

Table S1. The mean (95%CI) of the frequency of food consumption by dietary patterns for cancer-control sample (times/day)

Food groups [#]	Total	Dietary Patterns											
		'Prudent' tertiles			'Non-Healthy' tertiles			'Dressings and sweetened-low-fat dairy' tertiles			'Polish-aMED' levels		
		bottom	middle	upper	bottom	middle	upper	bottom	middle	upper	low	average	high
Size (n)	560	186	188	186	187	187	186	186	187	187	113	278	169
Sugar, honey and sweets	2.1 (2.0; 2.2)	2.1 (1.9; 2.3)	2.1 (1.9; 2.3)	2.0 (1.8; 2.2)	1.3 (1.2; 1.5)	1.9 (1.7; 2.0)	3.0 (2.8; 3.2)	1.9 (1.8; 2.1)	2.1 (1.9; 2.2)	2.2 (2.0; 2.4)	2.2 (2.0; 2.5)	2.1 (1.9; 2.2)	1.9 (1.7; 2.1)
Red and processed meats	1.5 (1.4; 1.6)	1.3 (1.2; 1.5)	1.5 (1.4; 1.6)	1.6 (1.5; 1.7)	1.0 (0.9; 1.1)	1.5 (1.4; 1.6)	2.0 (1.9; 2.1)	1.5 (1.4; 1.7)	1.4 (1.2; 1.5)	1.5 (1.4; 1.7)	1.5 (1.3; 1.6)	1.6 (1.5; 1.7)	1.2 (1.1; 1.4)
Animal fats	1.2 (1.1; 1.3)	1.0 (0.9; 1.2)	1.2 (1.1; 1.4)	1.3 (1.2; 1.4)	0.7 (0.6; 0.8)	1.1 (1.0; 1.2)	1.7 (1.6; 1.9)	1.9 (1.8; 2.0)	1.1 (1.0; 1.2)	0.5 (0.5; 0.6)	1.2 (1.1; 1.4)	1.3 (1.2; 1.4)	0.9 (0.8;) 1.0
Milk, fermented milk drinks and curd cheese	1.0 (0.9; 1.0)	0.6 (0.5; 0.6)	1.0 (0.9; 1.1)	1.4 (1.3; 1.5)	0.9 (0.9; 1.0)	1.0 (0.9; 1.1)	1.0 (0.9; 1.1)	0.8 (0.7; 0.9)	1.0 (0.9; 1.1)	1.2 (1.1; 1.3)	0.7 (0.6; 0.8)	1.0 (0.9; 1.0)	1.2 (1.1; 1.3)
Refined grains	1.0 (1.0; 1.1)	1.3 (1.1; 1.4)	1.0 (0.9; 1.1)	0.9 (0.7; 1.0)	0.4 (0.4; 0.5)	1.0 (0.9; 1.1)	1.7 (1.6; 1.8)	1.0 (0.9; 1.1)	1.0 (0.9; 1.1)	1.1 (1.0; 1.2)	1.3 (1.2; 1.4)	1.1 (1.0; 1.2)	0.7 (0.6; 0.8)
Vegetables	1.0 (1.0; 1.1)	0.7 (0.6; 0.8)	1.0 (0.9; 1.1)	1.4 (1.3; 1.4)	1.1 (1.0; 1.1)	1.0 (0.9; 1.1)	1.0 (0.9; 1.1)	1.0 (0.9; 1.1)	1.0 (1.0; 1.1)	1.0 (0.9; 1.1)	0.6 (0.5; 0.7)	1.0 (1.0; 1.1)	1.3 (1.2; 1.4)
Fruits	0.9 (0.8; 0.9)	0.6 (0.5; 0.7)	0.9 (0.8; 0.9)	1.2 (1.1; 1.2)	0.9 (0.8; 1.0)	0.8 (0.7; 0.9)	0.9 (0.8; 1.0)	0.9 (0.9; 1.0)	0.8 (0.8; 0.9)	0.9 (0.8; 0.9)	0.5 (0.5; 0.6)	0.9 (0.8; 0.9)	1.1 (1.1; 1.2)
Whole grains	0.7 (0.7; 0.8)	0.3 (0.3; 0.4)	0.7 (0.6; 0.7)	1.1 (1.0; 1.2)	1.0 (0.9; 1.1)	0.7 (0.6; 0.8)	0.4 (0.3; 0.5)	0.8 (0.7; 0.9)	0.7 (0.6; 0.8)	0.7 (0.6; 0.8)	0.3 (0.2; 0.3)	0.7 (0.6; 0.7)	1.1 (1.0; 1.2)
Potatoes	0.6 (0.6; 0.7)	0.7 (0.6; 0.7)	0.6 (0.6; 0.7)	0.6 (0.6; 0.7)	0.4 (0.4; 0.5)	0.7 (0.6; 0.7)	0.8 (0.8; 0.9)	0.6 (0.6; 0.7)	0.6 (0.6; 0.7)	0.7 (0.6; 0.7)	0.7 (0.6; 0.7)	0.7 (0.6; 0.7)	0.6 (0.5; 0.6)
