Twin Research and Human Genetics

Supplementary Material

Causes of variation in food preference in the Netherlands

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Supplementary Table S1. Principal component analysis: mean liking-disliking scores after imputation, factor loadings per cluster and presentation of excluded items. Factor loading above 0.4 indicates that that item is included in that cluster (shown in bold).

	Preference score after imputation (N=15,954)		Clusters								
Included items	Mean	SD	1	2	3	4	5	6	7	8	9
Broccoli	6.98	2.04	-0.075	0.090	0.056	-0.040	0.109	0.042	0.036	**0.712**	0.074
Tortilla chips or crisp	6.37	2.31	0.099	-0.020	**0.670**	0.111	0.048	0.042	0.064	0.007	-0.016
Crispy bacon	5.73	2.51	**0.672**	-0.055	0.248	0.043	-0.032	0.079	0.126	-0.027	0.044
Beer	4.64	3.32	0.227	-0.060	0.182	-0.048	0.131	0.159	**0.629**	0.013	-0.009
Prawns & shellfish	5.68	3.33	0.153	0.064	0.016	-0.089	0.048	0.147	0.156	0.004	**0.720**
Butter or margarine	5.74	2.11	0.166	-0.050	0.149	0.211	-0.049	-0.044	0.053	0.066	0.026
Chips	6.87	1.95	0.184	0.003	**0.711**	0.173	-0.044	-0.050	-0.035	-0.077	-0.037
Wholemeal- bread	7.90	1.74	-0.020	0.142	0.057	0.030	0.038	-0.034	0.053	0.137	0.006
Skimmed milk	4.62	2.89	0.056	0.007	0.004	0.031	0.073	-0.013	0.033	-0.013	0.010
Fresh tomatoes	7.33	2.31	-0.087	0.397	-0.004	-0.074	0.054	0.068	0.118	0.206	0.171
Cooling off on a hot day	7.96	1.72	0.059	0.211	0.338	0.005	0.158	0.098	-0.011	-0.012	0.001
Pizza	6.92	2.07	0.119	0.052	**0.628**	0.235	0.049	0.098	0.056	-0.010	0.013
Plain yoghurt	6.68	2.18	-0.042	0.193	-0.043	0.060	0.098	0.051	0.063	0.114	0.021
Fried chicken	5.10	2.62	**0.532**	-0.032	0.381	0.138	-0.001	0.027	-0.072	-0.111	0.157
Burn of spicy	3.58	2.65	0.122	-0.032	0.021	-0.012	0.040	**0.717**	0.140	-0.060	0.022
Black coffee	5.00	3.57	0.106	0.008	-0.004	-0.080	-0.001	0.199	**0.573**	0.015	-0.031
Bagel or rolls	7.18	1.81	0.184	0.070	0.374	0.343	0.004	-0.026	0.023	-0.097	-0.004
Sausage	5.33	2.39	**0.683**	-0.064	0.275	0.144	0.004	0.045	0.071	0.024	-0.020
Taking the stairs	7.61	1.70	-0.070	0.147	0.007	-0.060	**0.479**	0.034	-0.010	0.178	0.018
Fizzy soft drinks/sweet drinks	4.81	2.68	0.221	-0.030	0.377	0.302	0.015	-0.055	-0.087	-0.095	-0.134
Salty pretzels	4.63	2.41	0.176	-0.001	0.394	0.190	-0.019	0.014	0.119	-0.011	-0.034
Pasta or noodles	7.29	1.73	0.078	0.068	0.331	0.206	0.066	0.123	0.031	0.118	0.030
Mayonnaise	5.73	2.23	0.164	-0.037	**0.544**	0.140	0.018	0.048	0.020	-0.067	0.069
Chili pepper	4.00	2.71	0.073	0.012	0.054	0.016	0.096	**0.792**	0.190	-0.001	0.072
Whole milk	3.78	2.85	0.223	0.004	0.076	0.194	0.023	0.092	0.091	0.007	0.044
Baked chicken	6.45	2.43	**0.668**	0.077	0.073	0.048	0.025	0.057	-0.056	-0.003	0.208
Olives	5.46	3.41	-0.086	0.106	-0.014	-0.033	0.034	0.301	0.345	0.167	0.392
Dark chocolate	6.20	2.90	-0.033	0.064	-0.010	0.316	0.057	0.202	0.179	0.188	0.116
Garlic	6.71	2.32	0.007	0.111	0.128	-0.043	0.044	**0.550**	0.052	0.136	0.213
Ketchup	5.33	2.30	0.098	0.025	0.293	0.230	0.076	0.159	0.040	0.024	0.044
Ice cream	6.60	2.25	0.165	0.136	0.268	**0.578**	0.022	-0.032	-0.035	-0.057	-0.045
Grapefruit	5.08	2.80	0.025	0.308	0.052	0.020	0.101	0.187	0.154	0.072	0.040
Exercising alone	6.17	2.59	-0.038	0.065	-0.023	0.014	**0.717**	0.104	0.050	0.025	0.062
White rice	6.21	2.03	0.107	0.050	0.084	0.189	0.132	0.190	-0.002	0.074	0.044
Smell of freshly cut grass	7.57	2.11	0.004	0.297	-0.050	-0.043	0.101	0.102	0.081	0.070	0.027
Salad dressing	6.13	2.02	0.078	0.124	0.068	0.131	0.046	0.045	0.037	0.004	0.147
Fried fish	5.59	2.58	0.311	0.038	0.287	0.151	-0.015	0.017	-0.029	-0.021	**0.528**
Banana	7.20	2.04	0.039	**0.505**	0.157	0.097	0.103	0.044	0.023	0.097	-0.011

