

SUPPLEMENTARY DATA

Supplementary Table 1. High glycemic index, high carbohydrate menu

High GI High Carb Targets for each meal based on 2200 Calories: Kcals-733, CHO-102.6, Pro-36.6, Fat-19.5 (56/20/24)															
Gram Wt	Peach Yogurt with Trail Mix	Food Number	GI Glucose	GI Bread	Ref Svc	Avail CHO	GL	Kcals	Protein	Fat	CHO	Fiber	GI Bread	GL Bread	
13.00	Cheerios	163	74	106	30	20	15	47.45	1.36	0.77	9.91	1.14	1050.46		
110.00	yogurt, lowfat, aspartame	381	23	33	200	16	4	47.30	4.25	0.20	8.25	0.00	272.25		
28.00	dates	404	103	147	60	44	28	78.96	0.69	0.11	21.01	2.24	3088.47		
25.00	walnuts	None	NV	NV	NV	NV	NV	151.75	6.09	14.15	3.03	1.25	0		
84.00	cream cheese, fat free	None	NV	NV	NV	NV	NV	80.64	12.10	1.14	4.87	0.00	0		
40.50	White bread, Wonder	103	71	101	30	14	10	108.13	3.32	1.46	20.05	0.93	2025.05		
35.00	Cornflakes	168	92	130	30	26	21	127.75	2.30	0.25	30.27	0.88	3935.1		
60.00	egg white	None	NV	NV	NV	NV	NV	30.00	6.31	0.00	0.62	0.00	0		
2.00	Butter	None	NV	NV	NV	NV	NV	14.34	0.02	1.62	0.00	0.00	0		
6.00	Honey	586	55	78	25	18	10	18.24	0.02	0.00	4.94	0.01	385.32		
0.80	Cellulose	None	NV	NV	NV	NV	NV	0.00	0.00	0.00	0.00	0.80	0		
<b>Meal Totals</b>			<b>363</b>	<b>517</b>		<b>120</b>	<b>78</b>	<b>704.56</b>	<b>36.46</b>	<b>19.7</b>	<b>102.95</b>	<b>7.25</b>	<b>104.484</b>	<b>107.6</b>	
Gram Wt	Cheesy Bread	Food Number	GI Glucose	GI Bread	Ref Svc	Avail CHO	GL	Kcals	Protein	Fat	CHO	Fiber	GI	GL	
50.00	Milk, skim	373	32	46	250	13	4	18.43	1.78	0.13	2.51	0.00	0		
51.30	Flour, self rising (Bisquick)	101	70	100	30	14	10	205.2	3.85	7.69	32.06	0.00	3206		
40.00	Cheese, cheddar (RF)	None	NV	NV	NV	NV	NV	128.57	10.00	8.57	1.43	0.00	0		
49.60	Cornflakes, Kellogg's, USA	168	92	130	30	26	21	181.04	3.25	0.35	42.90	1.24	5577		
38.50	Bread, white, Wonder, ground	103	71	101	30	14	10	102.79	3.16	1.39	19.06	0.89	1925.06		
2.00	Butter, salted	None	NV	NV	NV	NV	NV	14.34	0.02	1.62	0.00	0.00	0		
50.00	Water, Tap	None	NV	NV	NV	NV	NV	0	0.00	0.00	0.00	0.00	0		
5.50	Cellulose, Food Grade	None	NV	NV	NV	NV	NV	0	0.00	0.00	0.00	5.50	0		
100.00	Egg white	None	NV	NV	NV	NV	NV	50	10.52	0.00	1.03	0.00	0		
50.00	Yogurt, plain, nonfat	381	24	34	200	14	3	27.89	2.87	0.09	3.84	0.00	130.56		
<b>Meal Totals</b>			<b>265</b>	<b>377</b>		<b>67</b>	<b>45</b>	<b>728.26</b>	<b>35.45</b>	<b>19.84</b>	<b>102.83</b>	<b>7.63</b>	<b>104.134</b>	<b>107.1</b>	
Gram Wt	Potato Bake	Food Number	GI Glucose	GI Bread	Ref Svc	Avail CHO	GL	Kcals	Protein	Fat	CHO	Fiber	GI	GL	
214.00	Potato, Russet, Baked, no skin, mea	603	85	121	150	30	26	199.02	4.19	0.21	46.12	3.21	5580.52		
40.00	Cheese, cheddar	None	NV	NV	NV	NV	NV	161.2	9.96	13.26	0.51	0	0		
20.00	Flour, All Purpose	101	70	100	30	14	10	72.8	2.07	0.2	15.26	0.54	1526		
60.00	Milk, skim	373	32	46	250	13	4	20.95	2.05	0.11	2.91	0	133.86		
100.00	Chicken Broth, Swanson	None	NV	NV	NV	NV	NV	16	2.02	0.57	0.38	0	0		
65.00	Ham, diced, smoked	None	NV	NV	NV	NV	NV	69.64	10.45	2.32	1.16	0	0		
71.00	Bread, white, Wonder, ground	103	71	101	30	14	10	189.57	5.82	2.56	35.15	1.63	3550.15		
20.00	Onions, Frozen, chopped	None	NV	NV	NV	NV	NV	5.8	0.16	0.02	1.36	0.36	0		
2.40	Cellulose, Food Grade	None	NV	NV	NV	NV	NV	0	0	0	0	2.4	0		
<b>Meal Totals</b>			<b>258</b>	<b>368</b>		<b>71</b>	<b>50</b>	<b>734.98</b>	<b>36.72</b>	<b>19.25</b>	<b>102.85</b>	<b>8.14</b>	<b>104.915</b>	<b>107.9</b>	

