

Rivendell Bicycle Works  
PO Box 5289  
Walnut Creek, CA 94596

Hasler

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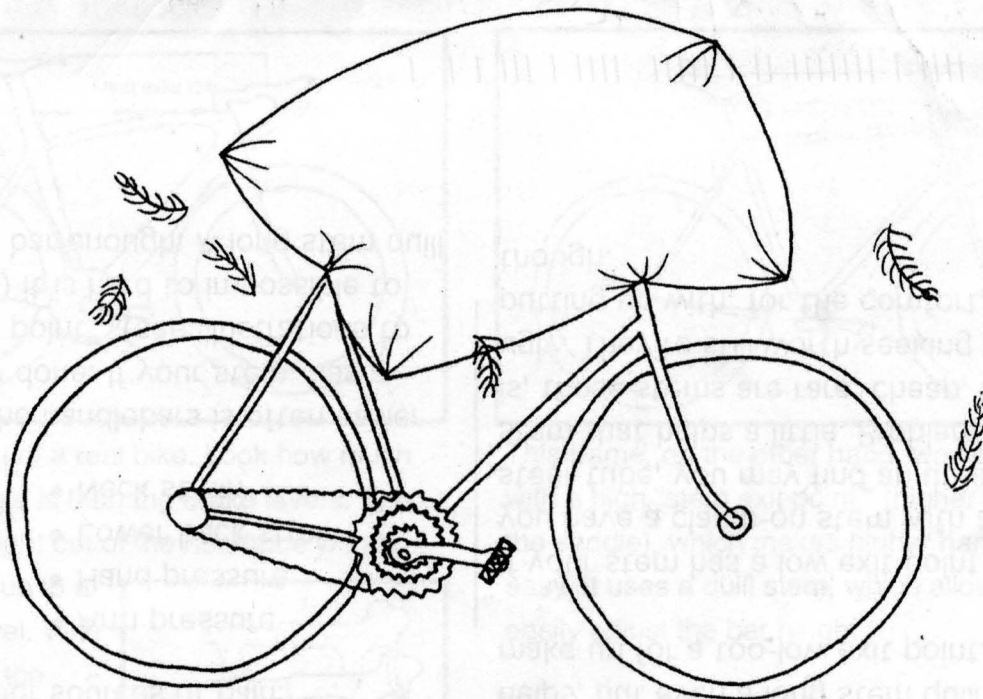
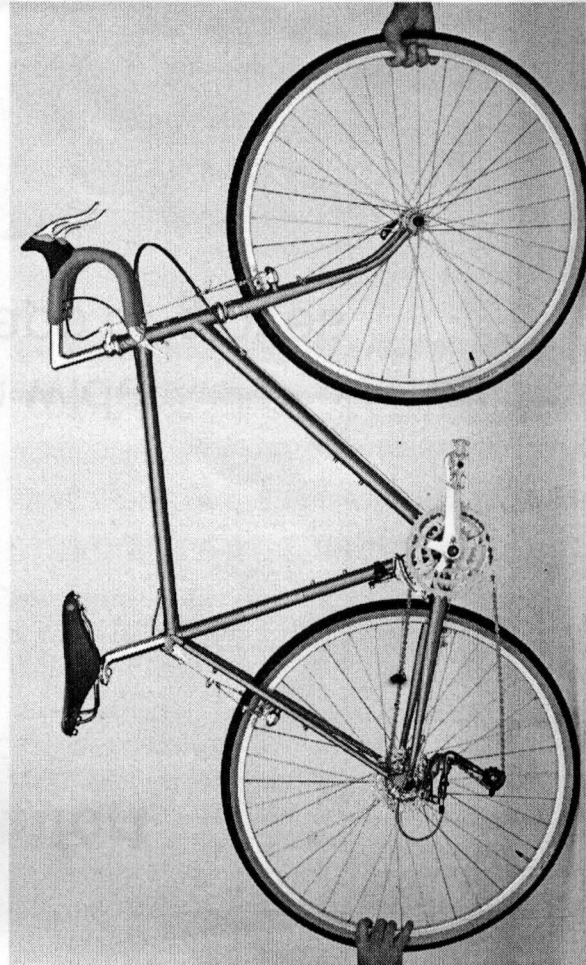
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How to make your bicycle as comfortable as a pillow. Or else.

