Correction to: Dietary total antioxidant capacity and mortality in the PREDIMED study

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The original version of this article unfortunately contained a mistake. The estimation of rates and relative risks using repeated measurements of diet (Tables 2 and 3) were incorrectly calculated because the *n* for baseline categories of antioxidants were used instead of using the updated number of subjects in each category. The follow-up time was not correctly presented. However, the results and the main message of the study remain the same.

The corrected details are given below for your reading.

In abstracts section, first sentence of the “Result” section should read as

A total of 319 deaths were recorded after a median follow-up of 4.83 years.

In Materials and methods section, fourth paragraph of the “Study design” section should read as

For this analysis, we excluded subjects whose follow up (*n* = 201) was inferior to 3 months, and with values of total energy intake outside of predefined limits (< 800 or > 4,000 kcal/day in men and: < 500 or > 3,500 kcal/day in

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women) ($n = 231$) [22]. Overall, 7,015 subjects were analyzed in this study.

In Materials and methods section, first paragraph of the “Statistical analysis” section should read as

Baseline characteristics of the population were summarized according to quintiles of dietary total antioxidant capacity. Follow-up time was calculated from 3 months of follow-up to the date of either death or end of follow-up (the date of the last visit or the last recorded clinical event of participants still alive). To assess the risk of all-cause mortality by quintiles of antioxidant intake and quintiles of dietary antioxidant capacity, different Cox regression models with yearly repeated measurements were used to estimate multivariable-adjusted hazard ratios (HR) and their 95% confidence intervals.

In section “Statistical analysis”, first sentence of the third paragraph should read as

To ascertain the association between the quintiles of dietary total antioxidant capacity and total mortality, a first model was adjusted for recruitment center, intervention group, age (years, continuous), sex, education (low, middle, high), marital status (married, other), BMI (kg/m^2 , continuous), smoking habit (never, past, current), leisure time physical activity (METs-min/day score, continuous), alcohol intake (g/day, continuous), total energy intake (kcal/day, continuous), self-reported history of cancer, arterial hypertension, history of dyslipidemia and cardiovascular disease (yes, no).

Second paragraph of the “Results” section should read as
During follow-up (median 4.83 years), 319 deaths were reported. Table 2 shows the association between the quintiles of antioxidant capacity index and mortality risk. There was an inverse association with total mortality (multivariable HR 0.85; 95% CI 0.60–1.20), for participants in the highest quintile of antioxidant capacity index compared with participants in the lowest quintile, although this association was not significant. Neither was significant the association for antioxidant capacity index and death from cancer. Additional adjustment for several dietary factors such as fatty acids and glycemic index did not change the reported results.

Third paragraph of the “Results” section should read as

After repeating the analyses including several product terms in the multivariable models, only a marginally significant interaction was found for dietary total antioxidant capacity and intervention group for cancer mortality (p for interaction $p = 0.056$). Thus, the analysis for this outcome was re-analyzed after stratifying the sample by intervention group. No significant association between dietary total antioxidant capacity and cancer mortality was found for any of the intervention groups.

Tables 2 and 3 should read as follows.

Table 2 Hazard ratios and 95% confidence intervals for the association between quintiles of dietary total antioxidant capacity and mortality

Antioxidant capacity (FRAP) (cumulative average)	Q1 < 12.7	Q2 12.7–16.7	Q3 16.7–20.7	Q4 20.7–27.9	Q5 > 27.9	p for trend	FRAP continuous
Person-year of follow-up	6,185	6,241	6,239	6,195	6,221		
Death from any cause							
Number of cases	77	75	54	49	64		
Crude rate/1,000 person-years	12.45	12.024	8.66	7.91	10.29		
Adjusted HR (95% IC) ^a	1 (ref)	1.05 (0.76–1.45)	0.75 (0.53–1.07)	0.68 (0.47–0.98)	0.85 (0.60–1.20)	0.110	0.98 (0.97–1.00)
Adjusted HR (95% IC) ^b	1 (ref)	1.07 (0.78–1.47)	0.79 (0.55–1.13)	0.71 (0.49–1.03)	0.88 (0.62–1.26)	0.189	0.99 (0.97–1.00)
Death from cardiovascular disease							
Number of cases	19	18	11	16	17		
Crude rate/1,000 person-years	3.07	2.88	1.76	2.58	2.73		
Adjusted HR (95% IC) ^a	1 (ref)	1.16 (0.60–2.26)	0.71 (0.33–1.52)	0.87 (0.45–1.71)	0.90 (0.46–1.76)	0.553	1.00 (0.97–1.02)
Adjusted HR (95% IC) ^b	1 (ref)	1.17 (0.60–2.29)	0.76 (0.34–1.68)	0.94 (0.48–1.85)	0.95 (0.48–1.88)	0.691	1.00 (0.97–1.03)
Death from cancer							
Number of cases	26	28	24	20	29		
Crude rate/1,000 person-years	4.20	4.48	3.85	3.23	4.66		
Adjusted HR (95% IC) ^a	1 (ref)	1.07 (0.63–1.84)	0.86 (0.48–1.53)	0.73 (0.40–1.34)	0.98 (0.56–1.73)	0.672	0.99 (0.97–1.02)
Adjusted HR (95% IC) ^b	1 (ref)	1.10 (0.64–1.88)	0.90 (0.50–1.61)	0.76 (0.42–1.41)	1.01 (0.56–1.82)	0.763	0.99 (0.97–1.02)

