

# Factors perceived by Portuguese adults as influent in health



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## Introduction and Aims

The knowledge about the factors perceived to have major influence in health is determinant to tailor public health interventions according to the population characteristics. Our **aims** were to evaluate the factors perceived by the Portuguese adult population as having the greatest importance in health and to relate their selection with socio-demographic and health characteristics.

## Participants and Methods

Data from the study “Portuguese Population’s Food Habits and Lifestyles” were used. A national representative sample of 3529 subjects was interviewed at home between February and April 2009. The present analysis is carried out in 2855 subjects due to incompleteness of 674 records. Subjects were asked to select from a list of nine, the two factors which had the greater importance in health (Kafatos et al. 1999). Physical activity was evaluated by the International Physical Activity Questionnaire (IPAQ; Craig et al. 2003). Binary logistic regression models were computed to estimate the odds of selecting each of the factors according to sex, age, education level, civil status, professional occupation, region of residence, BMI category (WHO 1998), physical activity level and smoking habits (OR adjusted for all other variables).

**Table 1.** Factors perceived as influent in health.

1	Food	57.5 %
2	Stress	27.9 %
3	Practicing exercise	20.5 %
4	Smoking	19.5 %
5	The weight	15.6 %
6	The environment	13.5 %
7	Genetic factors	10.3 %
8	Drinking alcohol	8.6 %
9	The support from family and friends	5.9 %

## Results and Discussion

Most of the sample considered “food” as one of the most important health determinants, followed by 28% who identified their health to be influenced by “stress” (Table 1). Reasons underlying this perception should be explored in future research. Due to their utility for the design of health promotion interventions, we highlight the relationships between sex, age and BMI category and factors perceived as influent in health.

Men selected more “practicing exercise” and “smoking”, while women selected more “the support from family and friends”.

Younger subjects selected more “stress”, “practicing exercise” and “drinking alcohol”, while older subjects selected more “smoking”, “genetic factors” and “the support from family and friends”. Overweight and/or obese subjects selected less than normal weight subjects “the weight”, “the environment” and less “food” (Table 2).

