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Table 1. Envidence table for epidemiological studies on association between environmental factors and Parkinson's disease

Ref.No.	Authors	Year	County	Type	Subjects	Age	Results
1	Koblkjær, et al	2003	Greenland	Case-control	Cases: 20/11 (M/F)	69	Plasma concentration of PCBs and pesticide: no association.
					Controls: 57/65 (M/F)	61	The mean DDE level was higher in cases than in controls.
2	Firestone, et al	2005	USA	Case-control	Cases: 156/94 (M/F)	70.1	Pesticide Occupational: 1.01 (0.53-1.92), Home-based: 0.95 (0.66-1.37)
					Controls: 241/147 (M/F)	70.8	Lifelong well water use: 1.81 (1.02-3.21), Agriculture region residence: 1.31 (0.84-2.03)
3	Ceravolo, et al	2004	Italy	Case-control	Cases: 106/84 (M/F)	58.1(onset), 63.9	Residency in rural areas: no relation
					Controls: 106/84 (M/F)	62.8	Well-water drinking : no relation
							Pesticide: no relation
							Coffee and tea: no relation
							Smoking: significantly decreased risk
4	Park, et al	2005	Korea	Case-control	Cases: 177/190 (M/F)	59.9	Exposure to hazardous materials, especially Mn: significantly decreased risk
					Controls: 198/111 (M/F)	58.2	

Classification	OR	(95% CI)
Industry		
Agriculture, hunting and forestry		
Fishing	1.88	(1.12-3.15)
Manufacturing	0.68	(0.17-2.77)
Construction	0.56	(0.34-0.92)
Wholesale, retail trade	1.29	(0.71-2.37)
Transportation	0.90	(0.57-1.42)
Finance, insurance	0.80	(0.30-2.12)
Housing and refectory	0.28	(0.09-0.87)
Services	2.44	(0.62-9.62)
Public Administration	1.37	(0.68-2.79)
Educational service	1.71	(0.66-4.43)
Health and welfare	2.25	(0.99-5.08)
Miscellaneous repair services	0.90	(0.15-5.51)
Private households	0.55	(0.26-1.17)
Occupation		
Legislators, senior officials and managers		
Professional	0.84	(0.36-1.96)
Technicians and associate professionals	1.56	(0.82-2.97)
Clerk	2.78	(0.66-11.67)
Service	1.57	(0.90-2.73)
Sales	0.42	(0.21-0.86)
Agriculture, fishery and forestry	0.77	(0.47-1.29)
Technicians	1.54	(0.92-2.59)
Machine operator and assemblers	0.46	(0.24-0.87)
Laborers in mining, construction, manufacturing and transport	0.68	(0.36-1.28)
Army	1.06	(0.69-1.61)
Industry		
Agriculture production crops	1.96	(1.16-3.30)
Fishing	0.48	(0.10-2.20)
Manufacturing for apparel and other finished products made from fabrics and similar materials	1.30	(0.34-4.99)
Manufacturing for industrial and commercial machinery and computer equipment	0.65	(0.33-1.27)
Manufacturing for transportation equipment	0.77	(0.14-4.22)
General construction	1.04	(0.56-1.94)
Construction special trade contractors	2.89	(0.60-13.93)
Automotive dealers and gasoline service stations	3.66	(0.66-20.35)
Wholesale and brokerage business	1.33	(0.47-3.77)
Retails	0.70	(0.40-1.21)
Housing and refectory	0.64	(0.25-1.63)
Transporting	0.20	(0.06-0.71)
Finance and insurance	2.21	(0.43-11.47)
Computation and information services	1.11	(0.17-7.42)
Research and developmental services	2.32	(0.23-23.61)

Business services	1.32	(0.61-2.83)
Public administration	1.77	(0.65-4.85)
Educational service	1.94	(0.88-4.27)
Health service	2.06	(0.22-19.71)
Membership organization	2.02	(0.20-20.71)
Other services	0.39	(0.14-1.11)
Private households	1.03	(0.63-1.70)
Occupation		
Directors and chef executives	1.98	(0.48-8.21)
General managers	0.84	(0.29-2.47)
Architects, engineers and related professions	0.49	(0.10-2.43)
Health professionals	2.06	(0.22-19.71)
Teaching professionals	1.97	(0.90-4.34)
Legal, social service and religious professions	2.87	(0.30-27.14)
Engineering science technicians	2.83	(0.48-16.61)
General office workers	1.36	(0.77-2.39)
Customer services	0.43	(0.17-1.10)
Restaurant service workers	0.38	(0.09-1.58)
Personal and protective service workers	1.81	(0.17-19.21)
Whole/retails sales	0.82	(0.49-1.38)
Farmers	1.64	(0.96-2.81)
Fishery workers	0.74	(0.15-3.63)
Metal, machinery and related engineers	0.30	(0.12-0.74)
Industrial machinery mechanics and fitters	1.74	(0.29-10.43)
Machinery/system operators	2.68	(0.89-8.07)
Automated-assembly-line operators	1.50	(0.40-5.66)
Drivers	0.13	(0.03-0.57)
Laborers in general services	0.97	(0.60-1.56)
Manufacturing laborers	0.27	(0.05-1.44)
Laborers in mining construction	1.36	(0.67-2.75)
Army	-	

5	Aschierio, et al	2004	USA	Prospective	Death 909/508,334 (M) Death 340/676,288 (F)	57 56	Coffee ≧ 6caps/day Coffee ≧4caps/day Estrogen ever: 1.33 (1.07-1.67)	M: 0.63 (0.46-0.86) F: 0.90 (0.55-1.48) Estrogen ever: 1.31 (0.75-2.30) Estrogen never: 0.47 (0.27-0.80)

6	Ueki, et al	2004	Japan	Case-control	Cases: 50/44 (M/F) Controls: 69 (total)	59.5 (onset), 68.1	(per1000kcal)		PD (n=80)	control (n=69)	p value
							Grains	(g)	264.8±77.0	235.2±97.6	NS
							Potatoes	(g)	21.7±18.1	20.9±15.1	NS
							Sugar	(g)	4.4±2.7	5.9±4.6	NS
							Snacks	(g)	14.5±11.7	15.3±12.5	NS
							Beans	(g)	144.6±85.6	123.8±70.7	NS
							Fish	(g)	44.3±22.5	55.8±29.5	0.008
							Meat	(g)	22.5±14.5	19.7±15.2	NS
							Eggs	(g)	13.3±9.5	12.8±11.4	NS
							Milk	(g)	105.5±87.8	117.1±103.2	NS
							Green Vegetables	(g)	58.1±33.9	71.0±65.61	NS
							Other vegetables	(g)	69.8±34.6	70.2±53.4	NS
							Fruit	(g)	87.2±50.8	85.3±50.4	NS
							Mushrooms	(g)	7.3±6.5	6.6±7.1	NS
							Seaweeds	(g)	8.9±9.1	10.4±8.9	NS
							Beverages	(g)	41.7±95.4	91.0±188.0	0.041
							Water (tea, coffee, juice)	(g)	341.3±209.0	597.1±402.5	<0.0001
							Seasoning	(g)	41.3±41.2	38.0±45.8	NS
							T. protein	(%E)	15.0±2.5	15.6±3.5	NS
							T. fat	(%E)	24.4±6.0	24.2±7.9	NS
							T.carbohydrate	(%E)	57.7±7.7	55.2±9.7	NS
							Na	(mg)	2893.2±735.2	2824.9±868.5	NS
							K	(mg)	1386.3±378.8	1522.2±484.7	NS
							Ca	(mg)	358.2±130.4	397.2±160.1	NS
							P	(mg)	589.6±131.7	623.7±165.6	NS
							Fe	(mg)	5.2±1.2	5.4±1.6	NS
							Vit.A	(mg)	1403.3±791.4	1474.7±1008.4	NS
							Vit.B1	(mg)	0.5±0.1	0.5±0.1	NS
							Vit.B2	(mg)	0.8±0.2	0.9±0.3	0.003
							Niacin	(mg)	7.6±2.1	8.4±2.4	0.043
							Vit. C	(mg)	74.3±36.8	87.1±40.2	0.043
							Carotene	(μg)	1384.2±942.6	1523.2±1172.1	NS
							Alcohol	(%E)	2.0±4.2	3.9±7.1	0.048
							Cholesterol	(mg)	141.2±53.6	148.1±70.5	NS
							SFA	(%E)	7.1±2.3	7.1±3.0	NS
							MUFA	(%E)	8.2±2.4	8.0±2.8	NS
							PUFA	(%E)	6.3±1.7	6.3±2.1	NS
							n-3 PUFA	(%E)	1.3±0.5	1.5±0.6	NS
							n-6 PUFA	(%E)	5.1±1.3	4.9±1.5	NS
							n-6/n-3 PUFA		4.0±0.9	3.5±1.0	0.002
							Fibers	(g)	8.5±2.7	8.3±2.8	NS
							water soluble	(g)	1.5±0.5	1.4±0.5	NS
							insoluble	(g)	6.5±1.9	6.2±2.0	NS

