The Body Shop

Fueling for sports and exercise

By Mackenzie Lobby

scarfing down 22 Big Macs in a 24-hour period. During training, Olympic swimmer Michael Phelps reportedly consumes as many as 12,000 calories daily—nearly as much as is in those burgers. Amazing, right? But as an athlete, Phelps can't live on fast food.

Good nutrition is important for an active lifestyle, whether you're on the road to winning 14 Olympic gold medals or simply taking a yoga class a couple of times a week. "The basis of any athlete's diet needs to incorporate a balance of whole grains, lean meats, fruits, and vegetables," says Lindsay Langford, a registered dietitian and specialist in sports dietetics at St. Vincent Sports Performance in Indianapolis.

Seventeen-year-old Chelsey S. of Texas knows that well. One of her go-to meals is a big bowl of whole-grain angel-hair pasta with spaghetti sauce. Chelsey, who has won multiple national championships in both cross-country and track, says, "I pay attention to nutrition not just because of my running but also because I feel better when I eat healthy."

Fueling the Tank

Think of your body as if it were a car. If you put the wrong type of gas in the tank, you won't be able to move, at least not very fast. By understanding

what fuel you need before, during, and after exercise, you will be able to run faster, jump higher, and get the best out of your body.

Glycogen is a molecule in your muscles that serves as your main source of energy during work-outs. You refuel your supply of glycogen by eating carbohydrates. When you load up on carbs the day before a big game or an intense workout, you are topping off the glycogen held in your muscles.

"When you're not properly fueling the body, and you don't have enough glycogen in your muscles and liver, the body pulls energy from two sources: fat and protein stores," Langford explains. "Then you can start to eat away at muscle, and that's not what most athletes are going for." If you head down that road, you may find yourself feeling overly fatigued, dizzy, or light-headed. That is sometimes called hitting the wall.

How can you steer clear of the wall? Get your carbs from a wide variety of sources, such as whole grains, fruits, and vegetables. Elliot R., a 17-year-old high school soccer player from Indiana, says, "We always have team pasta dinners the night before games."

Another important part of fueling before activity is hydration—consuming enough liquid to keep your body working well. "The general guidelines are about 20 ounces one and a half to two hours

What You Need

The amount of calories you need can vary widely based on your age, sex, current weight, and activity level. These are dietitian Dianne Fagan's recommendations for a teen who is active 30 minutes to one hour each day. She explains that the percentages "are starting points," especially for people who don't eat on a regular schedule: "Start with the basics and adjust ... percentages based on [your] food habits and schedule."

Girls 2,000–2,400 calories **Boys** 2,200–3,200 calories

Where those calories should come from:

Carbs: 50–60 percent

of total calories

Protein: 12–14 percent of total calories

Fats: 25-30 percent of total calories

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before [a workout], but it varies on size and sweat rate," notes Langford. The best sources of hydration are plain water and sports drinks.

Chelsey always makes sure she gets enough hydration before running. "At the beginning of the day, I pour some apple juice in my sports bottle and then fill the rest with water," she explains. "I drink a whole lot before I even get to practice because if I'm dehydrated, it's not going to be a good practice."

In the Middle of the Action

Refueling during activity can be important for certain athletes. If you are hopping on the treadmill for just 30 minutes, there's no need to inhale a snack partway through your workout. However, if you are on the volleyball court all day long with few breaks between sets, a granola bar or sports drink could mean the difference between feeling full of energy and crashing in the middle of a game.

The middle of a workout "can be a really valuable time to fuel the body that a lot of athletes neglect," says Langford. For hydration, she follows USA Track & Field's guidelines. They suggest drinking one-half cup to a full cup of fluid every 15 to 20 minutes during exercise. Dianne Fagan, a

A Recovery Treat Studies show that chocolate milk may be even better than sports drinks for hydration after a workout. It is packed with all the carbs proteins vitamins and minerals you need to replenish your musele And it tastes great!

registered dietitian and teen nutrition expert who operates a Web site at www.yourkidsdietitian.com, agrees. "If you are dehydrated," she says, "it's going to diminish your energy levels and impair your thought processes and physical performance."

Winding Down and Fueling Up

Eating immediately after exercise is one of the best ways to prepare your body for the next workout. "The muscles are definitely most receptive to replenishing the glycogen [supply] within the first 30 minutes after exercise," explains Fagan. So as soon as you wrap up your karate class or step off the soccer field, you should head straight for the kitchen.

"Protein, [such as] lean meat and low-fat dairy, really helps with muscle building and recovery, so for athletes looking to gain muscle mass, that's a big component," Langford says. "You really don't get the full benefit of your training if you're not having that recovery nutrition." A peanut butter and jelly sandwich or chicken breast with veggies are both great options after a workout.

It's also the time to gulp down a good amount of fluids. For every pound of sweat you lose during your workout, you should drink 16 to 24 ounces of liquid. Beverages such as chocolate milk and protein-rich sports drinks are your best bet postexercise.

The Long Haul

Topping off your tank with the right nutrients and hydration will help your body run longer and better. "Good nutrition helps me to stay on top of things like schoolwork and practice," says Elliot. "[Exercise] takes a lot out of you, so you need that energy."

By focusing on nutrition, Chelsey thinks she has an edge. "It gives me extra confidence during the race that I've prepared for it in every way I can," she says. Your body's output will be only as good as what you put into it. So to be at the top of your game, remember: You are what you eat. CH

Think About It

· What foods that you already eat would be good choices. for enhancing exercise and physical activity? What could you be eating more or less of?

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