

**Table S1.** Example diets for active 30-year-old female.

30 year old active female – 2,200 kcal		
Very Low Carbohydrate Diet (20-50 g/d)  ≈ 37 g Net	Low Carbohydrate Diet[< 130 g/d or < 26% of energy (143 g/d)]  ≈ 116 g Net	ADA Guidelines [45-60% of energy (248-330 g/d)]  ≈ 270 g Net
<p>Breakfast:</p> <ul style="list-style-type: none"> <li>• ½ avocado</li> <li>• 2 lg scrambled eggs</li> <li>• 1 t butter</li> <li>• Coffee or tea with sweetener</li> </ul> <p>AM Snack:</p> <ul style="list-style-type: none"> <li>• 1/3 C mixed nuts</li> </ul> <p>Lunch:</p> <ul style="list-style-type: none"> <li>• Spinach Salad with: 2 C spinach, 2 T onion, 1/3 english cucumber, ½ C cheddar cheese, 2 T oil and vinegar salad dressing</li> <li>• 3 oz sirloin steak</li> <li>• 4 spears cooked asparagus</li> <li>• 1 t butter</li> </ul> <p>PM Snack:</p> <ul style="list-style-type: none"> <li>• 2 med stalks celery</li> <li>• 2 T cream cheese</li> </ul> <p>Dinner:</p> <ul style="list-style-type: none"> <li>• Spring mix salad with:</li> <li>• 2 C spring mix, 1/3 english cucumber, ¼ C olives, 2 slices crumbled bacon, 1 T sunflower seeds, 2 T parmesan cheese, 2 T oil and vinegar salad dressing</li> <li>• 1 C cauliflower</li> <li>• 2 T grated parmesan cheese (add to salad or cauliflower)</li> <li>• 1 t butter</li> <li>• 4 oz chicken breast</li> </ul>	<p>Breakfast:</p> <ul style="list-style-type: none"> <li>• 3/4 C cooked oatmeal (1/3 C dry rolled oats)</li> <li>• 1 cup 2% milk</li> <li>• ¼ C mixed nuts</li> <li>• Coffee or tea with sweetener</li> </ul> <p>AM Snack:</p> <ul style="list-style-type: none"> <li>• 1/2 C plain Greek yogurt (not low fat)</li> <li>• ½ tsp honey</li> <li>• 1 tbsp ground flaxseeds</li> </ul> <p>Lunch</p> <ul style="list-style-type: none"> <li>• Spinach salad with:</li> <li>• 2 C spinach, ¼ english cucumber, 5 cherry tomatoes, 1 small carrot (14 cm), ½ avocado, 2 T oil and vinegar salad dressing</li> <li>• 1/3 C cooked quinoa</li> <li>• 4 oz grilled salmon</li> <li>• 1 C strawberries</li> </ul> <p>PM Snack:</p> <ul style="list-style-type: none"> <li>• 2 med stalks celery</li> <li>• 2 T peanut butter</li> </ul> <p>Dinner</p> <ul style="list-style-type: none"> <li>• Spring mix salad with:</li> <li>• 2 C spring mix, ¼ red pepper, 1 T sunflower seeds, 1 T grated parmesan cheese, 2 T oil and vinegar salad dressing</li> <li>• 1/3 C sweet potato</li> <li>• 2 spears cooked broccoli</li> </ul>	<p>Breakfast:</p> <ul style="list-style-type: none"> <li>• 1 C raisin bran cereal</li> <li>• 1 C skim milk</li> <li>• ½ C strawberries</li> <li>• Coffee or tea with sweetener</li> </ul> <p>AM Snack:</p> <ul style="list-style-type: none"> <li>• 2 T granola</li> <li>• 175 g fat free (w sucralose) yogurt</li> </ul> <p>Lunch:</p> <ul style="list-style-type: none"> <li>• Spring Salad with:</li> <li>• 1 C spring mix, ½ C mushrooms, ½ small red pepper, 1 T oil and vinegar salad dressing</li> <li>• ½ can flaked tuna</li> <li>• 1 cup cooked quinoa</li> <li>• 1 med apple</li> <li>• 2 oatmeal cookies</li> </ul> <p>PM Snack:</p> <ul style="list-style-type: none"> <li>• ½ C blueberries</li> <li>• 1 chocolate chip cookie</li> </ul> <p>Dinner:</p> <ul style="list-style-type: none"> <li>• 1 C pasta with ½ C meat sauce</li> <li>• 2 C romaine lettuce</li> <li>• 2 T croutons</li> <li>• 1 T Caesar salad dressing</li> <li>• 1 C skim milk</li> <li>• ½ C frozen yogurt</li> </ul>

<p>Evening snack:</p> <ul style="list-style-type: none"> <li>• ½ C creamed cottage cheese (4.5% MF)</li> <li>• 3 slices dry salami</li> </ul>	<ul style="list-style-type: none"> <li>• 2 t butter</li> <li>• 2 T grated parmesan cheese (add to salad or broccoli)</li> <li>• 4 oz chicken breast</li> <li>• 1 medium apple</li> </ul>	<p>Evening Snack:</p> <ul style="list-style-type: none"> <li>• 1 slice whole grain toast</li> <li>• 1 T peanut butter</li> <li>• ½ banana</li> </ul>
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**Table S2.** Example diets for active 30-year-old male.