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# 1. Raise the handlebars

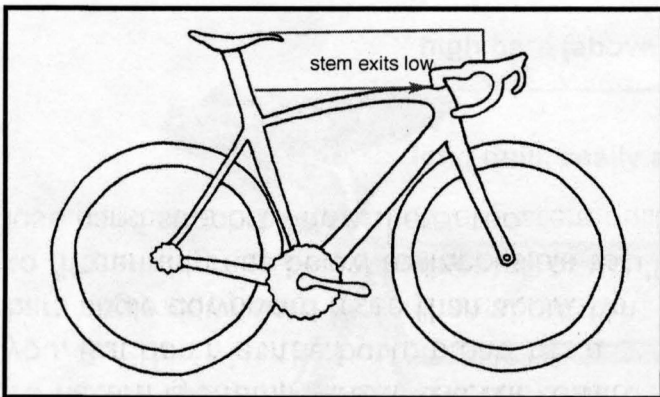
It fixes four sources of pain:

- Arm pressure
- Hand pressure
- Lower back strain
- Neck strain

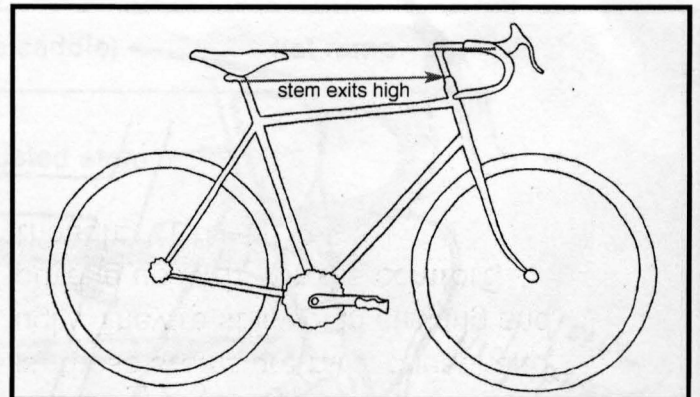
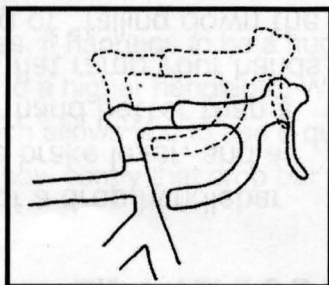
Raising the handlebars is often easier said than done. If your stem has a “low exit point” (see illustrations to the right) it is hard to impossible to raise the bar enough. A long stem quill

helps, but even a long stem quill can't make up for a too-low exit point.

If your stem has a low exit point and you have a clamp-on stem with a short steer tube, you may find an up-angled stem that helps a little. Problem there is, those stems are rare, cheap, and ugly. They're still worth seeking and putting up with, for the comfort, though.



Here's a tracing of a real bike. Look how much higher the saddle is than the brake levers. The stem goes straight out of the headtube with no way to move it up to a comfortable level. With steer tubes cut too short, this can't happen. But this is what needs to happen.