Continuation Table S1.	Preference score after imputation (N=15,954)		Clusters								
Included items	Mean	SD	1	2	3	4	5	6	7	8	9
Pork chops	5.45	2.64	**0.765**	0.032	0.002	0.084	-0.022	-0.021	0.059	0.006	0.015
Lentils or beans	5.58	2.38	-0.026	0.128	-0.077	0.110	0.051	0.290	0.137	**0.452**	0.086
Red wine	5.32	3.19	0.041	0.087	-0.041	0.011	0.058	0.166	**0.706**	0.093	0.192
Pear	7.20	1.90	0.013	**0.660**	0.017	0.089	0.082	0.011	0.082	0.120	0.013
Cake icing	3.85	2.55	0.167	0.027	0.239	**0.597**	0.001	0.021	-0.010	-0.047	-0.053
White potato	6.60	1.84	0.178	0.050	0.112	0.118	0.009	-0.054	-0.007	0.391	-0.170
Melon [yellow or green]	7.44	2.06	0.001	**0.620**	0.037	0.000	0.051	-0.016	0.030	0.095	0.075
Sautéed mushrooms	7.16	2.47	0.073	0.249	-0.048	0.053	-0.012	0.062	0.128	0.174	0.324
Playing sports	6.99	2.41	0.016	0.067	0.054	0.027	**0.885**	0.026	0.037	0.015	0.033
Extra virgin olive oil	6.92	1.96	-0.066	0.150	-0.011	-0.038	0.179	0.364	0.042	0.259	0.256
Asparagus	6.75	2.64	0.016	0.198	-0.113	0.032	0.038	0.095	0.224	0.360	0.357
Exercising with others	6.58	2.60	0.038	0.053	0.096	0.078	**0.742**	-0.018	0.034	0.000	0.016
Raw carrots	6.52	2.29	-0.055	0.374	0.013	-0.117	0.177	0.026	0.037	0.336	0.061
Going to the pub or bar	5.52	2.82	0.076	-0.018	0.250	0.066	0.270	0.095	**0.413**	-0.008	0.000
Jam or jelly	5.52	2.23	0.100	0.175	-0.016	**0.568**	0.058	-0.048	0.095	0.028	-0.037
Bicycling	7.59	1.91	-0.035	0.116	-0.091	0.097	**0.451**	-0.025	0.081	0.149	0.045
White wine	5.80	2.92	0.006	0.099	0.027	0.050	0.056	0.041	**0.603**	0.027	0.195
Watching television	6.83	1.84	0.111	0.016	0.254	0.120	-0.038	-0.032	-0.009	-0.001	-0.039
Lemon	5.52	2.25	0.012	0.268	0.101	-0.013	0.117	0.395	0.085	0.136	0.031
Cherries	7.06	2.32	-0.001	**0.594**	-0.071	0.119	-0.007	0.056	0.050	0.062	0.180
Vinegar	4.74	2.19	0.037	0.150	-0.043	0.023	0.046	0.349	0.116	0.185	0.116
Coffee or tea with sugar	3.10	3.29	0.139	-0.065	0.046	0.157	-0.057	-0.052	-0.092	0.005	0.008
Beetroot	6.13	2.54	-0.013	0.188	-0.135	0.053	0.009	0.060	0.041	**0.461**	0.029
Working up a sweat	6.67	2.26	0.055	0.069	0.010	0.003	**0.738**	0.101	0.037	0.052	-0.016
Tuna or salmon	7.14	2.78	0.109	0.167	-0.069	-0.034	0.066	0.075	0.064	0.113	**0.755**
Biscuits. cakes or pastries	6.77	2.17	0.096	0.088	0.272	**0.738**	0.016	-0.061	-0.107	-0.004	-0.026
Ham	6.16	2.20	**0.742**	0.017	-0.002	0.156	-0.007	-0.041	0.058	-0.010	0.019
High-fibre bar	5.48	2.36	0.069	0.147	0.053	**0.414**	0.133	0.028	0.070	0.074	0.039
Strawberries	8.22	1.65	0.010	**0.657**	0.023	0.163	0.043	0.001	-0.051	0.023	0.021
Savoury biscuits	6.63	1.87	-0.003	0.142	0.144	0.124	0.015	-0.058	-0.058	0.013	-0.019
Gherkins	6.19	2.31	0.073	0.241	0.029	-0.025	-0.009	0.090	0.045	0.093	0.021
Spinach or greens	7.91	1.56	-0.040	0.257	-0.130	-0.055	0.064	0.063	-0.018	**0.637**	0.072
Pineapple	7.50	2.09	0.017	**0.619**	-0.038	0.148	0.047	0.070	-0.007	0.075	0.051
Hot tea	7.67	2.17	-0.131	0.263	0.042	0.152	0.115	0.000	-0.165	0.223	0.097
Cheesecake	6.81	2.28	0.085	0.174	0.110	**0.653**	0.000	0.008	-0.018	0.052	0.050
Salting foods	4.88	2.61	0.172	-0.019	0.221	0.060	-0.031	0.188	0.064	-0.089	-0.018
Chargrilled meats	6.18	2.53	**0.720**	-0.015	0.184	0.063	0.030	0.103	0.017	-0.101	-0.005
Old cheese	6.14	3.08	0.033	0.072	-0.042	0.070	-0.010	0.233	0.312	0.011	0.200
Raw onion	5.00	2.63	0.096	0.068	-0.020	-0.122	-0.012	**0.453**	0.028	0.060	0.008