SUPPLEMENTARY DATA

Supplementary Table 2. High glycemic index, low carbohydrate menu

High GI Low Carb Targets for each meal based on 2200 Calories: Kcals-733, CHO73.3, Pro-36.6, Fat-32.6, (40/20/40)														
Gram Wt	Peach Yogurt with Trail Mix	Food Number	GI Glucose	GI Bread	Ref Svg Size(GM)	Avail CHO	GL	Kcals	Protein	Fat	CHO	Fiber	GI	GL
9.80	Cheerios	163	74	106	30	20	15	35.77	1.03	0.58	7.47	0.86	791.82	
120.00	yogurt, lowfat, aspartame	381	23	33	200	16	4	51.60	4.63	0.22	9.00	0.00	297	
34.70	dates, Sunsweet, California Ch	404	103	147	60	44	28	97.85	0.85	0.14	26.04	2.78	3827.88	
37.00	walnuts	558	22	31	50	13	3	228.66	8.90	21.83	3.67	2.52	113.77	
81.00	cream cheese, fat free	None	NV	NV	NV	NV	NV	77.76	11.67	1.10	4.70	0.00	0	
18.20	White Bread, Wonder	103	71	101	30	14	10	48.59	1.49	0.66	9.01	0.42	910.01	
14.30	Cornflakes, Kellogg's, USA	168	92	130	30	26	21	51.62	1.00	0.11	12.30	0.36	1599	
60.00	egg white	None	NV	NV	NV	NV	NV	31.20	6.54	0.10	0.44	0.00	0	
10.00	Butter, salted, whipped	None	NV	NV	NV	NV	NV	71.68	0.09	8.11	0.01	0.00	0	
1.80	Honey	586	55	78	25	18	10	5.47	0.01	0.00	1.48	0.00	115.44	
0.60	Cellulose, Food Grade	None	NV	NV	NV	NV	NV	0.00	0.00	0.00	0.00	0.60	0	
<b>Meal Totals</b>			<b>385</b>	<b>548</b>		<b>133</b>	<b>81</b>	<b>700.2</b>	<b>36.21</b>	<b>32.85</b>	<b>74.12</b>	<b>7.54</b>	<b>103.27739</b>	<b>76.55</b>
Gram Wt	Cheesy Bread	Food Number	GI Glucose	GI Bread	Ref Svg Size(GM)	Avail CHO	GL	Kcals	Protein	Fat	CHO	Fiber	GI	GL
50.00	Milk, skim	373	32	46	250	13	4	18.43	1.78	0.13	2.51	0.00	0	
45.00	Flour, self rising (Bisquick)	101	70	100	30	14	10	180	3.38	6.75	28.13	0.54	2813	
85.00	Cheese, cheddar (RF)	None	NV	NV	NV	NV	NV	273.21	21.25	18.21	3.04	0.00	0	
32.30	Cornflakes, Kellogg's, USA	168	92	130	30	26	21	117.89	2.12	0.23	27.94	0.81	3632.2	
24.40	Bread, white, Wonder, ground	103	71	101	30	14	10	65.15	2.00	0.88	12.08	0.56	1220.08	
8.00	Butter, salted	Nove	NV	NV	NV	NV	NV	57.36	0.07	6.49	0.00	0.00	0	
50.00	Water, Tap	Nove	NV	NV	NV	NV	NV	0	0.00	0.00	0.00	0.00	0	
55.00	Egg White, Raw	Nove	NV	NV	NV	NV	NV	27.5	5.79	0.00	0.57	0.00	0	
5.70	Cellulose, Food Grade	None	NV	NV	NV	NV	NV	0	0.00	0.00	0.00	5.70	0	
<b>Meal Totals</b>			<b>265</b>	<b>377</b>		<b>67</b>	<b>45</b>	<b>739.54</b>	<b>36.39</b>	<b>32.69</b>	<b>74.27</b>	<b>7.61</b>	<b>103.20829</b>	<b>76.65</b>
Gram Wt	Potato Bake	Food Number	GI Glucose	GI Bread	Ref Svg Size(GM)	Avail CHO	GL	Kcals	Protein	Fat	CHO	Fiber	GI	GL
185.00	Potato, Russet, Baked, no skin	603	85	121	150	30	26	172.05	3.63	0.19	39.87	2.77	4824.27	
55.00	Cheese, cheddar	None	NV	NV	NV	NV	NV	221.65	13.69	18.23	0.70	0.00	0	
20.00	Flour, All Purpose	101	70	100	30	14	10	72.80	2.07	0.20	15.26	0.54	1526	
60.00	Milk, skim	373	32	46	250	13	4	20.95	2.05	0.11	2.91	0.00	133.86	
100.00	Chicken Broth, Swanson	None	NV	NV	NV	NV	NV	16.00	2.02	0.57	0.38	0.00	0	
69.00	Ham, diced, smoked	None	NV	NV	NV	NV	NV	73.93	11.09	2.46	1.23	0.00	0	
24.00	Bread, white, Wonder, ground	103	71	101	30	14	10	64.08	1.97	0.86	11.88	0.55	1199.88	
10.00	Oil, Olive	None	NV	NV	NV	NV	NV	88.40	0.00	10.00	0.00	0.00	0	
20.00	Onions, Frozen, chopped	None	NV	NV	NV	NV	NV	5.80	0.16	0.02	1.36	0.36	0	
3.00	Cellulose, Food Grade	None	NV	NV	NV	NV	NV	0.00	0.00	0.00	0.00	3.00	0	
<b>Meal Totals</b>			<b>258</b>	<b>368</b>		<b>71</b>	<b>50</b>	<b>735.66</b>	<b>36.68</b>	<b>32.64</b>	<b>73.59</b>	<b>7.22</b>	<b>104.4165</b>	<b>76.84</b>