Adjusted for energy

FRAP ferric-reducing antioxidant power

^aAdjusted for recruitment center, intervention group, age (years, continuous), sex, education (low, middle, high), marital status (married/other), BMI (kg/m^2 , continuous), smoking habit (never smoker, ex-smoker, current smoker), alcohol consumption (g/day, continuous), physical activity (METs-h/w, continuous), total energy intake (kcal/day, continuous), and medical history of hypertension, diabetes, dyslipidemia, cardiovascular disease and cancer (yes/no)

^bAdditionally adjusted for energy-adjusted intake of saturated fatty acids, polyunsaturated fatty acids, monounsaturated fatty acids and glycemic index

Table 3 Hazard ratios and 95% confidence intervals for the association between quintiles of intake of individual antioxidants and mortality

	Q1	Q2	Q3	Q4	Q5	<i>p</i> for trend
Vitamin C						
Person-years of follow-up	6,209	6,262	6,239	6,190	6,181	
Death from any cause	88	66	66	52	47	
Adjusted HR (95% IC) ^a	1 (ref)	0.94 (0.68–1.31)	1.03 (0.73–1.46)	0.82 (0.56–1.21)	0.78 (0.51–1.18)	0.173
Vitamin E						
Person-years of follow-up	6,199	6,240	6,188	6,231	6,223	
Death from any cause	89	61	59	43	67	
Adjusted HR (95% IC) ^a	1 (ref)	0.86 (0.61–1.22)	1.01 (0.70–1.45)	0.85 (0.57–1.28)	1.42 (0.95–2.13)	0.113
Vitamin D						
Person-years of follow-up	6,239	6,187	6,242	6,240	6,172	
Death from any cause	80	69	50	64	56	
Adjusted HR (95% IC) ^a	1 (ref)	0.94 (0.68–1.30)	0.74 (0.52–1.06)	1.00 (0.70–1.42)	1.01 (0.69–1.47)	0.763
β-Carotene						
Person-years of follow-up	6,192	6,247	6,252	6,196	6,194	
Death from any cause	82	72	63	49	53	
Adjusted HR (95% IC) ^a	1 (ref)	1.04 (0.76–1.44)	1.00 (0.70–1.43)	0.74 (0.50–1.10)	0.82 (0.56–1.21)	0.148
α-Carotene						
Person-years of follow-up	6,223	6,257	6,270	6,141	6,190	
Death from any cause	89	68	48	51	63	
Adjusted HR (95% IC) ^a	1 (ref)	0.85 (0.62–1.17)	0.65 (0.45–0.93)	0.68 (0.46–1.00)	0.86 (0.60–1.24)	0.441
β-Cryptoxanthin						
Person-years of follow-up	6,184	6,233	6,249	6,234	6,180	
Death from any cause	90	60	61	53	55	
Adjusted HR (95% IC) ^a	1 (ref)	0.74 (0.53–1.03)	0.83 (0.60–1.16)	0.72 (0.50–1.04)	0.70 (0.48–1.02)	0.099
Lutein						
Person-years of follow-up	6,066	6,254	6,301	6,240	6,219	
Death from any cause	76	69	69	45	60	
Adjusted HR (95% IC) ^a	1 (ref)	0.92 (0.66–1.28)	1.05 (0.74–1.47)	0.72 (0.48–1.07)	0.84 (0.58–1.23)	0.317
Zeaxanthin						
Person-years of follow-up	6,192	6,175	6,226	6,267	6,221	
Death from any cause	82	58	54	56	69	
Adjusted HR (95% IC) ^a	1 (ref)	0.79 (0.56–1.12)	0.78 (0.54–1.11)	0.78 (0.54–1.13)	1.03 (0.72–1.47)	0.947
Lycopene						
Person-years of follow-up	6,273	6,196	6,230	6,191	6,192	
Death from any cause	75	80	47	65	52	
Adjusted HR (95% IC) ^a	1 (ref)	1.23 (0.90–1.69)	0.76 (0.52–1.11)	1.21 (0.83–1.76)	0.91 (0.61–1.37)	0.727
Phytosterols						
Person-years of follow-up	6,175	6,181	6,183	6,273	6,269	
Death from any cause	90	59	72	43	55	
Adjusted HR (95% IC) ^a	1 (ref)	0.73 (0.52–1.03)	0.91 (0.65–1.29)	0.55 (0.37–0.82)	0.73 (0.47–1.11)	0.102
Selenium						
Person-years of follow-up	6,208	6,221	6,185	6,235	6,232	
Death from any cause	87	57	64	55	56	
Adjusted HR (95% IC) ^a	1 (ref)	0.75 (0.53–1.05)	0.88 (0.62–1.25)	0.72 (0.49–1.06)	0.74 (0.49–1.10)	0.212
Zinc						
Person-years of follow-up	6,202	6,232	6,189	6,234	6,223	
Death from any cause	80	55	59	56	69	
Adjusted HR (95% IC) ^a	1 (ref)	0.70 (0.50–0.99)	0.75 (0.53–1.08)	0.80 (0.56–1.14)	0.93 (0.66–1.32)	0.935

Adjusted for energy

^aAdjusted for recruitment center, intervention group, age (years, continuous), sex, education (low, middle, high), marital status (married/other), BMI (Kg/m², continuous), smoking habit (never smoker, ex-smoker, current smoker), alcohol consumption (g/day, continuous), physical activity (METs-h/w, continuous), total energy intake (kcal/day, continuous), medical history of hypertension, diabetes, dyslipidemia, cardiovascular disease and cancer (yes/no), energy-adjusted intake of saturated fatty acids, polyunsaturated fatty acids, monounsaturated fatty acids and glycemic index