Continuation Table S1.	Preference score after imputation (N=15,954)		Clusters								
Included items	Mean	SD	1	2	3	4	5	6	7	8	9
Going to a cafe	6.65	2.21	-0.023	0.075	0.184	0.228	0.121	0.038	0.158	0.015	0.084
Orange juice	7.51	2.03	0.049	**0.445**	0.038	0.113	0.075	0.089	-0.034	-0.008	0.006
Black pepper	5.98	2.25	0.081	0.084	0.023	-0.006	0.066	**0.650**	0.132	0.156	0.074
Unsalted nuts	6.30	2.42	-0.082	0.208	-0.072	0.118	0.126	0.157	0.034	0.267	0.121
Beef steak	6.91	2.61	**0.659**	0.051	-0.064	0.012	0.025	0.107	0.087	0.008	0.049
Eggs	7.54	1.68	0.278	0.185	0.102	0.010	0.049	0.118	0.000	0.131	0.100

Excluded items	**Missing or never tried (%)**
Soy milk	30.2
Horseradish/wasabi	28.5
Faux meat products [Quorns]	21.4
Low calorie sweetener in coffee. teas or other beverages	18.0
Fresh coriander	17.4
Tabasco sauce	16.9
Cigarette smoking	13.3
Curries	11.9
Vodka. gin. scotch	10.1
Commuting [car. bus. train]	9.7
Porridge	8.5
Going to the gym	8.2
Eggplant	8.1
Seeing a mouse at home	7.5
Getting caught in a lie	6.5
Blue cheese	6.4
Soy sauce	5.4
Cornflakes	5.4
Sweet coffee drinks & whipped cream	5.1
Diet fizzy soft drinks	5.0

Supplementary Figure S1. Principal component analysis: scree plot. The inflection point was used to determine the number of components. Nine food preference clusters were identified.

