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Fruit: Questions and Concerns

"I know I should eat more fruit. I just don't do it..."

"I've stopped drinking orange juice; too much sugar." ...

"Should I buy organically grown fruit...?"

Some athletes wisely devour lots of fruit, believing it to be among the healthiest of food choices. But other athletes mistakenly avoid fruit, seeing it as an evil source of sugar and carbs. If you are confused about the role of fruit in your sports diet, keep reading!

Should I eat less fruit to reduce my carb intake?

No! Athletes need carbs to fuel their muscles. Despite popular belief, carbs are not fattening. (**Excess calories are fattening.**) Nor do carbs cause diabetes. (Lack of exercise and excess body weight are two main contributors to diabetes.) Carbs should actually be the foundation of each sports meal and snack.

The carbs in fruit are of two types: sugar and starch. The starch in fruit converts to sugar with ripening. For example:

- a green banana with some yellow is 80% starch and 7% sugar.
- a mostly yellow banana is 25% starch and 65% sugar.
- a spotted and specked banana is 5% starch and 90% sugar.

The sugar in fruit is neither unhealthful nor evil. Unlike refined white sugar, fruit sugar is accompanied by a plethora of health-protective nutrients: vitamin C, folate, potassium, fiber, and phytochemicals that improve healing, aid in recovery after exercise, and reduce the risk of high blood pressure, cancer and constipation. You should eat more fruit, not try to stay away from it!

Is fruit a smart choice for dieters?

Yes, fruit is a smart choice for everyone. Yet, dieters who believe fruit to be “calorie-free” fool only themselves. The average piece of fruit from a grocery store is about 100 calories. Eating four or five pieces of fruit a day can easily add 400 to 500 calories to your intake...healthful calories, but never the less, calories you need to count if weight is an issue.

Are some fruits better than others?

All fruits are good for your health, and some are more nutrient-dense than others. Some of the best fruits include oranges/citrus fruits, bananas, melons, berries, kiwi and mango. When choosing fruit, look for different colors of the rainbow: red berries, orange mango, white banana, yellow pineapple, green kiwi ... each color contains different health-protective nutrients.

I've heard today's fruits have less nutritional value..?

While some studies have shown a small decline in a few of the nutrients in today's produce, the overall picture shows we have a huge abundance of many varieties of fruits from which to choose. By simply eating an additional piece of fruit, we can more than make up for any possible decline in nutritional value.

How much fruit should I eat?

According to the new Food Pyramid (www.myfoodpyramid.gov), you should target at least two cups of fruits per day. (The old Food Pyramid stated “four servings” but, due to confusion about serving size, the new guide now better defines the appropriate intake: two cups.) You can easily hit this target at breakfast: simply enjoy cereal with banana (1 cup) + 8 ounces (1 cup) of orange juice. Voila ... baseline fruit-duty done for the day!

Should I buy organically grown fruit?

Organically grown fruits tend to have lower levels of pesticide residues than their conventionally grown counterparts. Be aware some fruits have more pesticides than others (and wash all fruits very well). The safest fruits include banana, mango, papaya, kiwi and pineapple. The fruits highest in pesticides include apples, cherries, imported grapes, nectarines, peaches, pears, raspberries and strawberries. If you can afford to do so, buy organic versions of these high-pesticide fruits. You'll have to pay more—perhaps double for strawberries.

Your best bet is to buy organic fruits in season at the local farmers' markets. By doing so, you will support your local farmers and also pay a reasonable price. Plus, it's nice to meet the people who grow your food.

How can fruit fit into my food budget?

Fresh fruit can be expensive for athletes on a budget. That is, if you need 3,000 calories a day, a 300-calorie snack of apples (3 medium-large apples) might cost you about \$2, while 300 calories of carbs from pretzels might cost only \$0.60. Yet, fruit bargains do exist—

- *dried fruit.* 300 calories (~1/2 cup) of raisins costs about \$0.65. Dried fruits are rich in carbs, fiber and potassium.

- *canned fruit*. 300 calories of canned peaches (a 16-oz. can) might cost \$1.30. Rest assured, canned fruits retain most of their nutritional value and are known to be low in pesticides.
- *frozen berries and other fruits*. Frozen strawberries are about half the price of fresh ones—and perfect for smoothies.
- *bananas*. A veritable bargain: 300 calories for about \$0.80. If you hesitate to buy bananas because they tend to “go bad on you” before you get around to eating them, take note. You can store bananas in the refrigerator: the peel will turn black but the banana will stay fresh and fine. Better yet, peel ripe bananas, cut them into chunks, freeze the individual chunks on a flat tray, and then store them in a zip-lock bag in the freezer. Perfect for bite-size, ice-cream-like snacks or smoothies.



How can I get myself to eat more fruit?

For many athletes, breakfast is an appealing time to enjoy fruit; cereal topped with banana or berries is an obvious choice.

- With snacks, some athletes fail to choose fruit because it’s “not enough.” That is, when you are hungry, 100 calories of an apple doesn’t satisfy the appetite. The solution is to enjoy protein-fruit combinations: apple+ (lowfat) cheese, banana + peanut butter, raisins + nuts.
- Think smoothies: Blenderize 1/2 cup of milk or juice, a banana (frozen chunks for a thick and frosty texture), (frozen) strawberries or whatever fruit is around, plus peanut butter, dry milk (for protein), graham crackers, cinnamon, vanilla ...be creative!
- If you like to stock up on snacks that don’t spoil, check out the new Tropicana FruitWise bars made from 99% fruit. Handy!
- For a post-exercise refresher, cut up a juicy, potassium-rich orange—far healthier than an orange-flavored sports drink.
- Serve orange sections at your child’s soccer game. Today’s kids—as well as adults—need to be brought back to fruit.

