

Supplementary Material

Table S1. Groups of Recommended, Not Recommended or Neutral foods

Label	Food decoding
<i>Food: Recommended</i>	
BLL_04	Vegetable milk without sugar (rise, oats, soybeans, almonds)
BLL_06	Tea, herbal tea, barley
BLL_07	Unsweetened natural yogurt
D_03	Brown sugar, honey, maple syrup, agave syrup
D_04	Malts
D_05	Jam without sugar
PC_03	Bread and pizza made with durum wheat flour
PC_04	Pasta (like spaghetti or macaroni)
PC_11	Oats, oatmeal
PC_12	Muesli without sugar
CPSU_04	Fish
LVF_01	Legumes (beans, lentils, chickpeas, beans, green/red soybeans etc.)
LVF_02	Yellow soybeans, tofu, tempeh
LVF_04	Onions, leeks, garlic
LVF_06	Tomato, tomato juice, tomato sauces
LVF_09	Green and black olives
LVF_10	Other cooked vegetables (zucchini, pumpkin etc.), vegetable soups
LVF_11	Other raw vegetables (lettuce, other kind of salad, cucumbers etc.)
LVF_12	Berries, pomegranate (including unsweetened fresh juices)
LVF_13	Apples, pears
LVF_16	Other kind of fresh fruits
LVF_17	Dried fruits, raisins, prunes, apricots
LVF_18	Walnuts, hazelnuts, almonds (including creams), oiled seeds
SG_01	Extra-virgin olive oil
SG_05	Miso, Tamari, tekka
SG_07	Mushroom
<i>Food: Not Recommended</i>	
BLL_01_01	Cow or goat's milk, any kind
BLL_02	Fresh/seasoned cheese of any kind (including those that are used for pizza or pasta)
BLL_03	Ricotta, with/without salt
BLL_08	Coca-Cola or other sweetened commercial beverages (fruit juices, vegetable milks and yogurt)
BLL_10	Alcoholic drinks (wine, beer, spirits etc. etc.)
D_01	Refined white sugar
D_02	Artificial sweeteners
D_06	Jam with sugar or fructose, glucose, dextrose
D_08	White or milk chocolate, candies

D_09	Cookies, brioches, sweets, brand ice cream
PC_05	Handmade egg pasta, pasta made with soft-wheat flour
PC_10	Corn, corn flakes
PC_13	Muesli with honey or sugar
CPSU_01	Red meat (beef and veal, sheep, porks, horses)
CPSU_02	Processed meat (salami, ham, sausages, canned meat)
LVF_05	Potatoes, potato chips, mashed potatoes, dumplings
SG_03	Butter, cream, suet, lard, margarine
SG_04	Souces, nuts, mayonnaise, ketchup etc.
Food: <i>Neutral</i>	
BLL_05	Cafè
BLL_09	Unsweetened fruit juices
D_07	Dark chocolate
D_10	Cookies, ice cream or other desserts without sugar, fructose, glucose and hydrogenated fats
PC_01	White bread, crackers, biscuits, pretzels, bread sticks, pizza
PC_02	Bread, pizza or crisp bread made with wholemeal flour or partial wholemeal flour
PC_06	White rice, puffed rice
PC_07	Whole rice/partial whole rice, basmati rice
PC_08	Rise cakes
PC_09	Spelt, barley, millet, buckwheat (grains or flakes), quinoa
CPSU_03	White meat or game (chicken, rabbit, turkey, ostrich, pheasant, etc. etc.)
CPSU_05	Clams and shellfish
CPSU_06	Seitan
CPSU_07	Eggs, omelette
LVF_03	Artichokes, cardoons, fennel
LVF_07	Peppers, eggplants
LVF_08	Cabbage, cauliflower, broccoli, turnips, radishes, arugula, daikon, beetroots
LVF_14	Citrus
LVF_15	Fresh unsweetened fruit juices
SG_02	Seed oil
SG_06	Spices

Table S2. Five-scale classification criteria of *Recommended* and *Not Recommended* foods at T0 and T1

<i>Recommended</i> food intake ($\Delta_R = T1 - T0$)	<i>Not Recommended</i> food intake ($\Delta_{NR} = T1 - T0$)	category	description
$\Delta_R = 0$	$\Delta_{NR} < 0$	1	Stability or decrease of <i>NR</i> foods and stability or increase of <i>R</i> foods
$\Delta_R > 0$	$\Delta_{NR} = 0$		
$\Delta_R > 0$	$\Delta_{NR} < 0$		
$\Delta_R = 0$	$\Delta_{NR} = 0$	2	No changes
$\Delta_R = 0$	$\Delta_{NR} > 0$	3	Increase of <i>NR</i> foods and stability or increase of <i>R</i> foods
$\Delta_R > 0$	$\Delta_{NR} > 0$		
$\Delta_R < 0$	$\Delta_{NR} = 0$	4	Decrease of <i>R</i> foods and stability or decrease of <i>NR</i> foods
$\Delta_R < 0$	$\Delta_{NR} < 0$		
$\Delta_R < 0$	$\Delta_{NR} > 0$	5	Decrease of <i>R</i> foods and increase of <i>NR</i> foods

Figure S1. Distribution of the food intake changes between T0 and T1.

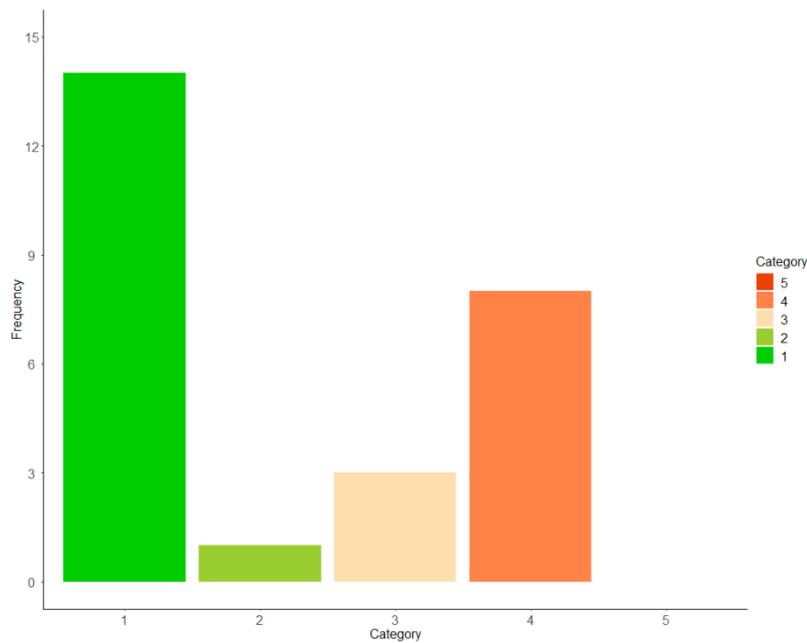


Figure S1. Bar plot reporting the changes in the food intake frequency as assessed by the diaries by jointly considering the intake modulation of *Recommended* and *Not Recommended* foods.