

Injury prevention in athletes

There are many misconceptions about injuries, but also easy steps that athletes can follow to be healthier and push themselves in a way that minimizes their chances of being injured

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A sprained ankle, a broken bone, or a torn muscle all have the ability to put even the best athlete on the sideline. An injury in high school athletics can make a big difference, from sitting out a season to not getting a chance to play in college. According to At Your Own Risk, an organization dedicated to increasing safety at work, in sports, and life in general, 90 percent of student athletes reported at least one sports-related injury.

"We don't want any injuries, obviously, [but] we understand that it's going to happen," cross-country coach Ryan Ahlers said. "When you're running six days a week, your preparation has to be there in order for you to be able to handle the rigors of the season."

According to City High athletic trainer Jennifer McHenry, the best way for high school athletes to prevent injuries is ensuring that they eat right, get enough fluids, and sleep for eight hours each night. While the necessary calories vary depending on the sport and weight of the athlete, McHenry generally recommends for an athlete to eat upwards of 4000 calories as opposed to a regular diet of 2000.

"I don't think that high school kids understand how much you need to eat as an athlete," McHenry said. "If you don't have enough fuel in your body to cover regular life, much less the three-hour practice, your muscles aren't going to recover on a micro level, like they should when you sleep."

A balanced diet does not mean that an athlete can never eat unhealthy foods, just that they have to make sure to eat enough protein and vegetables. According to Laura K Purcell, lack of enough energy from food can lead to a loss of muscle, and increased chances of fatigue, contracting an illness, or getting injured. Tatum Frazier '22 runs track and cross-country at City and has a nutritionist to help her make sure that she is getting all necessary nutrition elements.

"I went through a time where I was not getting anywhere near enough protein, as I was trying to be vegetarian, but I now have a diet that is pretty high-protein base[d]," Frazier said. "It's just eating clean. It has made me not necessarily lose weight, but be in better shape."

Her nutritionist helps Frazier create a meal plan that gives her ideas for meal prep as well as portion sizes. These sizes help her figure out how much she needs to eat, since Frazier does not track her calories.

"It's not a diet where I'm hungry all the time," Frazier said. "It's about getting the right amount of what my body needs for the

workouts I have that day so I can have more energy."

McHenry also recommends drinking more than the standard eight glasses of water to make sure an athlete is staying hydrated. One easy way to stay hydrated for a high school student is keeping a water bottle with them throughout the day so that they can drink without having to leave class.

"My theory is, if you're not getting up to the bathroom when you're sleeping, then you probably haven't had enough water," McHenry said.

McHenry works in the training room at City, dealing with City's injured athletes. The most common injury in McHenry's experience at City is a muscle strain. This can happen due to overuse or a muscle slip, and is most common in the quadricep or hamstring. These are mainly short-term injuries, but if they are not dealt with correctly, they could become a long-term problem for the athlete.

"Definitely don't show up on the first day of official practice without running," Ahlers said. "If you're just not able to run [before the start of the season], do some-

thing active, because your body has to be prepared."

However, even prepared, an athlete can still get injured. One cross-country athlete, Sophie Trom '20, has had recurring stress reactions and fractures in both of her shins for the past three years. This had made running cross-country a struggle for her, but she stuck with it all four years of high school. On days her injuries flared up, Trom would run less distance or spend her time biking in the cardio room.

"Everyone's body is different, and everyone has to take care of their body in different ways," Trom said. "Some people can run more and some people cannot run as much."w

Frazier dealt with a very similar situation. She had a stress fracture in seventh grade and also dealt with shin splints throughout her freshman year of cross-country. She started going to a physical therapist three times a week.

"Almost every day, I would do those [exercises] and at the beginning I was still having pains, but as my calves got stronger, they've been able to handle more

mileage," Frazier said. "Those exercises have really made it so my calves have gotten shorter, which just makes it a lot harder to get injured."

While physical therapy helps prevent an injury from becoming worse, other elements such as stretching, rolling, and icing can help the body recover faster to prevent injuries. In an average week, Frazier rolls six times to make herself less prone to injuries. She tries to roll after every run, but also realizes that she isn't perfect and won't be able to roll all the time.