7	Hernán, et al	2004	UK	Nested Case-control	Cases: 1,019 (total) Controls: 10,123 (total)		**Alcohol (units/week)**	**Cases**	**Controls**	**OR**	**(95 % CI)**	**P-value for trend**
							0	348	3,522	1.00	(ref.)	
							> 0-5	180	1,674	1.10	(0.91-1.33)	
							> 5-15	142	1,345	1.10	(0.89-1.36)	
							>15-30	74	624	1.27	(0.96-1.68)	
							>30-50	8	155	0.57	(0.28-1.18)	
							>50	8	60	1.46	(0.69-3.01)	0.71

8	Galanaud, et al	2005	France	Case-control	Cases: 138/109(M/F) Controls: 377/299(M/F)	65 (onset), 69 69

Ever cigarette smoking	Cases	Controls	OR	(95% CI)	p
By duration					
Never cigarette smokers	75 (182)	67 (448)	1	(ref.)	
≤30 years of smoking	14 (33)	17 (111)	0.6	(0.4-1.0)	0.05
>30 years of smoking	11 (28)	16 (107)	0.5	(0.3-0.9)	0.02
By intensity			Trend		0.009
Never cigarette smokers	75 (182)	67 (448)	1.0	(ref.)	
≤11 cigarettes/day	14 (33)	16 (105)	0.7	(0.4-1.1)	0.11
>11 cigarettes/day	11 (28)	17 (113)	0.5	(0.3=0.8)	0.009
By number of pack-years			Trend		0.005
Never cigarette smokers	75 (182)	67 (448)	1.0	(ref.)	
≤17.4 pack-years	16 (38)	16 (102)	0.8	(0.5-1.3)	0.35
>17.4 pack-years	9 (23)	17 (116)	0.4	(0.2-0.7)	0.0007
			Trend		0.0009

9	park, et al	2004	Korea	Case-control	Cases: 42/63(M/F) Disease control: 79/50 (M/F) Healthy control: 44/57 (M/F)	63.6 62.4 58.4

Well water: no relation, Exposure to hazardous materials: no relation
Clerk: 3.89 (1.28-11.82), Sales: 0.36 (0.14-0.94), Agriculture, fishery, forestry: 0.19 (0.06-0.58)

10	Chrysostone, et al	2004	France	Case-control	Cases: 27/23(M/F) Controls: 26/24 (M/F)	6.9 (duration)

Risk factors	OR	(95% CI)
Educational level	0.273	(0.091-0.820)
Smokers (ever)	0.290	(0.104-0.808)
Arterial hypertension	1.488	(0.535-4.135)
Occupational exposure to pesticides, %	1.227	(0.361-4.176)
CEI	1.003	(0.978-1.028)
Domestic exposure to pesticide, %	0.936	(0.369-2.379)

11	Curvie, et al	2004	USA	Case-control	Cases: 68 (F) Controls: 72 (F)	63 (onset), 71 66

Postmenopausal estrogen use : 0.40 (0.19-0.84)

12	Pals, et al	2003	Belgium	Case-control	Cases: 256/167 (M/F) Controls: 70/135 (M/F)	58 (onset), 67 64

	OR	(95% CI)
No children	2.49	(1.08-5.76)
smoking	0.67	(0.44-1.04)
Fish eating	0.33	(0.15-0.74)
Refined sugers	2.06	(1.07-3.97)
Metals	1.57	(0.90-2.74)
Zinc	11.6	(1.51-90.90)
Lead	1.76	(0.76-4.05)
Copper	-	-
Metallurgic activity	3.1	(1.04-9.20)
Toluene	7.8	(1.03-58.82)
Xylene	-	-
Organophosphates	3.73	(0.47-29.41)
Neurosurgery	2.66	(0.98-7.24)
Varicectomy	0.61	(0.28-1.38)
Prostatectomy	5.15	(1.54-17.24)
Antacids	1.58	(0.98-2.55)
Hormonal substitution	0.53	(0.13-2.11)
Anti-dandruff shampoo	2.01	(1.23-3.26)

13	Gorell, et al	2004	USA	Case-control	Cases: 144 (total) Controls: 464 (total)	

	OR	(95% CI)
Copper ≤ 20years	1.15	(0.55-2.41)
Copper > 20years	2.49	(1.06-5.89)
manganese ≤ 20years	0.40	(0.05-3.25)
manganese > 20years	10.63	(1.07-105.99)
Lead and copper, both > 20years	5.25	(1.60-17.25)
Lead and iron, both > 20years	2.84	(1.07-7.51)
Copper and iron, both > 20years	3.69	(1.40-9.71)
Pesticides and farming		
Occupational insecticide exposure	3.55	(1.75-7.18)
Occupational herbicide exposure	4.10	(1.37-12.23)
Farming as an occupation	2.79	(1.03-7.54)
family history		
PD in first-or second-degree relatives	4.22	(2.24-7.94)
Smoking		
≤30 pack-years	0.73	(0.47-1.13)
>30 pack-years	0.42	(0.25-0.71)

14	Abbott, et al	2003	Hawaii	Honolulu Heart Program	8006 men (baseline) 137 developed PD	54 30 years of follow up

inverse relation: coffee, smoking, polyunsaturated fat
positive relation: carbohydrates
No relation: total caloric intake, saturated, monounsaturated, protein, niacin, ribflavin, ¤-carotene, cholesterol, Vitamin A, Vitamin B, Vitamin C, cobalamin, Vitamin E, pantothenic acid

15	Chen, et al	2003	USA	Health Professionals Nurses' Health Study	44,057/98,845 (M/F) 415 incident PD	40-75 (M) 30-55 (F)

Regular use of nonaspirin NSAIDS: 0.55 (0.32-0.96)
Those who took 2 or more tablets of aspirin per day: 0.56 (0.26-1.21)

16	Chen, et al	2003	USA	Health Professionals Nurses' Health Study	47,331/88,563 (M/F) 359 incident PD	40-75 (M) 30-55 (F)

