

Table S1. Hazard ratios (95% CI) for type 2 diabetes associated with substitutions of serving/day¹ or kcal/day of dairy products in men in the Danish Diet, Cancer, and Health cohort

HR (95% CI)	Servings/day (n=25,738/3,964)				100 kcal/day (n=25,738/3,964)			
	Model 1a	Model 1b	Model 2	Model 3	Model 1a	Model 1b	Model 2	Model 3
Low-fat milk for:								
whole-fat milk	0.99 (0.95, 1.04)	1.00 (0.96, 1.05)	1.02 (0.98, 1.07)	0.98 (0.94, 1.03)	1.01 (0.98, 1.06)	1.02 (0.99, 1.07)	1.04 (1.00, 1.08)	0.99 (0.96, 1.03)
buttermilk	1.00 (0.92, 1.08)	0.97 (0.90, 1.05)	0.96 (0.89, 1.04)	0.97 (0.90, 1.05)	0.99 (0.89, 1.10)	0.96 (0.86, 1.06)	0.94 (0.85, 1.04)	0.96 (0.87, 1.07)
Whole-fat milk for:								
buttermilk	1.00 (0.92, 1.09)	0.97 (0.89, 1.06)	0.94 (0.86, 1.02)	0.99 (0.91, 1.08)	0.97 (0.88, 1.08)	0.93 (0.84, 1.04)	0.90 (0.81, 1.00)	0.97 (0.87, 1.08)
Low-fat yoghurt products for:								
whole-fat yoghurt products	1.39 (1.20, 1.60)	1.25 (1.09, 1.45)	1.28 (1.10, 1.47)	1.18 (1.03, 1.37)	1.22 (1.10, 1.34)	1.14 (1.04, 1.26)	1.16 (1.05, 1.28)	1.11 (1.00, 1.22)
low-fat milk	0.95 (0.85, 1.05)	0.97 (0.87, 1.08)	1.02 (0.91, 1.13)	1.04 (0.93, 1.16)	0.94 (0.87, 1.02)	0.96 (0.88, 1.04)	0.99 (0.91, 1.07)	1.02 (0.94, 1.10)
whole-fat milk	0.94 (0.84, 1.05)	0.97 (0.87, 1.09)	1.04 (0.93, 1.16)	1.02 (0.91, 1.14)	0.96 (0.88, 1.03)	0.98 (0.90, 1.06)	1.03 (0.95, 1.11)	1.01 (0.93, 1.10)
buttermilk	0.94 (0.83, 1.07)	0.95 (0.83, 1.08)	0.98 (0.86, 1.11)	1.01 (0.88, 1.15)	0.93 (0.82, 1.06)	0.92 (0.81, 1.04)	0.93 (0.82, 1.05)	0.98 (0.86, 1.12)
Whole-fat yoghurt products for:								
low-fat milk	0.68 (0.62, 0.76)	0.77 (0.70, 0.86)	0.79 (0.72, 0.88)	0.88 (0.79, 0.97)	0.77 (0.72, 0.83)	0.84 (0.78, 0.90)	0.85 (0.79, 0.91)	0.92 (0.86, 0.99)
whole-fat milk	0.68 (0.61, 0.76)	0.78 (0.70, 0.87)	0.81 (0.73, 0.91)	0.86 (0.77, 0.96)	0.79 (0.73, 0.85)	0.86 (0.80, 0.92)	0.88 (0.82, 0.95)	0.91 (0.85, 0.98)
buttermilk	0.68 (0.60, 0.77)	0.75 (0.66, 0.86)	0.77 (0.67, 0.87)	0.75 (0.75, 0.97)	0.77 (0.68, 0.87)	0.80 (0.71, 0.91)	0.80 (0.71, 0.90)	0.89 (0.78, 1.01)
Cheese for:								
low-fat milk	0.99 (0.97, 1.02)	1.01 (0.98, 1.03)	1.04 (1.02, 1.07)	1.02 (0.99, 1.04)	0.93 (0.89, 0.98)	0.96 (0.91, 1.00)	1.01 (0.96, 1.06)	1.01 (0.96, 1.06)
whole-fat milk	0.99 (0.97, 1.02)	1.01 (0.98, 1.03)	1.04 (1.02, 1.07)	1.01 (0.99, 1.04)	0.95 (0.90, 1.00)	0.98 (0.93, 1.03)	1.05 (1.00, 1.11)	1.00 (0.95, 1.06)
buttermilk	0.99 (0.97, 1.02)	1.00 (0.98, 1.03)	1.04 (1.01, 1.07)	1.01 (0.99, 1.04)	0.92 (0.83, 1.03)	0.91 (0.82, 1.02)	0.95 (0.85, 1.06)	0.97 (0.87, 1.09)
low-fat yoghurt products	1.00 (0.97, 1.03)	1.01 (0.98, 1.04)	1.04 (1.01, 1.07)	1.01 (0.98, 1.04)	0.99 (0.91, 1.08)	1.00 (0.92, 1.09)	1.02 (0.94, 1.11)	0.99 (0.91, 1.08)
whole-fat yoghurt products	1.03 (1.00, 1.06)	1.03 (1.00, 1.06)	1.07 (1.04, 1.10)	1.03 (1.00, 1.06)	1.20 (1.11, 1.30)	1.14 (1.06, 1.23)	1.19 (1.10, 1.29)	1.10 (1.02, 1.19)
butter	1.01 (0.97, 1.07)	0.99 (0.94, 1.05)	1.02 (0.96, 1.08)	1.00 (0.94, 1.06)	1.01 (0.95, 1.06)	1.01 (0.96, 1.07)	1.06 (1.00, 1.12)	1.02 (0.96, 1.08)

¹All serving sizes were 200 g/day except for cheese (20 g/day) and butter (6 g/day).