SIDEBAR

Vitamin C in Commonly Eaten Fruits

The recommended intake (DRI) for vitamin C for women is 75 milligrams (mg) per day, and for men, 90 mg.

- Apple, 1 medium 8 mg
- Banana, 1 medium 10
- Blueberries, 1 cup 20
- Cantaloupe, 1 cup 75

- Honeydew, 1 cup 45
- Kiwi, 1 medium 75
- Orange, 1 medium 70
- Peach, 1 medium 5
- Pear, 1 medium 7
- Pineapple, 1 cup 20
- Raisins, ¼ cup 1
- Strawberries, 1 cup 80

TOURNAMENT NUTRITION

"I'm in a three-day soccer tournament. I need food help!!"

"This weekend, we're playing in the semi finals. What should I eat the day before?"

If you have looming in the near future an endurance event—such as a soccer match that will tax your endurance, you may be concerned about the best nutritional preparations. The good news is, even if your training is over, you can still significantly enhance your performance with winning food strategies.

Without a doubt, what you eat and drink during the last few days and hours before exhaustive exercise makes a difference. By eating wisely and well, you can enjoy lasting energy without hitting the wall! Here are eight last minute nutrition tips for enhancing endurance.

1. Carbo-load, don't fat-load.

Carbohydrate-rich foods include cereals, fruits, juices, breads, rice, plain baked potatoes and pasta with tomato sauce. Lower carbohydrate choices include donuts, cookies, buttery potatoes, ice cream, cheesy lasagna and pepperoni pizza. These fat-laden foods may taste great and fill your stomach but fat does not get stored as muscle fuel.

2. No last minute hard training.

By resting your muscles and doing very little exercise this pre-event week, your muscles will have the time they need to store the carbohydrates and become fully saturated with glycogen (carbohydrate). You can only fully carbo-load if you stop exercising hard! You can tell if your muscles are well carbo-loaded if you have gained 2 to 4 pounds pre-event. Your muscles store three ounces of water along with each ounce of carbohydrate. (This water will be released during the event and be put to good use.)

3. No last minute dieting.

You can't fully carbo-load your muscles if you are dieting and restricting your calories. You will have greater stamina and endurance if you are well fueled, as compared to the dieter who may be a few pounds lighter but has muscles that are suboptimally carbo-loaded. Remember: you are supposed to gain (water) weight pre-event!

4. Drink extra fluids.

You can tell if you are drinking enough fluids by monitoring your urine. You should be urinating frequently (every 2 to 4 hours); the urine should be clear colored and significant in volume. Juices are a good fluid choice because they provide not only water and carbohydrates but also nutritional value. Save the sports drinks for during the event.

5. Eat tried-and-true foods.

If you drastically change your food choices (such as carbo-load by eating several extra bananas), you may end up with intestinal distress. Simply eat a comfortable portion of the tried-and-true carbohydrates you've enjoyed during training. You need not stuff yourself! If you will be traveling to a far away event, plan ahead so you can maintain a familiar eating schedule despite a crazy travel schedule.

6. Eat a moderate amount of fiber.

If you stuff yourself with lots of white bread, bagels, crackers, pasta and other foods made with refined white flour, you may end up constipated. Include enough fiber to promote regular bowel movements—but not too much fiber or you'll have the opposite problem! Moderate amounts of whole wheat bread, bran cereal, fruits and vegetables are generally good choices. (If you are concerned about diarrhea, limit your intake of high fiber foods and instead consume more of the refined breads and pastas.)

7. Eat the morning of the endurance event.

You'll need this fuel to maintain a normal blood sugar level. Although your muscles are well stocked from the foods you've eaten the past few days, your brain gets fuel only from the limited amount of sugar in your blood. When you nervously toss and turn the night before the event, you can deplete your blood sugar and, unless you eat carbs, you will start the event with low blood sugar. Your performance will go downhill from there...

Plan to replace the energy lost during the (sleepless) night with a light to moderate breakfast as tolerated. This will help you avoid hitting the wall. Stick with tried-and-true pre-exercise foods: cereal, bagels, toast, fruit, energy bars and/or juice. These carb-based foods invest in fueling the brain, as well as staving off hunger. If a pre-event breakfast will likely upset your system, eat extra food the night before. That is, eat your breakfast at 10:00 pm.

8. Consume carbs during the event.

During endurance exercise, you'll have greater stamina if you consume not only water, but also some carbohydrates, such as sports drinks, gels, bananas or dried fruit. You should target about 100 to 250 calories/hour after the first hour to avoid hitting the wall (For example, that's 16 to 32 ounces sports drink/hour.) Some players boost their energy intake by drinking diluted juices or defizzed cola; others suck on hard candies or eat chunks of energy bar, animal crackers and other easily chewed and digested foods along the way. Your muscles welcome this food; it gets digested and used for fuel during the event. And hopefully, you will have experimented during training to learn what settles best...