Different types of injuries occur for different types of sports. For sports involving running, such as cross-country and track, injuries are more commonly related to muscle strains and stress fractures, whereas physical contact sports such as football, soccer, and basketball have injuries based on collision, such as bruises, fractures, broken bones, or head injuries. The trainers can then work with the athlete to modify their workouts and practices to not further damage the injury.

"Head and neck injuries are

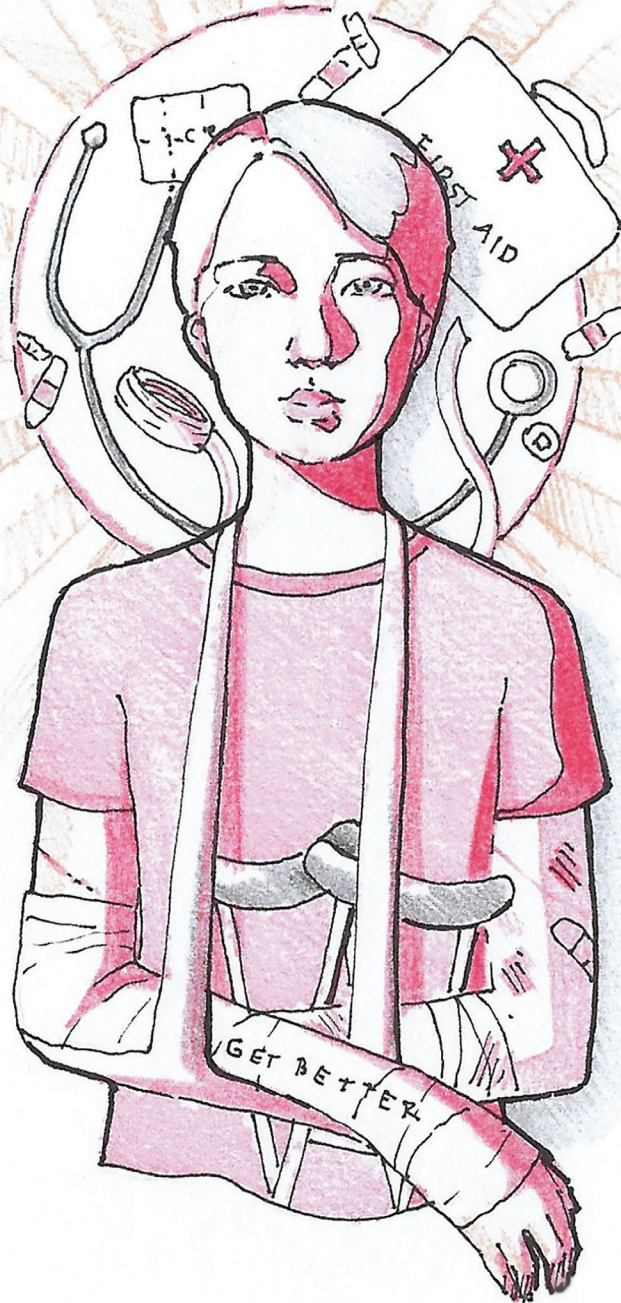
something that we always watch for," McHenry said. "Much less common in the young population are heart-related issues, but brain injuries [and] spine issues, those are scary."

The first thing McHenry does when an athlete comes into her office is to make sure that the injury is not life- or limb-threatening.

"I assess the seriousness of the situation and then treat accordingly," McHenry said. "If it's just a sore leg, then we can get in here and get ice or help them scratch and see if that's enough to allow them to go back out. It just depends on the severity of what's going on."

McHenry encourages all athletes to communicate with their coaches or go and see her as soon as they think they are injured. An injury heals much faster when treated in its early stages and continuing to train and compete with an injury will likely lead to a much longer recovery time.

"Sometimes kids wait until something really hurts instead of something only kind of hurts and then it's much harder to get back [on track]," McHenry said.



ART BY JOCELYN HARTE

90%
OF STUDENT ATHLETES REPORTED AT
LEAST ONE SPORTS-RELATED INJURY

4000
RECOMMENDED CALORIES FOR
ATHLETES PER DAY

8 HOURS OF
SLEEP A NIGHT

8 GLASSES OF
WATER