Table S1. Diet quality index (DQI) and dietary diversity score of individuals.

	Men (n=6297)	Women (n=6230)	Total (n=12527)	p-value
Diet quality index total score	62.18±8.31	62.34±8.25	62.26±8.28	0.27
DQI variety score	18.42±2.27	18.51±2.23	18.46±2.24	**0.018**
Food group variety	13.86±1.67	13.94±1.64	13.9±1.66	**0.005**
Protein source variety	4.56±0.1	4.57±0.97	4.57±0.98	0.493
DQI adequacy score	30.03±5.31	30.17±5.18	30.1±5.24	0.144
Vegetable group	2.7±1.86	2.72±1.72	2.71±1.79	0.49
Fruit group	2.04±1.87	2.12±1.86	2.08±1.87	**0.022**
Cereal group	3.13±1.29	3.08±1.28	3.1±1.29	**0.046**
Fiber	4.38±0.92	4.39±0.91	4.39±0.91	0.33
Protein	4.99±0.08	4.99±0.86	4.99±0.82	0.8
Iron	4.78±0.58	4.79±0.57	4.78±0.58	0.6
Calcium	3.86±1.17	3.86±1.17	3.86±1.17	0.79
Vitamin C	4.16±1.29	4.22±1.23	4.19±1.26	**0.011**
DQI moderation score	12.32±5.56	12.32±5.69	12.32±5.62	0.99
Total fat	1.43±1.89	1.36±1.84	1.4±1.85	**0.035**
Saturated fat	1.44±2.04	1.42±2.02	1.43±2.03	0.69
Cholesterol	4.67±2.17	4.72±2.16	4.69±2.17	0.17
Sodium	2.23±2.39	2.27±2.38	2.25±2.39	0.26
Empty calorie foods	2.55±2.22	2.54±2.24	2.54±2.23	0.66
DQI overall balance score	1.41±2.05	1.34±1.91	1.38±1.98	**0.049**
Macronutrient ratio	0.49±1.37	0.44±1.31	0.46±1.34	**0.039**
Fatty acid ratio	0.92±1.47	0.9±1.46	0.91±1.46	0.45
Dietary diversity score	6.65±1.32	6.67±1.31	6.66±1.31	0.57
Cereals	1.0±0.05 [99.8]	1.0±0.04 [99.8]	0.99±0.43 [99.8]	0.42
Dark green leafy vegetables and vitamin A-rich sources	0.39±0.49 [38.6]	0.39±0.49 [38.7]	0.39±0.49 [38.7]	0.12
Other fruits	0.61±0.49 [61.0]	0.63±0.48 [63.1]	0.62±0.49 [62.1]	**0.017**
Other vegetables	0.96±0.19 [96.3]	0.97±0.18 [96.6]	0.96±0.19 [96.4]	0.249
Legumes, nuts, and seeds	0.45±0.5 [44.7]	0.46±0.5 [45.7]	0.45±0.5 [45.2]	0.285
Meats	0.79±0.4 [79.4]	0.78±0.41 [78.4]	0.79±0.41 [78.9]	0.187
Milk and milk products	0.95±0.21 [95.4]	0.96±0.19 [96.2]	0.96±0.36 [95.8]	**0.027**
Eggs	0.65±0.48 [64.8]	0.63±0.48 [63.2]	0.64±0.48 [64.0]	0.062
Oils and fats	0.85±0.35 [85.3]	0.85±0.36 [84.8]	0.85±0.36 [85.1]	0.445

p-values calculated with the independent samples t-test. Bold type indicates statistical significance ($p < 0.05$). Values are mean ± SD or mean ± SD [%]

Table S2a. Energy and nutrients intake, RDA (%), DQI, dietary diversity score by GHGEs, and total water footprint tertiles, among 6230 women

