There is no doubt about it, exercise is beneficial for nearly everyone. The benefits of exercise are multiple and well known.

Yet, for the athlete with type 1 diabetes, exercise is a double edged sword! Yes the athlete wants to be fit, and meet their sport goals, but at the same time this very drive to be their best can precipitate episodes of hypoglycemia, hyperglycemia and dehydration.

What a juggling act, when one considers the number of additional stresses in an athlete’s life and then to add type 1 diabetes.

If the above do occur, the athlete will not be performing at their best, or worst case scenario, will be forced to drop out altogether.

Athletes need to adjust insulin, food, fluids and do multiple testing. Blood sugar testing needs to be done before, during and after competition, before and after meals, as well as the occasional nocturnal test.

Nutrition plays an integral part in athletic training, and is just as important as hard work and mental readiness, yet many athletes do not pay attention to what they eat, when they eat or how much they eat. Basic nutrition guidelines for all athletes are the same – everyone requires carbohydrates, fats, proteins and fluids in the right proportion for optimal nutrition, athletic performance and recovery.

The percentage of calories coming from each of the macronutrients (carbohydrate, fat, protein) depends on the sport itself – is it endurance or strength? It depends on the intensity, duration and frequency of training,
as well as the athlete’s fitness level, nutritional status, age and gender. Additionally the need for weight gain, loss or maintenance needs to be considered when assessing calories. For the athlete consuming enough calories from each of the macronutrients, the micronutrient (vitamins and minerals) will usually be satisfactory. However, for the athlete at risk for lower caloric intake, micronutrients may be lacking. In this case, the dietary intake requires further assessment. Low energy intake, over an extended period of time can result in poor macronutrients, causing poor athletic performance and increased recovery time.

After an intense training session or competition, it may take up to 48 hours to replenish liver and muscle glycogen. This delay may precipitate “late onset post exercise hypoglycemia.

A few years ago, the American Dietetic Association (ADA) and the American College of Sports Medicine (ACSM) revised the existing guidelines for athletes with type 1 diabetes. New guidelines discuss metabolic control, avoidance of hypoglycemia, hyperglycemia, dehydration, food intake and blood glucose monitoring. The guidelines are as follows:

1. Metabolic Control Before Exercise
   • Avoid exercise, if fasting blood glucose > 14 mmol, ketones present.
   • Use caution if blood sugars > 17 mmol, no ketones present
   • Ingest carbohydrate if blood sugars < 5.5 mmol

2. Blood Glucose Monitoring Before and After Exercise
   • Identify when changes in insulin and food intake are necessary.
   • Learn the glycemic response to different exercise and conditions.

3. Food intake
   • Consume carbohydrates as needed to avoid hypoglycemia.
   • Keep carbohydrate based foods readily available during and after exercise.

These new Guidelines no longer recommend specific amount of carbohydrate based on blood sugars. Nor are they based on intensity and duration of sport. It is up to the athlete to test blood sugars, adjust insulin, ingest carbohydrate, fats and protein to provide enough energy to keep blood sugars stable during training and competition. The athlete needs to note emerging blood sugar patterns and base insulin and food adjustments on these patterns. It should be noted that energy requirements vary depending on age,
All GLUCERNA products contain a unique blend of slowly digested carbohydrates to help make blood sugar control easier*.

*When compared to standard snack bar and nutritional liquid.
gender, body size, fat free mass and exercise intensity, frequency, duration and type.

Using the above, in conjunction with detailed food histories, a Sports Dietitian, Diabetes Educator can assess the nutritional requirements for the athlete. They will recommend the best fluids and fuels for the athlete to try pre-event, during and post even strategies.

Fluids remain a vital component of nutrition for the athlete. It becomes more important for the athlete with type 1 diabetes as they are more prone to dehydration. Fluids need to be consumed according to a schedule, not left to chance. The same fluids should be used in training and competition. The amounts of fluids required will vary depending on temperature, humidity, body size, intensity, duration and fitness of the athlete. As little as 1% loss body weight may affect performance and recovery.

