Supplementary Online Content

Tabung FK, Liu L, Wang W, et al. Associaton of dietary inflammatory potential with colorectal cancer risk in men and women. *JAMA Oncol*. Published online January 18, 2018. doi:10.1001/jamaoncol.2017.4844

This supplementary material has been provided by the authors to give readers additional information about their work.

eTable 1. Minimally adjusted hazard ratios and 95% confidence intervals for colorectal cancer risk in quintiles of the empirical dietary inflammatory pattern scores among men and women

eTable 2. Multivariable-adjusted associations between the empirical dietary inflammatory pattern score and colorectal cancer risk, with additional adjustment for BMI and diabetes in men and women

eTable 3. Multivariable-adjusted model showing hazard ratios for covariates, in the association between the empirical dietary inflammatory pattern score and colorectal risk

eTable 1. Minimally adjusted hazard ratios and 95% confidence intervals for colorectal cancer risk in quintiles of the empirical dietary inflammatory pattern scores among men and women[a,b,c]

	Quintile 1 (reference)	Quintile 2	Quintile 3	Quintile 4	Quintile 5	P-trend[d]
Colorectal cancer						
Men, cases per person-years	218/193045	234/193750	270/193477	249/192075	287/190327	
Men, HR (95% CI)	1.00	1.01 (0.83, 1.21)	1.14 (0.95, 1.38)	1.07 (0.88, 1.29)	1.39 (1.15, 1.67)	0.0001
Women, cases per person-years	259/322794	274/322102	293/321552	319/321328	296/321381	
Women, HR (95% CI)	1.00	1.04 (0.87, 1.24)	1.10 (0.93, 1.31)	1.22 (1.03, 1.45)	1.24 (1.04, 1.47)	0.003
Colon cancer						
Men, n cases=997	175	182	225	198	217	
Men, HR (95% CI)	1.00	0.98 (0.79, 1.22)	1.19 (0.96, 1.46)	1.07 (0.86, 1.32)	1.31 (1.06, 1.62)	0.002
Women, n cases=1,131	193	205	238	247	248	
Women, HR (95% CI)	1.00	1.02 (0.84, 1.25)	1.16 (0.95, 1.41)	1.23 (1.01, 1.50)	1.35 (1.11, 1.64)	0.0005
Proximal colon cancer						
Men, n cases=428	75	70	99	83	101	
Men, HR (95% CI)	1.00	0.85 (0.61, 1.19)	1.16 (0.85, 1.59)	1.00 (0.72, 1.38)	1.38 (1.01, 1.90)	0.02
Women, n cases=715	123	126	144	164	158	
Women, HR (95% CI)	1.00	0.97 (0.75, 1.25)	1.09 (0.85, 1.40)	1.27 (0.99, 1.62)	1.35 (1.06, 1.73)	0.002
Distal colon cancer						
Men, n cases=357	65	67	74	72	79	
Men, HR (95% CI)	1.00	1.05 (0.74, 1.49)	1.13 (0.80, 1.61)	1.16 (0.81, 1.66)	1.37 (0.96, 1.94)	0.05
Women, n cases=388	59	76	91	77	85	
Women, HR (95% CI)	1.00	1.29 (0.91, 1.82)	1.48 (1.06, 2.08)	1.30 (0.91, 1.84)	1.52 (1.08, 2.15)	0.03
Rectal cancer						
Men, n cases=261	43	52	45	51	70	
Men, HR (95% CI)	1.00	1.09 (0.72, 1.65)	0.98 (0.64, 1.51)	1.09 (0.71, 1.66)	1.68 (1.12, 2.51)	0.01
Women, n cases=310	66	69	55	72	48	
Women, HR (95% CI)	1.00	1.10 (0.78, 1.55)	0.92 (0.63, 1.33)	1.19 (0.84, 1.69)	0.84 (0.57, 1.24)	0.57