Model 1a adjusted for age at inclusion (50-54, 54-59, 59-67; as strata) and total energy intake (kcal/d; continuous); Model 1b further adjusted for education in years (<8, 8-10, >10 years), alcohol abstinence (yes, no), alcohol intake (g/day; continuous), smoking status (never, former, current <15 g tobacco/day, current 15-25 g tobacco/day, current >25 g tobacco/day), physical activity (<3.5 hours/week, ≥3.5 hours/week) and history of hypertension and/or hypercholesterolemia (yes, no, do not know); Model 2 further adjusted for: fruit and vegetables, red and processed meat, sugar-sweetened beverages, whole grains, fatty potatoes and coffee (all in g/day; continuous); Model 3 further adjusted for BMI (kg/m²; continuous) and waist circumference (cm; continuous). Alcohol intake was entered into the models as a restricted cubic spline with three knots.

Table S2. Hazard ratios (95% CI) for type 2 diabetes associated with substitutions of serving/day² or kcal/day of dairy products in women in the Danish Diet, Cancer, and Health cohort

HR (95% CI)	Servings/day (n=28,539/3,173)				100 kcal/day (n=28,539/3,173)			
	Model 1a	Model 1b	Model 2	Model 3	Model 1a	Model 1b	Model 2	Model 3
Low-fat milk for:								
whole-fat milk	1.04 (0.97, 1.13)	1.07 (0.99, 1.16)	1.08 (1.00, 1.17)	1.02 (0.94, 1.10)	1.06 (0.99, 1.13)	1.07 (1.01, 1.14)	1.08 (1.01, 1.16)	1.03 (0.97, 1.04)
buttermilk	1.06 (0.99, 1.15)	1.05 (0.97, 1.13)	1.04 (0.97, 1.12)	1.02 (0.95, 1.10)	1.08 (0.98, 1.20)	1.06 (0.96, 1.17)	1.04 (0.95, 1.15)	1.03 (0.93, 1.14)
Whole-fat milk for:								
buttermilk	1.02 (0.92, 1.13)	0.98 (0.88, 1.09)	0.96 (0.87, 1.07)	1.00 (0.90, 1.11)	1.02 (0.92, 1.14)	1.06 (1.00, 1.12)	0.97 (0.86, 1.08)	0.99 (0.88, 1.11)
Low-fat yoghurt products for:								
whole-fat yoghurt products	1.38 (1.21, 1.57)	1.26 (1.11, 1.43)	1.28 (1.12, 1.45)	1.14 (1.00, 1.30)	1.25 (1.14, 1.37)	1.17 (1.10, 1.25)	1.20 (1.10, 1.31)	1.11 (1.01, 1.21)
low-fat milk	1.04 (0.95, 1.14)	1.05 (0.96, 1.15)	1.08 (0.98, 1.18)	1.04 (0.96, 1.15)	1.02 (0.95, 1.10)	0.99 (0.91, 1.07)	1.04 (0.97, 1.12)	1.03 (0.95, 1.10)
whole-fat milk	1.09 (0.97, 1.22)	1.12 (1.00, 1.25)	1.16 (1.04, 1.29)	1.07 (0.96, 1.20)	1.08 (0.99, 1.17)	1.18 (1.08, 1.29)	1.13 (1.04, 1.23)	1.06 (0.97, 1.16)
buttermilk	1.11 (0.99, 1.24)	1.10 (0.98, 1.23)	1.12 (1.00, 1.25)	1.07 (0.96, 1.20)	1.10 (0.98, 1.24)	1.09 (0.97, 1.23)	1.09 (0.97, 1.22)	1.05 (0.93, 1.19)
Whole-fat yoghurt products for:								
low-fat milk	0.77 (0.68, 0.84)	0.83 (0.75, 0.92)	0.84 (0.77, 0.94)	0.92 (0.83, 1.02)	0.82 (0.76, 0.88)	0.87 (0.81, 0.94)	0.87 (0.81, 0.94)	0.92 (0.86, 1.00)
whole-fat milk	0.79 (0.69, 0.90)	0.89 (0.78, 1.00)	0.91 (0.80, 1.03)	0.94 (0.82, 1.06)	0.86 (0.79, 0.94)	0.93 (0.85, 0.85)	0.94 (0.86, 1.03)	0.96 (0.87, 1.05)
buttermilk	0.81 (0.71, 0.92)	0.87 (0.77, 0.99)	0.88 (0.77, 0.99)	0.94 (0.81, 1.07)	0.88 (0.78, 1.00)	0.92 (0.82, 1.04)	0.91 (0.81, 1.02)	0.95 (0.84, 1.07)
Cheese for:								
low-fat milk	0.95 (0.92, 0.98)	0.96 (0.94, 0.99)	0.99 (0.96, 1.02)	0.97 (0.94, 1.00)	0.87 (0.82, 0.92)	0.90 (0.85, 0.95)	0.93 (0.87, 0.98)	0.91 (0.86, 0.97)
whole-fat milk	0.96 (0.93, 0.98)	0.97 (0.94, 1.00)	1.00 (0.97, 1.03)	0.97 (0.95, 1.00)	0.92 (0.85, 0.99)	0.96 (0.90, 1.04)	1.00 (0.93, 1.08)	0.94 (0.87, 1.02)
buttermilk	0.96 (0.93, 0.99)	0.97 (0.94, 1.00)	0.99 (0.96, 1.02)	0.97 (0.94, 1.01)	0.94 (0.84, 1.05)	0.95 (0.86, 1.06)	0.97 (0.87, 1.08)	0.94 (0.84, 1.04)
low-fat yoghurt products	0.95 (0.92, 0.98)	0.96 (0.93, 0.99)	0.98 (0.95, 1.01)	0.97 (0.94, 1.00)	0.85 (0.78, 0.92)	0.87 (0.81, 0.94)	0.89 (0.82, 0.96)	0.89 (0.82, 0.96)
whole-fat yoghurt products	0.98 (0.95, 1.01)	0.98 (0.95, 1.01)	1.01 (0.97, 1.04)	0.98 (0.95, 1.01)	1.06 (0.98, 1.16)	1.03 (0.95, 1.12)	1.07 (0.98, 1.16)	0.99 (0.91, 1.07)
butter	0.97 (0.90, 1.04)	0.98 (0.91, 1.06)	0.98 (0.91, 1.06)	0.94 (0.97, 1.02)	0.93 (0.87, 1.00)	0.95 (0.89, 1.02)	0.98 (0.92, 1.05)	0.93 (0.88, 1.01)