**Table 2.** Determinants of factors perceived as influent in health.

	1		2		3		4		5		6		7		8		9	
	OR adj	p	OR adj	p	OR adj	p												
<b>SEX (vs. Female)</b>		<b>0.526</b>		<b>0.255</b>		<b>0.017</b>		<b>0.007</b>		<b>0.136</b>		<b>0.432</b>		<b>0.716</b>		<b>0.213</b>		<b>&lt; 0.001</b>
Male	1.057	0.526	0.896	0.255	1.289	0.017	1.345	0.007	0.840	0.136	0.907	0.432	0.950	0.716	1.208	0.213	0.492	< 0.001
<b>AGE (vs. 18-29 years)</b>		<b>0.948</b>		<b>&lt; 0.001</b>		<b>0.008</b>		<b>0.014</b>		<b>0.699</b>		<b>0.072</b>		<b>0.011</b>		<b>0.001</b>		<b>0.005</b>
30-44 years	1.057	0.710	1.150	0.361	0.883	0.447	1.070	0.718	1.028	0.895	1.671	0.022	1.690	0.041	0.357	< 0.001	1.103	0.780
45-64 years	1.082	0.616	0.658	0.012	0.581	0.003	1.590	0.018	1.165	0.484	1.849	0.009	2.336	0.001	0.466	0.004	1.707	0.125
≥ 65 years	1.022	0.920	0.498	0.006	0.523	0.032	1.890	0.027	0.988	0.965	1.774	0.068	2.663	0.005	0.395	0.011	3.995	0.002
<b>EDUCATION LEVEL (vs. Bach./Univ.)</b>		<b>0.102</b>		<b>0.105</b>		<b>&lt; 0.001</b>		<b>0.056</b>		<b>0.055</b>		<b>0.026</b>		<b>0.047</b>		<b>0.203</b>		<b>&lt; 0.001</b>
< 4th grade	0.773	0.214	0.489	0.013	0.168	< 0.001	0.670	0.165	0.761	0.323	0.506	0.030	0.684	0.231	1.773	0.118	0.742	0.507
4th grade	1.208	0.209	0.677	0.025	0.353	< 0.001	0.760	0.157	0.816	0.307	1.080	0.708	0.549	0.013	1.688	0.042	1.508	0.207
6th grade	0.866	0.374	0.943	0.738	0.271	< 0.001	0.909	0.637	1.321	0.177	0.715	0.169	0.911	0.708	1.515	0.138	3.313	< 0.001
9th grade	0.903	0.394	0.904	0.428	0.645	0.001	1.241	0.131	0.872	0.419	0.836	0.308	0.850	0.403	1.202	0.389	1.417	0.239
12th grade	1.003	0.978	0.885	0.324	0.479	< 0.001	0.912	0.530	1.216	0.226	1.158	0.378	1.188	0.358	0.912	0.676	1.592	0.101
<b>CIVIL STATUS (vs. Married)</b>		<b>0.053</b>		<b>&lt; 0.001</b>		<b>0.083</b>		<b>0.217</b>		<b>0.829</b>		<b>0.689</b>		<b>0.894</b>		<b>0.438</b>		<b>0.242</b>
Single	0.993	0.960	0.879	0.353	1.433	0.016	1.399	0.038	0.855	0.386	0.889	0.535	0.979	0.919	0.820	0.398	1.172	0.566
Separated/divorced	0.919	0.544	1.271	0.097	1.097	0.606	1.057	0.751	1.030	0.872	1.071	0.718	0.873	0.536	1.176	0.515	0.768	0.405
Widowed	0.670	0.006	0.441	< 0.001	0.838	0.468	1.122	0.563	0.949	0.777	1.204	0.356	0.881	0.580	0.736	0.241	1.532	0.095
<b>PROFESSIONAL OCCUPATION (vs. Active)</b>		<b>0.359</b>		<b>0.001</b>		<b>0.069</b>		<b>0.034</b>		<b>0.047</b>		<b>0.016</b>		<b>0.494</b>		<b>0.189</b>		<b>0.243</b>
Student	0.936	0.681	0.802	0.193	1.231	0.225	1.307	0.165	1.333	0.203	1.157	0.566	0.857	0.606	0.930	0.783	1.250	0.534
Unemployed	0.725	0.039	0.497	< 0.001	1.139	0.479	0.979	0.914	1.601	0.017	1.898	0.001	1.130	0.625	1.448	0.138	1.447	0.223
Housewife/househusband	0.922	0.669	1.420	0.094	1.924	0.009	0.357	0.005	1.097	0.703	1.390	0.184	1.425	0.192	0.583	0.158	0.750	0.406
Retired	0.926	0.631	1.075	0.702	1.035	0.883	0.783	0.256	1.504	0.042	0.957	0.845	0.906	0.682	1.181	0.533	0.547	0.069
<b>REGION OF RESIDENCE (vs. Norte)</b>		<b>&lt; 0.001</b>		<b>0.004</b>		<b>0.582</b>		<b>0.002</b>		<b>0.027</b>		<b>&lt; 0.001</b>		<b>&lt; 0.001</b>		<b>0.001</b>		<b>0.015</b>
Centro	1.101	0.397	0.998	0.985	0.871	0.329	0.688	0.014	0.607	0.002	2.928	< 0.001	1.917	< 0.001	0.332	< 0.001	1.076	0.780
LVT	0.712	< 0.001	1.218	0.064	0.891	0.329	1.186	0.147	1.032	0.799	1.757	< 0.001	0.539	< 0.001	0.830	0.240	1.853	0.003
Alentejo	0.883	0.505	1.831	0.002	1.040	0.871	0.607	0.068	0.758	0.287	1.413	0.219	0.361	0.018	0.486	0.051	1.879	0.070
Algarve	0.703	0.132	0.820	0.472	1.340	0.285	0.797	0.468	1.019	0.952	1.633	0.154	0.661	0.343	0.765	0.511	2.755	0.011
Madeira	0.394	0.001	1.275	0.384	0.956	0.892	1.452	0.217	1.122	0.723	2.178	0.030	1.220	0.610	0.986	0.973	2.030	0.150
Açores	0.762	0.322	2.130	0.008	1.377	0.335	1.522	0.189	0.551	0.153	1.114	0.823	0.680	0.454	1.120	0.777	2.232	0.098
<b>BMI CATEGORY (vs. Normal 18.50-24.99)</b>		<b>&lt; 0.001</b>		<b>0.619</b>		<b>0.669</b>		<b>0.853</b>		<b>&lt; 0.001</b>		<b>0.024</b>		<b>0.314</b>		<b>0.071</b>		<b>0.063</b>
Underweight (< 18.50)	1.313	0.404	1.140	0.683	0.734	0.386	0.865	0.717	2.040	0.050	0.512	0.236	1.185	0.577	0.596	0.436	1.780	0.300
Pre-obesity (25.00-29.99)	0.634	< 0.001	0.894	0.268	0.901	0.359	1.037	0.755	1.406	0.006	0.991	0.942	1.202	0.202	1.134	0.440	1.084	0.683
Obesity (≥ 30.00)	0.441	< 0.001	1.021	0.895	0.977	0.908	1.149	0.429	2.412	< 0.001	0.544	0.007	0.820	0.428	1.748	0.013	1.826	0.016
<b>PHYSICAL ACTIVITY LEVEL (vs. High)</b>		<b>&lt; 0.001</b>		<b>&lt; 0.001</b>		<b>0.038</b>		<b>0.213</b>		<b>0.057</b>		<b>0.001</b>		<b>0.359</b>		<b>0.981</b>		<b>0.580</b>
Low	1.131	0.272	1.629	< 0.001	0.703	0.016	1.266	0.098	1.208	0.199	0.681	0.016	0.808	0.238	0.964	0.855	0.789	0.318
Moderate	1.560	< 0.001	1.323	0.008	0.953	0.669	1.178	0.163	0.890	0.367	0.624	< 0.001	0.812	0.178	0.993	0.967	0.940	0.753
<b>SMOKING HABITS (vs. Never smoked)</b>		<b>&lt; 0.001</b>		<b>&lt; 0.001</b>		<b>0.087</b>		<b>&lt; 0.001</b>		<b>0.008</b>		<b>0.003</b>		<b>0.046</b>		<b>0.117</b>		<b>0.035</b>
Ex-smoker	0.862	0.201	1.037	0.782	0.919	0.577	1.880	< 0.001	0.929	0.624	1.257	0.136	0.867	0.448	1.130	0.530	0.470	0.010
Smoker	0.631	< 0.001	1.562	< 0.001	0.776	0.027	3.074	< 0.001	0.652	0.002	0.689	0.013	0.660	0.013	0.741	0.085	0.842	0.421

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