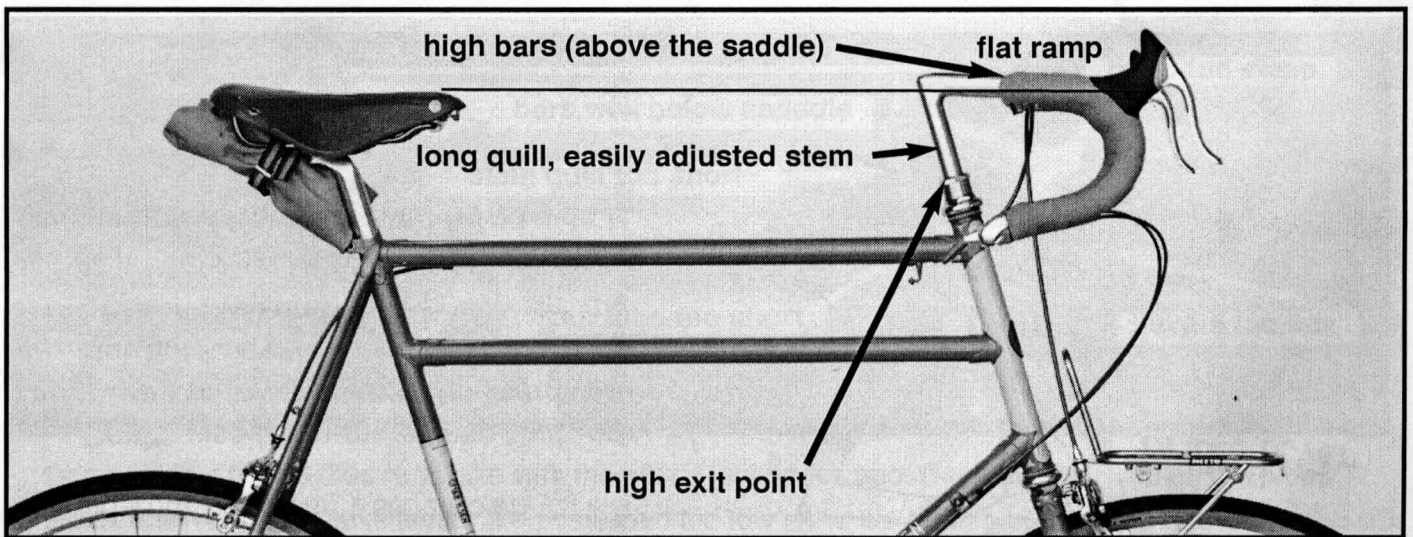
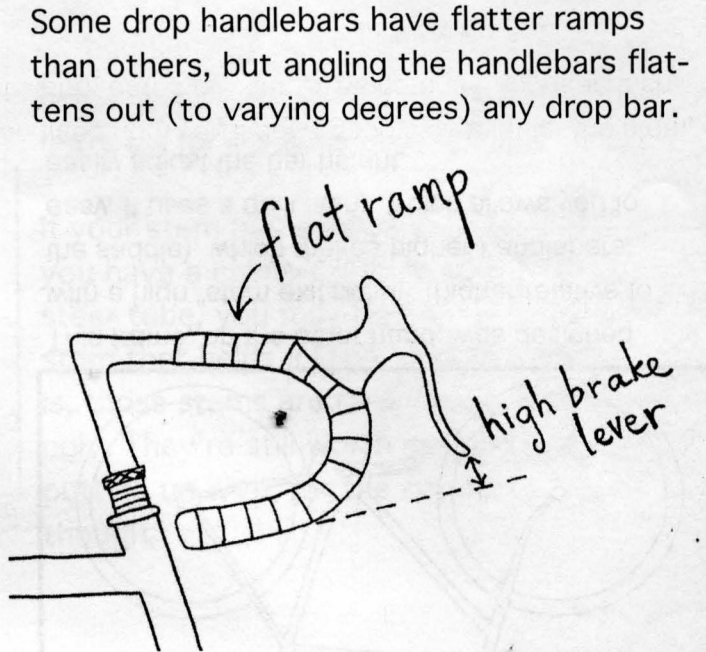


This frame, on the other hand, was designed with a high “stem exit point,” (higher relative to the saddle), which makes higher handlebars easy. It uses a quill stem, which allows you to easily adjust the bar height.

## 2. Flatten the ramp

The ramp is this part of a drop handlebar that's right behind the brake lever, and a flat one supports your hand better than a sloped one does. On a flat ramp your hands don't suffer the feeling of "falling down the curve," which makes you grab tighter. On a flat ramp, your hands relax more, grip less.

To flatten the ramp, rotate the bar toward you. But don't let the bottom part of the bars angle downward more than about ten to fifteen degrees below horizontal, or you'll lose hand support down there, too.