		GHGEs			p1	Total water footprint			p2
		Q1	Q2	Q3		Q1	Q2	Q3	
Cut-off		≤2.083	|2.083-3.516|	≥3.516		≤2115.4	|2115.4-3121.4|	≥3121.4	
Energy (kcal)		1460.1±528.82[a]	1846.3±589.98[b]	2231.1±711.22[c]	**<0.001**	1312.6±419.99[a]	1808.1±499.78[b]	2373.5±684.03[c]	**<0.001**
	RDA (%)	71.2±26.27[a]	89.9±29.36[b]	108.8±35.65[c]	**<0.001**	64.2±21.24[a]	88.0±25.18[b]	115.6±34.36[c]	**<0.001**
Carbohydrate (%)		50.3±9.69[a]	47.3±9.08[b]	44.9±8.59[c]	**<0.001**	50.1±9.98[a]	47.5±8.98[b]	45.1±8.65[c]	**<0.001**
Protein (%)		18.6±6.48[a]	20.0±6.57[b]	21.3±6.81[c]	**<0.001**	18.8±6.53[a]	19.9±6.59[b]	21.1±6.84[c]	**<0.001**
	RDA (%)	100.0±57.34[a]	137.7±76.32[b]	169.9±90.41[c]	**<0.001**	89.3±49.52[a]	130.9±67.91[b]	179.9±91.48[c]	**<0.001**
Fat (%)		31.1±8.63[a]	32.8±7.80[b]	33.8±7.42[c]	**<0.001**	31.2±8.70[a]	32.6±7.79[b]	33.8±7.47[c]	**<0.001**
Fiber (g)		19.8±8.55[a]	22.6±9.24[b]	24.5±9.88[c]	**<0.001**	18.0±7.65[a]	22.4±8.43[b]	26.1±10.33[c]	**<0.001**
	RDA (%)	83.5±37.20[a]	95.0±39.53[b]	103.1±42.54[c]	**<0.001**	76.2±33.30[a]	94.2±36.89[b]	109.5±44.08[c]	**<0.001**
Iron (mg)		12.6±19.75[a]	15.3±8.27[b]	19.2±10.68[c]	**<0.001**	11.6±20.50[a]	15.1±7.71[b]	20.2±10.80[c]	**<0.001**
	RDA (%)	85.3±115.97[a]	103.1±62.73[b]	129.5±80.84[c]	**<0.001**	79.2±118.81[a]	101.3±60.34[b]	135.6±81.81[c]	**<0.001**
Calcium (mg)		949.9±509.85[a]	1173.0±615.45[b]	1314.3±665.45[c]	**<0.001**	875.1±464.51[a]	1147.7±564.83[b]	1390.2±694.20[c]	**<0.001**
	RDA (%)	88.1±48.46[a]	108.6±58.15[b]	122.1±63.38[c]	**<0.001**	81.0±44.26[a]	106.7±54.16[b]	128.8±65.48[c]	**<0.001**
Vitamin C (mg)		108.5±89.41[a]	122.5±96.96[b]	130.7±101.23[c]	**<0.001**	106.8±94.29[a]	120.9±88.54[b]	132.6±105.00[c]	**<0.001**
	RDA (%)	123.2±102.88[a]	139.3±109.51[b]	148.6±115.79[c]	**<0.001**	121.4±108.00[a]	137.3±100.31[b]	151.0±120.10[c]	**<0.001**
Saturated fat (g)		16.3±7.86[a]	23.3±9.90[b]	30.4±12.01[c]	**<0.001**	15.0±7.15[a]	22.4±8.38[b]	31.9±12.05[c]	**<0.001**
Cholesterol (mg)		161.6±128.80[a]	241.7±150.24[b]	317.4±187.93[c]	**<0.001**	145.4±116.97[a]	227.3±128.75[b]	341.1±195.04[c]	**<0.001**
Diet quality index total score		62.7±8.58[a]	63.0±8.02[a]	61.3±8.05[b]	**<0.001**	62.4±8.52[a]	63.3±8.07[b]	61.2±8.06[c]	**<0.001**
DQI variety score		17.6±2.93[a]	19.0±1.62[b]	19.0±1.55[b]	**<0.001**	17.5±2.98[a]	18.9±1.69[b]	19.0±1.56[b]	**<0.001**
DQI adequacy score		28.3±5.55[a]	30.6±4.72[b]	31.6±4.65[c]	**<0.001**	27.5±5.51[a]	30.6±4.56[b]	32.0±4.51[c]	**<0.001**
DQI moderation score		15.3±5.22[a]	12.1±5.00[b]	9.5±5.30[c]	**<0.001**	15.9±5.09[a]	12.4±4.73[b]	9.0±5.18[c]	**<0.001**
DQI overall balance score		1.55±2.05[a]	1.32±1.89[b]	1.16±1.74[c]	**<0.001**	1.51±2.03[a]	1.34±1.91[b]	1.19±1.76[c]	**<0.001**
Dietary diversity score		6.1±1.38[a]	6.94±1.17[b]	7.0±1.14[b]	**<0.001**	5.96±1.36[a]	6.86±1.16[b]	7.09±1.15[c]	**<0.001**

p-values calculated with one-way analysis of variance (ANOVA) test.