SUPPLEMENTARY DATA

Supplementary Table 3. Low glycemic index, high carbohydrate menu

Low GI High Carb Targets for each meal based on 2200 Calories: Kcals-733, CHO-102.6, Pro-36.6, Fat-19.5 (56/20/24)														GI	GL	GI	GL
Gram Wt	Peach Yogurt with Trail Mi	Food Number	GI Glucose	GI Bread	Ref Svr	Avail CHO	GL	Kcals	Protein	Fat	CHO	Fiber	GI Glucos	GL Gluco	GI Bread	GL Bread	
31.20	Cheerios	163	74	106	30	20	15	115.13	3.43	1.87	23.09	2.81	1708.7		2447.5		
170.00	yogurt, lowfat, aspartame	381	23	33	200	16	4	73.10	6.56	0.31	12.75	0.00	293.25		420.75		
54.00	peaches, canned, juice packe	419	38	54	120	11	4	23.76	0.34	0.02	6.25	0.70	237.5		337.5		
32.00	cashews	558	22	31	50	13	3	183.68	4.90	14.83	10.46	0.96	230.12		324.26		
87.00	cream cheese, fat free	None	NV	NV	NV	NV	NV	83.52	12.54	1.18	5.05	0.00	0		0		
20.00	pumpnickel bread	84	50	71	30	12	6	55.00	1.90	0.68	10.44	1.42	522		741.24		
25.00	Golden Grahams	180	71	102	30	25	18	96.25	1.33	0.90	21.41	0.77	1520.1		2183.8		
50.00	egg white	None	NV	NV	NV	NV	NV	25.00	5.26	0.00	0.51	0.00	0		0		
13.00	Fructose	580	19.2	27	10	10	2	48.46	0.00	0.00	12.92	0.00	248.06		348.84		
1.00	Cellulose, Food Grade	None	NV	NV	NV	NV	NV	0.00	0.00	0.00	0.00	1.00	0		0		
<b>Meal Totals</b>			<b>278</b>	<b>397</b>		<b>97</b>	<b>50</b>	<b>703.9</b>	<b>36.26</b>	<b>19.79</b>	<b>102.88</b>	<b>7.66</b>	<b>46.265</b>	<b>47.597</b>	<b>66.135</b>	<b>68.04</b>	
Gram Wt	Cheesy Bread	Food Number	GI Glucose	GI Bread	Ref Svr	Avail CHO	GL	Kcals	Protein	Fat	CHO	Fiber	GI Glucos	GL Gluco	GI	GL	
50.00	Milk, skim	373	32	46	250	12	3	18.50	1.78	0.13	2.51	0.00	80.32		115.46		
61.00	Flour, self rising (Bisquick)	101	70	100	20	14	10	244.00	4.57	9.15	38.13	0.00	2669.1		3813		
53.00	Bread, Pumpnickel, mean 6	84	50	71	30	12	6	132.50	4.61	1.77	25.17	3.44	1258.5		1787.1		
40.00	Cheese, cheddar (RF)	None	NV	NV	NV	NV	NV	128.57	10.00	8.57	1.43	0.00	0		0		
