Dairy SF	Meat SF		Butter SF	Plant SF	Mixed animal and plant SF
	Unprocessed meat	Processed meat			
Plain yogurt	Hamburger	Sausage	Butter	Nuts	Fried fish
Flavored yogurt	Beef, pork or lamb steak	Ham hocks	Butter on veg/potato	Peanuts	Fried chicken
Frozen yogurt	Enchilada with meat	Ham		Pea soup	Stir fried vegetables
Sweet condensed milk	Oriental noodles	Liver		Margarine	Tuna
Ice cream	Picadillo	Chinese dumplings		Lettuce salad	Pies
Cottage or ricotta cheese	Chile with meat			Spinach salad	Burritos
Milk 2%t	Pasta tomato sauce with			Avocado	Chicken salad
	meat				
Skim milk	Red chili with meat				Other soup
Whole milk	Green chili with meat				Fried rice
Milk in coffee/tea	Meat stew				White bread
Cream in coffee/tea	Burritos with meat				Pancakes
Cheddar, American, Swiss,	Stir fried beef, pork or				Biscuits
any other cheese	chicken				
Pasta cream sauce					Crackers
Cream soup					French fries
Pizza					Chips
Hot cocoa					White donuts
Enchiladas w/o meat					Choc donuts
					Eggs

Table S1 - Foods included on the estimation of SF from different sources in $MESA^1$

¹ FFQ line items whose assignment was difficult to make concisely were included as 'Mixed animal and plant SF"; the direction of associations for each of these component line items were anticipated to be mixed, but for completeness, were included in a single group rather than omitted from consideration.

SF: saturated fat

	$\mathbf{IID} (050 / \mathbf{CI})$		HR (95% CI)		
	for each 5 g/day		for each 5 %	<i>P</i> -value	
	for each 5 g/day		energy		
Total SF					
Basic Model	0.98 (0.88,1.11)	0.79	0.94 (0.75,1.17)	0.56	
Model 1	0.94 (0.83,1.06)	0.25	0.85 (0.68,1.06)	0.12	
Model 2	0.86 (0.74,1.00)	0.05	0.73 (0.56,0.96)	0.02	
Dairy SF					
Model 1	0.94 (0.81,1.09)	0.38	0.88 (0.66,1.17)	0.37	
Model 2	0.91 (0.78,1.05)	0.18	1.16 (0.87,1.56)	0.16	
Model 3	0.84 (0.71,0.99)	0.03	0.71 (0.52,0.98)	0.03	
Meat SF					
Model 1	1.39 (1.13,1.72)	< 0.01	1.90 (1.23,2.93)	< 0.01	
Model 2	1.32 (1.07,1.64)	0.01	1.67 (1.07,2.60)	0.03	
Model 3	1.29 (1.03,1.62)	0.03	1.57 (0.98,2.51)	0.06	
Processed meat SF					
Model 1	1.25 (0.89,1.76)	0.20	1.52 (0.75,3.09)	0.25	
Model 2	1.19 (0.84,1.70)	0.35	1.28 (0.62,2.63)	0.55	
Model 3	1.12 (0.76,1.64)	0.59	1.10 (0.51,2.38)	0.84	
Unprocessed meat SF					
Model 1	1.63 (1.22,2.17)	< 0.01	2.61 (1.47,4.62)	< 0.01	
Model 2	1.56 (1.15,2.10)	< 0.01	2.37 (1.29,4.35)	< 0.01	
Model 3	1.51 (1.12,2.05)	< 0.01	2.22 (1.20,4.08)	0.01	
Butter SF					
Basic Model	0.85 (0.61,1.19)	0.34	0.77 (0.42,1.43)	0.41	
Model 1	0.80 (0.56,1.12)	0.19	0.68 (0.36,1.29)	0.22	
Model 2	0.79 (0.55,1.12)	0.18	0.67 (0.35,1.27)	0.20	
Plant SF					
Basic Model	0.81 (0.39,1.69)	0.57	0.54 (0.14,2.02)	0.36	
Model 1	0.80 (0.38,1.69)	0.54	0.51 (0.13,1.96)	0.32	
Model 2	1.00 (0.44,2.25)	0.99	2.09 (0.19,23.04)	0.63	

Table S2 - Hazards ratios (HR) and 95% CI of CHD according to quintiles of energy-adjusted saturated fat from different sources (N=5,209; 231 new cases)

Mixed source SF					
Basic Model	0.96 (0.74,1.24)	0.75	0.82 (0.50,1.33)	0.42	
Model 1	0.91 (0.70,1.18)	0.43	1.29 (1.17,1.43)	0.22	
Model 2	0.90 (0.65,1.24)	0.47	0.68 (0.38,1.24)	0.19	

SF: saturated fat

All values are HRs (95% CIs) derived from proportional hazards models adjusted as follows:

Model 1 included energy intake (kcal/day), age(y), sex, race-ethnicity (non-Hispanic Whites, African Americans, Hispanics and Chinese-Americans), and study center; model 2 included additional adjustment for education (<high school, high school, >high school), alcohol intake (g/day), physical activity (active and sedentary leisure in metabolic equivalents per min/wk), BMI (kg/m2), cigarette smoking (never, current or former smoker and pack-year of cigarette smoking), dietary supplement use (>1/week, yes or no), use of cholesterol lowering medication (yes/no); model 3 included all variables in model 2 plus intakes of fruits and vegetables (servings/day), energy-adjusted intakes of dietary fiber (g/day), dietary vitamin E (IU/day), trans fat and PUFA (g/day).

P-trend was calculated by using median values of energy-adjusted nutrient quintiles as continuous variables in the statistical models.

Table S3 - HRs and 95% CIs for the replacement of 2% percent of energy from SF from different food sources in MESA (N=5,209; 231 new cases)

CHD	Model 2	
	HR (95% CI)	
Dairy SF in replacement of meat SF	0.76 (0.61,0.94)	
Butter SF in replacement of meat SF	0.71 (0.53,0.95)	
Plant SF in replacement of meat SF	0.62 (0.35,1.11)	
Butter SF in replacement of dairy SF	0.94 (0.72,1.22)	
Plant SF in replacement of dairy SF	0.82 (0.48,1.42)	
Plant SF in replacement of butter SF	0.88 (0.50,1.55)	
SF: saturated fat		

All values are HRs (95% CIs) derived from proportional hazards models adjusting for energy intake (kcal/day), age(y), sex, race-ethnicity (non-Hispanic Whites, African Americans, Hispanics and Chinese-Americans), study center, education (<high school, high school, >high school), alcohol intake (g/day), physical activity (active and sedentary leisure in metabolic equivalents per min/wk), BMI (kg/m2), cigarette smoking (never, current or former smoker and pack-year of cigarette smoking), dietary supplement use (>1/week, yes or no) and use of cholesterol lowering medication (yes/no).

Supplemental Figure 1: HR and 95% CI for each serving/day of selected dairy sources



HRs and 95% CI derived from proportional hazards models adjusted for age, sex, race-ethnicity, study center, energy intake, education, alcohol intake, physical activity, BMI, cigarette smoking status, dietary supplement use, cholesterol lowering medication use, intakes of fruits and vegetables (servings/day), dietary fiber (g/day), dietary vitamin E (IU/day), trans fat and PUFA (g/day).

Milk variable captures beverages made with milk including cafe latte and café au lait.

Other cheese include Cheddar, American, Chihuahua, Swiss, cream cheese, cheese spreads, any other whole-fat cheese