Replacement of polyunsaturated fat with saturated fat in men: 1.83 (1.10-3.03)
Arachidonic acid (Q5): 0.65 (0.46-0.91)
Energy, protein, carbohydrate, total fat, animal fat, vegetable fat, saturated, monounsaturated, polyunsaturated, trans, cholesterol, linoleic, linolenic, EPA, DHA: no relation

17	Hernán, et al	2003	USA	Health Professionals Nurses' Health Study	44,057/98,845 (M/F) 415 incident PD	40-75 (M) 30-55 (F)

	RR	(95% CI)
Alcohol Intake (gm/day)		
0	1.0	(ref.)
> 0 to < 5	1.0	(0.8-1.3)
5 to < 15	1.0	(0.8-1.4)
15 to < 30	1.1	(0.8-1.6)
≥ 30	0.7	(0.5-1.2)
Beer		
< 1/mo	1.0	(ref.)
1-3/mo	0.7	(0.5-0.9)
< 1/week	0.7	(0.5-0.9)
Wine		
< 1/mo	1.0	(ref.)
1-3/mo	1.2	(0.9-1.6)
1-4/week	1.1	(0.8-1.5)
≥ 5/week	1.1	(0.8-1.7)
Liquor		
< 1/mo	1.0	(ref.)
1-3/mo	1.0	(0.8-1.4)
1-4/week	1.3	(1.0-1.7)
≥ 5/week	1.1	(0.8-1.6)

18	Powers, et al	2003	USA	Case-control	Cases: 156/144 (M/F) Controls: 241/147 (M/F)	70 71

Iron (highest quartile): 1.7 (1.0-2.7), Mn and Fe (both above median): 1.9 (1.2-2.9)
Zinc, Manganese, Magnesium, Copper, Calcium, ¤-carotene, Vitamin C, Vitamin E, Lutein, Lycopene, Selenium, Saturated fat, Total fat: no relation

19	Weisskopf, et al	2003	USA	Health Professionals	35815 (M) 189 incident PD	40-75

Crown-Crisp Anxiety index

	Cases(n)	Mulivariate RR	(95% CI)
0, 1	74	Ref	Ref
2	33	1.1	(0.8-1.7)
3	33	1.6	(1.1-2.4)
4+	49	1.5	(1.0-2.1)
p		0.01	

20	Bower, et al	2003	USA	Case-control	Cases: 121/75 (M/F) Controls: 121/75 (M/F)	71 (onset)

Any head trauma: 4.3 (1.2-15.2), more severe traumas: 11.0 (1.4-85.2)

21	Baldi,et al	2003	France	Cohort	585/922 (M/F) 10/14 (M/F) incident	78.6 6years: follow-up

		RR	(95% CI)
Occupational pesticide exposure	Men	5.63	(1.47-21.58)
	Womenn	1.02	(0.22-4.82)
Main job in agriculture	Men	1.62	(0.31-8.63)
	Womenn	0.81	(0.10-6.40)
Rural residency	Men	1.45	(0.38-5.49)
	Womenn	1.31	(0.40-4.30)
Residency in a district planted with vineyards	Men	0.46	(0.09-2.29)
	Womenn	0.87	(0.24-3.19)

22	Chen, et al	2002	USA	HPFS NHS	47331/88563 (M/F) 394 incident PD	40-75 (M) 30-55 (F)

Total dairy (highest quartile) Men:1.8 (1.2-2.8) Trend P = 0.004, Women: 1.1 (0.7-1.7)
Dairy calcium (400mg): 1.3 (1.0-1.6) Dairy vitamin D (160IU): 1.4 (1.1-1.9)
Dairy protein (5% energy): 1.6 (1.1.-2.6), Lactose (25mg): 1.7 (1.2-2.4)
Meat, Chicken, Fish, Fruit, Vegetables, Chocolate, Cereals: no relation

23	Petrovitch, et al	2002	Hawaii	Honolulu Heart Program	8006 men (baseline) 137 developed PD	54 years 30 years of follow up

Reported No. of years worked on a plantation (1965-1968)	RR	(95% CI)
0	Ref	
1-10	1.0	(0.6-1.6)
11-20	1.7	(0.8-3.7)
>20	1.9	(1.0-3.5)
Test for trend	P=.006	

24	Tsai, et al	2002	Taiwan	Case-Control	Cases: 20/10 (M/F) Controls: 20/10 (M/F)	34.8 (onset), 44.0 43.8

Variable	OR	(95% CI)	P-value
Lumber, ranch	1.52	(0.17-13.7)	0.707
Mining	1.30	(0.23-7.36)	0.770
Chemical/Petrol	2.46	(0.28-21.7)	0.416
Textile manufacture	0.22	(0.02-2.84)	0.248
Well Water	10.92	(1.77-67.5)	0.010
Spring Water	10.57	(0.83-134)	0.069
Tap Water	1.11	(0.24-5.17)	0.898
Water (other sources)	0.08	(0.01-1.67)	0.103
Smoke			0.299
Ex Smoker	2.40	(0.29-19.7)	
Current Smoker	0.30	(0.03-3.11)	
Alcohol			0.999
Ex Drinker	0.99	(0.04-23.62)	
Current drinker	0.96	(0.11-8.53)	
Exercise	0.09	(0.01-0.89)	0.040
Head injury	9.27	(1.02-84.10)	0.048

25	Schuurman, et al	2002	Belgium	Retrospective cohort		

Exposure	Subjects with PD	HR	(95% CI)
Not depressed	259/67570	1.0	(ref)
Depressed	19/1358	3.13	(1.95-5.01)

26	Checkowey, et al	2002	USA	Case-Control	Cases: 131/79 (M/F) Controls: 225/122 (M/F)	Newly diagnosed 70 71

Variable	No. of cases	No. of controls	OR	(95% CI)
Pack- years				
0	119	139	1.0	
> 0-19	47	82	0.6	(0.4-1.0)
20-39	23	71	0.4	(0.2-0.6)
≥ 40	21	55	0.4	(0.2-0.8)
P for trend				<0.001
Coffee (regular) (cups/day)				
Almost never	63	96	1.0	
> 0-1	32	66	0.8	(0.4-1.3)
2-3	69	105	1.1	(0.7-1.8)
4-6	30	48	1.2	(0.7-2.2)
> 6	16	32	1.0	(0.5-2.0)
P for trend				0.50

						Alcohol (drinks/week)				
						0		86	132	1.0
						1-2		48	72	1.1 (0.7-1.8)
						3-9		48	77	1.1 (0.6-1.7)
						> 10		28	66	0.8 (0.4-1.4)
						P for trend				0.53
						Tea (regular) (cups/day)				
						Almost never		138	202	1.0
						> 0-1		61	110	0.8 (0.6-1.3)
						≥ 2		11	35	0.4 (0.2-0.9)
						P for trend				0.032
						decaffeinated Coffee (cups/day)				
						Almost never		132	216	1.0
						> 0-1		42	75	1.0 (0.6-1.5)
						≥ 2		36	56	1.1 (0.7-1.8)
						P for trend				0.79
						cola (grasses/day)				
						Almost never		128	196	1.0
						> 0-1		71	125	0.9 (0.9-1.3)
						≥ 2		11	26	0.6 (0.3-1.4)
						P for trend				0.22
27	Elbaz, et al	2002 USA	Case-Control	Cases: 121/75 (M/F) Controls: 121/75 (M/F)	71 (onset)					