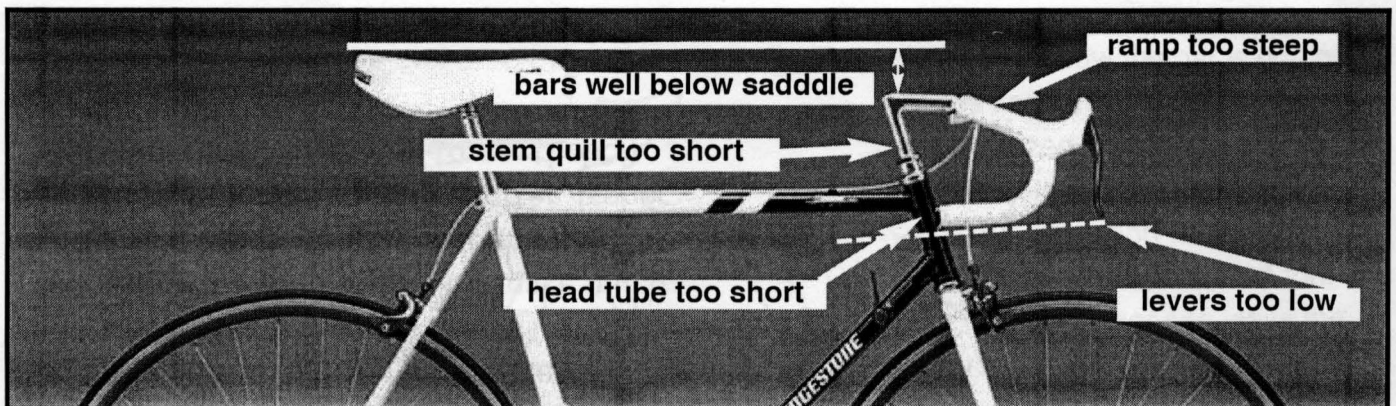
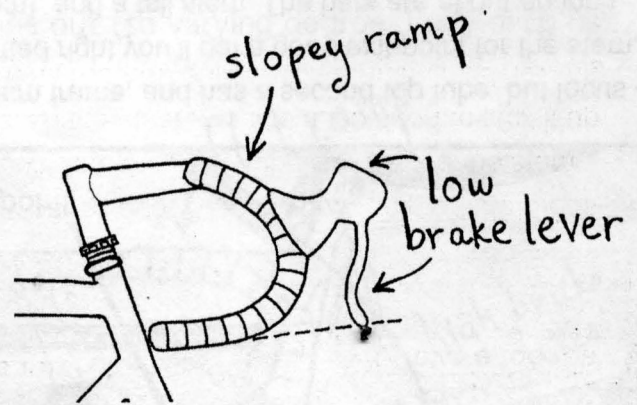
Here's one of our frames. It happens to be a huge, 71cm frame, and has a second top tube, but focus on the details that lead to a higher handlebar. When fitted right you'll get a good exit-point for the stem, a threaded steerer (which allows you to use a quill stem), and a tall stem. The bars are about an inch above the saddle. See how comfy that drop bar looks? You can ride this bike all day.

### 3. Raise the brake levers

Put the ends 15 to 20mm above the bottom edge of the handlebar. This will cover the slopey part of the curve, so your hand can't slide down it..

Don't raise them more than that, or they'll feel weird, and the levers will be too hard to reach.

To see a better example, look at the lever two pages back, on the "Flatten the Ramp" page. That's how to do it.



Compare this typical '80s road bike with the bike a few pages ago. See how the ramp on the drops slants down and the brake levers are positioned too low? And the head tube is short, so the stem exit point is low? And the headset stack is small, because the steerer was cut too short to jack it up with spacers that add comfort? And the stem has a short (135mm) quill, which further limits how high the bars can go?

