

**Supplementary Table 1. Estimated median reported nutrient intakes by tertile**

<b>Dietary Variable</b>	<b>Pre-treatment (n=414)</b>		
	<b>Low Intake</b> n=138	<b>Medium Intake</b> n=138	<b>High Intake</b> n=138
Carbohydrate (g/day)	199	234	273
Total Sugars (g/day)	79	110	143
Natural Sugars (g/day)	32	59	90
Added Sugars (g/day)	26	48	70
Glycemic Index	49	53	56
Glycemic Load	102	123	145
Starch (servings/day)	1.1	2.1	3.4
Simple Carbs (servings/day)	1.3	2.7	4.4
Protein (g/day)	63	77	92
Total Fat (g/day)	60	72	85
<b>Dietary Variable</b>	<b>Post-treatment (n=265)</b>		
	<b>Low Intake</b> n=88	<b>Medium Intake</b> n=88	<b>High Intake</b> n=88
Carbohydrate (g/day)	189	216	251
Total Sugars (g/day)	75	99	134
Natural Sugars (g/day)	26	43	62
Added Sugars (g/day)	30	50	83
Glycemic Index	48	52	56
Glycemic Load	95	113	134
Starch (servings/day)	0.9	1.9	3.4
Simple Carbs (servings/day)	1.0	2.2	3.7
Protein (g/day)	60	72	86
Total Fat (g/day)	55	67	81

**Supplementary Table 2. Unadjusted time-to-event cox proportional hazards analysis for all-cause mortality and recurrence by dietary intake**

	Pretreatment Intake			P <sub>trend</sub>
	Low n=138	Medium n=138	High n=138	
<b>Mortality</b>				
Carbohydrate	1.0	1.26 (0.67, 2.36)	1.78 (0.98, 3.22)	0.05*
Total Sugar	1.0	0.94 (0.51, 1.73)	1.44 (0.81, 2.54)	0.18*
Added Sugar	1.0	1.28 (0.67, 2.45)	1.22 (0.63, 2.35)	0.58
Natural Sugar	1.0	0.83 (0.43, 1.58)	0.93 (0.50, 1.74)	0.19
Glycemic Index	1.0	1.18 (0.67, 2.09)	0.95 (0.52, 1.71)	0.65
Glycemic Load	1.0	1.12 (0.59, 2.11)	1.70 (0.94, 3.10)	0.06*
Starchy Foods	1.0	0.74 (0.43, 1.27)	0.47 (0.25, 0.86)*	0.01*
Simple Carb Foods	1.0	1.75 (0.93, 3.28)	2.20 (1.17, 4.12)*	0.02*
Protein	1.0	0.77 (0.44, 1.35)	0.74 (0.42, 1.32)	0.31
Fat	1.0	0.73 (0.41, 1.30)	0.83 (0.48, 1.45)	0.51
<b>Recurrence</b>				
Carbohydrate	1.0	0.83 (0.46, 1.48)	1.12 (0.65, 1.95)	0.64
Total Sugar	1.0	0.92 (0.51, 1.66)	1.31 (0.75, 2.29)	0.32
Added Sugar	1.0	1.47 (0.75, 2.89)	1.43 (0.72, 2.83)	0.34
Natural Sugar	1.0	1.08 (0.58, 2.02)	0.82 (0.42, 1.60)	0.58
Glycemic Index	1.0	1.35 (0.78, 2.36)	0.91 (0.50, 1.66)	0.73
Glycemic Load	1.0	0.61 (0.33, 1.11)	1.02 (0.60, 1.75)	0.91
Starchy Foods	1.0	0.84 (0.50, 1.43)	0.52 (0.28, 0.94)*	0.03*
Simple Carb Foods	1.0	1.57 (0.87, 2.84)	1.64 (0.90, 2.99)	0.12
Protein	1.0	0.66 (0.37, 1.17)	0.89 (0.37, 1.17)	0.70
Fat	1.0	1.10 (0.61, 1.98)	1.32 (0.75, 2.33)	0.32
	Post-Treatment Intake			P <sub>trend</sub>
	Low n=88	Medium n=89	High n=88	
<b>Mortality</b>				
Carbohydrate	1.0	0.81 (0.28, 2.33)	1.66 (0.69, 4.00)	0.20*
Total Sugar	1.0	1.56 (0.63, 3.88)	0.94 (0.35, 2.53)	0.81
Added Sugar	1.0	0.95 (0.25, 3.55)	3.44 (1.24, 9.58)	0.006*
Natural Sugar	1.0	0.79 (0.29, 2.12)	0.78 (0.29, 2.09)	0.28
Glycemic Index	1.0	1.10 (0.41, 2.96)	1.32 (0.51, 3.41)	0.14*
Glycemic Load	1.0	1.12 (0.42, 2.98)	1.37 (0.55, 3.40)	0.50
Starchy Foods	1.0	0.36 (0.13, 0.99)*	0.61 (0.26, 1.41)	0.29
Simple Carb Foods	1.0	1.07 (0.45, 2.59)	0.92 (0.36, 2.35)	0.86
Protein	1.0	0.70 (0.30, 1.63)	0.37 (0.13, 1.04)	0.06*
Fat	1.0	0.24 (0.07, 0.82)*	0.73 (0.32, 1.68)	0.41
<b>Recurrence<sup>a</sup></b>				

