## Eating Behaviours of Brain Friendly Foods in Adults: A Pilot Study from Turkey



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Introduction: There is a body of evidence suggest that a diet rich in foods such as fish, nuts, legumes, fresh fruits and vegetables can support cognitive function and brain health and they are also known as brain friendly foods. It is also well known that aging is an independent risk factor which can lead a decline in cognitive function. Consumption of brain friendly foods and regular physical activity has an important role for healthy aging and might play a key role for their brain health in later life.

Objective: This study aims to assess the frequency of consumption of brain-friendly foods and physical activity status in an adult population in Turkey.

Methodology: Brain-friendly foods consumption frequency data of 3345 adults who performed the online "Balanced Nutrition Test" between January 2015 and November 2017, were analyzed. Frequency of consumption was classified into 7 categories: never, less than once a month, 1-3 times per month, 1-3 times per week, 4-6 times per week, once a day, several times per day. Consumption of raw and cooked vegetables, fresh fruits, fish, legumes, whole grains and raw nuts was measured. Additionally, physical activity status was questioned in 4 categories: never, 0.5-2 hours per week, 3-5 hours per week, more than 5 hours per week.

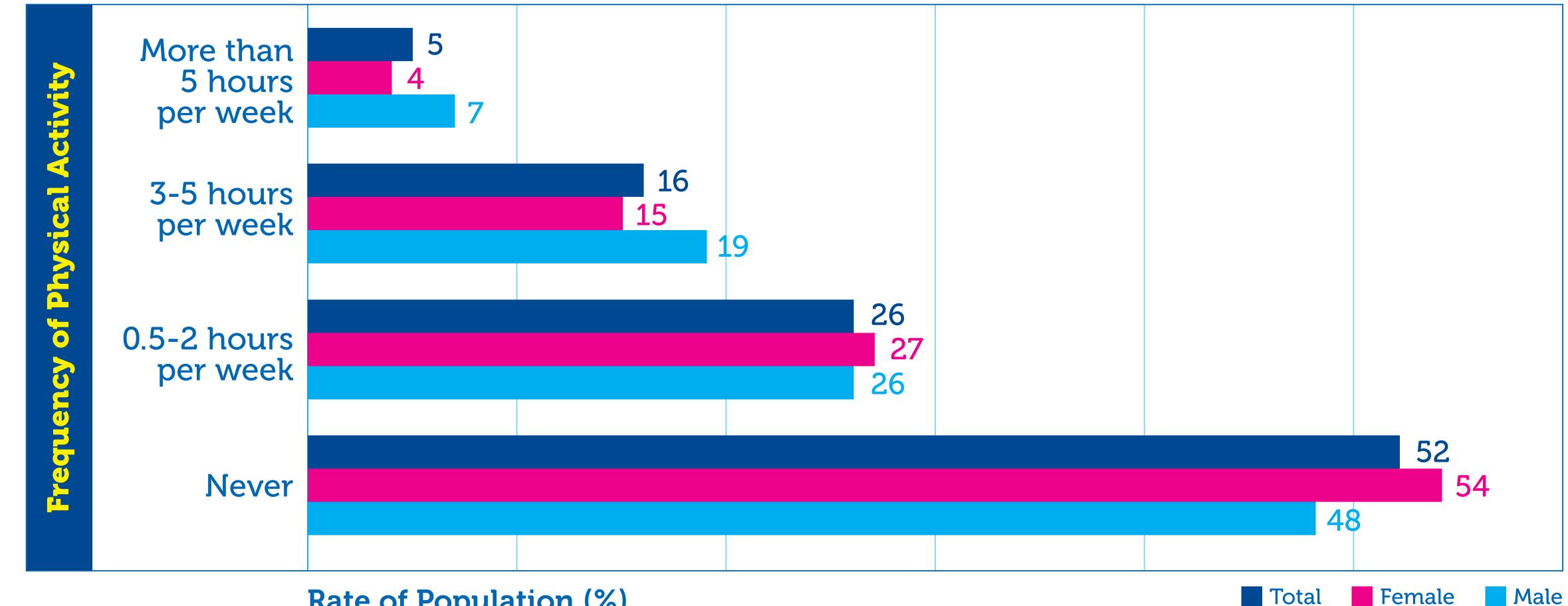
**Results:** Overall, 17% of adults to consume raw or cooked vegetables and 22% to consume fresh fruits several times per day. Only 16% of adults to consume whole grains one per day. 44% of adults to consume legumes, 25% to consume fish 1-3 times per week. It was revealed that %16 of adults never consume raw nuts which might play a key role for healthy aging (Table 1). Also physical activity status has been assessed which may have beneficial effects to healthy aging. Only %21 of adults meet the 150 minutes physical activity per week recommendation of WHO Physical Activity Guidelines (Chart 1).

Conclusion: In conclusion, the most of the adults did not adhere to recommended intake of brain-friendly foods such as fish, legumes, raw and cooked vegetables, fresh fruits, raw nuts which are the essential components of adequate and balanced nutrition for brain functions. Together with nutrition, physical activity could have substantial preventative and restorative effect for cognitive and brain functions. This results suggest that eating behaviours and physical activity should be enhanced for healthy aging and quality of life in adults.

Table 1. Frequency of brain-friendly foods consumption according to gender

	Fish			Legumes			Whole grains			Raw or cooked vegetables			Fresh fruits			Raw nuts		
	Male (%)	Female (%)	Total (%)	Male (%)	Female (%)	Total (%)	Male (%)	Female (%)	Total (%)	Male (%)	Female (%)	Total (%)	Male (%)	Female (%)	Total (%)	Male (%)	Female (%)	Total (%)
Never	3	4	4	3	2	2	12	12	12	0	1	1	1	1	1	20	14	16
Less than once a month	20	20	20	16	14	15	29	22	24	4	5	5	7	5	6	8	8	8
1-3 times per month	23	25	24	13	17	16	12	9	10	3	2	2	3	3	3	12	14	13
1-3 times per week	25	24	24	45	44	44	22	20	21	38	29	32	29	21	24	31	28	29
4-6 times per week	13	10	11	15	12	13	9	10	10	22	18	19	14	14	14	14	13	13
Once a day	11	11	11	6	8	7	12	18	16	21	25	24	30	31	30	12	19	17
Several times per day	5	6	6	2	3	3	4	9	7	12	20	17	16	25	22	3	4	4

Chart 1. Frequency of physical activity according to gender (hours/week)



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