Scree Plot
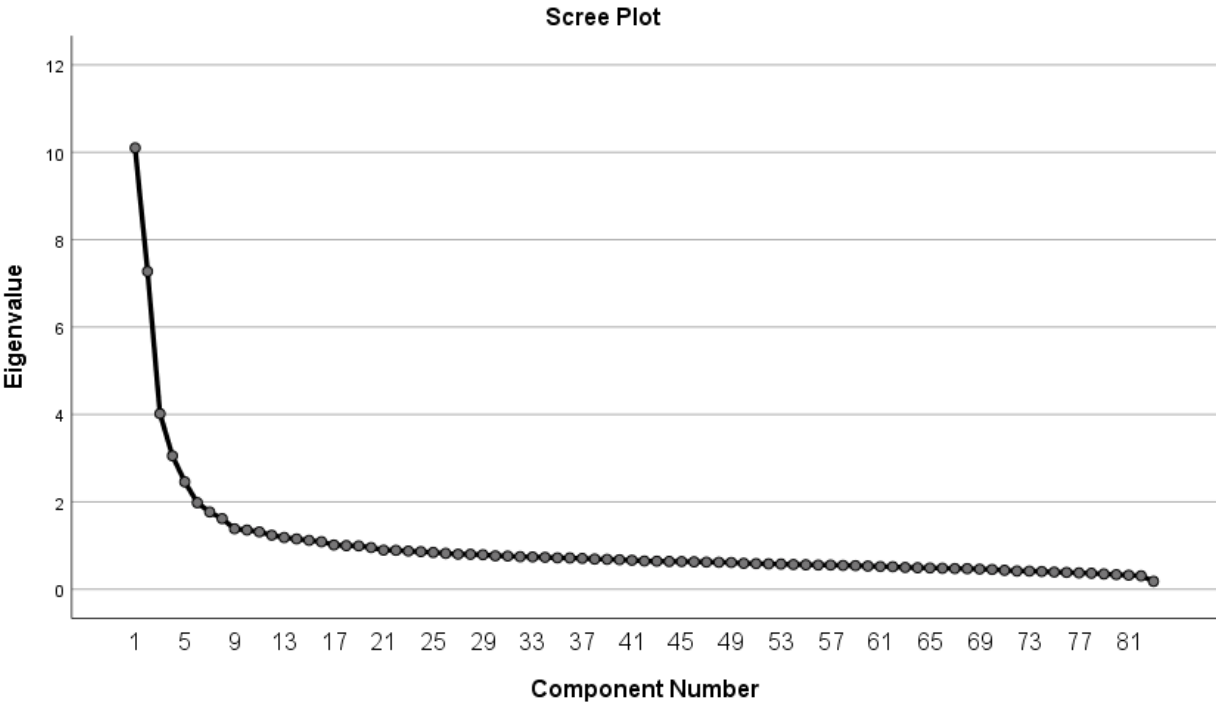
Supplementary Table S2. Saturated model-fitting results for twin correlations per food preference cluster.