Model 1a adjusted for age at inclusion (50-54, 54-59, 59-67; as strata) and total energy intake (kcal/d; continuous); Model 1b further adjusted for education in years (<8, 8-10, >10 years), alcohol abstinence (yes, no), alcohol intake (g/day; continuous), smoking status (never, former, current <15 g tobacco/day, current 15-25 g tobacco/day, current >25 g tobacco/day), physical activity (<3.5 hours/week, ≥3.5 hours/week) and history of hypertension and/or hypercholesterolemia (yes, no, do not know); Model 2 further adjusted for: fruit and vegetables, red and processed meat, sugar-sweetened beverages, whole grains, fatty potatoes and coffee (all in g/day; continuous); Model 3 further adjusted for BMI (kg/m²; continuous) and waist circumference (cm; continuous). Alcohol intake was entered into the models as a restricted cubic spline with three knots.

Table S3. Hazard ratios (95% CI) for type 2 diabetes mellitus associated with substitutions of servings/day¹ or kcal/day of dairy products with the follow-up time restricted to the point in time where 50% of the cases had occurred² in the Danish Diet, Cancer and Health cohort

HR (95% CI)	Servings/day (n=54,277/3,567)				100 kcal/day (n=54,277/3,567)			
	Model 1a	Model 1b	Model 2	Model 3	Model 1a	Model 1b	Model 2	Model 3
Low-fat milk for:								
whole-fat milk	1.04 (1.00, 1.08)	1.05 (1.01, 1.09)	1.06 (1.02, 1.11)	1.02 (0.98, 1.06)	1.05 (1.02, 1.09)	1.06 (1.03, 1.10)	1.07 (1.04, 1.11)	1.03 (1.00, 1.07)
buttermilk	1.06 (1.00, 1.12)	1.04 (0.99, 1.10)	1.04 (0.98, 1.09)	1.03 (0.97, 1.08)	1.07 (1.00, 1.15)	1.05 (0.98, 1.13)	1.04 (0.97, 1.11)	1.03 (0.96, 1.11)
Whole-fat milk for:								
buttermilk	1.02 (0.96, 1.08)	1.00 (0.93, 1.06)	0.97 (0.91, 1.04)	1.01 (0.94, 1.07)	1.02 (0.95, 1.10)	0.99 (0.92, 1.08)	0.96 (0.89, 1.04)	1.00 (0.93, 1.08)
Low-fat yoghurt products for:								
whole-fat yoghurt products	1.36 (1.24, 1.50)	1.25 (1.14, 1.38)	1.26 (1.15, 1.39)	1.16 (1.05, 1.27)	1.23 (1.15, 1.31)	1.16 (1.09, 1.24)	1.17 (1.10, 1.25)	1.11 (1.04, 1.18)
low-fat milk	0.98 (0.92, 1.05)	0.99 (0.93, 1.06)	1.02 (0.96, 1.10)	1.02 (0.95, 1.09)	0.97 (0.92, 1.02)	0.98 (0.93, 1.03)	1.00 (0.95, 1.05)	1.00 (0.95, 1.06)
whole-fat milk	1.02 (0.95, 1.10)	1.04 (0.97, 1.12)	1.09 (1.01, 1.17)	1.04 (0.97, 1.12)	1.02 (0.97, 1.08)	1.04 (0.98, 1.09)	1.07 (1.02, 1.13)	1.04 (0.98, 1.09)
buttermilk	1.04 (0.95, 1.13)	1.03 (0.95, 1.13)	1.06 (0.98, 1.16)	1.05 (0.96, 1.14)	1.04 (0.96, 1.14)	1.03 (0.94, 1.12)	1.04 (0.95, 1.13)	1.04 (0.95, 1.13)
Whole-fat yoghurt products for:								
low-fat milk	0.72 (0.67, 0.77)	0.79 (0.73, 0.85)	0.81 (0.75, 0.87)	0.88 (0.82, 0.95)	0.79 (0.75, 0.83)	0.84 (0.80, 0.89)	0.85 (0.80, 0.89)	0.91 (0.86, 0.95)
whole-fat milk	0.75 (0.69, 0.81)	0.83 (0.76, 0.90)	0.86 (0.80, 0.94)	0.90 (0.83, 0.97)	0.84 (0.79, 0.88)	0.89 (0.84, 0.94)	0.91 (0.86, 0.97)	0.94 (0.89, 0.99)
buttermilk	0.76 (0.70, 0.83)	0.82 (0.75, 0.90)	0.84 (0.77, 0.92)	0.90 (0.83, 0.99)	0.85 (0.78, 0.93)	0.89 (0.81, 0.97)	0.88 (0.81, 0.96)	0.94 (0.86, 1.02)
Cheese for:								
low-fat milk	0.98 (0.96, 1.00)	0.99 (0.97, 1.01)	1.02 (1.00, 1.04)	1.00 (0.98, 1.02)	0.91 (0.88, 0.94)	0.93 (0.90, 0.96)	0.97 (0.93, 1.00)	0.96 (0.93, 1.00)
whole-fat milk	0.98 (0.96, 1.00)	0.99 (0.97, 1.01)	1.03 (1.01, 1.05)	1.00 (0.98, 1.02)	0.96 (0.92, 1.00)	0.99 (0.95, 1.03)	1.04 (1.00, 1.09)	0.99 (0.95, 1.04)
buttermilk	0.98 (0.96, 1.00)	0.99 (0.97, 1.01)	1.02 (1.00, 1.04)	1.00 (0.98, 1.02)	0.97 (0.90, 1.05)	0.98 (0.91, 1.06)	1.00 (0.93, 1.08)	0.99 (0.92, 1.07)
low-fat yoghurt products	0.98 (0.96, 1.00)	0.99 (0.97, 1.01)	1.01 (0.99, 1.03)	1.00 (0.98, 1.02)	0.93 (0.88, 0.99)	0.95 (0.90, 1.01)	0.97 (0.92, 1.03)	0.96 (0.91, 1.02)
whole-fat yoghurt products	1.01 (0.99, 1.03)	1.01 (0.99, 1.03)	1.03 (1.01, 1.05)	1.01 (0.99, 1.03)	1.14 (1.08, 1.21)	1.10 (1.04, 1.17)	1.14 (1.08, 1.21)	1.06 (1.00, 1.12)
butter	1.01 (0.97, 1.05)	1.00 (0.95, 1.04)	1.01 (0.96, 1.06)	0.99 (0.95, 1.03)	0.99 (0.95, 1.03)	0.99 (0.95, 1.04)	1.03 (0.99, 1.08)	1.00 (0.97, 1.04)