The athlete needs to know their weight loss during an event to accurately replace lost fluids which should be replaced at 1 ½ times weight loss. It can take up to twenty four hours to adequately rehydrate.

Frequent blood sugar testing cannot be over emphasized – knowing how to manage these results are key to success in sports for the athlete with type 1 diabetes. It’s essential that blood sugars be tightly controlled to offset chances of hypoglycemia, hyperglycemia and dehydration. Athletes should consider a team approach to manage both diabetes and athletic performance. Team players could include, diabetes specialist, sports physician, coach and sports dietitian. The team can be there to assist the athlete in the good and bad times.

Along with the team approach, the athlete may find it very useful to start a training diary. This could include, among other information, dates, time of event, training, competition results, blood sugars, fuel/fluid intake, insulin adjustment and environmental conditions.

In conclusion, athletes with type 1 diabetes can participate in any sport, they need to be vigilant and continue to test blood sugars frequently so fuel, fluids and insulin adjustments can be made to keep them in the game!

Jacquie Bird is an RD, CDE and has been involved in diabetes education for the past 15 years. She holds two part time positions in Summerland and Penticton, is also the RD for the Healthy Heart Program at Penticton Regional Hospital and teaches the Canadian Diabetes Program, “Cooking For Your Life”.

Over the years Jacquie has had an ongoing interest in sports nutrition and earlier this year took a Sports Nutrition Course at the Institute of Sport in Canberra, Australia. She has now started her own private practice “nutrition 4 sport”.

Jacquie practices what she preaches by playing a lot of tennis, biking in the Kettle Valley Railway and running two to three times a week. You can reach her at Jacquie.Bird@interiorhealth.ca.
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4-6 ice cubes

Combine yogurt, milk and Equal in a blender or food processor. With machine running, add berries, a few at a time, and process until smooth. Add ice cubes one at a time, blending until slushy. Pour into frosty glasses. Makes 4 (6 oz.) servings.

Nutrition information per serving – 82 calories, 4 g protein, 17 g carbohydrates, 0 g fat, 1 mg cholesterol, 58 mg sodium.

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EQUAL
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Oral health and diabetes
As a diabetes educator, you may want to remind your patients with diabetes about the importance of their oral health in relation to their overall health. Research shows there may be a link between oral disease and diabetes confirming that people with diabetes need to pay special attention to their oral health.

How does oral health relate to diabetes?
Complications caused by diabetes can actually affect the oral health of a person with diabetes.
· Periodontal (gum) disease tends to develop more easily and more severely due to poor blood circulation caused by diabetes.
· Dry mouth caused by diabetes increases the risk of cavities and fungal infections.
· Oral infections caused by periodontal disease raises blood sugar levels and affect insulin requirements.

What are the warning signs of periodontal disease?
Also known as gum disease, periodontal disease often develops slowly and without causing any pain. This disease is the leading cause of tooth loss in adults. Here are some warning signs to share with your patients:
· Constant bad breath or bad taste in your mouth
· Red, swollen or tender gums
· Bleeding gums when you brush or floss
· Gums that have pulled away from the tooth
· Pus at the gums when you press them
· Teeth that are painful or loose

How can people with diabetes prevent periodontal disease?
As part of a healthy lifestyle and to reduce the risk of periodontal disease, here are some oral health care tips prepared by the Canadian Dental Association to share with your patients.
· Brush properly with a soft toothbrush and floss everyday. Clean dentures daily.
· Check your gums regularly for warning signs of periodontal disease and report any of these signs to your dentist.
· To keep your mouth moist, chew sugarless gum and drink plenty of water.
· Don’t smoke. Tobacco not only affects blood circulation, but is also a major cause of tooth loss through periodontal disease and may lead to serious problems like oral cancer.
· Have your teeth and gums examined regularly by your dentist to detect and prevent periodontal disease. Only your dentist has the training, skills and expertise to identify and address your oral health care needs.

