Before Activity Eating Strategy

The pre-event meal serves two purposes:

1) It prevents athletes from feeling hungry before or during an activity.
2) It helps supply fuel to the muscles during training and competition. Most of the energy needed for any sports event is provided by foods the child has eaten in the previous 24 to 48 hours.

Consider the following guidelines when planning before-activity meals and snacks:

- Include enough fluid to keep the body well hydrated (see the hydration tips on back page).
- Eat a small meal two to three hours before activity. A small snack can be eaten within one hour before activity if an athlete feels hungry.
- Meals and snacks should be large enough to prevent hunger but not too large that they cause discomfort.
- Choose foods that are familiar and well tolerated before competitive events. New foods can be tried before practice sessions to see what works best.
- Choose foods that are higher in carbohydrates, such as pasta, bread, cereal, rice, fruits, vegetables and low-fat yogurt or milk.
- Avoid eating higher fat foods such as hot dogs, hamburgers, french fries, potato chips, donuts and cheese before activity. Higher fat foods take longer to digest and may cause discomfort if eaten too close to the start of a practice or competitive event.
Before Activity Snack Ideas:
Ideally, aim for a snack two to three hours before exercise; however, if you must eat less than two hours before an activity, try the suggestions below.

<table>
<thead>
<tr>
<th>Time Before Activity</th>
<th>Meal/Snack Composition</th>
<th>Food Ideas</th>
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</table>
| 2 - 4 hours prior    | Balanced Meal or Snack | Fruit or vegetable juices  
Sports drinks  
Fresh fruit  
Breads, bagels, crackers, English muffins  
Peanut butter, lean meat, lower-fat cheese  
Yogurt (regular or frozen)  
Pasta with tomato sauce  
Whole grain cereal with lower-fat milk  
Soup and salad  
French toast |
| 1 - 2 hours prior    | High carbohydrate, moderate protein, low fat | Whole grain cereal with skim or 1% milk  
Yogurt with fruit  
Fruit or vegetable juice  
Sports drinks  
Fresh fruit  
Breads, bagels, crackers, English muffins  
Crackers, sports drink, fruit, toast, bagel with jam, sesame seed snaps, sport bar (less than 10 grams of protein) |
| Less than 1 hour prior | High carbohydrate, low protein, low fat | |

Before Activity Foods to Avoid:
- High sugar content: Sugar cereals, candy and candy bars, ice cream and soft drinks
- High in dietary fibre: Beans (any kind), prunes, gassy vegetables (e.g., broccoli, onions, cauliflower and brussel sprouts).
- High in fat: Full fat dairy products (e.g., cheese, ice cream and full fat milks), chocolate and chocolate bars, high fat meats (e.g., chicken wings and sausages), anything deep fried such as potato chips.
- Fast foods: Cheeseburgers, hotdogs, tacos, chicken wings, chicken fingers, greasy pizzas, french fries and anything else deep fried.
After Activity Eating Strategy
During activity, the body taps into the carbohydrate stores in muscles and the liver. Fueling up on high carbohydrate foods and beverages soon after activity replenishes these stores and helps the body recover.

Post Activity Snack Ideas Depending on the Time of the Activity
- Following an early morning activity - Eat a balanced breakfast including foods from three of the four food groups.
- Following an after school activity - Eat a carbohydrate snack followed by dinner including foods from all four food groups.
- Following an evening activity - Eat a high carbohydrate snack such as fruit or half a bagel.

Packable Snacks
Encourage athletes to eat a small snack with lots of fluid before and after a practice or an event. Here are some healthy snacks that are easy to carry in a gym bag.
- Plain cookies such as animal crackers, fig bars, graham crackers, arrowroot cookies
- Fresh fruit, dried fruit, or a fruit cup
- Individual boxes of cereal
- Granola bars
- Pretzels
- Half a cinnamon-raisin bagel
- Trail mix

Snacks in vending machines and snack booths are often high in fat and sugar. Encourage athletes to choose healthier snack options, such as pure fruit juice, crispy rice squares, oatmeal cookies, or granola bars.

Eating On the Road
If planning a road trip for an event, encourage athletes to bring along some of their favourite, well-tolerated foods from the Packable Snacks list from above. Non-refrigerated foods such as bagels, trail mix, dry cereal, fruit, and plain cookies are easy to pack for traveling. Cold foods such as yogurt, fruit juice, and chocolate milk can be packed in an insulated bag with an ice pack.

Traveling athletes may need to choose foods from restaurant menus. Athletes should consider the same guidelines in terms of timing, amount, and meal composition (lower fat, higher carbohydrate). Most fast food and family-style restaurants offer lower fat, higher carbohydrate options. Encourage athletes to choose these options when dining out.

Choose... Instead of...
- bagel or low-fat muffin
  donut or croissant
- grilled chicken sandwich
  burger, fried chicken or fish sandwich
- milk or juice
  pop
- salad (with a little dressing)
  french fries or onion rings
- or baked potato
- pasta with tomato sauce
  pasta with cream sauce
- turkey, grilled chicken, or veggie sub
  processed luncheon meats such as balogna
- frozen yogurt with fruit
  deep fried pies or cake
The Importance of Hydration

Fluid replacement is another key part of a winning sports nutrition plan. Young athletes have a harder time cooling the body during activity and therefore have a greater chance of becoming dehydrated than do adults. This is why fluids are so important for a young athlete's health and performance.

Dehydration can affect muscle strength, endurance, and coordination, and can lead to muscle cramps, exhaustion and heat stroke.

Follow these hydration tips:

- Athletes should drink at least 400 to 600 ml. of fluid before activity to ensure they are fully hydrated. During activity, have athletes drink around 150-350 ml. of fluid every 15 to 20 minutes. After activity, athletes should drink plenty of fluid to replace water loss from sweating.

- Thirst is not a good cue of how much water the body needs. By the time the thirst sensation is felt, an athlete is already becoming dehydrated. Encourage athletes to drink before they are thirsty.

- Have athletes carry their own water bottle. This will be a healthy reminder to drink up!

- Water is the best source of fluid for young athletes as it is absorbed quickly by the body.

- Caffeine-containing beverages, such as coffee, tea, and cola should be limited as caffeine increases the chances of dehydration.

- Avoid beverages that are higher in sugar like soft drinks because they may increase the chance of nausea or stomach cramps.

What about sports drinks?

Sports drinks are beverages that contain carbohydrate (sugar) in concentrations of 4 to 8%. Sports drinks are recommended for athletes involved in intense activity or in training that lasts longer than one hour. Sports drinks can help replace fluid and carbohydrates lost during activity.

Although cool water is an excellent fluid choice, young athletes may be more likely to drink enough fluids if they are flavoured. Look for sports drinks with a carbohydrate content of less than 20 grams per 1 cup (250 ml.) Some examples are Gatorade and Powerade. A more economical alternative to sports drinks is diluted fruit juice. Mix one part of juice with 1 part of water.

Websites with Sports Nutrition Information

Dietitians of Canada (DC) – www.dietitians.ca
- Fueling the Young Athlete: http://www.dietitians.ca/resources/resourcesearch.asp?fn=view&contentid=6467

Health Canada – www.hc-sc.gc.ca

Coaching Association of Canada – www.coach.ca
- Sport Nutrition: http://www.coach.ca/eng/nutrition/index.cfm

Other Resources (from www.halton.ca)
- Eating Well with Canada’s Food Guide
- Physical Activity Guide for Children
- Physical Activity Guide for Youth

For more information, contact:

Halton Region
905-825-6000
Toll free: 1-866-4HALTON (1-866-442-5866)
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www.halton.ca

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