¹All serving sizes were 200 g/day except for cheese (20 g/day) and butter (6 g/day).

²The analysis time was restricted to 9 March 2005.

Model 1a adjusted for sex (women, men; as strata), age at inclusion (50-54, 54-59, 59-67; as strata) and total energy intake (kcal/d; continuous); Model 1b further adjusted for education in years (<8, 8-10, >10 years), alcohol abstinence (yes, no), alcohol intake (g/day; continuous), smoking status (never, former, current <15 g tobacco/day, current 15-25 g tobacco/day, current >25 g tobacco/day), physical activity (<3.5 hours/week, ≥3.5 hours/week) and history of hypertension and/or hypercholesterolemia (yes, no, do not know); Model 2 further adjusted for: fruit and vegetables, red and processed meat, sugar-sweetened beverages, whole grains, fatty potatoes and coffee (all in g/day; continuous); Model 3 further adjusted for BMI (kg/m²; continuous) and waist circumference (cm; continuous). Alcohol intake was entered into the models as a restricted cubic spline with three knots.

Table S4. Hazard ratios (95% CI) for type 2 diabetes mellitus associated with substitutions of servings/day¹ or kcal/day of dairy products with exclusion of cases registered during the first two years (n=454) of follow-up in the Danish Diet, Cancer and Health cohort

