20.8 (9.4)  | 20.8 (9.9)                   | 0.794                |
| Free Sugars (g/d)        | 42.5 (28.8)   | 45.1 (30.1)                   | 0.006                | 45.1 (30.1)   | 40.9 (27.6)                  | 0.001                |
| Lipids (g/d)             | 94.5 (12.9)   | 95.2 (12.4)                   | 0.261                | 95.3 (12.5)   | 94.1 (12.1)                  | 0.051                |
| Cholesterol (mg)         | 219.7 (75.8)  | 225.4 (70.1)                  | 0.053                | 225.6 (71.1)  | 220.6 (69.6)                 | 0.353                |
| Saturated fats (g)       | 24.4 (5.8)  | 24.9 (5.6)                    | 0.058                | 25.0 (5.6)  | 24.5 (5.5)                   | 0.074                |
| Monounsaturated fats (g) | 53.4 (4.7)  | 53.6 (4.6)                    | 0.334                | 53.6 (4.6)  | 53.2 (4.4)                   | 0.051                |
| Polyunsaturated fats (g) | 10.1 (1.4)  | 10.0 (1.4)                    | 0.531                | 10.0 (1.4)  | 9.9 (1.3)                    | 0.014                |
| Fibre (g/d)              | 13.0 (4.6)  | 12.5 (4.3)                    | 0.002                | 12.5 (4.3)  | 12.0 (4.1)                   | 0.003                |
| Sodium (mg/d)            | 1352.2<br>(419.2)   | 1326.8<br>(408.9)             | 0.065                | 1325.4<br>(414.7)   | 1281.7<br>(401.9)            | 0.006                |
| Potassium (mg/d)         | 2253.3<br>(703.7)   | 2243.6<br>(645.3)             | 0.798                | 2241.3<br>(642.7)   | 2181.5<br>(647.7)            | 0.009                |
| Phosphorus (mg/d)        | 853.3<br>(263.1)  | 865.2<br>(236.3)              | 0.092                | 863.8<br>(237.2)  | 848.2<br>(242.8)             | 0.125                |
| Calcium (mg/d)           | 674.6<br>(266.2)  | 687.6<br>(229.2)              | 0.039                | 686.6<br>(227.9)  | 680.3<br>(253.5)             | 0.599                |
| Iron (mg/d)              | 7.8 (2.7)   | 7.7 (2.4)                     | 0.908                | 7.7 (2.4)   | 7.41 (2.3)                   | 0.003                |
| Vitamin A (µg/d)         | 616.6<br>(199.6)  | 620.9<br>(188.1)              | 0.319                | 623.3<br>(188.7)  | 613.1<br>(189.1)             | 0.121                |
| Vitamin E (mg/d)         | 10.1 (1.2)  | 10.1 (1.1)                    | 0.226                | 10.1 (1.1)  | 9.9 (1.1)                    | 0.058                |
| Vitamin C (mg/d)         | 79.2 (37.4)   | 75.5 (36.0)                   | 0.040                | 75.6 (36.1)   | 74.6 (36.3)                  | 0.257                |
| Vitamin D (µg/d)         | 1.8 (1.1)   | 1.9 (1.0)                     | 0.278                | 1.9 (1.0)   | 1.8 (1.1)                    | 0.308                |
| Vitamin B1 (mg/d)        | 0.9 (0.3)   | 0.9 (0.3)                     | 0.712                | 0.9 (0.3)   | 0.9 (0.3)                    | 0.050                |
| Vitamin B2 (mg/d)        | 1.3 (0.5)   | 1.4 (0.4)                     | 0.055                | 1.4 (0.4)   | 1.3 (0.4)                    | 0.726                |
| Niacin (mg/d)            | 13.1 (4.5)  | 13.0 (4.0)                    | 0.475                | 13.0 (4.1)  | 12.6 (3.9)                   | 0.027                |
| Vitamin B6 (mg/d)        | 1.3 (0.5)   | 1.3 (0.4)                     | 0.309                | 1.3 (0.4)   | 1.3 (0.4)                    | 0.027                |
| Vitamin B12 (µg/d)       | 4.4 (1.6)   | 4.5 (1.5)                     | 0.103                | 4.5 (1.5)   | 4.4 (1.6)                    | 0.411                |

|                      |              |              |       |              |              |       |
|----------------------|--------------|--------------|-------|--------------|--------------|-------|
| <b>Folate (µg/d)</b> | 212.0 (76.5) | 204.8 (69.4) | 0.051 | 204.6 (69.8) | 199.7 (65.7) | 0.094 |
|----------------------|--------------|--------------|-------|--------------|--------------|-------|

Values expressed as mean and standard deviation (SD). Natural sugar include: Sugars from fruits, vegetables, milk and salted cereals; Free sugar include: Monosaccharides and disaccharides added to foods and beverages and sugars naturally present in honey, syrups, fruit juices and fruit juice concentrates; Vitamin A (µg/d): Calculated as retinol activity equivalents.

