

Table S1. Prediction performances of the subjective value.

	Rank	Explanatory variables	Performance
<i>Linear regression</i>	1	fat, carbohydrate, protein, vitamin	0.481
	2	fat, sodium, carbohydrate, protein, vitamin	0.478
	3	fat, sodium, protein, vitamin	0.474
	4	fat, protein, vitamin	0.465
	5	sodium, carbohydrate, protein, vitamin	0.463
	6	fat, sodium, sugar, protein, vitamin	0.455
	7	fat, carbohydrate, sugar, protein, vitamin	0.455
	8	carbohydrate, protein, vitamin	0.453
	9	fat, sodium, carbohydrate, sugar, protein, vitamin	0.452
	10	fat, sugar, protein, vitamin	0.440
<i>Logistic regression</i>	1	fat, carbohydrate, protein, vitamin	69.95%
	2	fat, sodium, carbohydrate, protein, vitamin	69.64%
	3	sodium, carbohydrate, protein, vitamin	69.26%
	4	fat, protein, vitamin	69.10%
	5	fat, sodium, protein, vitamin	68.94%
	6	fat, sodium, carbohydrate, protein	68.79%
	7	sodium, protein, vitamin	68.79%
	8	carbohydrate, protein, vitamin	68.79%
	9	fat, sodium, carbohydrate, sugar, protein	68.48%
	10	sodium, carbohydrate, sugar, protein, vitamin	68.25%

Prediction performances of the best 10 models are shown for linear and logistic regression analyses (the best model in each analysis is shown in bold). Performance, z-transformed correlation between the predicted and the actual values for the linear regression analysis, and prediction accuracy for the logistic regression analysis. See Methods for details.

Table S2. Food items used

1. 3 Musketeers ^d	29. Sun Chips ^e
2. Barnum's Animal Crackers ^d	30. Dole Mixed Fruit ^a
3. Doritos Nacho Cheese ^e	31. Grapefruit ^a
4. Chips Ahoy! ^d	32. Banana Chips ^e
5. Kit Kat ^d	33. Dark Chocolate Bananas ^d
6. Pop-Tarts Brown Sugar Cinnamon ^d	34. Crispy Apple ^e
7. Pop-Tarts Frosted Strawberry ^d	35. Vegetable Chips ^e
8. Hostess Powdered Donettes ^d	36. Sweet Potato Chips ^e
9. Twix Cookie Bars ^d	37. Chopped Salad Chicken ^c
10. Hershey's Whatchamacallit Candy ^d	38. Mexicali Salad ^c
11. Apple Pie ^d	39. Caesar Salad ^c
12. Avocado ^a	40. Veggie Wrap ^c
13. Blackberries ^a	41. Super Burrito ^c
14. Cauliflower ^a	42. Chocolate & Berry ^d
15. Ritz Crackers'n Cheese Dip ^e	43. Green Beans Chips ^e
16. Cherry Pie ^d	44. Salami ^b
17. Chocolate Muffins ^d	45. Smoked Turkey ^b
18. Hostess Donettes ^d	46. American Cheese ^b
19. Granny Smith Apple ^a	47. Chicken & Roasted Beet ^c
20. Green Grapes ^a	48. Mozzarella Cheese ^b
21. Mango ^a	49. Roast Beef ^b
22. Milano Cookies ^d	50. Caprese Sandwich ^c
23. Orange ^a	51. Tuna Salad Wrap ^c
24. Raspberries ^a	52. Smoked Salmon ^b
25. Red Velvet Cake ^d	53. Plain Yogurt ^b
26. Quaker Chewy Granola Bar ^d	54. Strawberry Yogurt ^b
27. Starburst Candy ^d	55. Blueberry Yogurt ^b
28. Strawberry ^a	56. Deviled Eggs ^b

^a fresh vegetables and fruits (e.g., Orange and Apple), ^b meet and dairy products (e.g., salami and yogurt), ^c cooked products (e.g., salad and wrap), ^d sweet snacks (e.g., chocolate bar and cake), and ^e salty snacks (e.g., chips and crackers).