

Supplementary material

Table S1. Composition of food groups on the food frequency questionnaire of the MCC-Spain study and component loading for each pattern identified in the EpiGEICAM study [30].

Food group	Food	L _W ¹	L _P ¹	L _M ¹
High-fat dairy	Whole-fat milk, condensed milk, whole-fat yogurt, semi-cured, cured, or creamy cheese, blue cheese, custard, milk shake, ice-cream, double cream.	0.60	-0.11	0.20
Low-fat dairy	Semi-skimmed and skimmed milk, soy milk, skimmed yogurt, curd, cottage or fresh white cheese.	-0.49	0.60	-0.01
Eggs	Eggs.	0.19	0.08	0.16
White meat	Chicken, rabbit and duck.	0.08	0.17	0.18
Red meat	Pork, beef, lamb, liver (beef, pork or chicken), entrails, hamburgers (pork or beef) and meatballs (pork or beef).	0.27	0.09	0.22
Processed meat	Sausages, serrano ham and other cold meat, bacon, pâté, foie-gras.	0.36	0.10	0.26
White fish	Fresh or frozen white fish (hake, sea bass, sea bream), ½-salted fish and ½-smoked fish.	0.01	0.24	0.34
Oily fish	Fresh or frozen blue fish (tuna, swordfish, sardines, anchovies, salmon), canned fish, ½-salted fish and ½-smoked fish.	0.05	0.24	0.44
Seafood/shellfish	Clams, mussels, oysters, squid, cuttlefish, octopus, prawn, crab, shrimp and similar products.	0.17	0.27	0.35
Leafy vegetables	Spinach, chard, lettuce and other leafy vegetables.	-0.11	0.34	0.40
Fruiting vegetables	Tomato, eggplant, zucchini, cucumber, pepper, artichoke and avocado.	0.00	0.36	0.45
Root vegetables	Carrot, pumpkin and radish.	0.05	0.35	0.44
Other vegetables	Cooked cabbage, cauliflower or broccoli, onion, green beans, asparagus, mushrooms, corn, garlic, gazpacho, vegetable soup and other vegetables.	-0.04	0.40	0.42
Legumes	Peas, lentils, chickpeas, beans and broad beans.	0.21	0.15	0.34
Potatoes	Roasted or boiled potatoes and sweet potatoes.	0.17	0.25	0.40
Fruits	Orange, grapefruit, mandarin, banana, apple, pear, grapes, kiwi, strawberries, cherries, peach, figs, melon or watermelon, prunes, mango and papaya and other fresh or dried fruits.	-0.07	0.31	0.31
Nuts	Almonds, peanuts, pine nuts, hazelnut	0.18	0.22	0.29
Refined grains	White-flour bread, rice, pasta	0.37	0.15	0.23

Whole grains	Whole-grain bread and breakfast cereals	-0.43	0.47	-0.06
Olives and vegetable oil	Olives, added olive oil to salads, bread and dishes, other vegetable oils (sunflower, corn, and soybean).	0.12	0.19	0.34
Other edible fats	Margarine, butter and lard.	0.22	0.02	0.11
Sweets	Chocolate and other sweets, cocoa powder, plain cookies, chocolate cookies, pastries (croissant, donut, cake, pie or similar)	0.35	0.18	0.05
Sugary	Jam, honey, sugar and fruit in sugar syrup.	0.24	0.05	0.00
Juices	Tomato juice, freshly squeezed orange juice, juice (other than freshly squeezed)	0.25	0.67	-0.39
Caloric drinks	Sugar-sweetened soft drinks and nut milk.	0.74	0.21	-0.25
Convenience food and sauces	Croquette, fish sticks, dumplings, kebab, fried potatoes, crisps, pizza, instant soup, mayonnaise, tomato sauce, hot sauce, ketchup and other sauces.	0.47	0.12	0.24

¹Component loadings for the W: Western; P: Prudent; M: Mediterranean dietary patterns.

Table S2: Association between adherence to dietary patterns and risk of chronic lymphocytic leukemia by time from diagnosis to interview, in the MCC-Spain study.