Vegetable oils	0.6 (0.6; 0.6)	0.4 (0.3; 0.4)	0.6 (0.6; 0.7)	0.8 (0.7; 0.8)	0.5 (0.4; 0.5)	0.6 (0.6; 0.7)	0.7 (0.6; 0.7)	0.6 (0.6; 0.7)	0.6 (0.5; 0.6)	0.6 (0.5; 0.6)	0.4 (0.3; 0.5)	0.6 (0.5; 0.6)	0.7 (0.7; 0.8)
Other edible fats	0.5 (0.4; 0.5)	0.5 (0.4; 0.6)	0.5 (0.4; 0.5)	0.4 (0.3; 0.5)	0.3 (0.3; 0.4)	0.5 (0.4; 0.6)	0.5 (0.4; 0.6)	0.1 (0.1; 0.1)	0.2 (0.2; 0.3)	1.1 (1.0; 1.2)	0.4 (0.3; 0.6)	0.5 (0.4; 0.6)	0.4 (0.3; 0.5)
Cheese	0.4 (0.4; 0.4)	0.3 (0.2; 0.3)	0.4 (0.4; 0.5)	0.5 (0.4; 0.6)	0.3 (0.2; 0.3)	0.4 (0.4; 0.4)	0.5 (0.4; 0.5)	0.4 (0.3; 0.4)	0.4 (0.3; 0.4)	0.4 (0.4; 0.5)	0.3 (0.2; 0.4)	0.4 (0.4; 0.5)	0.4 (0.4; 0.5)
White meat	0.4 (0.4; 0.4)	0.3 (0.3; 0.4)	0.4 (0.4; 0.5)	0.5 (0.5; 0.5)	0.3 (0.3; 0.4)	0.4 (0.4; 0.5)	0.5 (0.5; 0.5)	0.4 (0.3; 0.4)	0.4 (0.4; 0.5)	0.5 (0.4; 0.5)	0.4 (0.3; 0.4)	0.4 (0.4; 0.5)	0.4 (0.4; 0.5)
Juices	0.4 (0.4; 0.5)	0.2 (0.2; 0.3)	0.4 (0.4; 0.5)	0.7 (0.6; 0.8)	0.3 (0.3; 0.4)	0.4 (0.3; 0.5)	0.6 (0.5; 0.7)	0.4 (0.3; 0.5)	0.5 (0.4; 0.5)	0.5 (0.4; 0.5)	0.4 (0.3; 0.5)	0.5 (0.4; 0.5)	0.5 (0.4; 0.6)
Eggs	0.3 (0.3; 0.4)	0.2 (0.2; 0.2)	0.3 (0.3; 0.4)	0.5 (0.4; 0.5)	0.3 (0.2; 0.3)	0.3 (0.3; 0.4)	0.4 (0.4; 0.5)	0.4 (0.3; 0.4)	0.3 (0.3; 0.4)	0.3 (0.3; 0.4)	0.3 (0.2; 0.3)	0.3 (0.3; 0.4)	0.4 (0.4; 0.5)
Sweetened milk drinks and flavored homogenized cheese	0.3 (0.3; 0.3)	0.1 (0.1; 0.2)	0.3 (0.3; 0.4)	0.4 (0.3; 0.5)	0.2 (0.1; 0.2)	0.3 (0.2; 0.4)	0.4 (0.3; 0.5)	0.2 (0.1; 0.2)	0.3 (0.2; 0.3)	0.5 (0.4; 0.5)	0.2 (0.2; 0.3)	0.3 (0.3; 0.4)	0.3 (0.2; 0.4)
Fish	0.3 (0.2; 0.3)	0.1 (0.1; 0.1)	0.2 (0.2; 0.3)	0.5 (0.4; 0.5)	0.3 (0.2; 0.3)	0.3 (0.2; 0.3)	0.3 (0.2; 0.3)	0.3 (0.2; 0.3)	0.3 (0.2; 0.3)	0.3 (0.2; 0.3)	0.1 (0.1; 0.1)	0.3 (0.2; 0.3)	0.4 (0.3; 0.5)
Nuts and seeds	0.2 (0.2; 0.3)	0.1 (0.0; 0.1)	0.2 (0.1; 0.2)	0.4 (0.4; 0.5)	0.4 (0.3; 0.4)	0.2 (0.1; 0.2)	0.2 (0.1; 0.2)	0.3 (0.2; 0.4)	0.2 (0.2; 0.3)	0.2 (0.1; 0.2)	0.0 (0.0; 0.0)	0.2 (0.1; 0.2)	0.5 (0.4; 0.5)
Legumes	0.2 (0.2; 0.2)	0.1 (0.1; 0.1)	0.2 (0.1; 0.2)	0.4 (0.3; 0.4)	0.2 (0.2; 0.3)	0.2 (0.1; 0.2)	0.2 (0.2; 0.3)	0.3 (0.2; 0.3)	0.2 (0.1; 0.2)	0.2 (0.1; 0.2)	0.1 (0.1; 0.1)	0.2 (0.2; 0.2)	0.3 (0.3; 0.4)
Cereals	0.1 (0.1; 0.1)	0.0 (0.0; 0.0)	0.1 (0.1; 0.1)	0.2 (0.2; 0.3)	0.1 (0.1; 0.2)	0.1 (0.1; 0.1)	0.1 (0.1; 0.1)	0.1 (0.0; 0.1)	0.1 (0.1; 0.1)	0.2 (0.1; 0.2)	0.0 (0.0; 0.1)	0.1 (0.1; 0.1)	0.2 (0.1; 0.2)
Sweetened beverages and energy drinks	0.1 (0.1; 0.1)	0.1 (0.0; 0.1)	0.1 (0.1; 0.1)	0.1 (0.1; 0.1)	0.0 (0.0; 0.0)	0.0 (0.0; 0.1)	0.2 (0.1; 0.2)	0.1 (0.1; 0.2)	0.1 (0.1; 0.1)	0.1 (0.0; 0.1)	0.1 (0.0; 0.1)	0.1 (0.1; 0.1)	0.1 (0.0; 0.1)