26.00	Barley, pearled, raw	256	25	36	150	42	11	91.52	2.58	0.30	20.21	4.06	505.25		727.56		
70.00	Yogurt, plain, nonfat	381	24	34	200	14	3	39.04	4.01	0.13	5.38	0.00	129.12		182.92		
50.00	Water, Tap	None	NV	NV	NV	NV	NV	0.00	0.00	0.00	0.00	0.00	0		0		
9.00	Fructose	580	19.2	27	10	10	2	32.31	0.00	0.00	8.62	0.06	165.5		232.74		
85.00	Egg white	Nove	NV	NV	NV	NV	NV	42.50	8.94	0.00	0.88	0.00	0		0		
<b>Meal Totals</b>			<b>201</b>	<b>287</b>		<b>94</b>	<b>33</b>	<b>728.94</b>	<b>36.49</b>	<b>20.05</b>	<b>102.33</b>	<b>7.56</b>	<b>46.983</b>	<b>48.078</b>	<b>67.026</b>	<b>68.588</b>	
Gram Wt	Sweet Potato Bake	Food Number	GI Glucose	GI Bread	Ref Svr	Avail CHO	GL	Kcals	Protein	Fat	CHO	Fiber	GI Glucos	GL Gluco	GI	GL	
60.00	Cheese, mozzarella, part skim	None	NV	NV	NV	NV	NV	152.50	14.56	9.55	1.66	0.00	0		0		
80.00	Chicken Broth, Home Taste	None	NV	NV	NV	NV	NV	12.80	1.62	0.46	0.30	0.00	0		0		
31.00	Flour, All Purpose	101	70	100	20	14	10	112.84	3.20	0.30	23.66	0.84	1656.2		2366		
60.00	Milk, skim	373	32	46	250	12	3	20.95	2.05	0.11	2.91	0.00	93.12		133.86		
127.00	Sweet Potato, cooked	613	44	63	150	25	11	147.32	1.89	0.18	35.05	4.95	1542.2		2208.2		
60.00	Ham, diced, smoked	None	NV	NV	NV	NV	NV	64.29	9.64	2.14	1.07	0.00	0		0		
40.00	Bread, Pumpnickel, mean 6	84	50	71	30	12	6	100.00	3.48	1.24	19.00	2.60	950		1349		
10.00	Onion, frozen	None	NV	0	NV	NV	NV	2.90	0.08	0.01	0.68	0.18	0		0		
80.00	Orange Juice	431	46	74	250	34	15	35.20	0.64	0.22	8.05	0.16	370.3		595.7		
10.00	Fructose	580	19.2	27	10	10	2	39.23	0.00	0.00	10.46	0.00	200.83		282.42		
5.00	Olive Oil	None	NV	NV	NV	NV	NV	44.20	0.00	5.00	0.00	0.00	0		0		
<b>Meal Totals</b>			<b>196</b>	<b>381</b>		<b>63</b>	<b>30</b>	<b>732.23</b>	<b>37.16</b>	<b>19.21</b>	<b>102.84</b>	<b>8.73</b>	<b>46.797</b>	<b>48.127</b>	<b>67.436</b>	<b>69.351</b>	