HR (95% CI)	Servings/day (n=53,823/6,683)				100 kcal/day (n=53,823/6,683)			
	Model 1a	Model 1b	Model 2	Model 3	Model 1a	Model 1b	Model 2	Model 3
Low-fat milk for:								
whole-fat milk	1.00 (0.96, 1.04)	1.02 (0.98, 1.06)	1.03 (0.99, 1.08)	0.99 (0.95, 1.03)	1.02 (0.98, 1.05)	1.03 (1.00, 1.07)	1.04 (1.01, 1.08)	1.00 (0.97, 1.04)
buttermilk	1.04 (0.99, 1.10)	1.03 (0.97, 1.09)	1.02 (0.96, 1.07)	1.01 (0.95, 1.06)	1.06 (0.98, 1.14)	1.03 (0.96, 1.11)	1.01 (0.94, 1.09)	1.01 (0.93, 1.09)
Whole-fat milk for:								
buttermilk	1.04 (0.98, 1.11)	1.01 (0.94, 1.08)	0.98 (0.92, 1.05)	1.02 (0.95, 1.09)	1.04 (0.96, 1.12)	1.00 (0.92, 1.08)	0.97 (0.90, 1.05)	1.00 (0.93, 1.09)
Low-fat yoghurt products for:								
whole-fat yoghurt products	1.33 (1.21, 1.47)	1.22 (1.11, 1.34)	1.23 (1.12, 1.36)	1.12 (1.01, 1.24)	1.21 (1.13, 1.29)	1.14 (1.07, 1.22)	1.16 (1.08, 1.24)	1.08 (1.01, 1.16)
low-fat milk	0.98 (0.91, 1.05)	1.00 (0.93, 1.07)	1.03 (0.96, 1.11)	1.03 (0.95, 1.10)	0.98 (0.92, 1.03)	0.99 (0.94, 1.04)	1.01 (0.96, 1.07)	1.02 (0.96, 1.07)
whole-fat milk	0.98 (0.91, 1.06)	1.02 (0.94, 1.10)	1.07 (0.99, 1.16)	1.02 (0.94, 1.10)	0.99 (0.94, 1.05)	1.02 (0.96, 1.08)	1.06 (1.00, 1.12)	1.02 (0.96, 1.08)
buttermilk	1.02 (0.94, 1.12)	1.02 (0.94, 1.12)	1.05 (0.96, 1.15)	1.03 (0.94, 1.13)	1.03 (0.94, 1.13)	1.02 (0.93, 1.12)	1.02 (0.94, 1.12)	1.02 (0.93, 1.12)
Whole-fat yoghurt products for:								
low-fat milk	0.74 (0.68, 0.79)	0.82 (0.76, 0.88)	0.84 (0.78, 0.90)	0.92 (0.85, 0.99)	0.81 (0.77, 0.85)	0.87 (0.82, 0.91)	0.88 (0.83, 0.92)	0.94 (0.89, 0.99)
whole-fat milk	0.74 (0.68, 0.80)	0.83 (0.77, 0.91)	0.87 (0.80, 0.94)	0.91 (0.84, 0.99)	0.82 (0.78, 0.87)	0.89 (0.84, 0.95)	0.91 (0.86, 0.97)	0.94 (0.89, 1.00)
buttermilk	0.77 (0.70, 0.84)	0.84 (0.77, 0.92)	0.85 (0.78, 0.94)	0.92 (0.84, 1.01)	0.85 (0.78, 0.93)	0.89 (0.82, 0.98)	0.89 (0.81, 0.97)	0.94 (0.86, 1.03)
Cheese for:								
low-fat milk	0.98 (0.96, 1.00)	0.99 (0.97, 1.01)	1.02 (1.00, 1.04)	1.00 (0.98, 1.02)	0.92 (0.88, 0.95)	0.94 (0.91, 0.98)	0.98 (0.95, 1.02)	0.98 (0.94, 1.02)
whole-fat milk	0.98 (0.96, 1.00)	0.99 (0.97, 1.01)	1.02 (1.00, 1.05)	1.00 (0.98, 1.02)	0.93 (0.89, 0.97)	0.97 (0.93, 1.01)	1.03 (0.98, 1.07)	0.98 (0.94, 1.03)
buttermilk	0.98 (0.96, 1.00)	0.99 (0.97, 1.01)	1.02 (1.00, 1.04)	1.00 (0.98, 1.02)	0.97 (0.89, 1.05)	0.97 (0.90, 1.05)	1.00 (0.92, 1.08)	0.99 (0.91, 1.07)
low-fat yoghurt products	0.98 (0.96, 1.00)	0.99 (0.97, 1.01)	1.01 (0.99, 1.03)	1.00 (0.98, 1.02)	0.94 (0.88, 1.00)	0.95 (0.90, 1.01)	0.97 (0.92, 1.03)	0.96 (0.91, 1.02)
whole-fat yoghurt products	1.02 (0.99, 1.03)	1.01 (0.99, 1.03)	1.03 (1.01, 1.05)	1.01 (0.99, 1.03)	1.13 (1.07, 1.20)	1.09 (1.03, 1.15)	1.12 (1.06, 1.19)	1.04 (0.99, 1.11)
butter	1.01 (0.96, 1.06)	1.00 (0.96, 1.05)	1.01 (0.97, 1.06)	1.00 (0.95, 1.05)	0.99 (0.95, 1.03)	1.00 (0.95, 1.04)	1.04 (0.99, 1.08)	1.00 (0.96, 1.05)

¹All serving sizes were 200 g/day except for cheese (20 g/day) and butter (6 g/day).

Model 1a adjusted for sex (women, men; as strata), age at inclusion (50-54, 54-59, 59-67; as strata) and total energy intake (kcal/d; continuous); Model 1b further adjusted for education in years (<8, 8-10, >10 years), alcohol abstinence (yes, no), alcohol intake (g/day; continuous), smoking status (never, former, current <15 g tobacco/day, current 15-25 g tobacco/day, current >25 g tobacco/day), physical activity (<3.5 hours/week, ≥3.5 hours/week) and history of hypertension and/or hypercholesterolemia (yes, no, do not know); Model 2 further adjusted for: fruit and vegetables, red and processed meat, sugar-sweetened beverages, whole grains, fatty potatoes and coffee (all in g/day; continuous); Model 3 further adjusted for BMI (kg/m²; continuous) and waist circumference (cm; continuous). Alcohol intake was entered into the models as a restricted cubic spline with three knots.

