

Making Yourself Comfortable

By Roy Furchgott March 6, 2001

It took only one \$40 bike part to turn Leslie Tierstein, of Arlington, from a cyclist whose shoulders, hands and back ached during recreational rides to someone who can ride "up to 130 miles in a day pretty comfortably," she says.

The miracle bike part? A handlebar stem that moved the bars closer to the seat. But don't rush to the bike store just yet. The real trick wasn't the stem itself, but the adjustment it allowed that put her in the proper position for comfortable cycling.

For baby boomers and others seeking a low-impact alternative to jogging, cycling may be a good solution, says Jeff Potteiger, director of the exercise physiology laboratory University of Kansas in Lawrence. Cyclists typically burn 10 calories a minute during moderate exertion.

But who wants to take even a moderate ride when a Sunday spin on the bike makes you feel like a contestant in a porcupine rodeo. Cycling stalwarts may delude themselves for a while, as Tierstein did. "Something didn't feel quite right, but I thought that's how a bike is supposed to feel and that I'd get used to it," she says.

But toughing it out is not the answer. The problem facing the bike rider is that the body's entire weight rests on just a few small spots -- a bit of both hands, a small portion of the butt and, periodically, the feet. That not-quite-right feeling may lead to pain in the neck, shoulders, elbows, feet, hands and -- truly scary -- the nerves to the reproductive equipment. (More on this later.) Unattended, some of those hurts can become chronic injuries.

Fortunately, the bicycle industry feels your pain and is addressing those aches with shock-absorbing materials, new saddle designs and even a hot-selling new breed of machine dubbed the "comfort bike," which incorporates an upright riding position, fat tires and shocks fore and aft for a cushy ride.

You can also forsake the standard steed altogether and opt for a recumbent, a style of bike that lets riders pedal from a reclined seat with a back on it. Riders look like they are on two-wheeled lawn chairs, but their torsoes are supported in a relaxed position. The downside is that some recumbents aren't as easily seen in traffic, and they are not as efficient for climbing hills -- you can't stand up on the pedals.

For those of us still wedded to the standard model, all the shock absorbers and gel saddles on the planet won't compensate for a bike that doesn't fit properly. The most common problem is knee pain, says John Hollands, a custom bike builder in Reisterstown, Md. The cause is easily spotted at any group ride, he says. "You see people flogging the bike, struggling, and they are invariably too low and too far forward."

"The patella [kneecap] is especially sensitive to seat height. I tell people to try it a little on the higher side," says Nicholas DiNubile, orthopedic consultant for the National Basketball Association's Philadelphia 76ers and former special adviser to the President's Council on Fitness. "You can overload the kneecap, especially if you are doing a lot of hills and don't use your gears properly."

Cyclists can also hurt themselves by having the seat too high, which can cause the hips to rock side to side and lead to unpleasant chafing of the nether regions. In rarer cases, it can also cause hyperextension of the knee.

But for all the focus on the part of the bike bearing the most sensitive parts of our anatomy, it's not the seat of all ills. Aches in the neck, shoulder and back -- after the knees, the next most common trouble spots -- are usually symptomatic of a handlebar-fit problem. The tricky part here is that the pains from being too stretched out are much the same as those from being too bunched up.

The remedy -- seldom addressed -- may require not just raising or lowering the bars, but buying a new stem (the upside-down L-shaped piece that attaches the handlebars to the front forks). In Tierstein's case, an article in a cycling magazine alerted her to the problem by pointing out that men's bike frames don't always accommodate women, who typically have shorter torsos. "I measured the bike and a light went off in my head," she said. After changing the stem, "It was like night and day. My back felt better, and I could go longer. Then the seat problem manifested itself."

Which reveals an unfortunate truth -- any adjustment in one area can cause a problem to another. That may leave you wondering, with so many variables, where the heck do you start? The easy answer: With the geometry between seat, pedals and handlebars.

Any competent bike mechanic can put a rider in classic cycling position, with the aid of basic measurements or a "Fit Kit" device that helps determine each rider's proper pedal position, seat height, distance from the seat to the handlebars, and even shoe position on the pedals. Some shops can accomplish roughly the same thing with a yardstick, a level and a plumb bob. To learn how a fitting should go, or even do it yourself, you might start at the Colorado Cyclists Web site (www.coloradocyclist.com/BikeFit/index.cfm), which offers information and a work sheet.

Once the initial setup is done, make changes conservatively -- "one-eighth of an inch per week," says Hollands. While you're fine-tuning, start with a short ride and build up, so problems can reveal themselves gradually. "Don't make a change of an inch then go out and ride 100 miles," warns Sam Callan, science and education manager for USA Cycling, the national governing body for competitive cycling in the United States.

Keep a detailed record of any changes, in a log or on the bike itself, as racers do, says Callan. Some riders mark the original position of a seat post or handlebar stem with tape, so they can restore the original position if need be.

Even though there is a basic best position, there are still individual differences for which there is no accounting. This is especially true when it comes to saddles, a prime candidate for a comfort upgrade, and the most researched and modified cycling product over the last two years.

Besides comfort, the chief reason saddles get a lot of attention is because at least one doctor, Boston University Medical Center urologist Irwin Goldstein, claims a direct link between saddle pressure and male impotency. But other urologists say that the claim is based on flawed studies and that there is no proof that cycling poses a significant impotence risk. Still, there is that comfort question.

The problem is that many nerves and arteries to the sexual apparatus are routed between the "sit bones" -- in medical lingo, the ischial tuberosity. Some saddles may cause compression of the blood vessels or irritation of the nerves in the area. "Some men [cyclists] have had erectile dysfunction, says Lewis G. Maharam, a Manhattan sports medicine doctor and fellow with the American College of Sports Medicine. "Some women get numbness and complain of orgasmic dysfunction as well," he says. "Usually these things are not permanent, and just by changing the seat it gets better."

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The threat of sexual dysfunction -- and the promise of comfier seat support -- has spawned new designs and sent sales soaring. The result has been saddles with holes cut in them, saddles padded with squishy gel, saddles with rubber shock absorbers built in. Unfortunately, there is only one way to find the right one for you: Try one -- or several -- for an extended period of time.

"You can't test with your thumb, and you can't go by anyone's decision but your own," says Larry Black, owner of College Park and Mount Airy Bikes. Many shops, like Black's, will allow riders to buy a saddle, try it and exchange at almost full price for a different saddle (provided it's unscuffed). It took me four tries to find that the best saddle for me on my tandem bike is a woman's racing saddle. Yeah, I take some ribbing for it, but that's better than damage downstairs.

Why not avoid all this bother and just go for the swank new "comfort bike"? You could, but the model won't spare you from dealing with the "fit" problem, and the comfort it affords may be limited to 10-mile jaunts. Says Black, "People will find what feels good on a shorter ride might not be as comfortable on a longer ride."

Or a hillier ride. Those fatter tires and extra shocks make for a heavier bike, harder to get up a climb. The upright position can expose the rider to more wind resistance. And the shock absorbers can also soak up energy that should be going into the pedal stroke, producing an up-and-down bounce cyclists call "pogo-ing."

Better bets for enhancing comfort -- once you adjust your bike for fit -- might be the right accessories: bike shoes for serious riders, padded shorts and cycling gloves. Padded gloves can help protect against numbness in the hands that comes from pressure and vibration against the carpal or ulnar nerves. In the end, getting a bike set up properly may take some effort, but the payoff will be worth it: You'll enjoy more time on your mount rather than letting it molder in the garage.