SUPPLEMENTARY DATA

Supplementary Table 4. Low glycemic index, low carbohydrate menu

Low GI Low Carb Targets for each meal based on 2200 Calories: Kcals-733, CHO73.3, Pro-36.6, Fat-32.6, (40/20/40)																	
Gram Wt	Peach Yogurt with Trail Mix	Food Number	GI Glucose	GI Bread	Ref Svc	Avail CHO	GL	Kcals	Protein	Fat	CHO	Fiber	GI Glucose	GL Glucose	GI	GL	
17.00	Cheerios	163	74	106	30	20	15	62.05	1.68	1.00	12.95	1.50	958.3		1372.7		
150.00	yogurt, lowfat, aspartame	381	23	33	200	16	4	64.50	5.17	0.27	11.25	0.00	258.75		371.25		
32.00	peaches, canned, juice packed	419	38	54	120	11	4	7.68	0.29	0.02	1.96	0.42	74.48		105.84		
42.00	cashews	558	22	31	50	13	3	244.02	4.90	20.06	12.67	1.39	278.74		392.77		
65.00	cream cheese, fat free	None	NV	NV	NV	NV	NV	62.40	12.10	0.88	3.77	0.00	0		0		
29.50	pumpnickel bread	84	50	71	30	12	6	73.75	2.57	0.91	14.01	1.92	700.5		994.71		
20.00	Golden Grahams	180	71	102	30	25	18	77.00	1.06	0.72	17.13	0.62	1216.2		1747.26		
80.00	egg white	None	NV	NV	NV	NV	NV	40.00	8.42	0.00	0.82	0.00	0		0		
11.00	Butter, salted, whipped	None	NV	NV	NV	NV	NV	78.85	0.14	8.92	0.01	0.00	0		0		
1.40	Cellulose, Food Grade	None	NV	NV	NV	NV	NV	0.00	0.00	0.00	0.00	1.30	0		0		
<b>Meal Totals</b>			<b>278</b>	<b>397</b>		<b>97</b>	<b>50</b>	<b>710.25</b>	<b>36.33</b>	<b>32.78</b>	<b>74.57</b>	<b>7.15</b>	<b>46.761</b>	<b>34.87</b>	<b>66.84364</b>	<b>49.85</b>	
Gram Wt	Cheesy Bread	Food Number	GI Glucose	GI Bread	Ref Svc	Avail CHO	GL	Kcals	Protein	Fat	CHO	Fiber	GI Glucose	GL Glucose	GI	GL	
50.00	Milk, skim	373	32	46	250	13	4	18.43	1.78	0.13	2.51	0.00	80.32		115.46		
42.00	Flour, self rising (Bisquick)	101	70	100	30	14	10	168.00	3.15	6.30	26.25	0.00	1837.5		2625		
40.00	Bread, Pumpnickel, mean 6	84	50	71	30	12	6	100.00	3.48	1.24	19.00	2.60	950		1349		
80.00	Cheese, cheddar (RF)	None	NV	NV	NV	NV	NV	257.14	20.00	17.14	2.86	0.00	0		0		
23.50	Barley, pearled, raw	256	25	36	150	42	11	82.72	2.33	0.27	18.26	3.67	456.5		657.36		
30.00	Yogurt, plain	381	24	34	200	14	3	16.73	1.72	0.05	2.30	0.00	55.2		78.2		