	Cases		Controls			
Type of cancer	**N**	**%**	**N**	**%**	**OR**	**(95% CI)**
Any cancer						
Overall	38	19.4	46	23.5	0.79	(0.49-1.27)
Men	26	21.5	28	23.1	0.91	(0.50-1.67)
Women	12	16.0	18	24.0	0.63	(0.28-1.38)
Age at onset of PD≤71 years	13	12.8	19	18.6	0.67	(0.32-1.38)
Age at onset of PD>72 years	25	26.6	27	28.7	0.90	(0.48-1.70)
Any cancer except nonmelanoma skin cancer	28	14.3	35	17.9	0.77	(0.45-1.32)
Lung	2	1.0	2	1.0	1.00	(0.14-7.10)
Bladder	1	0.5	4	2.0	0.22	(0.03-2.24)
Smoking-related cancer						
Overall	7	3.6	9	4.6	0.75	(0.26-2.16)
Ever-smokers	2	2.1	7	6.5	0.27	(0.05-1.34)
Never-smokers	5	4.9	2	2.3	2.21	(0.42-11.7)
Colorectal	5	2.6	5	2.6	1.00	(0.29-3.45)
Skin cancer						
Nonmelana	13	6.6	16	8.2	0.79	(0.36-1.73)
Melanoma	3	1.5	2	1.0	1.50	(0.25-8.98)
Breast	1	1.3	5	6.7	0.20	(0.02-1.71)
Prostate	10	8.3	6	5.0	1.80	(0.60-5.37)
Histologic type						
Squamous cell	5	2.6	9	4.6	0.43	(0.11-1.66)
Squamous cell, excluding skin	3	1.5	5	2.6	0.50	(0.09-2.73)
Adenocarcinoma	22	11.2	19	9.7	1.17	(0.62-2.19)

28	Benedetti, et al	2001 USA	Case-Control	Cases: 72 (F) Controls: 72 (F)	70-79: 36%	

Risk factor	Discordant pairs (case, control) + −	− +	Concordant pairs (case, control) + +	− −	Adjusted OR	(95% CI)
Surgical menopause	15	7	3	45	2.23	(0.90-5.54)
Hysterectomy (without bilateral oophorectomy)	12	4	1	53	3.36	(1.05-10.77)
Early menopause (≤ 46 years vs. otherwise)	15	8	8	33	2.18	(0.88--5.39)
Postmenopausal estrogen use (≥ 6 months vs. otherwise)						
All women	6	10	0	56	0.47	(0.12-4.85)
Only women with natural menopause	3	6	0	36	0.08	(0.004-1.58)

29	Behari, et al	2001 India	Case-Control	301/76 (M/F) 271/106 (M/F)	52 (onset), 57 57	

Variables	Cases (n = 377)	Controls (n = 377)	OR	(95% CI)
Gender (male)	301	271	1.98	(1.34-2.92)
Family history of PD	21	3	9.98	(2.63-37.07)
Rural residency				
No	176	166	1.00	
≤ 10 years	11	25	0.42	(0.20-0.89)
> 10 years	188	186	0.94	(0.70-1.25)
Farming				
No	321	303	1.00	
≤ 10 years	3	5	0.55	(0.13-2.32)
> 10 years	53	69	0.72	(0.48-1.05)
Smoking				
No	318	289	1.00	
≤ 20 years	8	34	0.19	(0.08-0.47)
> 20 years	51	54	0.74	(0.46-1.19)
Alcohol consumption				
No	329	318	1.00	
≤ 20 years	11	32	0.45	(0.20-1.01)
> 20 years	37	27	1.48	(0.82-2.65)
Well water drinking				
No	156	140	1.00	
≤ 10 years	22	24	0.65	(0.19-2.20)
> 10 years	199	213	1.94	(1.33-2.80)
Pets exposure				
No	285	261	1.00	
≤ 10 years	14	14	0.78	(0.33-1.84)
> 10 years	78	102	0.50	(0.34-0.74)
Prior depression duration				
No	237	259	1.00	
≤ 10 years	122	100	1.54	(1.06-2.23)
> 10 years	18	18	1.51	(0.54-2.50)

30	Ascherio, et al	2001 USA	HPFS, NHS	47,351/88,565 (M/F) 288 incident PD	40-75 (M) 30-55 (F)	**Coffee consumption (cups/day)**		
						Men		
						0	1.0	(Ref.)
						< 1	0.8	(0.5-1.2)
						1-3	0.6	(0.4-0.9)
						4-5	0.5	(0.2-1.1)
						6+	0.5	(0.1-2.1)
						p, trend		0.02
						Women		
						0	1.0	(Ref.)
						< 1	1.1	(0.6-2.0)
						1-3	0.6	(0.4-0.9)
						4-5	0.9	(0.6-1.6)
						6+	1.00	(0.5-2.1)
						p, trend	0.96	
						Caffein intake men in the top quintile: 0.42 (0.23-0.78), women: U-shaped		
						Men		
						Tea		
						Almost never	1.0	(Ref.)
						< 1 cup/day	0.8	(0.5-1.1)
						1 cup/day	0.4	(0.2-1.2)
						> 1 cup/day	0.4	(0.2-1.2)
						p, trend	0.02	
						Missing	-	
						Decaffeinated Coffee		
						Almost never	1.0	(Ref.)
						< 1 cup/day	0.7	(0.4-1.2)
						1 cup/day	0.4	(0.2-1.0)
						> 1 cup/day	1.0	(0.6-1.8)
						p, trend	0.3	
						Missing	-	
						Other caffeinated bevrages		
						Almost never	1.0	(Ref.)
						< 3/Week	0.9	(0.6-1.4)
						3-5/Week	0.9	(0.5-1.6)
						6-7/Week	0.2	(0.1-1.0)
						> 1/Day	0.5	(0.1-2.3)
						p, trend	0.05	
						Missing	-	
						Women		
						Tea		
						Almost never	1.0	(Ref.)
						< 1 cup/day	1.1	(0.6-2.2)
						1 cup/day	1.4	(0.6-3.4)
						> 1 cup/day	1.1	(0.5-2.5)
						p, trend	0.70	
						Missing	-	

Decaffeinated Coffee		
Almost never	1.0	(Ref.)
< 1 cup/day	0.7	(0.3-1.6)
1 cup/day	0.8	(0.4-2.0)
> 1 cup/day	1.0	(0.5-2.0)
p, trend	0.80	
Missing	-	
Other caffeinated bevrages		
Almost never	1.0	(Ref.)
< 3/Week	1.2	(0.6-2.4)
3-5/Week	1.5	(0.6-3.9)
6-7/Week	1.3	(0.5-3.8)
> 1/Day	2.4	(0.8-7.4)
p, trend	0.14	

31 Kirkey, et al 2001 USA Case-Control

Cases: 90/54 (M/F)
Controls: 293/171 (M/F)