Carbohydrate	1.0	1.27 (0.53, 3.07)	2.42 (1.10, 5.31)	0.02*
Total Sugar	1.0	1.02 (0.47, 2.21)	1.11 (0.52, 2.36)	0.78
Added Sugar	1.0	2.17 (0.88, 5.39)	2.31 (0.94, 5.67)	0.10*
Natural Sugar	1.0	1.26 (0.58, 2.73)	0.88 (0.38, 2.04)	0.78
Glycemic Index	1.0	0.96 (0.47, 1.95)	0.59 (0.26, 1.30)	0.21
Glycemic Load	1.0	1.27 (0.57, 2.84)	1.50 (0.70, 3.23)	0.30
Starchy Foods	1.0	1.04 (0.30, 3.59)	1.42 (0.45, 4.47)	0.52
Simple Carb Foods	1.0	1.02 (0.29, 3.51)	1.35 (0.43, 4.28)	0.58
Protein	1.0	0.66 (0.32, 1.39)	0.60 (0.28, 1.29)	0.19*
Fat	1.0	0.39 (0.17, 0.88)*	0.53 (0.26, 1.11)	0.08*

\*Denotes significance at  $P \leq 0.20$

<sup>a</sup>N=199 participants included in analysis

**Supplementary Table 3. Multivariable time-to-event cox proportional hazards analysis for all-cause mortality and recurrence by post-treatment nutrient intake (n=265)**

	<b>Mortality<sup>a</sup> (28 Events)</b>			<b>P<sub>trend</sub></b>
	<b>Low</b>	<b>Medium</b>	<b>High</b>	
Carbohydrate	1.0	0.64 (0.21, 1.98)	2.18 (0.78, 6.11)	0.11
Total Sugar	1.0	1.44 (0.53, 3.91)	0.83 (0.29, 2.33)	0.61
Added Sugar	1.0	1.33 (0.33, 5.35)	2.76 (0.92, 8.26)	0.06
Natural Sugar	1.0	0.87 (0.30, 2.46)	0.88 (0.26, 2.97)	0.82
Glycemic Index	1.0	1.28 (0.44, 3.75)	1.73 (0.59, 5.12)	0.32
Glycemic Load	1.0	1.12 (0.39, 3.19)	1.66 (0.59, 4.72)	0.34
Starchy Foods	1.0	0.45, 0.13, 1.60)	0.74 (0.21, 2.63)	0.78
Simple Carb Foods	1.0	0.99 (0.39, 2.53)	0.65 (0.24, 1.75)	0.39
Protein	1.0	1.10 (0.45, 2.73)	0.61 (0.20, 1.90)	0.43
Fat	1.0	0.27 (0.07, 0.96)*	0.52 (0.20, 1.34)	0.14
	<b>Recurrence<sup>a,b</sup> (17 Events)</b>			
Carbohydrate	1.0	0.78 (0.20, 2.95)	1.52 (0.45, 5.20)	0.46
Total Sugar	1.0	1.10 (0.31, 3.70)	0.60 (0.15, 2.48)	0.44
Added Sugar	1.0	2.10 (0.38, 11.52)	1.37 (0.29, 6.38)	0.68
Natural Sugar	1.0	0.99 (0.24, 3.98)	0.39 (0.08, 1.94)	0.24
Glycemic Index	1.0	1.39 (0.34, 5.67)	2.58 (0.63, 10.56)	0.19
Glycemic Load	1.0	1.81 (0.48, 6.81)	1.82 (0.52, 6.36)	0.36
Starchy Foods	1.0	0.81 (0.17, 3.79)	1.01 (0.20, 5.12)	0.91)
Simple Carb Foods	1.0	1.03 (0.26, 4.12)	1.47 (0.39, 5.49)	0.54
Protein	1.0	1.07 (0.30, 3.85)	1.51 (0.40, 5.79)	0.54
Fat	1.0	0.08 (0.01, 0.69)*	0.67 (0.21, 2.15)	0.97

<sup>a</sup>Adjusted for age, tumor site, cancer stage, smoking, total fruit and vegetable intake, HPV-status, percent weight change and total caloric intake

<sup>b</sup>N=199 participants included in analysis