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1 based on three independent clinical studies
2 see coupon insert included in the Canadian Diabetes Care Professional Pack for more information on gum disease.
†Gingivitis is a minor inflammation and bleeding of the gums
†† Colgate-Palmolive independent research study on file
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J.M. Smucker’s delicious No Sugar Added Fruit Spreads are ideal for people who follow a sugar-reduced or carbohydrate-reduced diet.

All Smucker’s No Sugar Added Fruit Spreads are naturally sweetened with concentrated white grape juice and Sucralose. “The advantage of Sucralose over artificial sweeteners is that it delivers a similar taste to that of sugar,” Marketing Manager Leslie Gage points out. “So our No Sugar Added Fruit Spreads match the wholesome fruit flavour of our regular jams.”

Sucralose has other advantages for people with diabetes. The body does not recognize it as a sugar or carbohydrate, so it does not influence carbohydrate metabolism, insulin secretion, fructose absorption, glucose absorption, glucose utilization nor short- or long-term blood glucose control.

Smucker’s No Sugar Added Fruit Spreads are available in Strawberry, Orange, Blueberry, Raspberry and Apricot. They contain no artificial flavours. For anyone who is sacrificing sugar, it’s all sweet news indeed.

**Nutritional information per 15 mL serving (1 tbsp)**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Energy</td>
<td>20 Cal / 90 kJ</td>
<td></td>
</tr>
<tr>
<td>Protein</td>
<td>0 g</td>
<td></td>
</tr>
<tr>
<td>Fat</td>
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<td></td>
</tr>
<tr>
<td>Carbohydrate</td>
<td>5.4 g</td>
<td></td>
</tr>
<tr>
<td>Sucralose</td>
<td>8 mg</td>
<td></td>
</tr>
</tbody>
</table>

Canadian Diabetes Association Food Choice Value

15 mL serving (1 tbsp) = 1/2

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Diabetes and Nutrition: The role of carbohydrates and the glycemic index

By Serena Beber, RD, CDE

There are more than two million Canadians diagnosed with diabetes and, according to the Canadian Diabetes Association (CDA), there are many more who don’t know they have the disease.

Diabetes is a condition that requires people to provide their own care and self management, often in a home or community setting. To do this they require support.

In fact, the CDA identified accurate and detailed support and education from a trained and knowledgeable health professional as one of the key critical components of successful diabetes management.

Nutrition therapy is a vital aspect of diabetes management, and one that the family physician should be familiar with in order to provide the proper care for his or her diabetic patients.

Appropriate dietary choices can help lower and stabilize blood sugars, helping to minimize the highs and lows associated with many of the side effects and complications of diabetes. Canada’s Guidelines for Healthy Eating provides a helpful roadmap towards effective nutritional management of diabetes:

* Enjoy a variety of foods.
* Emphasize cereals, breads and other whole grain products, vegetables and fruit.

* Choose lower-fat dairy products, leaner meats and foods prepared with little or no fat.
* Achieve and maintain a healthy body weight by enjoying regular physical activity and healthy eating.
* Limit salt, alcohol and caffeine.

**Dietary components affecting blood sugars**

Dietary carbohydrates are a major part of our diet and should provide 50-60% of energy requirements. Carbohydrates are chains of sugar molecules. Carbohydrates include simple sugars, starches and dietary fibre. Simple sugars are monosaccharides or disaccharides (chains of one or two sugar molecules). Monosaccharides found in our food include glucose, fructose and galactose. Starches are often referred to as complex carbohydrates. Starches are long chains of sugar molecules. When digested, they are broken down into monosaccharides.

Monosaccharides are absorbed, enter the blood stream and are transported...
to the liver to become glucose. Glucose is either used as energy or may be stored for later use. Both the amount and the source of carbohydrates affect blood glucose levels. There are several considerations when determining how a particular food will affect the blood sugars. How quickly carbohydrate is digested and affects your blood glucose is different for every food. This is where the glycemic index comes into play.