[a]EDIP scores were adjusted for total energy intake using the residual method prior to analyses. Lower scores indicate anti-inflammatory diets whereas higher scores indicate pro-inflammatory diets.
[b]HR (95%CI) adjusted for age, alcohol intake and calendar year of current questionnaire.
[c]Heterogeneity for risk by anatomic subsite was tested using Duplication method cause-specific Cox models (*P*-heterogeneity=0.84 in men and 0.10 in women).
[d]The p-value for linear trend was obtained using EDIP quintile medians as an ordinal variable adjusted for age and calendar year of current questionnaire.

eTable 2. Multivariable-adjusted associations between the empirical dietary inflammatory pattern score and colorectal cancer risk, with additional adjustment for BMI and diabetes in men and women[a,b,c]

	Quintile 1 (reference)	Quintile 2	Quintile 3	Quintile 4	Quintile 5	P-trend[d]
Colorectal cancer among men						
BMI	1.00	0.99 (0.82, 1.19)	1.15 (0.95, 1.39)	1.09 (0.90, 1.32)	1.42 (1.18, 1.72)	<0.0001
Diabetes	1.00	0.99 (0.82, 1.19)	1.15 (0.95, 1.38)	1.08 (0.89, 1.31)	1.40 (1.16, 1.70)	<0.0001
Colorectal cancer among women						
BMI	1.00	1.04 (0.88, 1.24)	1.10 (0.93, 1.31)	1.21 (1.02, 1.43)	1.19 (0.99, 1.42)	0.02
Diabetes	1.00	1.05 (0.88, 1.25)	1.11 (0.93, 1.32)	1.22 (1.03, 1.45)	1.21 (1.01, 1.44)	0.009
Colon cancer among men						
BMI	1.00	0.96 (0.78, 1.19)	1.19 (0.96, 1.46)	1.09 (0.88, 1.35)	1.35 (1.09, 1.67)	0.0007
Diabetes	1.00	0.96 (0.78, 1.19)	1.19 (0.96, 1.46)	1.08 (0.87, 1.34)	1.33 (1.08, 1.65)	0.001
Colon cancer among women						
BMI	1.00	1.03 (0.84, 1.26)	1.16 (0.95, 1.41)	1.22 (1.00, 1.49)	1.31 (1.07, 1.60)	0.002
Diabetes	1.00	1.03 (0.85, 1.26)	1.17 (0.96, 1.42)	1.23 (1.01, 1.50)	1.32 (1.08, 1.61)	0.001
Proximal colon cancer among men						
BMI	1.00	0.85 (0.60, 1.18)	1.16 (0.85, 1.59)	1.02 (0.73, 1.42)	1.43 (1.04, 1.98)	0.01
Diabetes	1.00	0.84 (0.60, 1.18)	1.16 (0.85, 1.59)	1.01 (0.73, 1.41)	1.42 (1.03, 1.96)	0.01
Proximal colon cancer among women						
BMI	1.00	0.98 (0.76, 1.26)	1.10 (0.86, 1.41)	1.28 (1.00, 1.63)	1.33 (1.04, 1.71)	0.004
Diabetes	1.00	0.98 (0.76, 1.27)	1.10 (0.86, 1.41)	1.28 (1.00, 1.63)	1.33 (1.04, 1.71)	0.004
Distal colon cancer among men						
BMI	1.00	1.03 (0.72, 1.46)	1.15 (0.81, 1.63)	1.20 (0.84, 1.71)	1.39 (0.98, 1.98)	0.03
Diabetes	1.00	1.03 (0.73, 1.47)	1.15 (0.81, 1.64)	1.21 (0.85, 1.72)	1.43 (1.00, 2.03)	0.02
Distal colon cancer among women						
BMI	1.00	1.29 (0.91, 1.82)	1.46 (1.04, 2.04)	1.26 (0.88, 1.79)	1.41 (0.99, 2.01)	0.09
Diabetes	1.00	1.29 (0.91, 1.83)	1.47 (1.05, 2.07)	1.28 (0.90, 1.82)	1.46 (1.03, 2.07)	0.06
Rectal cancer among men						
BMI	1.00	1.07 (0.71, 1.62)	0.99 (0.65, 1.53)	1.09 (0.71, 1.67)	1.68 (1.12, 2.52)	0.01
Diabetes	1.00	1.07 (0.71, 1.62)	0.99 (0.64, 1.53)	1.08 (0.70, 1.65)	1.65 (1.10, 2.48)	0.02