[a,b,c] Values on the same row not sharing the same superscript letters were significantly different and bold type used for impression (p<0.05). p1: GHGEs, p2: Total water footprint.

Abbreviations: Q: tertiles (Q1 is the lowest and Q3 is the highest); GHGEs: greenhouse gas emission; RDA: recommended dietary allowance; DQI: diet quality index.

Table S2b. Energy and nutrients intake, RDA (%), DQI, dietary diversity score by GHGEs, and total water footprint tertiles, among 6297 men

		GHGEs			p1	Total water footprint			p2
		Q1	Q2	Q3		Q1	Q2	Q3	
Cut-off		≤2.083	|2.083-3.516|	≥3.516		≤2115.4	|2115.4-3121.4|	≥3121.4	
Energy (kcal)		1482.1±520,79[a]	1891.9±633.91[b]	2243.7±731.66[c]	**<0.001**	1327.9±438.93[a]	1814.9±492.75[b]	2391.8±716.33[c]	**<0.001**
	RDA (%)	57.7±21.42[a]	73.1±25.62[b]	87.1±29.81[c]	**<0.001**	51.5±17.68[a]	70.5±20.84[b]	92.7±29.33[c]	**<0.001**
Carbohydrate (%)		50.7±9.77[a]	47.4±9.12[b]	45.0±8.82[c]	**<0.001**	50.4±10.18[a]	47.8±9.10[b]	45.4±8.81[c]	**<0.001**
Protein (%)		18.2±6.62[a]	20.0±6.86[b]	21.6±7.20[c]	**<0.001**	18.7±6.73[a]	19.8±6.85[b]	21.4±7.19[c]	**<0.001**
	RDA (%)	99.8±59.26[a]	134.0±73.02[b]	168.4±90.89[c]	**<0.001**	90.1±48.91[a]	131.2±68.77[b]	177.1±92.49[c]	**<0.001**
Fat (%)		30.9±8.46[a]	32.5±7.79[b]	33.4±7.79[c]	**<0.001**	30.9±8.58[a]	32.5±7.94[b]	33.2±7.66[c]	**<0.001**
Fiber (g)		19.5±8.36[a]	23.1±10.38[b]	24.7±10.40[c]	**<0.001**	18.2±8.67[a]	22.2±8.49[b]	26.2±11.01[c]	**<0.001**
	RDA (%)	67.2±28.84[a]	79.7±35.80[b]	85.1±35.87[c]	**<0.001**	62.8±29.89[a]	76.5±29.27[b]	90.4±37.96[c]	**<0.001**
Iron (mg)		11.7±6.46[a]	15.5±8.67[b]	18.9±16.07[c]	**<0.001**	10.8±5.94[a]	14.7±7.46[b]	20.0±10.18[c]	**<0.001**
	RDA (%)	117.3±64.56[a]	155.3±86.71[b]	189.2±98.04[c]	**<0.001**	107.9±59.36[a]	147.5±74.64[b]	199.5±101.78[c]	**<0.001**
Calcium (mg)		941.4±503.38[a]	1192.6±643.58[b]	1333.2±696.57[c]	**<0.001**	887.2±490.20[a]	1121.0±564.81[b]	1417.9±721.83[c]	**<0.001**
	RDA (%)	87.2±46.92[a]	111.3±62.21[b]	123.5±66.29[c]	**<0.001**	82.5±46.60[a]	109.8±53.41[b]	132.0±69.27[c]	**<0.001**
Vitamin C (mg)		105.8±98.46[a]	129.3±128.83[b]	131.9±103.77[b]	**<0.001**	108.1±126.39[a]	119.2±96.11[b]	137.5±111.99[c]	**<0.001**
	RDA (%)	120.1±111.04[a]	146.8±144.87[b]	150.7±121.55[b]	**<0.001**	122.4±141.14[a]	135.8±108.87[b]	156.8±129.91[c]	**<0.001**
Saturated fat (g)		16.6±8.19[a]	23.6±9.72[b]	30.3±12.09[c]	**<0.001**	15.2±7.78[a]	22.3±7.89[b]	31.8±12.00[c]	**<0.001**
Cholesterol (mg)		163.9±122.55[a]	248.6±149.07[b]	323.0±179.46[c]	**<0.001**	139.3±105.73[a]	236.4±126.82[b]	343.7±184.44[c]	**<0.001**
Diet quality index total score		62.4±8.53[a]	62.8±8.48[a]	61.3±7.84[b]	**<0.001**	62.2±8.91[a]	63.0±8.12[b]	61.3±7.90[c]	**<0.001**
DQI variety score		17.6±2.89[a]	18.8±1.83[b]	18.9±1.63[b]	**<0.001**	17.4±2.96[a]	18.8±1.83[b]	18.9±1.69[b]	**<0.001**
DQI adequacy score		28.0±5.37[a]	30.6±5.18[b]	31.6±4.69[c]	**<0.001**	27.3±5.75[a]	30.3±4.62[b]	32.0±4.60[c]	**<0.001**
DQI moderation score		15.2±5.15[a]	12.0±5.06[b]	9.8±5.09[c]	**<0.001**	15.8±5.00[a]	12.4±4.78[b]	9.3±4.99[c]	**<0.001**
DQI overall balance score		1.67±2.25[a]	1.51±2.14[b]	1.05±1.66[c]	**<0.001**	1.62±2.20[a]	1.54±2.19[a]	1.10±1.69[b]	**<0.001**
Dietary diversity score		6.10±1.37[a]	6.87±1.20[b]	7.00±1.19[c]	**<0.001**	5.95±1.37[a]	6.84±1.18[b]	7.04±1.18[c]	**<0.001**