	Cases (n=144)		Controls (n=464)			
Category	**No.**	**%**	**No.**	**%**	**OR**	**(95% CI)**
DOT						
Professional, technical, and managerial	71	49.31	19	47.20	1.09	(0.75-1.58)
Clerical and sales	69	47.92	223	48.06	0.99	(0.68-1.45)
Service	65	45.14	253	54.53	0.69	(0.47-1.00)
Agriculture, fishery, forestry	12	8.33	23	4.96	1.74	(0.85-3.60)
Processing	15	10.42	57	12.29	0.83	(0.46-1.52)
Machine trades	38	26.39	145	31.25	0.79	(0.52-1.20)
Benchwork	16	11.11	62	13.36	0.81	(0.45-1.45)
Structural work	40	27.78	118	25.43	1.13	(0.74-1.72)
Miscellaneous	33	22.92	106	22.84	1.00	(0.64-1.57)
SIC						
Agriculture, fishery, forestry	9	6.25	17	3.66	1.75	(0.76-4.02)
Mining	1	0.69	4	0.86	0.80	(0.09-7.25)
Construction	13	9.03	42	9.05	1.00	(0.52-1.91)
Manufacturing	96	66.67	325	70.05	0.86	(0.57-1.28)
Transportation, communications, electric, gas, and sanitary services	24	16.67	75	16.16	1.04	(0.63-1.72)
wholesale trade	7	4.86	34	7.33	0.65	(0.28-1.49)
Retail trade	42	29.17	151	32.54	0.85	(0.57-1.28)
Finance, insurance, and real estate	20	13.89	57	12.28	1.15	(0.67-1.99)
Services	81	56.25	274	59.05	0.89	(0.61-1.30)
Public administration	68	47.22	216	46.55	1.03	(0.71-1.49)

32 Herishanu, et al 2001 Israel Case-Control

Cases: 93 (total)
Controls: 93 (total)

Disease	**PD (n)**	**Controls (n)**	**Significance**	**OR**	**(95% CI)**
Hypertension	28	44	0.02	0.48	(0.26-0.88)
Diabetes mellitus	11	26	0.01	0.35	(0.15-0.75)
Isch. heart disease	20	40	0.003	0.36	(0.19-0.69)
Variables				**OR**	**(95% CI)**
Smoking				0.37	(0.19-0.72)
Exposure to pesticides				6.81	(0.75-64.89)
Work in construction				2.32	(0.84-6.44)
Work in mechanical factory				0.63	(0.22-1.83)
Country of birth (other than USSR)				2.00	(1.04-3.85)
Peptic disease				1.83	(0.42-4.36)

33	Peganimi-Hill	2001 USA	Nested case-Control	Cases: 395 (total) Controls: 2320 (total)		

Smoking			
	Past, < 1 pack/day	1.22	(0.91-1.65)
	Past, ≥ 1 pack/day	0.78	(0.57-1.05)
	Current, < 1 pack/day	0.70	(0.32-1.51)
	Current, ≥ 1 pack/day	0.42	(0.22-0.80)
Blood pressure medication		0.62	(0.48-0.80)
Children			
	1	1.25	(0.88-1.76)
	2	1.34	(0.99-1.82)
	3+	1.90	(1.35-2.67)
Coffee			
	≤ 1	0.98	(0.75-1.27)
	2+	0.71	(0.52-0.95)
Alcohol, drinks / day			
	≤ 1	1.03	(0.76-1.38)
	2+	0.77	(0.58-1.03)
Dietary vitamin C			
	Medium	1.00	(0.75-1.33)
	High	1.24	(0.91-1.68)
Total vatamin A			
	Medium	1.15	(0.86-1.54)
	High	1.16	(0.85-1.57)

34	Elbaz, et al	2000 Europe	Case-control	Cases: 57/70 (M/F) Controls: 137/169 (M/F)	72 (onset), 78 78	

Family history	Ever Smoking	Controls n	Cases n	OR	(95% CI)	P
Overall						
No	No	151	62	1.0	(Ref.)	-
No	Yes	143	49	1.0	(0.5-1.7)	0.9
Yes	No	9	7	2.0	(0.7-5.7)	0.2
Yes	Yes	3	9	10.0	(2.0-49.6)	0.005
Interaction	-	-	-	5.0	(0.8-33.3)	0.09
Age≤75 years						
No	No	42	19	1.0	(Ref.)	-
No	Yes	75	20	0.4	(0.1-1.0)	0.06
Yes	No	1	2	4.9	(0.4-55.6)	0.2
Yes	Yes	2	3	4.2	(0.4-46.4)	0.2
Interaction	-	-	-	2.4	(0.08-74.6)	0.6
Age≤75 years						
No	No	109	43	1.0	(Ref.)	-
No	Yes	68	29	1.5	(0.8-3.1)	0.2
Yes	No	8	5	1.8	(0.6-5.9)	0.4
Yes	Yes	1	6	17.6	(1.9-160.5)	0.01
Interaction	-	-	-	6.3	(0.5-73.6)	0.12

35	Preux, et al	2000 France	Case-control	Cases: 74/66 (M/F) Controls: 148/132 (M/F)	63.7 (onset), 71.1 70.5	

Variable	Adjusted OR	(95% CI)
Past history of familial PD (first-degree relative)	9.3	(2.6-32.6)
Smoking	0.5	(0.3-0.8)
Coffee consumption	0.7	(0.4-1.2)
Tea consumption	1.9	(1.1-3.2)
Urban area	0.6	(0.4-1.0)
Toxic products	1.2	(0.7-2.3)

36	Johansen	2000 Denmark	Retrospective Cohort	24,850/578 (M/F) 68 incident PD	follow-up: 12.3years	Average estimated level of electromagnetic field exposure

No.	Background (< 0.09¤T)	Low (0.1-0.29¤T)		Medium (0.3-0.99¤T)		High (≥ 1.0¤T)		Unknown	
	PR	PR	(95% CI)	PR	(95% CI)	PR	(95% CI)	PR	(95% CI)
64	1.00	0.89	(0.42-1.87)	0.68	(0.31-1.49)	0.64	(0.26-1.54)	0.72	(0.29-1.79)

37	Shiba, et al	2000 USA	Case-control	Cases: 121/75 (M/F) Controls: 121/75 (M/F)	71 (onset)

Risk factor (psychiatric disease)	Exposure frequency Cases %	Control subjects %	OR	(95% CI)
depressive disorder				
All diagnoses	24.0	14.8	1.9	(1.1-3.2)
5-year restriction	14.8	11.2	1.4	(0.8-2.6)
10-year restriction	11.2	9.2	1.3	(0.6-2.5)
20-year restriction	5.1	4.1	1.3	(0.5-3.2)
Only definite diagnoses	6.6	7.7	0.9	(0.4-1.9)
Anxiety disorders				
All diagnoses	43.9	25.5	2.2	(1.4-3.4)
5-year restriction	40.3	24.0	2.1	(1.3-3.2)
10-year restriction	33.7	24.0	1.6	(1.0-2.5)
20-year restriction	26.0	16.3	1.9	(1.1-3.1)
Only definite diagnoses	6.1	2.6	2.8	(0.9-8.6)
Both depressive disorders and anxiety disorders	14.8	7.1	2.4	(1.2-4.8)
Somatoform disorders	10.7	7.7	1.4	(0.7-2.8)
personality disorders	3.1	4.1	0.8	(0.3-2.2)
Bipolar disorders	0.5	0.5	1.0	(0.1-16.0)
schizophrenia	1.0	1.0	1.0	(0.1-7.1)

38	Ross, et al	2000 USA	Honolulu Heart Program	8,004 102 incident PD	45-68 follow-up: 30years

Coffee Intake, oz/d	No. of Cases of PD/No. of subjects at risk	Incidence Rate/10000 Person-years Unadjusted	Adjusted for age	Adjusted Relative Hazard (95% CI) compared with the top category of coffee intake	
	Based on 30 years of follow-up after 1965 to 1968 Examinations				
Nondrinker	32/1286	10.5	10.4	5.1	(1.8-14.4)
4 to 8	33/2576	5.5	5.3	2.7	(1.0-7.8)
12 to 16	24/2149	4.7	4.7	2.5	(0.9-7.3)
20 to 24	9/1034	3.6	3.7	2	(0.6-6.4)
≥ 28	4/959	1.7	1.9	Ref	
Test for trend	...	P<.001	P<.001	P<.001	
Nondrinkers vs drinkers	...	...	...	2.2	(1.4-3.3)