Rectal cancer among women						
BMI	1.00	1.09 (0.77, 1.54)	0.90 (0.62, 1.30)	1.16 (0.82, 1.65)	0.80 (0.54, 1.19)	0.41
Diabetes	1.00	1.10 (0.78, 1.56)	0.92 (0.63, 1.33)	1.20 (0.84, 1.70)	0.85 (0.57, 1.25)	0.60

NSAIDs=non-steroidal anti-inflammatory drugs

[a]EDIP scores were adjusted for total energy intake using the residual method. Lower scores indicate anti-inflammatory diets whereas higher scores indicate pro-inflammatory diets.

[b]Values are hazards ratios (95% confidence intervals)

[c]All analyses were adjusted for the following potential confounding variables: race (white, nonwhite), family history of cancer (yes, no), history of endoscopy (yes, no), multivitamin use (yes, no), alcohol intake (continuous, g/d), physical activity (continuous, MET-hour/week), pack-years of smoking (continuous), regular aspirin use (yes, no), regular NSAIDs use (yes, no) and additionally for menopausal status (pre-, postmenopausal), and postmenopausal hormone use (yes, no) in women.

[d]The p-value for linear trend was obtained using EDIP quintile medians as an ordinal variable adjusted for all covariates listed in footnote #3;

eTable 3. Multivariable-adjusted model showing hazard ratios for covariates, in the association between the empirical dietary inflammatory pattern score and colorectal risk

Covariate	HR (95%CI) - Women	HR (95%CI) - Men
EDIP score (Quintile 1 is the reference)	1.00	1.00
Quintile 2	1.05 (0.88, 1.25)	0.99 (0.82, 1.20)
Quintile 3	1.11 (0.93, 1.32)	1.15 (0.96, 1.39)
Quintile 4	1.22 (1.03, 1.45)	1.10 (0.91, 1.33)
Quintile 5	1.22 (1.02, 1.45)	1.44 (1.19, 1.74)
Non-Hispanic White vs. other race/ethnic groups combined	1.17 (0.81, 1.64)	0.98 (0.81, 1.19)
Family history of colorectal cancer (Yes vs No)	1.28 (1.14, 1.44)	1.13 (0.98, 1.29)
Screening endoscopy (Yes vs No)	0.67 (0.57, 0.77)	3.22 (2.87, 3.61)
Multivitamin use (Yes vs No)	0.85 (0.76, 0.94)	0.97 (0.87, 1.09)
Total alcohol intake (continuous), per unit increase in servings/day	1.007 (1.001, 1.14)	1.08 (1.03, 1.14)
Total recreational physical activity (continuous), per unit increase in MET-hours per week	0.998 (0.995, 1.001)	0.997 (0.995, 0.999)
Pack-years of smoking (continuous), Per year increase	1.007 (1.005, 1.009)	1.004 (1.001, 1.007)
Regular aspirin use (Yes vs No)	0.86 (0.78, 0.96)	0.72 (0.64, 0.81)
Regular use of other anti-inflammatory drugs (Yes vs No)	0.81 (0.72, 0.92)	0.78 (0.67, 0.91)
Menopausal hormone use (pre/missing is the reference)	1.00	NA
Never user	1.23 (0.86, 1.74)	NA
Former user	1.10 (0.77, 1.56)	NA
Current user	0.96 (0.67, 1.37)	NA
Postmenopausal vs premenopausal	0.52 (0.35, 0.78)	NA