Table S5. Hazard ratios (95% CI) for type 2 diabetes associated with substitutions of serving/day¹ or kcal/day of dairy products with exclusion of participants who were registered with a diagnosis of cardiovascular disease² at baseline in the Danish Diet, Cancer, and Health cohort

HR (95% CI)	Servings/day (n=53,015/6,853)				100 kcal/day (n=53,015/6,853)			
	Model 1a	Model 1b	Model 2	Model 3	Model 1a	Model 1b	Model 2	Model 3
Low-fat milk for:								
whole-fat milk	1.00 (0.96, 1.04)	1.02 (0.98, 1.05)	1.03 (0.99, 1.07)	0.99 (0.95, 1.03)	1.02 (0.99, 1.05)	1.03 (1.00, 1.07)	1.05 (1.01, 1.08)	1.00 (0.97, 1.04)
buttermilk	1.03 (0.98, 1.09)	1.01 (0.96, 1.07)	1.00 (0.95, 1.06)	0.99 (0.94, 1.05)	1.04 (0.97, 1.12)	1.01 (0.94, 1.09)	1.00 (0.93, 1.07)	0.99 (0.92, 1.07)
Whole-fat milk for:								
buttermilk	1.03 (0.97, 1.10)	1.00 (0.94, 1.06)	0.97 (0.91, 1.04)	1.00 (0.94, 1.07)	1.02 (0.94, 1.10)	0.98 (0.91, 1.06)	0.95 (0.88, 1.03)	0.99 (0.91, 1.07)
Low-fat yoghurt products for:								
whole-fat yoghurt products	1.40 (1.27, 1.54)	1.28 (1.17, 1.41)	1.30 (1.18, 1.43)	1.17 (1.06, 1.29)	1.24 (1.16, 1.33)	1.18 (1.11, 1.26)	1.20 (1.12, 1.28)	1.12 (1.04, 1.19)
low-fat milk	1.00 (0.94, 1.08)	1.03 (0.97, 1.10)	1.06 (0.99, 1.14)	1.05 (0.98, 1.13)	0.99 (0.94, 1.04)	1.01 (0.95, 1.06)	1.03 (0.97, 1.08)	1.03 (0.98, 1.09)
whole-fat milk	1.00 (0.93, 1.08)	1.04 (0.97, 1.12)	1.10 (1.02, 1.18)	1.04 (0.97, 1.13)	1.01 (0.95, 1.06)	1.04 (0.98, 1.10)	1.07 (1.02, 1.14)	1.03 (0.98, 1.09)
buttermilk	1.04 (0.95, 1.13)	1.04 (0.95, 1.13)	1.07 (0.98, 1.16)	1.05 (0.96, 1.14)	1.03 (0.94, 1.12)	1.02 (0.93, 1.11)	1.02 (0.94, 1.12)	1.02 (0.93, 1.12)
Whole-fat yoghurt products for:								
low-fat milk	0.72 (0.67, 0.78)	0.80 (0.74, 0.86)	0.82 (0.76, 0.88)	0.90 (0.83, 0.97)	0.79 (0.75, 0.84)	0.85 (0.81, 0.90)	0.86 (0.82, 0.90)	0.92 (0.88, 0.97)
whole-fat milk	0.72 (0.66, 0.78)	0.81 (0.75, 0.88)	0.84 (0.78, 0.92)	0.90 (0.82, 0.97)	0.81 (0.77, 0.86)	0.88 (0.83, 0.93)	0.90 (0.85, 0.95)	0.93 (0.88, 0.98)
buttermilk	0.74 (0.68, 0.81)	0.81 (0.74, 0.89)	0.82 (0.75, 0.90)	0.89 (0.81, 0.98)	0.83 (0.76, 0.90)	0.86 (0.79, 0.94)	0.86 (0.78, 0.93)	0.91 (0.84, 1.00)
Cheese for:								
low-fat milk	0.97 (0.95, 0.99)	0.99 (0.97, 1.00)	1.02 (1.00, 1.04)	1.00 (0.98, 1.02)	0.90 (0.87, 0.94)	0.93 (0.89, 0.96)	0.97 (0.94, 1.01)	0.97 (0.93, 1.00)
whole-fat milk	0.97 (0.95, 0.99)	0.99 (0.97, 1.01)	1.02 (1.00, 1.04)	1.00 (0.98, 1.02)	0.92 (0.88, 0.96)	0.96 (0.92, 1.00)	1.02 (0.97, 1.06)	0.97 (0.93, 1.01)
buttermilk	0.97 (0.95, 0.99)	0.99 (0.97, 1.01)	1.02 (1.00, 1.04)	1.00 (0.98, 1.02)	0.94 (0.87, 1.01)	0.94 (0.87, 1.02)	0.97 (0.90, 1.05)	0.96 (0.88, 1.04)
low-fat yoghurt products	0.97 (0.95, 0.99)	0.98 (0.96, 1.00)	1.01 (0.99, 1.03)	0.99 (0.97, 1.01)	0.91 (0.86, 0.97)	0.92 (0.87, 0.98)	0.95 (0.90, 1.00)	0.94 (0.88, 0.97)
whole-fat yoghurt products	1.00 (0.98, 1.02)	1.01 (0.99, 1.03)	1.04 (1.02, 1.06)	1.01 (0.99, 1.03)	1.13 (1.07, 1.20)	1.09 (1.03, 1.16)	1.13 (1.07, 1.20)	1.05 (0.99, 1.11)
butter	0.99 (0.95, 1.04)	0.99 (0.94, 1.03)	1.00 (0.95, 1.05)	0.98 (0.94, 1.03)	0.97 (0.93, 1.01)	0.98 (0.94, 1.03)	1.02 (0.98, 1.07)	0.99 (0.94, 1.03)

¹All serving sizes were 200 g/day except for cheese (20 g/day) and butter (6 g/day).

²Diagnosis of acute myocardial infarction (n=794) or stroke (n=468) at baseline was obtained by linkage with Danish nationwide registers.