Quintile of caffeine intake mg/d	No. of Cases of PD/No. of subjects at risk	Incidence Rate/10000 Person-years Unadjusted	Adjusted for age	Adjusted Relative Hazard (95% CI) compared with the top category of coffee intake	
	Total Caffeine				
0-123	35/1522	9.8	9.7	5.1	(2.1-12.3)
124-208	17/1396	5.2	5	2.6	(1.0-6.6)
209-287	26/1607	6.8	6.7	3.8	(1.6-9.3)
288-420	12/1485	3.4	3.4	2.0	(0.7-5.3)
421-2716	6/1481	1.7	1.8	Ref	
Test for trend	...	P<.001	P<.001	P<.001	P<.001
	Caffeine from Noncoffee sources				
0-2.8	35/1642	9.2	9.2	2.7	(1.4-5.4)
2.9-35.5	11/1389	3.4	3.4	1.2	(0.5-2.7)
35.6-59.2	18/1486	5.1	5.1	1.6	(0.7-3.3)
59.3-106.7	21/1487	5.9	5.9	1.9	(0.9-4.0)
416.8-705.3	11/1487	3.1	3.1	Ref	
Test for trend	...	P=.03	P=.03	P=.03	P=.03

39	Johnson, et al	1999	USA	Case-control	Cases: 78/48 (M/F) Controls: 271/161 (M/F)			

Nutrient	Quartile	OR	(95% CI)
Energy (total kcal)	Q_2	0.90	(0.49-1.65)
	Q_3	0.96	(0.53-1.76)
	Q_4	1.62	(0.90-2.92)
Total fat (g)	Q_2	1.08	(0.57-2.02)
	Q_3	1.51	(0.83-2.77)
	Q_4	1.94	(1.05-3.58)
Protein (g)	Q_2	0.98	(0.54-1.79)
	Q_3	1.18	(0.64-2.16)
	Q_4	1.35	(0.74-2.48)
Carbohydrates (g)	Q_2	1.07	(0.59-1.93)
	Q_3	1.12	(0.62-2.03)
	Q_4	1.38	(0.76-2.49)
Saturated fats (g)	Q_2	1.16	(0.63-2.12)
	Q_3	1.37	(0.75-2.52)
	Q_4	1.77	(0.97-3.23)
Oleic acid (g)	Q_2	0.66	(0.35-1.26)
	Q_3	1.25	(0.70-2.23)
	Q_4	1.64	(0.91-2.95)
Linoleic acid (g)	Q_2	1.17	(0.64-2.11)
	Q_3	1.23	(0.68-2.22)
	Q_4	1.40	(0.77-2.55)
Cholesterol (mg)	Q_2	1.24	(0.65-2.35)
	Q_3	1.56	(0.84-2.87)
	Q_4	2.11	(1.14-3.90)
Vitamin A (IU)	Q_2	1.01	(0.56-1.83)
	Q_3	0.97	(0.54-1.76)
	Q_4	1.31	(1.75-2.30)
Beta-carotene (mcg)	Q_2	1.07	(0.59-1.93)
	Q_3	1.10	(0.61-1.99)
	Q_4	1.24	(0.70-2.21)
Lutein (mcg)	Q_2	1.61	(0.83-3.10)
	Q_3	2.15	(1.14-4.07)
	Q_4	2.52	(1.32-4.84)
Vitamin B (thiamin) (mg)	Q_2	0.85	(0.46-1.59)
	Q_3	1.03	(0.56-1.90)
	Q_4	1.50	(0.84-2.69)
Vitamin B (riboflavin) (mg)	Q_2	0.82	(0.44-1.52)
	Q_3	1.04	(0.57-1.89)
	Q_4	1.52	(0.87-2.65)
Niacin (mg)	Q_2	0.66	(0.36-1.24)
	Q_3	0.98	(0.54-1.77)
	Q_4	1.34	(0.76-2.36)
Vitamin B (mg)	Q_2	0.69	(0.36-1.30)
	Q_3	0.86	(0.47-1.58)
	Q_4	1.62	(0.92--2.85)
Folate (mcg)	Q_2	0.78	(0.42-1.44)
	Q_3	0.92	(0.51-1.69)
	Q_4	1.44	(0.82-2.52)
Vitamin C/ascorbic acid (mg)	Q_2	1.21	(0.65-2.23)
	Q_3	1.56	(0.87-2.81)
	Q_4	1.37	(0.75-2.50)
Vitamin E (alpha-tocopherol)	Q_2	0.87	(0.48-1.58)
	Q_3	1.13	(0.63-2.03)
	Q_4	1.25	(0.71-2.22)

						Calcium (mg)	Q_2	1.55 (0.86-2.79)
							Q_3	1.16 (0.62-2.18)
							Q_4	1.54 (0.85-2.81)
						Iron (mg)	Q_2	1.12 (0.60-2.07)
							Q_3	1.00 (0.53-1.88)
							Q_4	1.88 (1.05-3.38)
						Phosphorus (mg)	Q_2	1.24 (0.67-2.27)
							Q_3	1.18 (0.63-2.19)
							Q_4	1.77 (0.98-3.21)
						Potassium (mg)	Q_2	0.80 (0.45-1.44)
							Q_3	0.68 (0.36-1.26)
							Q_4	1.24 (0.71-2.18)
						Sodium (mg)	Q_2	1.46 (0.78-2.75)
							Q_3	1.98 (1.06-3.70)
							Q_4	1.85 (0.97-3.52)
40	Kuopio, et al	1999	Finland	Case-Control	Cases: 63/60 (M/F) Controls: 126/120 (M/F)	5.8 (duration), 68.7 69.3		

Associations of the number of different animal species at home with the risk to be affected with PD

Age	n	OR	(95% CI)
Whole life	0	1.00	
	1	1.28	(0.67-2.47)
	2-3	0.64	(0.31-1.35)
	4-8	0.59	(0.31-1.12)
‹ 10 yrs	0	1.00	
	1	0.75	(0.39-1.44)
	2-3	0.73	(0.34-1.59)
	4-8	0.43	(0.25-0.75)
‹ 20 yrs	0	1.00	
	1	0.96	(0.52-1.77)
	2-3	0.68	(0.32-1.43)
	4-8	0.44	(0.26-0.74)
≥ 20 yrs	0	1.00	
	1	0.79	(0.45-1.37)
	2-3	0.80	(0.41-1.54)
	4-8	0.51	(0.25-1.07)

Animal species	Age	OR	(95% CI)
Cats	Whole life	0.76	(0.48-1.22)
Dogs	Whole life	0.69	(0.44-1.08)
Cows	Whole life	0.58	(0.35-0.95)
Horses	Whole life	0.71	(0.42-1.20)
Sheep	Whole life	0.48	(0.29-0.78)
Pigs	Whole life	0.53	(0.33-0.84)
Chickens	Whole life	0.52	(0.31-0.85)
Rabbits	Whole life	0.89	(0.50-1.59)

