

What you need to know

Fueling Your Workout

October 2018 – Stephanie MacNeill, Registered Dietitian

Fueling before workouts should not be underestimated. As an athlete, if you make the effort to properly fuel before working out, you'll be able to go harder and longer, helping you get the most out of each and every one of your workouts. However, the timing and types of foods you choose are essential to making sure your energy stores are topped off to power your entire workout. Certain foods can even help your body jumpstart the recovery process, so you're primed and ready to go for your next workout.

So just what should you eat to fuel your workout?

Pre-Exercise

Athletes should consume their last solid meal approximately 3-4 hours prior to a workout. The contents of this meal should be high in slow digestion carbohydrates (sweet potatoes, oats, whole wheat pasta, brown rice), moderate in protein (meat, fish, eggs, tofu) and relatively low in fat (potato chips, French fries, deep fried foods). Examples include pasta salad with chicken, veggies and Italian dressing or a tuna sandwich with an apple and a glass of milk.



To top up energy levels, athletes should consume a snack roughly 45-90 minutes before the workout begins. This snack should emphasize quickly digesting carbohydrates like bananas, dried fruit, instant oatmeal and certain energy bars. Athletes may need to play around with what, how much and how soon before a workout a food is consumed, paying attention to how this food makes them feel in the workout. Did you eat too much and felt sluggish during the workout? Did you not eat it too close to the workout? What if you tried to eat it 15 minutes earlier?

Notice how I'm saying 'before a workout'? That's because you never want to try something new on game/race day. Workouts are the time to experiment and find out what works and what doesn't.

During Exercise

For a workout lasting an hour or less, water is sufficient.

For exercise lasting over an hour, it's important that athletes take in some carbohydrates, as well as fluids to maintain hydration. Athletes want to take in enough to sustain their energy levels for the remainder of the workout, but not so much that the body has to divert blood flow away from the working muscles in order to aid digestion.

When choosing foods/beverages to consume, it's important to consider the logistics of the workout. For example, it's not appropriate to bring food out on to the pool deck. Carbohydrate in the form of a sports



drink might be more appropriate in this situation. A sports drink will also help to keep the athlete hydrated.

Post-Exercise

Because exercise sensitizes muscle tissue to certain hormones and nutrients, muscle is most receptive to nutrient intake during the first 20-45 minutes post-exercise. Successful recovery will only occur with proper planning!

Protein is important to repair, maintain and build new muscles. Protein provides athletes with amino acids, which are the building blocks of muscles. Good choices include:

- lean meats such as poultry, fish or seafood
- milk, yogurt, cheese or cottage cheese
- eggs
- nuts and seeds (and their nut butters)
- legumes such as chickpeas, black beans, lentils and red kidney beans
- tofu, soy products and fortified soy beverage

Carbohydrate rich foods will help to replenish a young athlete's carbohydrate stores, also know as glycogen, in the muscle and liver. Examples include:

- whole grains such as bread, bagels, crackers
- whole fruit
- milk, yogurt and smoothies
- starchy vegetables such as potatoes and sweet potatoes
- legumes such as chickpeas, black beans, lentils and red kidney beans

Notice many of the examples listed above contain both protein and carbohydrate to help young athletes repair and replenish after a workout.

Hydration

How do you know if you're dehydrated? You might say 'I'm thirsty', right? Almost everyone associates thirst with a need to drink more water. In certain cases, however, thirst is not the most reliable indicator of hydration status.

Children and older adults do not experience thirst as intensely as younger adults do. Plus, exercise and fatigue/stress may contribute to a reduced thirst response.

Fortunately, our bodies have another way to signal hydration.

An athlete's urine color says a lot about hydration status. Ideally, urine should be pale yellow, corresponding with a state of hydration. The darker the colour, the more dehydrated the athlete.

ARE YOU DEHYDRATED?



1, 2, 3 Well hydrated	1
	2
	3
4, 5 Hydrated but not well	4
	5
6, 7, 8 Dehydrated - You need to drink more	6
	7
	8





The urine color chart can help your athlete determine if they are hydrated. It starts with normal, wellhydrated colours. But as you move down the list, dehydration becomes more severe.

Working with a Sports Dietitian

Fueling properly before, during and after exercise is highly individual and will also depend on the type and timing of the workout. A sports dietitian can help you understand these guidelines by translating the science of meal timing into practical examples of what, when, and how much food and fluid to consume at any given time. Consider working with a sports dietitian to help fuel your next personal best!

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