	Controls N(%) (n=1.543)	<1 year from diagnosis		≥ 1 year from diagnosis		p-het ²
		Cases N(%) (n=98)	OR ¹ (95% CI)	Cases N(%) (n=271)	OR ¹ (95% CI)	
Western						
Q1	402 (25)	23 (23)	1	54 (20)	1	
Q2	401 (25)	20 (20)	0.89 (0.48;1.66)	70 (26)	1.30 (0.88;1.93)	
Q3	401 (25)	18 (18)	0.78 (0.41;1.49)	70 (26)	1.36 (0.92;2.02)	
Q4	401 (25)	37 (38)	1.69 (0.96;3.00)	77 (28)	1.56 (1.05;2.31)	
p-trend			0.073		0.03	
1-SD increase			1.16 (0.93;1.45)		1.18 (1.03;1.36)	0.90
Prudent						
Q1	402 (25)	26 (27)	1	54 (20)	1	
Q2	401 (25)	26 (27)	0.90 (0.51;1.60)	66 (24)	1.13 (0.76;1.67)	
Q3	401 (25)	20 (20)	0.67 (0.37;1.24)	69 (25)	1.20 (0.81;1.77)	
Q4	401 (25)	26 (27)	0.84 (0.47;1.49)	82 (30)	1.42 (0.96;2.08)	
p-trend			0.402		0.07	
1-SD increase			0.94 (0.76;1.16)		1.14 (0.99;1.32)	0.11
Mediterranean						
Q1	402 (25)	23 (23)	1	59 (22)	1	
Q2	401 (25)	24 (24)	0.92 (0.51;1.67)	64 (24)	0.99 (0.67;1.46)	
Q3	401 (25)	32 (33)	1.13 (0.65;1.99)	73 (27)	1.10 (0.75;1.61)	
Q4	401 (25)	19 (19)	0.65 (0.35;1.22)	75 (28)	1.13 (0.77;1.65)	
p-trend			0.313		0.43	
1-SD increase			0.94 (0.76;1.15)		1.05 (0.92;1.21)	0.33

OR, odds ratio; 95% CI, 95% confidence interval; Q, quartile; SD, standard deviation.

¹Multinomial-logistic regression models adjusted for age, sex, level of education, energy intake (kcal/day), body mass index (kg/m²) with province of residence as a random effect.

²P-value for the heterogeneity of effects

In bold: P-trend < 0.05

Table S3: Association between adherence to dietary patterns and risk of chronic lymphocytic leukemia according to treatment prior to interview, in the MCC-Spain study.

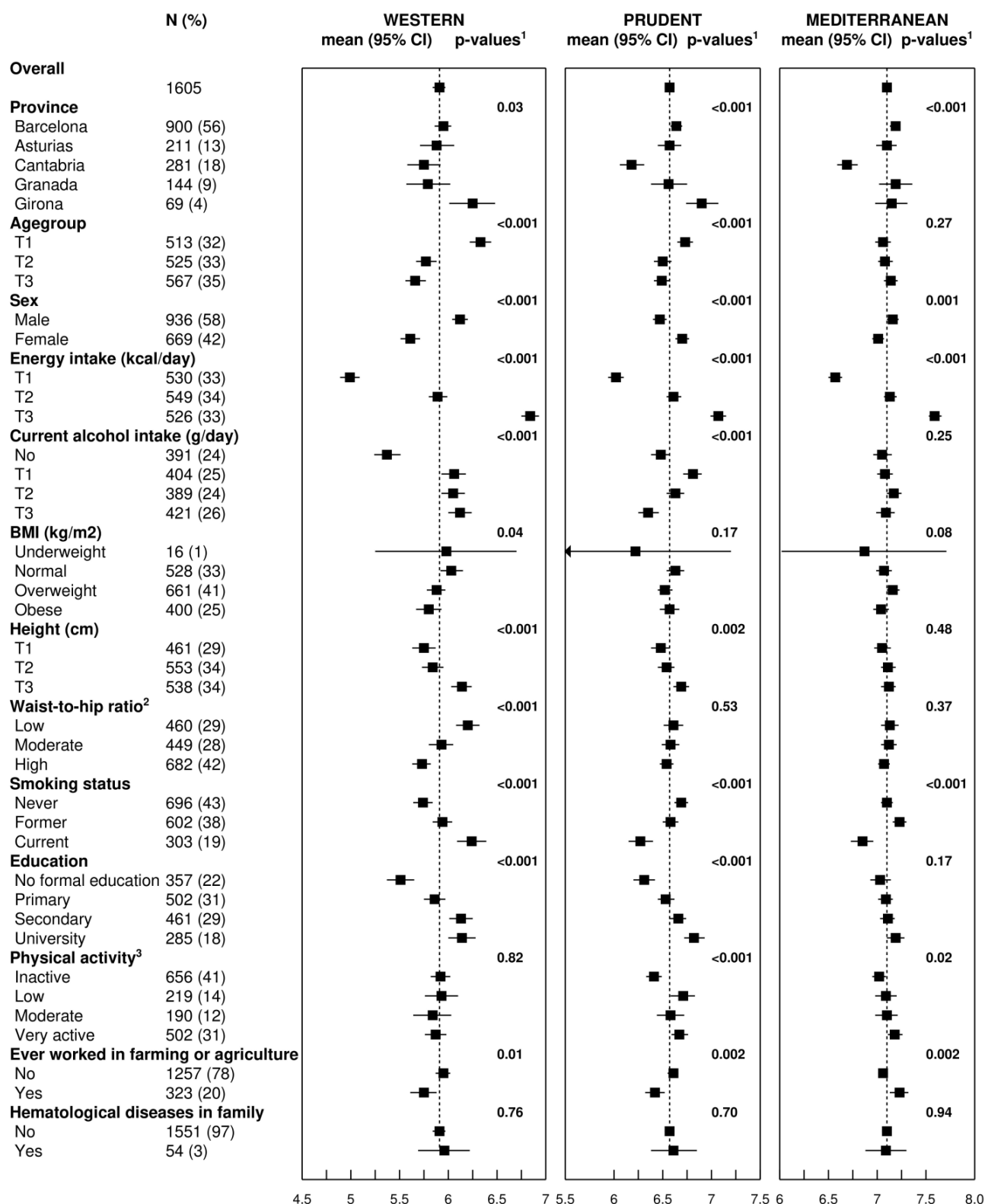
	Controls N(%) (n=1,605)	Cases not treated before the interview		Cases treated before the interview		p-het ²
		Cases N(%) (n=288)	OR ¹ (95% CI)	Cases N(%) (n=79)	OR ¹ (95% CI)	
Western						
Q1	402 (25)	66 (23)	1	11 (14)	1	
Q2	401 (25)	71 (25)	1.11 (0.76;1.62)	18 (23)	1.54 (0.71;3.36)	
Q3	401 (25)	66 (23)	1.07 (0.72;1.60)	22 (28)	1.85 (0.85;4.03)	
Q4	401 (25)	85 (30)	1.47 (0.96;2.26)	28 (35)	2.35 (1.04;5.31)	
p-trend			0.11		0.04	
1-SD increase			1.13 (0.96;1.33)		1.37 (1.02;1.82)	0.25
Prudent						
Q1	402 (25)	62 (22)	1	17 (22)	1	
Q2	401 (25)	72 (25)	1.02 (0.70;1.50)	19 (24)	1.06 (0.54;2.11)	
Q3	401 (25)	75 (26)	1.07 (0.72;1.57)	14 (18)	0.75 (0.35;1.59)	
Q4	401 (25)	79 (27)	1.08 (0.71;1.63)	29 (37)	1.45 (0.72;2.92)	
p-trend			0.69		0.41	
1-SD increase			1.02 (0.88;1.19)		1.20 (0.91;1.58)	0.32
Mediterranean						
Q1	402 (25)	64 (22)	1	18 (23)	1	
Q2	401 (25)	74 (26)	0.99 (0.68;1.44)	13 (16)	0.70 (0.34;1.46)	
Q3	401 (25)	83 (29)	1.04 (0.72;1.52)	22 (28)	1.06 (0.54;2.06)	
Q4	401 (25)	67 (23)	0.79 (0.52;1.20)	26 (33)	1.15 (0.57;2.32)	
p-trend			0.34		0.47	
1-SD increase			0.94 (0.81;1.09)		1.10 (0.83;1.45)	0.33