The glycemic index

The glycemic index (GI) is a method of measuring the relative amount that a carbohydrate-containing food causes the blood sugar to increase. Some carbohydrates are broken down quickly and cause quick rises in blood glucose. These foods are considered to have a high glycemic index. Foods with a low GI cause the blood sugar to rise more slowly.

When a high GI food is eaten, the pancreas releases a surge of insulin, resulting in a decrease in blood glucose. The insulin spike can sometimes cause the blood glucose to drop too much. Foods with a lower glycemic index cause the blood sugar to rise slowly, resulting in a more appropriate release of insulin from the pancreas. This result is a more desirable steady raising and lowering of blood glucose levels.

GI food lists may use either white bread or glucose as the standard for comparison. Foods are compared against the standard based on the relative rise in blood sugar that a food with the same amount of carbohydrate (50 grams) would cause. For example, when white bread is given a glycemic index of 100, table sugar (sucrose) has a glycemic index of 83. This means that for the same amount of carbohydrates eaten as sugar, white bread will raise the blood sugar more quickly. Most health care professionals used to think that because bread is a complex carbohydrate, the body must break it down more slowly than simple carbohydrates like table sugar, but research has shown us otherwise.

Factors which affect the rate at which a particular food causes the blood glucose to rise include the amount of carbohydrate, the type of carbohydrate, the way the food is prepared and other foods that are eaten at the same time. Carbohydrates have different forms, sizes and chemical properties that affect blood glucose response.

Fibre

The fibre content of foods affects GI. Foods with higher insoluble fibre content have lower GI, decreasing the blood glucose response. Soluble fibre slows down the interaction between starch and enzymes during digestion. This improves blood sugar control in addition to lowering serum cholesterol. All individuals, especially those with diabetes, can benefit from increasing their total dietary fibre intake.

Protein and fat

Including protein and fat in a meal slows down digestion and absorption of carbohydrates, while, in turn, lowers the GI. People with diabetes have the same protein requirements as those without. Having a balanced meal which includes protein may stimulate insulin secretion and decrease serum glucose response. Because high fat intake is associated with poor blood glucose control, people with diabetes should follow

| Table 2. GI values of some common foods* (Reference Standard is glucose, GI=100) |
|-----------------------------|-----------------------------|-----------------------------|
| **Low GI (< 55)**          | **Intermediate GI (55-70)** | **High GI (> 70)**          |
| Milk Products              |                            |                            |
| skim milk 32               |                            |                            |
| whole milk 42              |                            |                            |
| Fruits                     |                            |                            |
| apple 39                   | cranberry juice 68         |                            |
| apple juice 41             |                            |                            |
| banana 46                  |                            |                            |
| grapes 43                  |                            |                            |
| orange 40                  |                            |                            |
| orange juice 53            |                            |                            |
| pear 33                    |                            |                            |
| Vegetables                 |                            |                            |
| peas 39                    | potato 60                  | instant potatoes 88        |
| sweet potato 48            | sweet corn 59              |                            |
| Grains, Pasta              |                            |                            |
| barley 22                  | brown rice 55              |                            |
| beans 40                   | bagle, white 72            |                            |
| chick peas 31              | instant rice 87            |                            |
| kidney beans 29            |                            |                            |
| spaghetti 40               |                            |                            |
| white rice 51              |                            |                            |
| whole wheat spaghetti 37   |                            |                            |
| Breads, Crackers, Cookies  |                            |                            |
| oat bran bread 44          | arrowroot cookies 63       | white bread 71             |
| rye bread 41               | bran muffin 60             |                            |
|                            | Bretons 67                 |                            |
|                            | croissant 67               |                            |
|                            | digestive cookies 55       |                            |
|                            | Ryvita 69                  |                            |
| Cereals                    |                            |                            |
| All-Bran 50                | Cream of Wheat 66          | Corn Flakes 80             |
|                            | quick oats 65              |                            |
|                            | sugar coated cornflakes 55 |                            |
| Sweeteners                 |                            |                            |
| fructose 12                | sucrose 60                 | glucose 100                |
|                            |                            | honey 87                   |
| Beverages                  |                            |                            |
| Coca Cola 63               |                            |                            |
| Gatorade 78                |                            |                            |

* Whenever possible, a Canadian product was given as an example.
Health Canada's recommendations of dietary intake < 30% of Calories. In addition, <10% of fat intake should be from saturated fat and < 10% from polyunsaturated fat. Monounsaturated fats and omega-3 fatty acids may help improve glycemic control and decrease triglycerides. However, monounsaturated fat intake should not be consumed in quantities which promote weight gain.