9.00	Butter, salted	None	NV	NV	NV	NV	NV	64.53	0.08	7.30	0.01	0.00	0		0		
50.00	Water	None	NV	NV	NV	NV	NV	0.00	0.00	0.00	0.00	0.00	0		0		
2.00	Fructose	580	19.2	27	10	10	2	9.23	0.00	0.00	2.46	0.00	47.232		66.42		
40.00	Egg white	None	NV	NV	NV	NV	NV	20.00	4.21	0.00	0.41	0.00	0		0		
0.70	Cellulose, Food Grade	None	NV	NV	NV	NV	NV	0.00	0.00	0.00	0.00	0.70	0		0		
<b>Meal Totals</b>			<b>201</b>	<b>287</b>		<b>95</b>	<b>34</b>	<b>736.78</b>	<b>36.75</b>	<b>32.43</b>	<b>74.06</b>	<b>6.97</b>	<b>46.27</b>	<b>34.268</b>	<b>66.04699</b>	<b>48.91</b>	
Gram Wt	Sweet Potato Bake	Food Number	GI Glucose	GI Bread	Ref Svc	Avail CHO	GL	Kcals	Protein	Fat	CHO	Fiber	GI Glucose	GL Glucose	GI	GL	
60.00	Cheese, mozzarella, part skim	None	NV	NV	NV	NV	NV	152.55	14.56	9.55	1.66	0.00	0		0		
100.00	Chicken Broth, Home Taste	None	NV	NV	NV	NV	NV	16.00	2.02	0.57	0.38	0.00	0		0		
20.00	Flour, All Purpose	101	70	100	20	14	10	72.80	2.07	0.02	15.26	0.54	1068.2		1526		
60.00	Milk, whole, mean 5 studies	369	27	38	250	12	3	36.00	1.93	1.95	2.71	0.00	73.17		102.98		
140.00	Sweet Potato, cooked	613	44	63	150	25	11	162.40	2.09	0.20	38.61	5.46	1698.8		2432.43		
70.00	Ham, diced, smoked	None	NV	NV	NV	NV	NV	75.00	11.25	2.50	1.25	0.00	0		0		
28.00	Bread, Pumpnickel, mean 6	84	50	71	30	12	6	70.00	2.44	0.87	13.30	1.82	665		944.3		
10.00	Onion, frozen	None	NV	0	NV	NV	NV	2.90	0.08	0.01	0.68	0.18	0		0		
16.50	Oil, olive	None	NV	NV	NV	NV	NV	145.86	0.00	16.50	0.00	0.00	0		0		
<b>Meal Totals</b>			<b>191</b>	<b>272</b>		<b>63</b>	<b>30</b>	<b>733.51</b>	<b>36.44</b>	<b>32.17</b>	<b>73.85</b>	<b>8.00</b>	<b>47.464</b>	<b>35.052</b>	<b>67.78213</b>	<b>50.06</b>	

SUPPLEMENTARY DATA

**Supplementary Table 5.** Baseline characteristics of study participants (n=26)

Variable	Mean ± SD
Height (cm)	169.0 ± 8.7
Weight (kg)	83.4 ± 11.7
BMI (kg/m <sup>2</sup> )	29.1 ± 2.8
Systolic BP (mm Hg)	115.5 ± 10.8
Diastolic BP (mm Hg)	76.5 ± 9.0
Age (yrs)	43.5 ± 14.7
Fasting glucose (mg/dL)	90.9 ± 10.9

**Supplementary Figure 1.** High glycemic index, high carbohydrate menu.

