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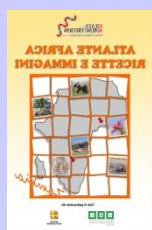


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XXII

World Congress on Parkinson's Disease and Related Disorders

Ambito Scientifico:

XXII World Congress on Parkinson's Disease and Related Disorders



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**BRAIN AND
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Chronic Diseases Association



DIETARY HABITS IN PARKINSON'S DISEASE: ADHERENCE TO MEDITERRANEAN DIET

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INTRODUCTION

Our objective is to describe the dietary habits, food preferences and adherence to Mediterranean diet (MeDi) of a large sample of Italian Parkinson's Disease (PD) patients compared to a group of healthy controls.



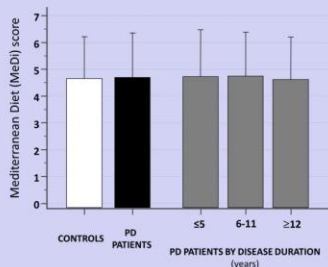
METHODS

Dietary habits of 600 PD patients from throughout Italy and 600 healthy controls matched by gender, age, education, physical activity level and geographical residence, were collected using the ON-GP Food Frequency Questionnaire*. Then, we compared patients by disease duration and the presence of swallowing disturbances.

* Available on www.educazionetrizionale.granapadano.it

RESULTS

Adherence of PD patients (males, 53.8%; mean disease duration, 9.2±7.0 years) to MeDi was similar to controls (score, 4.8±1.7 vs. 4.9±1.6; P=0.294). Disease duration was associated with increased intake of several food groups but it was not associated with changes in MeDi score (P=0.721).



Patients with swallowing disturbances (n=72) preferred softer and more viscous food but preferences did not result in differences in dietary pattern. However, patients with dysphagia drank less fluids (P=0.043).

Variable	No swallowing disturbances (N=528)	Swallowing disturbances (N=72)	P-value *
Calorie intake, kcal/kg/day [Mean (SD)]	31.3 (10.7)	30.8 (10.5)	0.709
Protein intake, g/kg/day [Mean (SD)]	1.2 (0.4)	1.2 (0.3)	0.896
Carbohydrates intake, g/day [Mean (SD)]	293.3 (81.4)	291.7 (107.7)	0.881
Lipids intake, g/day [Mean (SD)]	84.0 (23.3)	81.6 (25.8)	0.419
Water intake, mL/day [Mean (SD)]	1110 (463)	958 (465)	0.011
Fluids intake, mL/day [Mean (SD)]	1611 (567)	1467 (562)	0.043
Fibers intake, g/day [Mean (SD)]	32.0 (8.5)	32.7 (9.5)	0.519
Calcium intake, mg/day [Mean (SD)]	1019 (278)	1058 (359)	0.283
Iron intake, mg/day [Mean (SD)]	13.9 (3.4)	13.9 (3.4)	0.920
Vitamin D intake, µg/day [Mean (SD)]	2.6 (1.1)	2.7 (1.1)	0.470
Vitamin B12 intake, µg/day [Mean (SD)]	4.6 (1.6)	4.3 (1.3)	0.128
Vitamin C intake, mg/day [Mean (SD)]	220 (88)	252 (95)	0.325
Folate intake, µg/day [Mean (SD)]	448 (127)	472 (124)	0.132

Patients consumed less alcohol and fish and drank significantly less water, coffee, and milk which resulted also in lower total fluids intake. On the contrary, they ate more fruit, cooked vegetables, cereals and baked items, more dressings and more sweets in general.

Overall population (N = 1200)			
	Controls ^a (N = 600)	PD patients ^a (N = 600)	P-value ^b
DAIRY PRODUCTS			
Skimmed/partially skimmed milk (mL/day)	118 (75)	106 (78)	0.007
Whole milk (mL/day)	101 (105)	83 (86)	0.001
Soy milk or yogurt (mL/day)	54 (51)	36 (73)	<0.001
Yogurt without sugar (g/day)	73 (90)	52 (72)	<0.001
Sweetened yogurt (g/day)	56 (71)	68 (83)	0.007
Grated cheese (g/day)	9 (7)	13 (10)	<0.001
BREAD, PASTA AND CEREALS			
Refined pasta, rice (g/day)	66 (40)	74 (48)	0.002
Whole grain pasta, rice (g/day)	22 (27)	18 (24)	0.007
Whole grain bread (g/day)	33 (36)	26 (36)	<0.001
Pizza (g/day)	29 (21)	32 (23)	0.018
Potatoes (g/day)	40 (33)	52 (40)	<0.001
Oatmeal (g/day)	14 (12)	12 (17)	0.019
PROTEIN SOURCES (MEAT, FISH, CURED MEAT, EGGS AND LEGUMES)			
Fresh fish (g/day)	38 (27)	34 (26)	0.009
Preserved fish (g/day)	7 (7)	6 (5)	0.004
Eggs (g/day)	10 (7)	12 (8)	<0.001
FRUIT AND VEGETABLES			
Fresh fruit (g/day)	233 (157)	256 (141)	0.008
Dried fruit in shell (g/day)	12 (15)	10 (12)	0.011
Raw vegetables (g/day)	175 (131)	158 (100)	0.012
Cooked vegetables (g/day)	154 (104)	179 (120)	<0.001
Cooked tomatoes (g/day)	45 (28)	51 (34)	0.001
Vegetable soup/purée (g/day)	95 (82)	112 (81)	<0.001
SUGAR AND SWEETS			
Artificial sweeteners (g/day)	3.5 (2.8)	2.6 (2.5)	<0.001
Milk puddings and custards (g/day)	12 (17)	17 (19)	<0.001
Ice cream (g/day)	16 (23)	21 (25)	<0.001
Candy bars, snacks (g/day)	6 (10)	4 (7)	<0.001
DRESSINGS			
Olive oil (mL/day)	28 (15)	30 (13)	0.014
Seed oil (mL/day)	2.0 (4.5)	3.0 (7.5)	0.005
Margarine (g/day)	1.1 (1.3)	4.0 (7.8)	<0.001
DRINKS			
Water (mL/day)	1344 (474)	1092 (443)	<0.001
Wine (mL/day)	135 (128)	111 (116)	0.001
Other alcoholic drinks (mL/day)	7 (11)	4 (6)	<0.001
Blended vegetables/fruit, juices (mL/day)	77 (105)	95 (111)	0.004
Tea (mL/day)	108 (130)	87 (141)	0.009
Coffee (mL/day)	70 (50)	55 (47)	<0.001

^aData are provided as mean and standard deviation (between parentheses).

^bAccording to between-group comparisons by paired Student's t-test.

DISCUSSION

PD patients presented different dietary habits and food preferences compared to the general population and adherence to MeDi was not associated with disease duration. Self-reported dysphagia was associated with reduced intake of fluids.

These aspects may be amenable to change in order to improve the management of nutritional issues in this patient population.



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www.parkinson.it
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