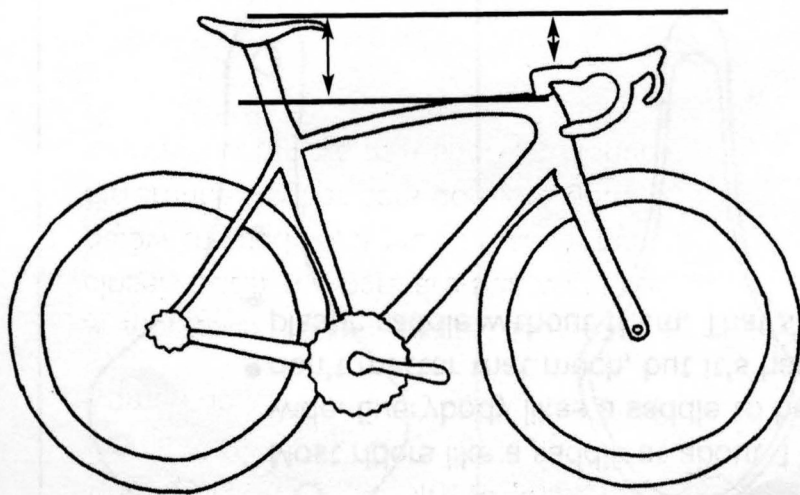
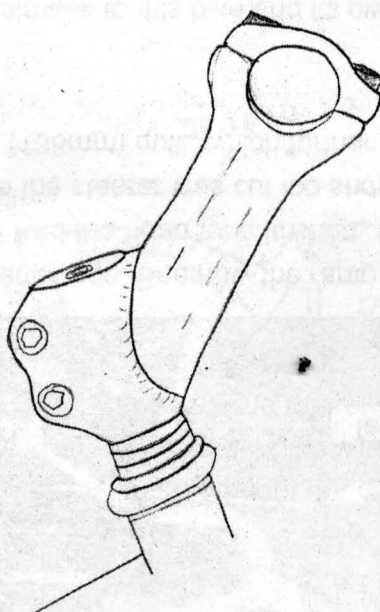
This set-up is fine for a short, fast criterium race, and in fairness to this bike and its owner, that's likely what it was set up to do. But this racing position has become the norm for all-purpose riding, and is not as comfortable as it could be, with small tweaks.

## 4. Use a shorter, higher stem extension?

Many bikes come with stems too long. They look racy in photos, but stretch you out too much.

Most guys do better with 8-9-10cm stems than with 11-12-13. Most women do better with 7-8-9cm stems.

A shorter extension brings the bars closer, but if the bars are still way below the saddle, it won't make much difference. Higher bars do more good than a shorter stem. A shorter, higher stem may be the way to go, though.