Model 1a adjusted for age at inclusion (50-54, 54-59, 59-67; as strata) and total energy intake (kcal/d; continuous); Model 1b further adjusted for education in years (<8, 8-10, >10 years), alcohol abstinence (yes, no), alcohol intake (g/day; continuous), smoking status (never, former, current <15 g tobacco/day, current 15-25 g tobacco/day, current >25 g tobacco/day), physical activity (<3.5 hours/week, ≥3.5 hours/week) and history of hypertension and/or hypercholesterolemia (yes, no, do not know); Model 2 further adjusted for: fruit and vegetables, red and processed meat, sugar-sweetened beverages, whole grains, fatty potatoes and coffee (all in g/day; continuous); Model 3 further adjusted for BMI (kg/m²; continuous) and waist circumference (cm; continuous). Alcohol intake was entered into the models as a restricted cubic spline with three knots.

Table S6. Hazard ratios (95% CI) for type 2 diabetes associated with substitutions of serving/day¹ or kcal/day of dairy products with exclusion of participants with hypertension, hypercholesterolemia or who were obese at baseline in the Danish Diet, Cancer, and Health cohort

HR (95% CI)	Servings/day (n=38,207/3,364)				100 kcal/day (n=38,207/3,364)			
	Model 1a	Model 1b	Model 2	Model 3	Model 1a	Model 1b	Model 2	Model 3
Low-fat milk for:								
whole-fat milk	0.95 (0.90, 1.00)	0.98 (0.94, 1.04)	1.00 (0.95, 1.05)	0.96 (0.92, 1.02)	0.98 (0.94, 1.03)	1.01 (0.96, 1.05)	1.02 (0.97, 1.07)	0.99 (0.94, 1.03)
buttermilk	1.05 (0.97, 1.14)	1.04 (0.96, 1.12)	1.03 (0.95, 1.12)	1.02 (0.94, 1.10)	1.07 (0.97, 1.19)	1.05 (0.95, 1.17)	1.04 (0.93, 1.15)	1.02 (0.92, 1.14)
Whole-fat milk for:								
buttermilk	1.11 (1.02, 1.21)	1.06 (0.97, 1.15)	1.03 (0.94, 1.13)	1.06 (0.96, 1.16)	1.09 (0.98, 1.22)	1.04 (0.94, 1.16)	1.02 (0.91, 1.13)	1.04 (0.93, 1.16)
Low-fat yoghurt products for:								
whole-fat yoghurt products	1.41 (1.24, 1.61)	1.39 (1.22, 1.59)	1.41 (1.23, 1.61)	1.26 (1.11, 1.44)	1.26 (1.15, 1.38)	1.26 (1.15, 1.39)	1.27 (1.16, 1.40)	1.18 (1.08, 1.29)
low-fat milk	1.12 (1.01, 1.24)	1.18 (1.07, 1.30)	1.21 (1.10, 1.34)	1.18 (1.06, 1.30)	1.07 (0.99, 1.15)	1.11 (1.03, 1.20)	1.13 (1.05, 1.22)	1.11 (1.03, 1.20)
whole-fat milk	1.06 (0.96, 1.18)	1.16 (1.05, 1.29)	1.21 (1.09, 1.35)	1.13 (1.02, 1.26)	1.05 (0.97, 1.13)	1.12 (1.04, 1.21)	1.15 (1.07, 1.24)	1.09 (1.01, 1.18)
buttermilk	1.18 (1.04, 1.33)	1.22 (1.08, 1.38)	1.25 (1.11, 1.42)	1.20 (1.06, 1.36)	1.15 (1.01, 1.30)	1.17 (1.03, 1.32)	1.17 (1.03, 1.32)	1.14 (1.00, 1.29)
Whole-fat yoghurt products for:								
low-fat milk	0.79 (0.72, 0.88)	0.84 (0.76, 0.93)	0.86 (0.78, 0.95)	0.93 (0.84, 1.03)	0.85 (0.77, 0.91)	0.88 (0.82, 0.95)	0.89 (0.83, 0.95)	0.94 (0.87, 1.01)
whole-fat milk	0.75 (0.67, 0.84)	0.83 (0.74, 0.93)	0.86 (0.77, 0.96)	0.90 (0.80, 1.00)	0.83 (0.77, 0.89)	0.89 (0.82, 0.96)	0.91 (0.84, 0.98)	0.93 (0.86, 1.00)
buttermilk	0.84 (0.73, 0.95)	0.88 (0.77, 1.00)	0.89 (0.78, 1.01)	0.94 (0.83, 1.08)	0.91 (0.80, 1.03)	0.93 (0.82, 1.05)	0.92 (0.81, 1.04)	0.96 (0.85, 1.09)
Cheese for:								
low-fat milk	0.98 (0.95, 1.00)	0.99 (0.96, 1.02)	1.02 (1.00, 1.05)	1.01 (0.99, 1.04)	0.92 (0.88, 0.98)	0.94 (0.89, 1.00)	0.99 (0.94, 1.05)	0.99 (0.94, 1.05)
whole-fat milk	0.98 (0.95, 1.00)	0.99 (0.96, 1.02)	1.02 (1.00, 1.05)	1.01 (0.98, 1.04)	0.91 (0.86, 0.96)	0.95 (0.90, 1.01)	1.01 (0.95, 1.07)	0.98 (0.92, 1.04)
buttermilk	0.99 (0.96, 1.02)	1.00 (1.00, 1.02)	1.03 (1.00, 1.06)	1.02 (0.99, 1.05)	0.99 (0.89, 1.11)	0.99 (0.89, 1.11)	1.03 (0.92, 1.15)	1.02 (0.91, 1.14)
low-fat yoghurt products	0.97 (0.94, 1.00)	0.98 (0.95, 1.00)	1.00 (0.98, 1.04)	1.00 (0.97, 1.03)	0.87 (0.80, 0.94)	0.85 (0.78, 0.92)	0.88 (0.81, 0.95)	0.90 (0.82, 0.97)
whole-fat yoghurt products	1.00 (0.97, 1.03)	1.01 (0.98, 1.04)	1.04 (1.01, 1.07)	1.02 (0.99, 1.05)	1.09 (1.01, 1.18)	1.07 (0.99, 1.16)	1.12 (1.03, 1.21)	1.06 (0.98, 1.14)
butter	1.01 (0.95, 1.08)	1.04 (0.97, 1.11)	1.05 (0.98, 1.12)	1.02 (0.95, 1.09)	0.99 (0.94, 1.06)	1.02 (0.96, 1.09)	1.06 (1.00, 1.13)	1.03 (0.97, 1.10)