	Test	-2 LL	df	$|X^2|$	Δdf	p-value	AIC
Cluster Meat							
0. Saturated model		38748.52	4866				29016,52
1. Zygosity effects on means	1 vs 0	38750.95	4868	2.44	2	0.12	29014.95
2. Sex effect on mean	2 vs 1	39301.67	4869	550.72	1	0.00	29563.67
3. Age effect on mean	3 vs 1	38867.81	4869	116.85	1	0.00	29129.81
4. Zygosity effect on variance	4 vs 1	38781.83	4872	30.88	4	0.00	29037.83
5. Sex effect on variance	5 vs 1	38861.47	4871	110.52	3	0.00	29119.47
6. Covariances are equal across sexes	-						
Cluster Fish							
0. Saturated model		32187.59	4866				22455.59
1. Zygosity effects on means	1 vs 0	32188.71	4868	1.12	2	0.57	22452.71
2. Sex effect on mean	2 vs 1	32212.46	4869	23.75	1	0.00	22474.46
3. Age effect on mean	3 vs 1	32197.35	4869	8.64	1	0.00	22459.35
4. Zygosity effect on variance	4 vs 1	32193.73	4872	5.02	4	0.29	22449.73
5. Sex effect on variance	5 vs 4	32200.63	4873	6.91	1	0.009	22454.63
6. Covariances are equal across sexes	-						
Cluster Fruit							
0. Saturated model		34753.40	4866				25021.40
1. Zygosity effects on means	1 vs 0	34761.51	4868	8.11	2	0.02	25025.51
2. Sex effect on mean	2 vs 1	34841.18	4869	79.67	1	0.00	25103.18
3. Age effect on mean	3 vs 1	34761.62	4869	0.11	1	0.74	25023.62
4. Zygosity effect on variance	4 vs 3	34770.27	4873	8.65	4	0.07	25024.27
5. Sex effect on variance	5 vs 4	34770.35	4874	0.08	1	0.78	25022.35
6. Covariances are equal across sexes	6 vs 5	34779.45	4877	9.09	3	0.03	25025.45
Cluster Vegetables							
0. Saturated model		30529.48	4866				20797.48
1. Zygosity effects on means	1 vs 0	30530.37	4868	0.89	2	0.64	20794.37
2. Sex effect on mean	2 vs 1	30541.29	4869	10.92	1	0.00	20803.29
3. Age effect on mean	3 vs 1	30656.20	4869	125.83	1	0.00	20918.20
4. Zygosity effect on variance	4 vs 1	30538.51	4872	8.14	4	0.09	20794.51
5. Sex effect on variance	5 vs 4	30544.40	4873	5.89	1	0.02	20798.40
6. Covariances are equal across sexes	6 vs 5	30550.11	4876	5.72	3	0.13	20798.11
Cluster Savory Snacks							
0. Saturated model		30367.40	4866				20635.40
1. Zygosity effects on means	1 vs 0	30372.65	4868	5.25	2	0.07	20636.65
2. Sex effect on mean	2 vs 1	30380.98	4869	8.33	1	0.00	20642.98
3. Age effect on mean	3 vs 1	30830.82	4869	458.17	1	0.00	21092.82
4. Zygosity effect on variance	4 vs 1	30387.61	4872	14.96	4	0.00	20643.61
5. Sex effect on variance	5 vs 1	30399.93	4871	27.28	3	0.00	20657.93
6. Covariances are equal across sexes	-						

* Note: -2LL = -2 log-likelihood; df = degrees of freedom; AIC = Akaike's Information Criterion; SD = standard deviation.

Continuation Table S2.	Test	-2 LL	df	$|X^2|$	Δdf	p-value	AIC
Cluster Sweet snacks							
0. Saturated model		34855.04	4866				25123.04
1. Zygosity effects on means	1 vs 0	34858.91	4868	3.87	2	0.14	25122.91
2. Sex effect on mean	2 vs 1	34860.30	4869	1.39	1	0.24	25122.30
3. Age effect on mean	3 vs 2	35059.97	4870	199.67	1	0.00	25319.97
4. Zygosity effect on variance	4 vs 2	34866.17	4873	5.87	4	0.21	25120.17
5. Sex effect on variance	5 vs 4	34870.39	4874	4.22	1	0.04	25122.39
6. Covariances are equal across sexes	6 vs 5	34873.74	4877	3.35	3	0.34	25119.74
Cluster Spices							
0. Saturated model		34213.90	4866				24481.90
1. Zygosity effects on means	1 vs 0	34216.27	4868	2.38	2	0.30	24480.27
2. Sex effect on mean	2 vs 1	34349.55	4869	133.28	1	0.00	24611.55
3. Age effect on mean	3 vs 1	34217.11	4869	0.84	1	0.36	24479.11
4. Zygosity effect on variance	4 vs 3	34222.89	4873	5.78	4	0.22	24476.89
5. Sex effect on variance	5 vs 4	34225.12	4874	2.23	1	0.14	24477.12
6. Covariances are equal across sexes	6 vs 5	34228.92	4877	3.80	3	0.28	24474.92
Cluster Drinks							
0. Saturated model		35940.76	4866				26208.76
1. Zygosity effects on means	1 vs 0	35943.58	4868	2.82	2	0.24	26207.58
2. Sex effect on mean	2 vs 1	36125.51	4869	181.93	1	0.00	26387.51
3. Age effect on mean	3 vs 1	35962.61	4869	19.03	1	0.00	26224.61
4. Zygosity effect on variance	4 vs 1	35950.82	4872	7.24	4	0.12	26206.82
5. Sex effect on variance	5 vs 4	35967.62	4873	16.80	1	0.00	26221.62
6. Covariances are equal across sexes	-						