**Food preparation**
The way that a food is cooked or processed affects its GI. When foods are cooked, the carbohydrate structure changes. It swells or becomes gelatinized, increasing GI compared with the raw form of the food.

Sugar helps decrease gelatinization of starch and can help lower GI. This helps explain why some foods that have a more refined sugar content have a surprisingly lower GI. For example, sweet potatoes have a lower GI than white potatoes and corn flakes cereal has a higher GI than sugar-coated corn flakes.

Acid slows digestion and absorption of foods, lowering GI. Including foods with vinegar or lemon juice in them may improve the glycemic response.

**Application of glycemic index**
Traditionally, nutrition education in diabetes has centred on the amount and type carbohydrates consumed, limiting simple sugars and emphasizing complex carbohydrates. Research is emerging demonstrating that the glycemic index of foods is a more accurate way to control blood glucose levels. However, the use of GI in diabetic education is not universally endorsed. The Canadian Diabetes Association, the Food and Agriculture Organization and the World Health Organization recommend the consumption of lower GI foods for people with diabetes to improve glycemic control. Presently, the American Diabetic Association does not endorse the use of GI for treatment of diabetes because of the limited number of foods studied, the complicated nature required to educate patients and the varied results from different studies. The ADA's emphasis is the total amount of carbohydrates in meals and snacks.

Although some refined sugars have a lower glycemic response than some whole grains, they may also have less vitamins, minerals and fibre which are all important for good health. The GI can help make decisions but should not be used in isolation. Having a well-balanced diet that meets all nutrition needs is important.

**Table 1**

*Using the glycemic index to help optimize blood glucose control*

- Choose foods with a lower glycemic index whenever possible.
- Choose oat bran or pumpernickel bread more often than white bread.
- Choose fresh fruits instead of juice.
- Choose brown rice instead of instant rice.
* Choose pasta, rice or sweet potatoes instead of instant potatoes.
* When eating high glycemic index foods, combine with foods that have a lower GI or with protein and fat to achieve an overall lower GI.
* Add beans to soups, salads and chilies.
* Avoid high GI foods alone.

Some population groups have difficulty meeting their nutrient requirements. For these individuals, it is often helpful to take nutritional supplements either as a meal replacement or to complement their current intake. For people with Diabetes, a nutritional supplement such as Glucerna, can be used as a snack or as a meal replacement. It is geared towards individuals with Diabetes. Glucerna has a lower carbohydrate content relative to standard supplements. The fibre content is beneficial for blood glucose control and high cholesterol levels often found in individuals with diabetes. In addition, the fibre can help improve poor bowel function that is common in those requiring supplements and in people with diabetes who have complications such as gastroparesis. Glucerna has a higher fat content than the standard formula which may slow gastric emptying and minimize postprandial glucose increases in patients with abnormal glucose tolerance. The effect of Glucerna versus a standard nutritional supplement was compared for the effect on blood sugar control and lipoprotein profile in patients with type 2 diabetes. Notwithstanding the high monounsaturated fat content of Glucerna, the lipoprotein profiles were not significantly different from those consuming the standard lower fat formula. As always, following a healthy meal plan developed with a dietitian is the best way to control blood sugars and promote optimal nutrition. The addition of supplements should be discussed with the dietitian.