p-values calculated with one-way analysis of variance (ANOVA) test.

[a,b,c] Values on the same row not sharing the same superscript letters were significantly different and bold type used for impression (p<0.05). p1: GHGEs, p2: Total water footprint.

Abbreviations: Q: tertiles (Q1 is the lowest and Q3 is the highest); GHGEs: greenhouse gas emission; RDA: recommended dietary allowance; DQI: diet quality index.

Table S3. The contribution of foods to greenhouse gas emission and total water footprint value (n=12527).

Food	g/day	Greenhouse gas emission		Total water footprint	
		Mean±SD [Median]	% contribution	Mean±SD [Median]	% contribution
Red meats	43.3	1.137±1.10 [0.82]	40.1	0.588±0.56 [0.425]	23.7
Poultry	25.2	0.255±0.20 [0.21]	2.94	0.279±0.22 [0.228]	3.6
Sea products	14.1	0.324±0.36 [0.25]	1.18	0.178±0.16 [0.144]	0.75
Eggs	32.2	0.07±0.07 [0.47]	3.4	0.107±0.11 [0.072]	5.89
Dairy products	192.4	0.152±0.16 [0.13]	16.9	0.112±0.13 [0.084]	14.13
Cereals	249.2	0.017±0.023 [0.011]	3.16	0.079±0.096 [0.053]	16.86
Potato	37.2	0.014±0.02 [0.009]	0.27	0.015±0.02 [0.011]	0.33
Nuts and seeds	16.3	0.011±0.01 [0.007]	0.38	0.045±0.06 [0.026]	1.78
Legumes	25.0	0.03±0.03 [0.028]	0.67	0.047±0.092 [0.035]	1.76
Vegetables	215.4	0.017±0.04 [0.009]	4.40	0.006±0.012 [0.003]	1.76
Fruits	159.9	0.028±0.05 [0.02]	1.82	0.037±0.063 [0.023]	2.67
Oils	22.0	0.017±0.017 [0.01]	1.64	0.04±0.08 [0.025]	4.33
Fats	12.9	0.015±0.024 [0.01]	0.81	0.04±0.051 [0.031]	2.51
Sugar and confectioneries	36.9	0.017±0.046 [0.006]	1.71	0.029±0.08 [0.008]	3.36
Soft drink*	51.5	0.028±0.08 [0.003]	0.62	0.034±0.09 [0.005]	0.83
Alcoholic beverages*	6.6	0.167±0.164 [0.117]	0.11	0.086±0.147 [0.016]	0.06
Turkish coffee	12.9	0.034±0.036 [0.02]	0.27	0.103±0.109 [0.062]	0.88
Black tea*	494.0	0.112±0.108 [0.083]	7.67	0.032±0.031 [0.024]	2.51
Other coffee (filtered, espresso, etc.) herbal teas, and water	-	0.137±0.68 [0.003]	11.45	0.112±0.564 [0.0001]	10.9
Other (black olive, green olive, flavoring, vanilla, etc.)	-	0.008±0.01 [0.005]	0.3	0.038±0.064 [0.026]	1.82

*mL/day