* Note: -2LL = -2 log-likelihood; df = degrees of freedom; AIC = Akaike's Information Criterion; SD = standard deviation.

Supplementary Table S3. Saturated model-fitting results for ADE models per food preference cluster.

	Test	-2LL	df	$|X^2|$	Δdf	p-value	AIC
Cluster Meat							
0. Saturated ADE model		38743.11	4867				29009.11
1. Qualitative sex differences	1 vs 0	38743.43	4869	0.32	2	0.85	29005.43
2. Quantitative sex differences	2 vs 1	38848.27	4872	104.84	3	0.00	29104.27
3a. AE model. males	3a vs 1	38744.07	4870	0.64	1	0.42	29004.07
3b. AE model. females	3b vs 1	38746.04	4870	2.61	1	0.11	29006.04
4a. E model. males	4a vs 3a	38833.26	4871	89.19	1	0.00	29091.26
4b. E model. females	4b vs 3b	39116.71	4871	370.68	1	0.00	39116.71
Cluster Fish							
0. Saturated ADE model		32165.64	4867				22431.64
1. Qualitative sex differences	1 vs 0	32165.64	4869	0.00	2	1.00	22427.64
2. Quantitative sex differences	2 vs 1	32182.33	4872	16.70	3	0.00	22438.33
3a. AE model. males	3a vs 1	32167.38	4870	1.75	1	0.19	22427.38
3b. AE model. females	3b vs 1	32172.72	4870	7.09	1	0.01	22432.72
4a. E model. males	4a vs 3a	32358.15	4871	190.76	1	0.00	22616.15
4b. E model. females	Not tested because model 3b not accepted.						
Cluster Fruit							
0. Saturated ADE model		34743.62	4868				25007.62
1. Qualitative sex differences	1 vs 0	34743.62	4870	0.00	2	1.00	25003.62
2. Quantitative sex differences	2 vs 1	34751.57	4873	7.95	3	0.05	25005.57
3. AE model	3 vs 2	34762.72	4874	11.15	1	0.00	25014.72
4. E model	Not tested because model 3 not accepted.						
Cluster Vegetables							
0. Saturated ADE model		30517.47	4867				20783.47
1. Qualitative sex differences	1 vs 0	30517.47	4869	0.00	2	1.00	20779.47
2. Quantitative sex differences	2 vs 1	30528.64	4872	11.17	3	0.01	20784.64
3. AE model	3 vs 2	30528.90	4873	0.26	1	0.61	20782.90
4. E model	4 vs 3	31032.80	4874	503.89	1	0.00	21284.80
Cluster Savory snacks							
0. Saturated ADE model		30364.94	4867				
1. Qualitative sex differences	1 vs 0	30364.94	4869	0.00	2	1.00	20626.94
2. Quantitative sex differences	2 vs 1	30394.26	4872	29.32	3	0.00	20650.26
3a. AE model. males	3a vs 1	30364.96	4870	0.02	1	0.88	20624.96
3b. AE model. females	3b vs 1	30366.15	4870	1.21	1	0.27	20626.15
4a. E model. males	4a vs 3a	30436.32	4871	71.35	1	0.00	20694.32
4b. E model. females	4b vs 3b	30639.34	4871	273.19	1	0.00	20897.34

* Note: -2LL = -2 log-likelihood; df = degrees of freedom; AIC = Akaike's Information Criterion.