References


When you have diabetes, keeping your blood glucose in a healthy range helps you feel your best today and in the future. Carbohydrate counting is a way to plan the amount of carbohydrate you eat and better manage your diabetes. Carbohydrate counting is not a diet. It is a meal planning tool that helps you understand how your food choices affect your blood glucose level.

**CARBOHYDRATE AND BLOOD GLUCOSE**
Most of the carbohydrate you eat is digested to glucose. The right balance between carbohydrate and insulin (made by the pancreas or from injections) keeps your blood glucose level normal. When you eat, how much you eat, and whether or not you have snacks should be based on your lifestyle, medications, and meal planning goals. A dietitian can help you choose, from the goals below, the one that is best for you.

- **CONSISTENCY** For many people who use diabetes medications or insulin, it is important to eat the same amount of food at the same times. Planning the amount of carbohydrate you eat can keep your blood glucose from going too high or too low.

- **MAXIMUMS** If you use a healthy lifestyle to control your diabetes, or medications that do not cause low blood glucose, having a maximum limit for carbohydrate at meals keeps your blood glucose from going too high, and allows you to choose less carbohydrate when you wish.

- **MATCHING** Some insulin plans allow you to vary meal times or carbohydrate amounts. If you follow this type of insulin plan you need to know how to match your insulin to the amount of carbohydrate you eat.

**TO COUNT CARBOHYDRATES YOU NEED TO KNOW:**
**FOODS THAT CONTAIN CARBOHYDRATE**
- Grains, breads, cereals and dried beans
- Starchy vegetables
- Fruits
- Milk and yogurt
- Sweets and desserts
(Nonstarchy vegetables contain small amounts of carbohydrate and will not affect blood glucose unless you eat large amounts.)

**PORTION SIZES**
- A “carbohydrate choice” is a portion of food that has 15 grams of carbohydrate. (1 carbohydrate choice = 15 grams of carbohydrate)
- Carbohydrate from any food has the same effect on blood glucose. Small portions of sweets or sugar can be used in place of other carbohydrate foods.
- Measure or weigh foods to learn what common portion sizes look like. When you can’t, use these hand estimates.

**HOW TO READ A FOOD LABEL**
- Find the Serving Size.
- Find the Carbohydrate in one serving. (Sugars are included in this number, do not count them separately.)
- Compare the serving size listed to your portion.
- Calculate the amount of carbohydrate in your portion.
- You can count grams of carbohydrate or carbohydrate choices.

<table>
<thead>
<tr>
<th>Nutrition Facts</th>
<th>Amount/Teneur %DV / %VQ*</th>
<th>Amount/Teneur %DV / %VQ*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fat / Lipides 7g</td>
<td>11%</td>
<td>Carbohydrate / Glucides 18g</td>
</tr>
<tr>
<td>Saturated / saturés 2g</td>
<td>10%</td>
<td>Sugar / Sucre 0g</td>
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<tr>
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</tr>
<tr>
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</tr>
<tr>
<td>Protein / Protéines 2g</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sodium / Sodium 110mg</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*% Daily Value / % valeur quotidienne: Vit A 0%  •  Vit C 0 %  •  Calcium 0 %  •  Iron / Fer 6 %
CARBOHYDRATE CHOICES
When there is not a label, these food lists can help you.

Each portion is one carbohydrate choice (15 grams of carbohydrate).
(Foods with less than 20 calories and 5 grams of carbohydrate are considered “free”. These include: sugar-free sodas and beverages, sugar substitutes, spices and seasonings.)

