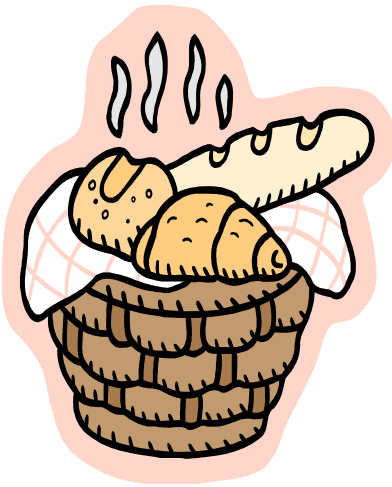


Eating for Performance

Working muscles require oxygen and an energy source. Carbohydrates and fats provide the raw material that creates ATP (adenosine triphosphate) that is the true energy source inside the cell. The daily food intake must contain adequate amounts of calories and nutrients to meet this demand. Selecting foods that fuel exercising muscles is very important for athletes. This handout provides examples of pre and post-game meals, ideas for all-day events, and tips for off-season maintenance.



Pre-game meals



Athletic performance requires dedication to the sport, proper coaching and training, adequate sleep, and of course good nutrition. Eating before the event can be a real benefit, however if done improperly it can result in decreased performance. Athletes are advised to avoid large meals too close to competition. The digestive system requires additional blood flow and time in order to do its job. Therefore, if an athlete consumes a large meal close to game time, the food may not be properly digested and absorbed because blood flow is diverted from the intestines to fuel working muscles. The result can be anything from mild cramps to outright nausea or vomiting, bloating, gas, and diarrhea, all of which are distracting to athletes. Note the following suggestions:

- Allow two full hours to digest a meal before game time and do not over eat.
- Minimize both high-fat and high-fiber foods in the meal before the event. For example - avoid fried foods, large salads, popcorn, nuts, and seeds.
- Eat carbohydrates (fruits, bread, rice, pasta, potato), low-fat dairy foods, and small portions of lean meats.
- Sip fluids often after the meal until game time to aid digestion and absorption. However, be careful not to drink too much as this can slow you down.
- If there is a long time between lunch and the event, bring a small snack to school. Again, allow time to digest the food before you exercise.



During the Event

Unless you are competing in an ultra-endurance sport (triathlon or marathon) you should not be eating solid foods during the event. Sipping fluids on a regular basis is important for hydration but eating snack food is not necessary.

Post-game meals

The event is over for the day but you must begin preparing for the next workout. The energy and fluids utilized during competition must be replenished as soon as possible. Studies have shown that eating within 20 minutes and up to 2 hours after exercise is ideal for restoring energy. Small carbohydrate foods like fruit, muffins, crackers, yogurt, fig bars, and sports drinks work well to reload muscles. Furthermore, your body can benefit from some protein to assist recovery. When you get home, try to eat

some protein foods like peanut butter, lean meats, cottage cheese, or yogurt. Some athletes may choose to eat sports bars that provide a combination of carbohydrate, protein, and fat all in one. This is ok as long as it fits your budget and you have a regular meal relatively soon after the event. The main goal is to replenish your body soon after exercise, especially with carbohydrate, protein, and fluids to prepare for the next training session.

All day events or tournaments

If a sporting event requires multiple games on the same day you must plan ahead. Small and easy to eat foods are important to fuel your working muscles without putting too much stress on your digestive system. If possible pack a cooler to bring meat and cheese sandwiches, yogurt and milk. Fruits, bagels, low-fat crackers, dry cereals, rice cakes, granola bars, or even a handful of pretzels can help keep your energy levels

up for the next game. Soda pop and snack chips are not the best options. Do not eat a large, heavy meal unless you have at least 5 or 6 hours before the next event. Remember that your body is in working mode and will not process foods well if you're not somewhat relaxed and have adequate time to digest a meal. As always drink fluids to stay hydrated.

Game On !

Try This Out!

Take a look at your current routine by listing the times of your daily meals and your athletic event. Next list some common foods you eat for meals and snacks the same day (see example below). Now compare your results to the guidelines listed above. How did you do? Are there any changes you can make?

Example

Breakfast at 6:45 am Juice, and a donut

Lunch at 11:30 am Twinkies, soda pop, apple

Practice at 3:00 pm for ~ 90 minutes

Dinner at 6:30 pm Pasta, dinner roll, soda pop

Your Schedule

<u>Meal or event and time</u>	<u>Foods</u>
_____	_____
_____	_____
_____	_____
_____	_____

The example above has room for improvement. Add cereal, milk, and fruit to breakfast for more carbohydrates and some protein. A second breakfast may be necessary for some, which is where a snack bar or fruit and yogurt would work well. Lunch needs protein, some healthy fats, vegetables and a calcium containing food. A small snack

around 1:00 pm may also be needed depending on the size of the meal you had at lunch. Half a bagel and a small handful of raisins would do it. The evening meal could include more vegetables and another protein food and milk instead of soda pop.

Off-season nutrition

The season is over now and you deserve a break. However, the same standards for healthy eating still apply. Young athletes may still be growing yet extra weight gain over the off-season can make getting into good physical shape more difficult next season. Try to stay healthy and to keep body weight fairly stable during the off-season while allowing for normal growth. Plan activities you enjoy and do them often to stay fit. Keep foods like cakes, pies, cookies, and candy to a minimum. Avoid excessive use of sugar sweetened beverages (pops, juice drinks) as they contribute little to a nutritious diet and may lead to unwanted weight gain. Have fun but keep eating habits within reason. Healthy eating should be a lifetime goal. See the menus listed in the nutrition guide handout for examples of a daily diet.



In summary

What you eat and when you eat it will impact your performance. Know your schedule in advance and plan ahead by bringing appropriate foods and beverages. Eat regular meals and snacks throughout the day to maintain energy levels but don't have a large meal right before an event. Good eating habits are important at all times (before the game, after the game, and during the off-season)

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