Risk factor	OR	(95% CI)
Use of unpurified water		
Age < 20 yrs	1.01	(0.65-1.61)
Age < 20-40 yrs	0.78	(0.45-1.34)
Age > 40 yrs	0.66	(0.30-1.46)
Use of drill water		
Age < 20 yrs	0.78	(0.38-1.58)
Age < 20-40 yrs	1.07	(0.45-2.57)
Age > 40 yrs	1.48	(0.44-4.95)
Use of purified tap water		
Age < 20 yrs	1.12	(0.67-1.86)
Age < 20-40 yrs	1.27	(0.73-2.21)
Age > 40 yrs	1.24	(0.61-2.55)
Educational level		
Low	1.00	
Intermediate	0.89	(0.55-1.42)
High	1.04	(0.50-2.19)
Years of education		
High grade	1.00	
Intermediate grade	1.02	(0.44-2.38)
Low grade	0.86	(0.44-1.69)
Farming		
As an occupation	0.77	(0.41-1.43)
Part-time farming	1.56	(0.95-2.54)
Both together	1.45	(0.88-2.41)
Forestry		
As an occupation	1.17	(0.60-2.31)
Part-time forestry	1.71	(0.58-5.10)
Both together	1.42	(0.78-2.60)
Physical strain of the work		
Light	1.00	
Fairly light	0.98	(0.51-1.90)
Heavy	0.84	(0.43-1.64)
Very heavy	2.22	(1.05-4.69)
Use of DDT	1.04	(0.68-1.60)
Use of herbicides		
Regular use	0.79	(0.38-1.66)
Occasional use	1.71	(0.90-3.23)
Both together	1.40	(0.79-2.48)
Use of pesticides		
Regular use	0.65	(0.33-1.29)
Occasional use	1.23	(0.74-2.04)
Both together	1.02	(0.63-1.65)
Use of mercury-containing pickling solutions		
Regular use	1.37	(0.53-3.53)
Occasional use	1.47	(0.58-3.70)
Both together	1.58	(0.74-3.42)

Risk factor	OR	(95% CI)
Never-smoking	0.92	(0.55-1.52)
Tried of never-smoking	0.55	(0.27-1.13)
Current smoking	0.50	(0.20-1.24)
Ever-smoking men	0.96	(0.50-1.86)
Ever-smoking women	0.85	(0.38-1.89)

						Reason for non-smoking			
						Physical reasons		1.00	
						Educational reasons		1.42	(0.59-3.39)
						No special reason		4.07	(1.44-11.5)
						Reason for cessation			
						Personal reasons		1.00	
						Circumstantial reasons		1.24	(0.34-4.48)
						Competitive sports			
						Age <20 years		0.80	(0.45-1.42)
						Age 20-40 years		0.69	(0.33-1.46)
						Age 40-60 years		2.16	(0.65-7.19)
						Regular exercise			
						Age <20 years		1.24	(0.79-2.95)
						Age 20-40 years		1.51	(0.96-2.39)
						Age 40-60 years		1.58	(0.99-2.53)
						Age > years		1.47	(0.89-2.43)
						Exercise index			
						Age <20 years			
							NO exercise	1.00	
							Medium stage	2.03	(1.04-3.96)
							Highest stage	1.03	(0.63-1.69)
						Age 20-40 years			
							NO exercise	1.00	
							Medium stage	1.60	(0.89-2.75)
							Highest stage	1.50	(0.87-2.49)
						Age 40-60 years			
							NO exercise	1.00	
							Medium stage	2.08	(1.10-4.00)
							Highest stage	2.67	(1.19-6.00)
						Age >60 years			
							NO exercise	1.00	
							Medium stage	0.96	(0.38-2.46)
							Highest stage	3.88	(0.31-48.3)
41	Taylor,et al	1999	USA	Case-control	Cases: 52/88 (M/F) Controls: 57/90 (M/F)	56.0 (onset), 66.2 66.9	Head injury	6.23	(2.58-15.07)
							Family history: PD	6.08	(2.35-15.69)
							Family history: tremor	3.97	(1.17-13.50)
							Depression	3.01	(1.32-6.88)
							Years of:		
							Education	0.79	(0.71-0.88)
							Urban living	1.05	(0.99-1.12)
							Suburban living	1.04	(0.98-1.11)
							Rural living	1.07	(0.99-1.15)
							Pesticide	1.02	(0.90-1.17)
							Herbicide	1.06	(0.68-1.65)
							Well water	0.93	(0.88-0.98)
							Smoking (pack/yrs)	0.98	(0.96-0.99)
							vitamins	1.02	(0.99-1.06)

42	Tsui, et al	1999 Canada	Case-control	Cases: 300/125 (M/F) Controls: 3,029/2,632 (M/F)	53.7 36.3	Management, administration	0.48	(0.32-0.72)
						Sciences, engineering	1.39	(0.85-2.27)
						Social sciences, Low, Library	2.49	(1.27-4.88)
						Teaching	2.50	(1.67-3.74)
						Medicine, Health	2.07	(1.34-3.20)
						Art, Literature, Recreation, Religion	1.00	(0.48-2.11)
						Clerical	0.58	(0.40-0.85)
						Sales, Commodities services	1.08	(0.77-1.51)
						Service-food, lodging	1.11	(0.77-1.59)
						Farming / Horticulture	0.68	(0.32-1.41)
						Other primary: Forestry, logging, mining, oil / gas field	3.79	(1.72-8.37)
						Processing-ore, metal, glass, stone, rubber, wood, etc.	1.22	(0.68-2.20)
						Machine related	0.75	(0.48-1.19)
						Construction	0.31	(0.15-0.63)
						Transport equipment operating	0.89	(0.50-1.59)
						Material handling, printing / utilities, Eqipment operating	1.32	(0.80-2.06)
						Not applicable	0.16	(0.10-0.26)
43	Werneck, et al	1999 Brazil	Case-control	Cases: 41/51 (M/F) Controls: 47/63 (M/F)	70.6 68.4	Rural life	1.00	(0.52-1.95)
						Well-water	1.49	(0.74-3.01)
						Herbicides / insecticides	2.49	(0.53-13.14)
						Trauma	1.55	(0.67-3.62)
						Drugs	11.01	(3.41-39.41)
						Family history	14.05	(2.98-91.38)
						Cigarette consumption	0.39	(0.16-0.95)
						Chemical agents	5.87	(1.48-27.23)
44	Gorell, et al	1999 USA	Case-control	Cases: 90/54 (M/F) Controls: 293/171 (M/F)		Lead	≤20	1.08	(0.55-2.13)
							>20	2.05	(0.97-4.31)
						Iron	≤20	1.02	(0.59-1.75)
							>20	1.27	(0.69-2.34)
						Copper	≤20	1.15	(0.55-2.41)
							>20	2.49	(1.06-5.89)
						Manganese	≤20	0.40	(0.05-3.24)
							>20	10.61	(1.06-105.83)
						mercury	≤20	0.55	(0.12-2.52)
							>20	0.65	(0.07-5.79)
						Zinc	≤20	0.45	(0.10-2.02)
							>20	1.19	(0.24-6.02)
						Lead and copper	both exposures>20 years	5.24	(1.59-17.21)
						Lead and iron	both exposures>20 years	2.83	(1.07-7.50)
						Iron and copper	both exposures>20years	3.69	(1.40-9.71)
45	Elbaz, et al	1999 Europe	Case-control	Cases: 79/96 (M/F) Controls: 210/271 (M/F)	72 (onset), 79 79	Association between PD and family history (at least one first-degree relative affected) Cases Controls OR (95% CI) 18/175 (10.3) 17/481 (3.5) 3.2 (1.6-6.6)			