**Table S3.** Energy intake and percentage of total energy contributed by macronutrients during pregnancy and post-partum

|                                 | Comparison intake first trimester versus second trimester |   |                                  | Comparison intake second trimester versus third trimester |  |                                  | Comparison intake third trimester versus post-partum        |  |                                  |
|---------------------------------|---|---|----------------------------------|---|--|----------------------------------|---|--|----------------------------------|
|                                 | First trimester <sup>a</sup><br>n=513<br>Mean (SD)        | Second trimester <sup>b</sup><br>n=513<br>Mean (SD) | p-value between <sup>(a-b)</sup> | Second trimester <sup>b</sup><br>n=426<br>Mean (SD)       | Third trimester <sup>c</sup><br>n=426<br>Mean (SD) | p-value between <sup>(b-c)</sup> | Mean of three trimesters <sup>c</sup><br>n=395<br>Mean (SD) | Post-partum <sup>d</sup><br>n=395<br>Mean (SD) | p-value between <sup>(c-d)</sup> |
| <b>Energy (Kcal/d)</b>          | 1794.5<br>(414.9)   | 1787.9<br>(389.6)                                   | 0.695                            | 1788.5<br>(382.2)   | 1740.9<br>(372.5)                                  | 0.001                            | 1779.1<br>(356.0)   | 1744.8<br>(382.8)                              | 0.282                            |
| <b>Proteins (%)</b>             | 12.8<br>(1.9)   | 12.9 (1.8)  | 0.295                            | 12.9 (1.8)  | 12.9 (1.9)   | 0.807                            | 12.9 (1.5)  | 13.2 (1.9)                                     | 0.001                            |
| <b>Carbohydrates (%)</b>        | 38.5<br>(6.5)   | 38.0 (6.1)  | 0.064                            | 38.1 (6.0)  | 37.3 (6.2)   | 0.001                            | 37.9 (5.5)  | 36.8 (6.3)                                     | <0.001                           |
| <b>Natural Sugars (%)</b>       | 4.8 (1.8)   | 4.6 (1.8)   | 0.138                            | 4.6 (1.9)   | 4.8 (1.9)  | 0.103                            | 4.7 (1.5)   | 4.3 (1.7)                                      | <0.001                           |
| <b>Free Sugars (%)</b>          | 9.0 (4.9)   | 9.6 (4.8)   | 0.006                            | 9.5 (4.7)   | 8.9 (4.6)  | 0.003                            | 9.0 (4.1)   | 8.5 (4.8)                                      | 0.028                            |
| <b>Lipids (%)</b>               | 48.6<br>(6.1)   | 49.0 (5.6)  | 0.097                            | 48.5 (5.6)  | 49.8 (5.7)   | 0.001                            | 49.2 (5.1)  | 50.1 (5.9)                                     | 0.001                            |
| <b>Saturated fats (%)</b>       | 12.4<br>(1.6)   | 12.6 (1.5)  | <0.001                           | 12.7 (1.6)  | 12.8 (1.5)   | 0.111                            | 12.6 (1.3)  | 12.8 (1.5)                                     | 0.001                            |
| <b>Monounsaturated fats (%)</b> | 27.7<br>(4.3)   | 27.8 (3.9)  | 0.513                            | 27.8 (4.0)  | 28.4 (4.0)   | <0.001                           | 28.0 (3.6)  | 28.6 (4.3)                                     | 0.004                            |
| <b>Polyunsaturated fats (%)</b> | 5.2 (0.6)   | 5.3 (0.6)   | 0.678                            | 5.2 (0.6)   | 5.3 (0.6)  | 0.005                            | 5.2 (0.6)   | 5.3 (0.7)                                      | 0.016                            |

Values expressed as mean and standard deviation (SD). Natural sugars include: Sugars from fruits, vegetables, milk and salted cereals; Free Sugars include: Monosaccharides and disaccharides added to foods and beverages and sugars naturally present in honey, syrups, fruit juices and fruit juice concentrates.