<table>
<thead>
<tr>
<th>Grains, Breads, Cereals</th>
<th>Milk and Yogurt</th>
<th>Fruits</th>
<th>Vegetables</th>
<th>Sweets and Snack Foods</th>
</tr>
</thead>
<tbody>
<tr>
<td>- 1 oz bread (1 slice bread, 1/4 large bagel, 6” tortilla)</td>
<td>- 1 cup milk</td>
<td>- 1 small fresh fruit</td>
<td>- 1/2 cup potato, peas, or corn</td>
<td>- 3/4 oz snack food (pretzels, chips, 4-6 crackers)</td>
</tr>
<tr>
<td>- 1/2 cup cooked dried beans</td>
<td>- 2/3 cup unsweetened yogurt (6 oz) or sweetened with noncaloric sweetener</td>
<td>- 1/2 cup fruit</td>
<td>- 1 cup melon or berries</td>
<td>- 1 oz sweet snack (2 small sandwich cookies, 5 vanilla wafers)</td>
</tr>
<tr>
<td>- 1/3 cup pasta or rice</td>
<td>- 1/2 cup fruit juice</td>
<td>- 1/2 cup fruit juice</td>
<td>- 3 cups raw vegetables</td>
<td></td>
</tr>
<tr>
<td>- 1 cup soup</td>
<td>- 1/4 cup cooked dry rice</td>
<td>- 1/4 cup dried fruit</td>
<td>- 1 1/2 cups cooked vegetables</td>
<td>- 1 Tbsp sugar or honey</td>
</tr>
<tr>
<td>- 3/4 cup cold cereal</td>
<td></td>
<td></td>
<td>(Small portions of nonstarchy vegetables are free.)</td>
<td>- 1/2 cup ice cream</td>
</tr>
<tr>
<td>- 1/2 cup cooked cereal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

MY CARBOHYDRATE GOALS

Breakfast ______:______ (time) ______ carbohydrate choices or grams
Snack: ______ carbohydrate choices or grams
Lunch ______:______ (time) ______ carbohydrate choices or grams
Snack: ______ carbohydrate choices or grams
Dinner ______:______ (time) ______ carbohydrate choices or grams
Snack: ______ carbohydrate choices or grams

Most women need about 3–4 carbohydrate choices (45 to 60 grams of carbohydrate) at each meal. Men generally need about 4–5 (60 to 75 grams of carbohydrate). If you eat snacks, 1-2 carbohydrate choices (15-30 grams of carbohydrate) is reasonable. How many carbohydrate choices you need will depend on your size and activity level.

Healthy eating is more than just carbohydrate counting. Eat a variety of foods, including 5 servings of fruits and vegetables, 6 servings of grains (3 whole grain), 2 servings of low-fat dairy. Foods in the meat and fat groups do not directly affect blood glucose. Make heart healthy choices for optimal health.
How do you measure whether the CDA Conference was a success? For many of the exhibitors it’s related to sales and whether or not it makes a difference to their bottom line. For us it’s an opportunity to meet and talk to our educators, hear their ideas and bounce some of our own off them. So for us the Conference was a resounding success and we’d like to thank everyone who came by to talk to us and look forward to hearing from you and seeing you again.

The conference in Quebec City was tiring but fun. There seemed to be fewer booths this year but more educators – although that’s just our impression. It was great to meet up with old friends and put faces to new voices we speak to on the phone. With Maytag and Equal we gave away skipping ropes this year which were a huge success—we ran out by lunchtime on Thursday and that was almost 1000 ropes. Maytag gave a refrigerator as a draw and Cindy Keith from Halifax was the winner. It was Cindy’s lucky week as she also received an award at the Conference.

We really appreciated all of the very, very positive comments we received from the educators who visited our booth. Without exception we were told how appreciated and useful the Patient Kits and Professional Packs were. We know that you value them but it’s nice to hear it person, and also to know that educators recognize the value of the resources that our advertisers provide.

Quebec City was very kind to us providing beautiful Fall weather, blue skies, sunshine and pleasant temperatures. It was only too bad that we all had to spend most of the time indoors. However we did manage to take some evening strolls in the Old City and treat ourselves to dinner. We obviously didn’t get the opportunity to attend lectures but did purchase some of the tapes so we shall have the opportunity to listen and learn at our leisure.

For those of you who didn’t make the Conference please feel free to contact us with your thoughts and ideas on resources for your clinics – our phone number 416-690-4871/416-690-3553, or e-mail alan@diabetescareguide.com and maureen@diabetescareguide.com

~ Alan & Maureen Donaldson