46	Fall ,et al	1999 Sweden	Case-control	Cases: 113 (total) Controls: 263 (total)	8.3 (duration) 62.9 56.8	Fried or broiled meat			
						Daily	3/9	0.47	(0.07-2.30)
						Each week	66/177	0.44	(0.25-0.77)
						Never/each month	43/57	1.00	
						Smoked ham or meat			
						Daily	1/4	0.23	(0.00-2.57)
						Each week	26/70	0.33	(0.13-0.77)
						each month	59/140	0.44	(0.21-0.90)
						Never	26/28	1.00	
						Egg			
						Daily	21/62	0.30	(0.11-0.77)
						Each week	67/159	0.35	(0.16-0.73)
						each month	22/24	1.00	
						French loaf , wheat bread			
						Daily	16/71	0.29	(0.13-0.64)
						Each week	52/11	0.66	(0.37-1.19)
						Never/each month	44/59	1.00	
						Tomatoes			
						Daily	23/75	0.21	(0.06-2.65)
						Each week	52/134	0.27	(0.09-0.80)
						each month	19/23	0.43	(0.10-1.64)
						seldom or never	18/8	1.00	
						Coffee			
						> 5 cups/day	8/55	0.13	(0.03-0.44)
						2-5 cups/day	84/156	0.74	(0.36-1.53)
						Never, ≤ 1 cups/day	20/31	1.00	
						Tea			
						2-5 cups/day	7/31	0.31	(0.10-0.87)
						≤1 cups/day	57/143	0.64	(0.36-1.14)
						Never	47/57	1.00	
						medium			
						1-3 bottles/day	27/98	0.47	(0.26-0.83)
						≤ 1 bottles/day, never	83/135	1.00	
						Strong beer			
						1 bottle/week	8/51	0.38	(0.15-0.90)
						bottle/day, never	101/182	1.00	
						Wine			
						2-6 bottles/week	11/56	0.25	(0.11-0.56)
						1-4 bottles/week	31/101	0.38	(0.20-0.68)
						Never	69/80	1.00	
						Liquor			
						1 bottle/week or more	4/21	0.24	(0.06-0.80)
						1/2 bottle/week	6/44	0.19	(0.06-0.52)
						1/2 bottle/month	35/87	0.51	(0.27-0.93)
						Never	67/88	1.00	
						Current smoker			
						Yes	6/64	0.17	(0.06-0.43)
							196/179	1.00	
						Ex-smoker			
						Yes	29/60	0.82	(0.44-1.51)
						No	83/159	1.00	
						Pack-years			
						24-123	pack-years 7/35	0.31	(0.11-0.78)
						10-23	pack-years 4/38	0.15	(0.03-0.45)
						1-9	pack-years 11/28	0.63	(0.26-1.45)
						0-1	pack-years 85/118	1.00	

47	Anderson, et al	1999	USA	Case-control	Cases: 96/60 (M/F) Controls: 61/42 (M/F)	72 72

Increased risk, males			
Carpenters	8/6	3.9	(1.0-15.7)
Cabinet-makers	4/1	11	(0.91-6.30)
Joiners also working with surface treatment, lacquer, and paints	4/1	9.8	(0.78-5.70)
Agriculture	25/42	1.4	(0.68-2.9)
Handling pesticides within agriculture	6/8	1.9	(0.46-7.3)
Handling insecticides within agriculture	5/7	2.2	(0.48-9.0)
Handling pesticides within any occupation	10/10	2.8	(0.89-8.7)
Increased risk, females			
Cleaners	10/5	6.7	(1.76-30)
Increased risk, both genders			
carpenters	8/9	2.4	(0.72-7.9)
Cabinet-makers	4/2	6.6	(0.77-85)
Carpenters involved in surface treatment	4/2	5.9	(0.67-78)
Reduced risk, both genders			
Drivers	3/19	0.24	(0.04-0.92)
Filling station attendants	1/14	0.14	(0.00-0.99)
Metal workers	7/48	0.34	(0.12-0.82)

Quartiles of intake

Food group	1	2	3	4	p tend
Fruit servings/day	.3-1.4	>1.4-2.3	>2.3-3.3	>3.3	
No. of cases/control subjects	19/40	31/38	26/40	27/37	
OR (95% CI)	1.00	.72 (.31-1.66)	1.26 (.59-2.67)	1.02 (.48-2.16)	0.62
Vegetables servings/day	.2-3.3	>3.3-4.1	>4.1-5.4	>5.4	
No. of cases/control subjects	32/39	19/38	26/40	25/38	
OR (95% CI)	1.00	1.12 (.52-2.42)	.63 (.28-1.43)	.96 (.46-2.02)	0.93
Fruit vegetable servings/day	.5-4.9	>4.9-6.6	>6.6-8.6	>8.6	
No. of cases/control subjects	19/39	35/39	25/38	23/38	
OR (95% CI)	1.00	.66 (.28-1.57)	1.56 (.71-3.42)	1.08 (.50-2.30)	0.56
Bread/cereals servings/day	.5-3.0	>3.0-4.2	>4.2-5.2	>5.2	
No. of cases/control subjects	28/39	28/45	22/33	25/39	
OR (95% CI)	1.00	.67 (.25-1.82)	.67 (.27-1.65)	.89 (.38-2.07)	0.38
Dairy servings/day	.8-2.4	>2.4-3.3	>3.3-4.2	>4.2	
No. of cases/control subjects	38/39	19/40	22/41	24/36	
OR (95% CI)	1.00	1.44 (.63-3.30)	.64 (.27-1.53)	.83 (.37-1.87)	0.35
Total meat servings/day	0-.7	>.7-1.0	>1.0-1.3	>1.3	
No. of cases/control subjects	25/39	36/51	16/30	25/36	
OR (95% CI)	1.00	.72 (.31-1.70)	.90 (.43-1.86)	.74 (.32-1.74)	0.59
Fish servings/day	0-.2	>.3-.5	>.3-.5	>.5	
No. of cases/control subjects	35/57	16/23	27/40	25/36	
OR (95% CI)	1.00	.80 (.40-1.62)	1.32 (.55-3.18)	.88 (.41-1.87)	0.65
Chicken servings/day	.1-.5	>.5-.7	>.7-.9	>.9	
No. of cases/control subjects	19/39	34/50	18/29	32/38	
OR (95% CI)	1.00	.50 (.22-1.12)	.66 (.33-1.32)	.49 (.22-1.12)	0.14
Red meat servings/day	0-.5	>.5-.6	>.6-.9	>.9	
No. of cases/control subjects	44/53	20/34	20/32	18/37	
OR (95% CI)	1.00	1.67 (.76-3.69)	1.15 (.49-2.67)	1.34 (.58-3.09)	0.24
Food containing vitamin A	0-.5	>.5-.8	>.8-1.1	>1.1	
No. of cases/control subjects	31/43	26/37	16/36	28/40	
OR (95% CI)	1.00	.97 (.47-2.00)	.96 (.46-2.02)	.65 (.29-1.45)	0.83
Food containing vitamin C	0-.6	>.6-1.1	>1.1-1.4	>1.4	
No. of cases/control subjects	31/35	37/46	13/34	22/40	
OR (95% CI)	1.00	1.90 (.83-4.37)	1.43 (.68-3.03)	.75 (.32-1.77)	0.06
Food containing vitamin D	0-.6	>.6-1.4	>1.4-2.6	>2.6	
No. of cases/control subjects	19/39	33/33	32/44	18/40	
OR (95% CI)	1.00	1.21 (.52-2.84)	2.32 (1.06-5.09)	1.79 (.83-3.87)	0.53