30 year old active male ≈ 2,500 kcal		
<p>Very Low Carbohydrate Diet (20-50 g/d)</p> <p>≈ 39 g net carb</p>	<p>Low Carbohydrate Diet [&lt; 130 g/d or &lt; 26% of energy (143 g/d)]</p> <p>≈ 123 g net carb</p>	<p>ADA Guidelines [45-60% of energy (248-330 g/d)]</p> <p>≈ 275 g net carb</p>
<p>Breakfast:</p> <ul style="list-style-type: none"> <li>• 1/2 avocado</li> <li>• 2 lg scrambled eggs</li> <li>• 1 t butter</li> <li>• 2 oz smoked salmon</li> <li>• Coffee or tea with sweetener</li> </ul> <p>AM Snack:</p> <ul style="list-style-type: none"> <li>• 1/2 C mixed nuts</li> </ul> <p>Lunch:</p> <ul style="list-style-type: none"> <li>• Spinach Salad wi</li> <li>• 2 C spinach, ½ avocado, 1/3 english cucumber, 2 T diced onion, 2 T sunflower seeds, ½ C cheddar cheese, 2 T oil and vinegar salad dressing</li> <li>• 3 oz top sirloin steak</li> <li>• 4 spears asparagus</li> <li>• 1 t butter</li> </ul> <p>PM Snack:</p> <ul style="list-style-type: none"> <li>• 2 med stalks celery</li> <li>• 2 T cream cheese</li> </ul> <p>Dinner:</p> <ul style="list-style-type: none"> <li>• Spring Salad with:</li> </ul>	<p>Breakfast:</p> <ul style="list-style-type: none"> <li>• ¾ C cooked oatmeal (1/3 C dry oats)</li> <li>• 1 C 2% MF milk</li> <li>• ½ C mixed nuts</li> <li>• Coffee or tea with sweetener</li> </ul> <p>AM Snack:</p> <ul style="list-style-type: none"> <li>• ½ C plain Greek yogurt (not low fat)</li> <li>• ½ tsp honey</li> <li>• 1 T ground flaxseeds</li> </ul> <p>Lunch:</p> <ul style="list-style-type: none"> <li>• Spinach Salad with: 2 C spinach, ¼ English cucumber, 1 small carrot (14 cm), 5 cherry tomatoes, ½ avocado, 2 T oil and vinegar salad dressing</li> <li>• 1/3 C cooked quinoa</li> <li>• 4 oz grilled salmon</li> <li>• 1 C strawberries</li> </ul> <p>PM Snack:</p> <ul style="list-style-type: none"> <li>• 2 med stalks celery</li> <li>• 2 T peanut butter</li> </ul> <p>Dinner:</p> <p>Spring Salad with:</p>	<p>Breakfast:</p> <ul style="list-style-type: none"> <li>• 1 ½ C raisin bran</li> <li>• 1 C skim milk</li> <li>• ½ C strawberries</li> <li>• Coffee or tea with sweetener</li> </ul> <p>AM Snack:</p> <ul style="list-style-type: none"> <li>• ¼ C almonds</li> <li>• 2 T granola</li> <li>• 175 g fat free (w sucralose) yogurt</li> </ul> <p>Lunch:</p> <ul style="list-style-type: none"> <li>• Spring Salad with: 1 C spring mix, ½ small red pepper, ½ C mushrooms, ½ avocado, 2 T oil and vinegar salad dressing</li> <li>• 1 C cooked quinoa</li> <li>• ½ can flaked tuna</li> <li>• 1 med apple</li> <li>• 2 oatmeal cookies</li> </ul> <p>Dinner:</p> <ul style="list-style-type: none"> <li>• 1 C cooked pasta with ½ C meat sauce</li> <li>• 2 C romaine lettuce, ¼ C croutons, 1 T Caesar salad</li> </ul>

<ul style="list-style-type: none"> <li>• 2 C spring mix, ¼ C olives, 2 slices crumbled bacon, 1 T sunflower seeds, 2 T oil and vinegar salad dressing</li> <li>• 1 C cauliflower</li> <li>• 2 T grated parmesan cheese (add to salad or cauliflower)</li> <li>• 1 t butter</li> <li>• 4 oz chicken breast</li> </ul> <p>Evening Snack:</p> <ul style="list-style-type: none"> <li>• 3 slices hard salami</li> </ul>	<ul style="list-style-type: none"> <li>• 2 C spring mix, ¼ red pepper diced, 2 T sunflower seeds, 2 T oil and vinegar salad dressing</li> <li>• 1/3 C sweet potato</li> <li>• 2 spears steamed broccoli</li> <li>• 2 t butter</li> <li>• 2 T parmesan cheese (add to salad or broccoli)</li> </ul> <p>4 oz chicken breast</p>	<p>dressing</p> <ul style="list-style-type: none"> <li>• 1 C skim milk</li> <li>• ½ C frozen yogurt</li> </ul> <p>Evening Snack:</p> <ul style="list-style-type: none"> <li>• 1 slice whole grain toast</li> <li>• 1 T peanut butter</li> <li>• ½ banana</li> </ul>
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<sup>†</sup>Harris-Benedict Equation for Estimating Energy Requirement:

30 year old active male:  $66.5 + 13.8 (\text{weight}) + 5 (\text{height}) - 6.8 (\text{age})$

$= 66.5 + 13.8(70) + 5(174) - 6.8(30)$

$= 66.5 + 966 + 870 - 204$

$= 1698.5 \times \text{Activity Factor of } 1.5 = 2,550 \text{ kcal}$

30 year old active female:  $655 + 9.6 (\text{weight}) + 1.8 (\text{height}) - 4.7 (\text{age})$

$= 655 + 9.6(60) + 1.8(161) - 4.7 (30)$

$= 655 + 576 + 290 - 141$

$= 1480 \times \text{Activity Factor of } 1.5 = 2,220 \text{ kcal}$

Men – average height in Canada = 174 cm

Women average height in Canada = 161cm

Assuming BMI of 23, average weight of male = 70 kg, average weight of female = 60 kg

T = tablespoon; t = teaspoon; C = cup