'Polish-aMED' – 'Polish-adapted Mediterranean Diet' (range of points: 0-8), levels (in points): 'low' (0-2), 'average' (3-5), 'high' (6-8);

#the frequency consumption was expressed as a times/day after assigning the values for categories of frequency consumption as follows: 'never or almost never'=0; 'once a month or less'=0.025; 'several times a month'=0.1; 'several times a week'=0.571; 'daily'=1; 'several times a day'=2;

95%CI – 95% confidence interval.

Table S2. Potential confounders in the pooled analysis of two Polish case-control studies

Confounders	Response categories	Scoring
Socioeconomic status (SES) after combining data based on SES' single factors	low	1
	average	2
	high	3
SES' single factors Place of residence	village	1
	town <20,000 inhabitants	2
	town 20,000-100,000 inhabitants	3
	city >100,000 inhabitants	4
Educational level	primary	1
	secondary	2
	higher	3
Economic situation (self-declared)	below the average	1
	average	2
	above average	3
Physical activity at work [39]	low more than 70% of working time spent sedentary or retired	1
	moderate approx. 50% of working time spent sedentary and 50% of working time spent in an active manner	2
	high approx. 70% of working time spent in an active manner or physical work related to great exertion	3
Physical activity in leisure time [39]	low sedentary for most of the time, watching TV, reading books, walking 1-2 hours per week	1
	moderate walking, bike riding, gymnastics, gardening, light physical activity performed 2-3 hours per week	2
	high bike riding, jogging, gardening, sport activities involving physical exertion performed more than 3 hours weekly	3
Overall physical activity	low	1

after combining data based on physical activity at work and physical activity in leisure time (Table S2)	moderate		2
	high		3
Abuse of alcohol [6]	no		1
	yes	intake at least 1 bottle (0.5 liters) of beer or 2 glasses of wine (300ml) or 2 drinks (300ml) or 2 glasses of vodka (60ml) per day	2
Current-smoker	no		1
	yes		2
Former-smoker	no		1
	yes		2
Smoking status	non-smoker		1
	smoker	current-smoker or/ and former-smoker	2

Table S3. Estimate the overall physical activity after combining data based on self-reported physical activity at work and physical activity in leisure time [40]

		Physical activity at work		
		low	moderate	high
Physical activity in leisure time	low	low	low	moderate
	moderate	low	moderate	moderate
	high	moderate	moderate	high