Continuation Table S3.	Test	-2LL	df	$|X^2|$	Δdf	p-value	AIC
Cluster Sweet snacks							
0. Saturated ADE model		34839.55	4868				25103.55
1. Qualitative sex differences	1 vs 0	34839.55	4870	0.00	2	1.00	25099.55
2. Quantitative sex differences	2 vs 1	34846.38	4873	6.83	3	0.08	25100.38
3. AE model	3 vs 2	34850.21	4874	3.82	1	0.05	25102.21
4. E model	4 vs 3	35228.04	4875	377.83	1	0.00	25478.04
Cluster Sport							
0. Saturated ADE model		34945.82	4867				25211.82
1. Qualitative sex differences	1 vs 0	34945.83	4869	0.01	2	1.00	25207.83
2. Quantitative sex differences	2 vs 1	34960.79	4872	14.66	3	0.00	25216.79
3a. AE model. males	3a vs 1	34945.84	4870	0.01	1	0.92	25205.84
3b. AE model. females	3b vs 1	34950.76	4870	4.93	1	0.03	25210.76
4a. E model. males	4a vs 3a	35027.16	4871	81.32	1	0.00	25285.16
4b. E model. females	4b vs 3b	35226.32	4871	275.56	1	0.00	25484.32
Cluster Spices							
0. Saturated ADE model		34197.45	4868				24461.45
1. Qualitative sex differences	1 vs 0	34197.45	4870	0.00	2	1.00	24457.45
2. Quantitative sex differences	2 vs 1	34203.21	4873	5.76	3	0.12	24457.21
3. AE model	3 vs 2	34212.16	4874	8.96	1	0.00	24464.16
4. E model	Not tested because model 3 not accepted.						
Cluster Drinks							
0. Saturated ADE model		35923.45	4867				26189.45
1. Qualitative sex differences	1 vs 0	35923.45	4869	0.00	2	1.00	26185.45
2. Quantitative sex differences	2 vs 1	35943.32	4872	19.87	3	0.00	26199.32
3a. AE model. males	3a vs 1	35923.48	4870	0.03	1	0.85	26183.48
3b. AE model. females	3b vs 1	35928.64	4870	5.19	1	0.02	26188.64
4a. E model. males	4a vs 3a	36086.35	4871	162.87	1	0.00	26344.35
4b. E model. females	4b vs 3b	36459.39	4871	530.75	1	0.00	26717.39

* Note: -2LL = -2 log-likelihood; df = degrees of freedom; AIC = Akaike's Information Criterion.

Supplementary Table S4. Spouse correlations for father-mother pairs and for twin-spouse pairs.

Cluster	Father-mother spouse pairs N=1.387		Twin-spouse pairs N=582	
	r	p-value	r	p-value
Meat	.20	<.001	.21	<.001
Fish	.19	<.001	.19	<.001
Fruit	.14	<.001	.09	.056
Vegetables	.23	<.001	.31	<.001
Savory snacks	.19	<.001	.31	<.001
Sweet snacks	.12	<.001	.24	<.001
Spices	.29	<.001	.25	<.001
Drinks	.30	<.001	.30	<.001

Supplementary Table S5. Overview current literature on heritability of different food preference clusters.

Studies in children

Breen et al. (2006) (N=428)	Correlation MZ [95% CI]	Correlation DZ [95% CI]	A [95% CI]	C [95% CI]	E [95% CI]
Vegetables	0.88 [0.83; 0.92]	0.67 [0.56; 0.77]	0.37 [0.20; 0.58]	0.51 [0.30; 0.66]	0.13 [0.09; 0.17]
Fruits	0.84 [0.78; 0.89]	0.73 [0.63-0.81]	0.20 [0.04; 0.38]	0.64 [0.46; 0.77]	0.16 [0.12; 0.22]
Desserts	0.90 [0.85; 0.93]	0.52 [0.37; 0.65]	0.78 [0.63; 0.92]	0.12 [0.00; 0.27]	0.10 [0.08; 0.12]
Meat and Fish	0.82 [0.75; 0.88]	0.59 [0.45; 0.70]	0.51 [0.37; 0.68]	0.32 [0.16; 0.46]	0.17 [0.14; 0.20]