OR, odds ratio; 95% CI, 95% confidence interval; Q, quartile; SD, standard deviation.

¹Multinomial-logistic regression models adjusted for age, sex, level of education, energy intake (kcal/day), body mass index (kg/m²) with province of residence as a random effect.

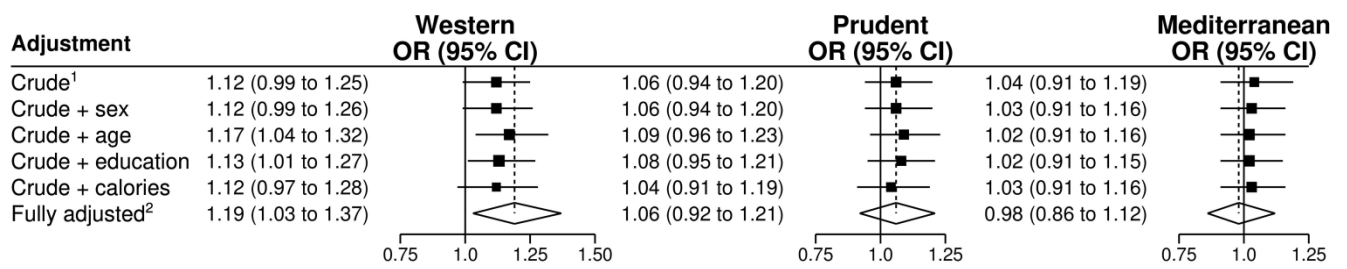
²P-value for the heterogeneity of effects

In bold: P-trend < 0.05



T, tertile; BMI, body mass index. Numbers do not always add up due to missing data ¹P value for heterogeneity ²Waist to hip ratio ³Waist to hip ratio risk categories according to WHO criteria. ⁴Physical activity, in the last 10 years, measured in METs/week: inactive (0), low (0.1-8), moderate (8-15.9) and very active (≥ 16).

Figure S1. Means and 95% confidence intervals (CI) of levels of adherence to the dietary patterns according to characteristics of controls of the MCC-Spain study.



OR, odds ratio; CI, confidence interval. ¹Crude model includes only province as random effects. ²Model adjusted for age, sex, education, energy intake with province of residence as random effects.

Figure S2. Odds ratios of chronic lymphocytic leukemia for a 1-SD increase in dietary patterns adjusted for one factor at a time covariate of the final model, in the MCC-Spain study.

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