

# SOUTHWESTERN NEWS

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## **UT Southwestern sports medicine doctor pedals advice on gearing up for safe cycling season**

DALLAS – April 21, 2005 – So what if you're no Lance Armstrong, six-time winner of the Tour de France. Even beginning cyclists should be armed with health information that can help reduce strain, injury and infection, says Dr. Luis Palacios, associate professor of family and community medicine at UT Southwestern Medical Center.

Dr. Palacios – a cyclist himself – explains that staying safe while on a bike means more than wearing a helmet. Proper fit between bike and rider, following preventive measures and knowing first-aid are essential for a safe outing.

For instance, knee and back pain can afflict the most seasoned riders. But most bike shops will help you find the right-sized bike and even adjust the seat for a proper fit, which will head off most joint difficulties.

“These problems are usually associated with bike positioning as well as training technique,” Dr. Palacios said. “When the seat is too high, it can increase stress on the lower back and hamstrings. If it's too low, problems with the distal quadriceps and anterior knee can occur.”

Once you have proper fit with your bike, it's important to know the best riding techniques. If you pedal slowly with high resistance (using the big chain ring and smaller cogs), you can strain your quadriceps or knee. Pedaling fast with low resistance can cause increased pressure on the base of your pelvic region and back, said Dr. Palacios, who has developed a sports medicine clinic in the UT Southwestern family practice residency clinic. Most experienced cyclists will have a cadence (revolutions per minute) between 90-100. For beginning cyclists, a reasonable and energy-efficient cadency might be between 60-80.

Preparing your equipment and mastering your riding technique shouldn't be the only things on your “to-do” list. Whether you're riding a 100-mile race or just exercising at a leisurely pace, getting the right mix of carbohydrates and protein before, during and after a ride is essential.

“Research indicates that for someone in training, carbohydrates are an important source of energy. A healthy diet would include one with 60 percent carbohydrates, less than 30 percent fats, and 15 to 20 percent protein,” Dr. Palacios said. “For activities, including warm-ups, lasting less than one hour, water is sufficient. If the activity lasts longer than an hour, carbohydrate supplements in the form

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of sports drinks, carbohydrate bars or gels would be beneficial.”

Cramping also can be avoided by drinking plenty of fluids during exercise. Sports drinks are a good source of fluids, carbohydrates and salts, and between four to eight ounces should be consumed every 15 to 20 minutes, Dr. Palacios said.

“Most sports drinks have 6 percent to 8 percent carbohydrates, which have been found to cause fewer gastric problems and are ideal for absorption,” he said. “Cyclists should also try different sports drinks during training to get an idea of which one works best for them, as research has shown that taste is the most important factor for consumers.”

Chafing and skin irritation – often called “saddle sores” – are a common annoyance for cyclists. But they can be minimized by buying properly fitted seats and wearing cycling shorts with plenty of moisture-absorbing padding in the bottom to help protect skin.

“In my experience the biggest problem I see with cyclists is hygiene,” Dr. Palacios said. “Cyclists should remove sweaty clothing as soon as possible after training or racing and shower. In addition, one should wash clothes after every use to prevent irritation or infection of broken skin.”

Falls are an unpleasant but inevitable part of biking. There are multiple remedies to help heal scrapes with minimal scarring. The important thing is to wash and clean the area. There are a variety of antiseptic skin cleansers available for this purpose.

“Failure to do this can lead to tattooing of the affected area from retained gravel, dirt or oil,” Dr. Palacios said. “After cleansing, the affected area should be covered with a dressing and a topical antibiotic such as bacitracin, polysporin or silvadene, which help prevent infection and decrease pain.”

One of the most important things for cyclists to learn is how to avoid heat-related problems. It takes approximately two weeks to acclimate to heat, longer for extreme heat. If preparing to ride in high heat for a prolonged period of time, a cyclist should build up slowly, by initially limiting workouts to one hour or less, train during the cooler parts of the day and always hydrate. The athlete can then increase training load. In hot temperatures, take a drink every 10 to 15 minutes, even if not thirsty.

Dr. Palacios – who serves as a team physician for several local high schools and colleges – is a member of the American College of Sports Medicine, American Medical Society for Sports Medicine, and the Texas Chapter of the American College of Sports Medicine.

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