Fildes et al. (2014) (N=2.686)	Correlation MZ [95% CI]	Correlation DZ [95% CI]	A [95% CI]	C [95% CI]	E [95% CI]
Vegetables	0.89 [0.87; 0.90]	0.62 [0.59; 0.65]	0.54 [0.47; 0.63]	0.35 [0.27; 0.42]	0.11 [0.10; 0.13]
Fruits	0.88 [0.86; 0.89]	0.61 [0.57; 0.63]	0.53 [0.45; 0.61]	0.35 [0.26; 0.43]	0.13 [0.11; 0.15]
Protein	0.84 [0.82; 0.86]	0.62 [0.59; 0.65]	0.48 [0.40; 0.57]	0.37 [0.27; 0.45]	0.15 [0.13; 0.17]
Dairy	0.81 [0.79; 0.83]	0.68 [0.65; 0.70]	0.27 [0.20; 0.35]	0.54 [0.47; 0.60]	0.19 [0.16; 0.22]
Snacks	0.88 [0.87; 0.90]	0.76 [0.74; 0.78]	0.29 [0.24; 0.35]	0.60 [0.54; 0.65]	0.11 [0.09; 0.12]
Starch	0.88 [0.86; 0.89]	0.73 [0.71; 0.76]	0.32 [0.26; 0.38]	0.57 [0.51; 0.62]	0.11 [0.10; 0.13]

Studies in adults

Pallister et al. (2015) (N=2.107)	Correlation MZ [95% CI]	Correlation DZ [95% CI]	A [95% CI]	C [95% CI]	E [95% CI]
Fruit and vegetable	0.39 [0.30; 0.47]	0.10 [-0.04; 0.24]	0.36 [0.25; 0.44]	-	0.64 [0.56; 0.72]
Distinctive tastes	0.58 [0.51; 0.65]	0.33 [0.20; 0.45]	0.58 [0.52; 0.64]	-	0.42 [0.36; 0.48]
Sweet and high carbohydrate	0.53 [0.45; 0.60]	0.33 [0.20; 0.45]	0.52 [0.45; 0.59]	-	0.48 [0.41; 0.55]
Meat	0.46 [0.38; 0.54]	0.12 [-0.02; 0.25]	0.44 [0.35; 0.51]	-	0.56 [0.49; 0.64]

Smith et al. (2016) (N=2.865)	Correlation MZ [95% CI]	Correlation DZ [95% CI]	A [95% CI]	D [95% CI]	E [95% CI]
Vegetables	0.58 [0.51; 0.63]	0.17 [0.10; 0.24]	0.58 [0.52; 0.63]	-	0.42 [0.37; 0.48]
Fruit	0.52 [0.45; 0.58]	0.23 [0.16; 0.30]	0. 35 [0.29; 0.46]	0. 15 [0.06; 0.24]	0.50 [0.44; 0.57]
Meat or fish	0.45 [0.37; 0.52]	0.18 [0.11; 0.25]	0.48 [0.41; 0.54]	-	0.52 [0.46; 0.59]
Dairy	0.47 [0.40; 0.54]	0.16 [0.09; 0.23]	0.48 [0.41; 0.54]	-	0.52 [0.46; 0.59]
Snacks	0.46 [0.39; 0.53]	0.15 [0.08 -0.22]	0.47 [0.40; 0.53]	-	0.53 [0.47; 0.60]
Starches	0.36 [0.28 - 0.44]	0.08 [0.01; 0.15]	0.37 [0.29; 0.45]	-	0.63 [0.55; 0.71]

Törnwall et al. (2014) (N=331)	Correlation MZ [95% CI]	Correlation DZ [95% CI]	A [95% CI]	D [95% CI]	E [95% CI]
Cluster including: Salty-and-fatty. Sweet-and-fatty. Fish and Fruit and Vegetables	0.72 [0.30; 0.93]	0.32 [0.00; 0.60]	0.72 [0.36; 0.92]	-	0.28 [0.10; 0.64]

* Note: MZ = monozygotic twins; DZ = dizygotic twins; A = Additive genetic effects; C = Common environmental effects; D = Dominance genetic effects; E = Non-shared environmental effects; 95% CI = 95% confidence interval.