¹All serving sizes were 200 g/day except for cheese (20 g/day) and butter (6 g/day).

Model 1a adjusted for sex (women, men; as strata), age at inclusion (50-54, 54-59, 59-67; as strata) and total energy intake (kcal/d; continuous); Model 1b further adjusted for education in years (<8, 8-10, >10 years), alcohol abstinence (yes, no), alcohol intake (g/day; continuous), smoking status (never, former, current <15 g tobacco/day, current 15-25 g tobacco/day, current >25 g tobacco/day), and physical activity (<3.5 hours/week, ≥3.5 hours/week); Model 2 further adjusted for: fruit and vegetables, red and processed meat, sugar-sweetened beverages, whole grains, fatty potatoes and coffee (all in g/day; continuous); Model 3 further adjusted for BMI (kg/m²; continuous) and waist circumference (cm; continuous). Alcohol intake was entered into the models as a restricted cubic spline with three knots.

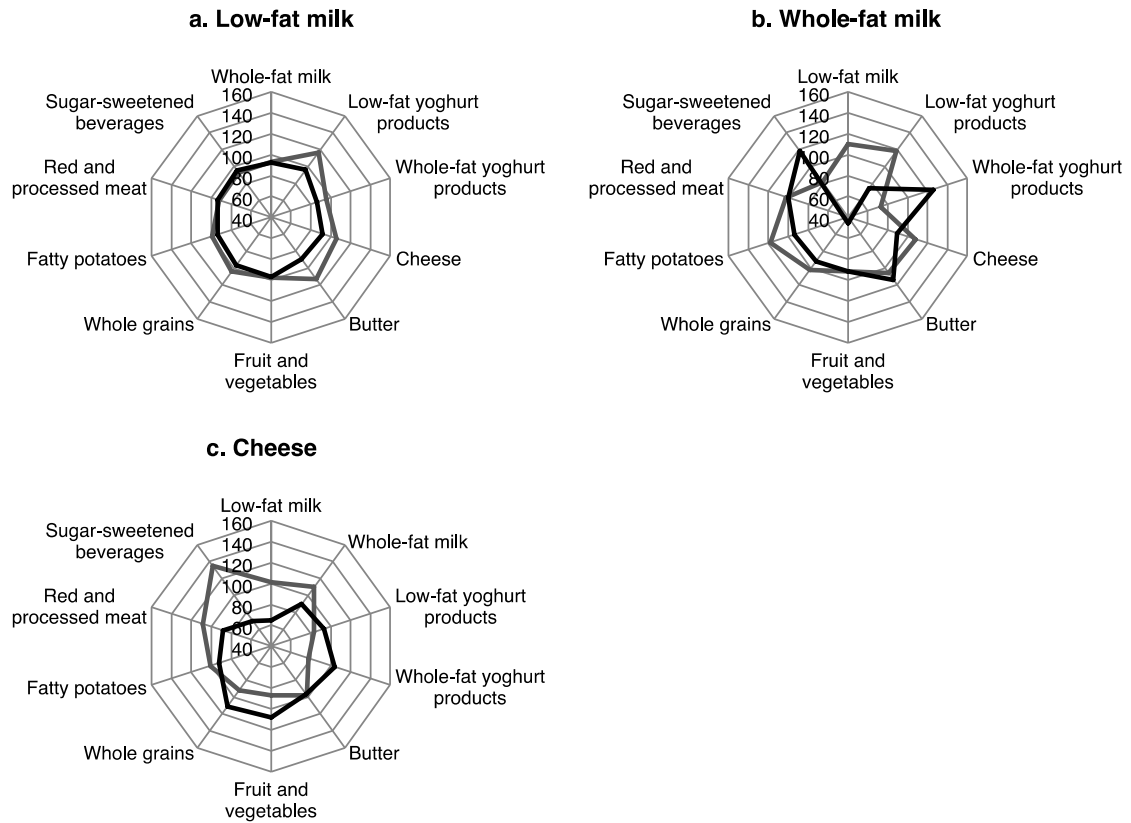


Fig. S1. Radar charts of the percent-wise differences from the median in energy-adjusted food intake of 10 food and beverage groups among individuals with the lowest (grey line) and highest (black line) intake of low-fat milk (panel a), whole-fat milk (panel b) and cheese (panel c). Non-consumers of the respective dairy products were not included. 100% is equivalent to the median of the entire cohort.