Should kids be using pre-workout supplements? Matt Sheehan | Media Relations Coordinator Print Version

Did you have a childhood hero? If so, you likely aspired to emulate them and their achievements.

Nowadays, your kids may see their favorite athlete or influencer using pre-workout supplements, whether on social media or in stores, to enhance their performance in the gym or on the field.

What are pre-workout supplements?

Pre-workout supplements come in various names, flavors, and sizes. Some popular options are creatine and branched-chain amino acids (BCAA). While creatine and the main ingredient in most pre-workout supplements is caffeine, most BCAAs don't contain caffeine.

These supplements are taken before a workout or athletic match with the goals of increasing endurance, muscle mass, and reducing recovery time. But the question is should middle- or high school-aged kids use these supplements? The answer: Probably not.

What are the risks of pre-workout supplements?

"These can cause increased heart rate or heart burn. You're also taking a lot of supplements that are going straight to your gut. You can see some nausea, vomiting, diarrhea or constipation. They're also not well-monitored, the U.S. Food & Drug Administration (FDA) isn't regulating these very closely," says Erica Dawkins, a dietetic intern with OSF HealthCare.

Taking it further, kids with heart defects need to steer clear of these supplements.

"A lot of times we see defects or heart irregularities that somebody isn't even aware of. They don't know that until they take something like this and have an adverse event," Dawkins says. "So, if you already know, avoid these because we don't want to throw that heart into an abnormal rhythm it might not be able to come back from."

What are the benefits of pre-workout supplements?

"A lot of them will already have beta-alanine or branched-chain amino acids which help improve recovery time and reduce fatigue," Dawkins says. "We also see some nitrates used that help improve blood flow to the muscles."

Most pre-workouts are intended for healthy adults in moderation. Pregnant and nursing women are generally advised to avoid them due to the high caffeine content.

Alternatives for improving athletic performance in kids

"Focus first on making sure you're having quality workouts, then introduce healthy nutrition," Dawkins says. "We want to make sure we're getting that nutrition throughout the day. Especially if we're working out multiple times throughout the day. If you're working out within two to four hours, make sure you're getting a snack. We see a lot of benefits for pre-workout snacks or snacks during half-time. We also want to make sure we're staying adequately hydrated."

Dawkins says leafy and root vegetables like spinach, lettuce and beets are a great, natural option.

"Those have the natural nitrate in it. So, we're getting the same effects we would from a preworkout supplement, just in our regular diet," Dawkins adds.

Having a conversation with your child's pediatrician or sports medicine physician is extremely important if you are wondering what supplements should or should not be added into their routine.