### Supplemental table 5. Associations between intake of added sugar, treats, toppings and sugar sweetened beverages and risk of incident aortic stenosis for various covariate adjustment models.

| Aortic stenosis | Intake | n/Cases/person-years | Basic model with lifestyle factors\(^1\) | Basic model with lifestyle factors and BMI\(^2\) | Main model with potential mediators\(^3\) |
|-----------------|--------|----------------------|------------------------------------------|------------------------------------------|------------------------------------------|
| Added sugar, E% | <5     | 2,354/59/46,590      | 1                                        | 1                                        | 1                                         |
|                 | 5-7.5  | 5,027/126/101,045    | 0.84 (0.62-1.15)                         | 0.86 (0.63-1.18)                         | 0.87 (0.63-1.20)                         |
|                 | 7.5-10 | 6,709/161/135,715    | 0.74 (0.55-1.00)                         | 0.77 (0.57-1.05)                         | 0.78 (0.57-1.06)                         |
|                 | 10-15  | 8,735/250/173,9587   | 0.87 (0.65-1.16)                         | 0.92 (0.69-1.23)                         | 0.90 (0.66-1.22)                         |
|                 | 15-20  | 2,377/53/46,720      | 0.68 (0.47-1.00)                         | 0.74 (0.50-1.07)                         | 0.69 (0.46-1.02)                         |
|                 | >20    | 675/20/12,632        | 1.05 (0.63-1.75)                         | 1.09 (0.65-1.82)                         | 0.89 (0.51-1.55)                         |
|                 | P-trend|                      | 0.52                                     | 0.74                                     | 0.70                                     |
| Treats, servings/week | ≤2     | 2,931/74/56,470      | 1                                        | 1                                        | 1                                         |
|                 | >2-5   | 7,161/183/143,543    | 0.92 (0.70-1.21)                         | 0.93 (0.71-1.22)                         | 0.90 (0.68-1.19)                         |
|                 | >5-8   | 6,775/181/136,355    | 0.90 (0.68-1.19)                         | 0.92 (0.69-1.21)                         | 0.87 (0.66-1.16)                         |
|                 | >8-14  | 6,687/171/134,249    | 0.77 (0.58-1.03)                         | 0.79 (0.59-1.05)                         | 0.76 (0.57-1.02)                         |
|                 | >14    | 2,323/60/46,044      | 0.79 (0.55-1.15)                         | 0.80 (0.55-1.15)                         | 0.73 (0.49-1.06)                         |
|                 | P-trend|                      | 0.12                                     | 0.13                                     | 0.05                                     |
| Toppings, servings/week | ≤2     | 3,419/74/69,234      | 1                                        | 1                                        | 1                                         |
|                 | >2-7   | 7,008/156/141,771    | 0.93 (0.71-1.24)                         | 0.95 (0.72-1.26)                         | 0.90 (0.68-1.20)                         |
|                 | >7-14  | 6,909/187/138,010    | 1.03 (0.78-1.36)                         | 1.09 (0.82-1.43)                         | 1.08 (0.82-1.43)                         |
|                 | >14-28 | 5,908/182/117,102    | 1.05 (0.79-1.40)                         | 1.14 (0.86-1.52)                         | 1.14 (0.85-1.53)                         |
|                 | >28    | 2,633/70/50,543      | 0.96 (0.67-1.37)                         | 1.07 (0.74-1.53)                         | 1.01 (0.70-1.46)                         |
|                 | P-trend|                      | 0.87                                     | 0.62                                     | 0.83                                     |
| SSBs, servings/week | ≤1     | 15,188/394/302,807   | 1                                        | 1                                        | 1                                         |
|                 | >1-3   | 5,329/135/108,253    | 1.04 (0.85-1.26)                         | 1.02 (0.84-1.24)                         | 1.02 (0.83-1.24)                         |
|                 | >3-5   | 2,246/55/45,008      | 0.96 (0.72-1.28)                         | 0.94 (0.70-1.25)                         | 0.91 (0.68-1.22)                         |
|       | Cases/Consortium/Total | HR (95% CI) | P-value | HR (95% CI) | P-value | HR (95% CI) | P-value |
|-------|------------------------|-------------|---------|-------------|---------|-------------|---------|
| >5-8  | 1,561/40/31,046        | 1.04 (0.75-1.45) | 1.01 (0.73-1.41) | 1.01 (0.72-1.41) | 0.57 | 0.79 | 0.92 |
| >8    | 1,553/45/29,547        | 1.18 (0.86-1.62) | 1.13 (0.83-1.56) | 1.05 (0.75-1.47) | 0.12 | 0.87 | 0.92 |

BMI: Body Mass Index. E%: Energy percentage. MET: Metabolic equivalent of task. HR: Hazard ratio. CI: Confidence interval. SSBs: Sugar-sweetened beverages.

1 Adjusted for age, sex, season of dietary assessment, diet method, energy intake, smoking status, educational level, leisure-time physical activity and alcohol consumption.

2 Adjusted for age, sex, season of dietary assessment, diet method, energy intake, smoking status, educational level, leisure-time physical activity, alcohol consumption and body mass index.

3 Adjusted for age, sex, season of dietary assessment, diet method, energy intake, smoking status, educational level, leisure-time physical activity, alcohol consumption, body mass index and dietary habits including intake of processed meat, coffee, saturated fatty acids and fiber density, ApoB/ApoA-1, hypertension and lipid-lowering medication.

The associations were determined using multivariable Cox proportional hazards regression model and are expressed as HR with a 95% confidence interval and P-value for the linear trend.