

**ESM Table 3:** HRs and 95% CIs for incident type 2 diabetes, during 12 (NHS II) and 16 years (NHS and HPFS) of follow-up, according to initial 4-year changes in coffee and tea intake

Changes in frequency of consumption						
Intake/study	Moderate to large decrease (>1 cup/day)	Small to moderate decrease (1 cup/week-1 cup/day)	No change ( $\pm 1$ cup/week) <sup>a</sup>	Small to moderate increase (1 cup/week-1 cup/day)	Moderate to large increase (>1 cup/day)	HR per 1 serving
<b>Coffee</b>						
<b>HPFS</b>						
<i>n</i>	4158	3521	12502	3779	3799	
Cases/Person-years	271/59731	227/50603	747/180134	224/54550	235/54665	
Multivariable adjusted 1 <sup>b</sup>	0.94 (0.80, 1.10)	0.98 (0.83, 1.15)	1.00	0.93 (0.79, 1.09)	0.95 (0.82, 1.11)	0.97 (0.93, 1.02)
Multivariable adjusted 2 <sup>c</sup>	0.93 (0.79, 1.09)	1.01 (0.86, 1.18)	1.00	0.95 (0.81, 1.11)	0.93 (0.79, 1.08)	0.97 (0.93, 1.01)
<b>NHS</b>						
<i>n</i>	9827	6803	20235	5123	6476	
Cases/Person-years	715/145440	493/100769	1551/299679	378/76028	406/96062	
Multivariable adjusted 1 <sup>b</sup>	1.05 (0.95, 1.16)	0.94 (0.84, 1.04)	1.00	0.94 (0.84, 1.05)	0.78 (0.70, 0.87)	0.94 (0.91, 0.97)
Multivariable adjusted 2 <sup>c</sup>	1.07 (0.97, 1.18)	0.95 (0.85, 1.06)	1.00	0.96 (0.86, 1.08)	0.81 (0.73, 0.91)	0.94 (0.91, 0.97)
<b>NHS II</b>						
<i>n</i>	6339	5084	24330	5662	6095	
Cases/Person-years	311/72772	250/58343	1150/279645	222/65122	207/70132	
Multivariable adjusted 1 <sup>b</sup>	1.38 (1.19, 1.62)	1.21 (1.03, 1.42)	1.00	0.90 (0.77, 1.05)	0.86 (0.73, 1.01)	0.87 (0.83, 0.91)
Multivariable adjusted 2 <sup>c</sup>	1.31 (1.12, 1.53)	1.17 (0.99, 1.38)	1.00	0.94 (0.80, 1.10)	0.91 (0.77, 1.07)	0.90 (0.87, 0.94)
<b>Pooled<sup>d</sup></b>						
Multivariable adjusted 1 <sup>b</sup>	1.11 (0.90, 1.35)	1.03 (0.88, 1.19)	1.00	0.92 (0.85, 1.00)	0.85 (0.75, 0.96)	0.93 (0.88, 0.98)
Multivariable adjusted 2 <sup>c</sup>	1.09 (0.92, 1.30)	1.03 (0.91, 1.16)	1.00	0.95 (0.88, 1.03)	0.87 (0.79, 0.95)	0.94 (0.90, 0.97)
<b>Tea</b>						
<b>HPFS</b>						
<i>n</i>	1206	3141	18436	3627	1350	
Cases/Person-years	77/17344	220/45123	1086/265548	217/52260	104/19410	
Multivariable adjusted 1 <sup>b</sup>	1.02 (0.78, 1.34)	1.17 (0.97, 1.42)	1.00	1.03(0.88, 1.20)	1.26 (1.01, 1.56)	1.04 (0.97, 1.12)
Multivariable adjusted 2 <sup>c</sup>	0.97 (0.74, 1.27)	1.15 (0.95, 1.39)	1.00	1.03 (0.89, 1.20)	1.15 (0.93, 1.43)	1.02 (0.96, 1.10)

<b>NHS</b>						
<i>n</i>	2649	5564	29201	7089	3961	
Cases/Person-years	213/39180	450/82394	2005/432753	577/104890	298/58759	
Multivariable adjusted 1 <sup>b</sup>	1.26 (1.07, 1.48)	1.28 (1.14, 1.43)	1.00	1.12 (1.02, 1.23)	1.10 (0.97, 1.23)	0.97 (0.93, 1.01)
Multivariable adjusted 2 <sup>c</sup>	1.23 (1.05, 1.45)	1.23 (1.10, 1.38)	1.00	1.09 (0.99, 1.20)	1.07 (0.95, 1.22)	0.97 (0.93, 1.01)
<b>NHS II</b>						
<i>n</i>	4602	8738	25008	6452	2710	
Cases/Person-years	235/52859	385/100416	1060/287521	302/74113	158/31106	
Multivariable adjusted 1 <sup>b</sup>	1.13 (0.90, 1.41)	1.04 (0.89, 1.21)	1.00	1.08 (0.95, 1.24)	1.21 (1.01, 1.45)	1.04 (0.99, 1.10)
Multivariable adjusted 2 <sup>c</sup>	1.12 (0.90, 1.39)	1.01 (0.86, 1.19)	1.00	1.03 (0.90, 1.18)	1.12 (0.93, 1.34)	1.02 (0.97, 1.07)
<b>Pooled<sup>d</sup></b>						
Multivariable adjusted 1 <sup>b</sup>	1.17 (1.04, 1.32)	1.17 (1.02, 1.33)	1.00	1.09 (1.02, 1.17)	1.16 (1.06, 1.27)	1.01 (0.96, 1.07)
Multivariable adjusted 2 <sup>c</sup>	1.14 (1.00, 1.29)	1.14 (1.01, 1.28)	1.00	1.06 (0.99, 1.14)	1.10 (1.00, 1.21)	1.00 (0.96, 1.03)

<sup>a</sup>Reference category.

<sup>b</sup>Adjusted for age, family history of diabetes (yes/no), race (white/non-white), postmenopausal hormone use (premenopausal, postmenopausal current user, postmenopausal never/past user, missing), physical exam in the previous cycle (yes/no), change in smoking status (never to never, never to current, current to current, current to past, past to current, past to past) baseline alcohol intake (0, 0.1-4.9, 5-9.9, 10-14.9,  $\geq 15$  g/d), change in alcohol intake (quintiles), baseline physical activity ( $<3$ , 3-8.9, 9-17.9, 18-26.9,  $\geq 27$  METS/week), change in physical activity (quintiles), history of hypertension and hypercholesterolemia (yes/no), baseline and 4-year changes in beverage intake (quintiles or tertiles; beverages include sugar-sweetened beverages, artificially sweetened beverages, punch, milk, tea, caffeinated coffee/decaffeinated coffee depending on the model), baseline alternate healthy eating index score, change in alternate healthy eating index score, and physical exam in last cycle (yes/no)

<sup>c</sup>Multivariable model 1 + baseline BMI ( $<21$ , 21-22.9, 23-24.9, 25-26.9, 27-29.9, 30-34.9, 35-39.9,  $\geq 40$  kg/m<sup>2</sup>) and change in body weight (quintiles)

<sup>d</sup>The results across the 3 cohorts were pooled using an inverse variance-weighted, random-effects meta-analysis.