

Preparing players for heat of battle

Fowkes-Godek's research beneficial

By **MIKE KERN**
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When football players are asked to perform in severe heat, things happen to their bodies. Mostly bad things. And, in worst-case scenarios, it can turn tragic. That is what Dr. Sandy Fowkes-Godek is trying to prevent.

Fowkes-Godek works at West Chester University as an associate professor in the department of sports medicine. For the past two summers she has conducted research, a line of study that actually began several years back when she was writing her doctoral dissertation at Temple. The purpose? To find the effects of dehydration, and the best means of rehydration. She has received grants from the NFL and the NCAA. She has spoken on the subject on MSNBC. Partly because of the data she has collected, the NCAA changed its rules this season on how teams can practice in training camp.

And it's probably only the start.

"There's definitely more attention being paid to it, because you've had high-level athletes who have died of heat stroke," she said. "I think people are more willing to discuss what guidelines should be in place, for what's safe. There are issues that come up whenever you have these big bodies, in equipment, going through 3 and 4 hours of intense workouts in conditions that just aren't suitable for that kind of exercise. It's not just football. It just happens in that sport more than any other. It's a different game.

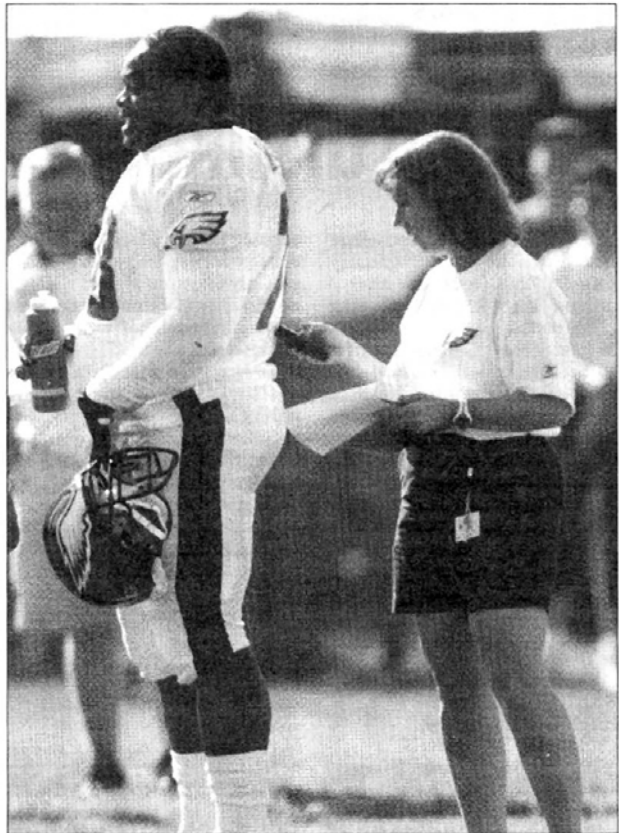
"We found out that runners, for

instance, can actually have a higher core body temperature. But we also found that temperature alone doesn't play as big of a role as many people think. Football players sweat sooner. And they sweat at a greater rate. Just by nature, for their size. That's a problem."

Fowkes-Godek spent 8 weeks last summer monitoring a dozen West Chester football players on a daily basis. She checked to see how they responded to intravenous rehydration, which has been the standard practice in the NFL, as opposed to Gatorade with a salt additive. This year, she also spent time with the Eagles while they were at Lehigh University. In between, she talked to the NCAA's Competitive Safeguard Committee. This year, that organization changed the rules regarding the start of practice. No two-a-day sessions were allowed until after the first week. After that, there were no two-a-days allowed on consecutive days. In essence, it provided for a gradual acclimation period. She thinks it makes a big difference.

Similar work was done at the University of Connecticut.

"I haven't run all the statistics, but clearly [players] did better that first week," Fowkes-Godek said. "These guys really struggled before. People don't realize that a 6-4, 300-pound lineman can lose 3 liters of sweat an hour. And Gatorade has, at best, 25 percent of the salt that sweat has. The bottom line is, a lot of illness we see related to this has a lot to do with the imbalance of electrolytes. You just can't replace



YONG KIM/Daily News

Sandy Fowkes-Godek takes temperature of Eagles' Hollis Thomas.

enough salt. That's when you get cramps, people start feeling sick, you're at the biggest risk."

Reasons are one part of the equation. Solutions are quite another matter. Fowkes-Godek will speak at the Academic Sports Medicine meeting next May in Indianapolis. Many will listen. Hopefully, even more actions will be taken. It's an ongoing process of understanding and response.

"The truth is, there's no way to prevent 100 percent of heat-strokes," she said. "They don't just occur because you're dehydrated. Some people have a predisposition to it. What this will accomplish is to allow these guys to adapt over a longer period of time, as certain cardiovascular

adjustments are made. We found that by about the fourth day, plasma volume expanded by nearly 15 percent. That makes it easier for the body to function in those strenuous conditions.

"It drives me nuts that we still can't figure out why football players cramp up, and what to do about it. It's been happening for 100 years, and we're still asking questions. A lot of it is common sense. And some of it maybe you have to legislate.

"I think I've just opened a treasure chest, with all this. If there's a better way to go, let's do it."

Especially if it helps prevent too many more players from becoming the wrong kind of statistics. ★

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