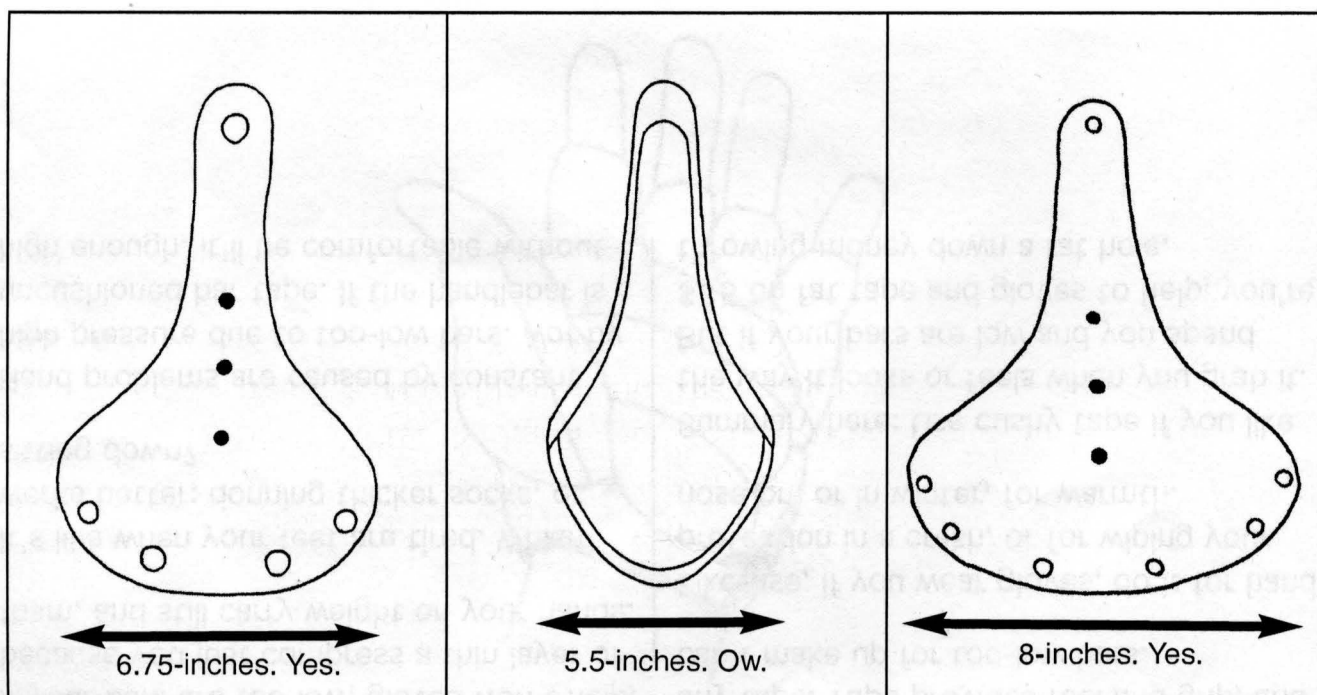


On this typical modern race bike, the low exit point, short steerer tube, and long stem make a long reach to the bars.

Notice how low the bar is compared to the saddle—inevitable when the bike is sized small to begin with, and the steer tube is carbon, which must be kept short for safety. On a steel bike with a steel fork and steerer, the maker can leave the steerer long, and stack the space between the headset and stem with spacers. Combine that fantastic strategy with a shorter, up-angled stem, and you can easily raise the handlebar up into the heavenly comfort zone.

## 5. Sit on a wide-enough saddle that's flat in back. Slotted or not.

Most riders like a saddle at about 170mm wide (6 5/8-in) wide. Everybody likes a saddle to be flat in back. Slots don't matter that much, but it's hard to buy a modern plastic saddle without them. That's OK.



In the middle is your typical road saddle. Skinny all over, not enough room in the back to sit on. The bike on the left has a Brooks B17. If you're even more upright, go with the wider B68 on the right.

## 6. Hand comfort. Gloves, padding, and so on...

If your bars are too low, gloves won't help, because you just compress a thin layer of foam, and still carry weight on your hands.

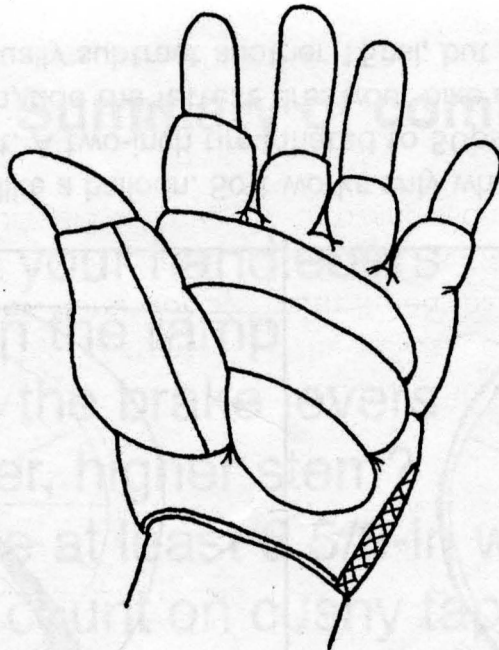
It's like when your feet are tired. Which works better: donning thicker socks, or sitting down?

Hand problems are caused by constant high pressure due to too-low bars. *Not* by uncushioned bar tape. If the handlebar is high enough, it'll be comfortable without

any tape. Tape provides feel and grip, and can't make up for too-low bars.

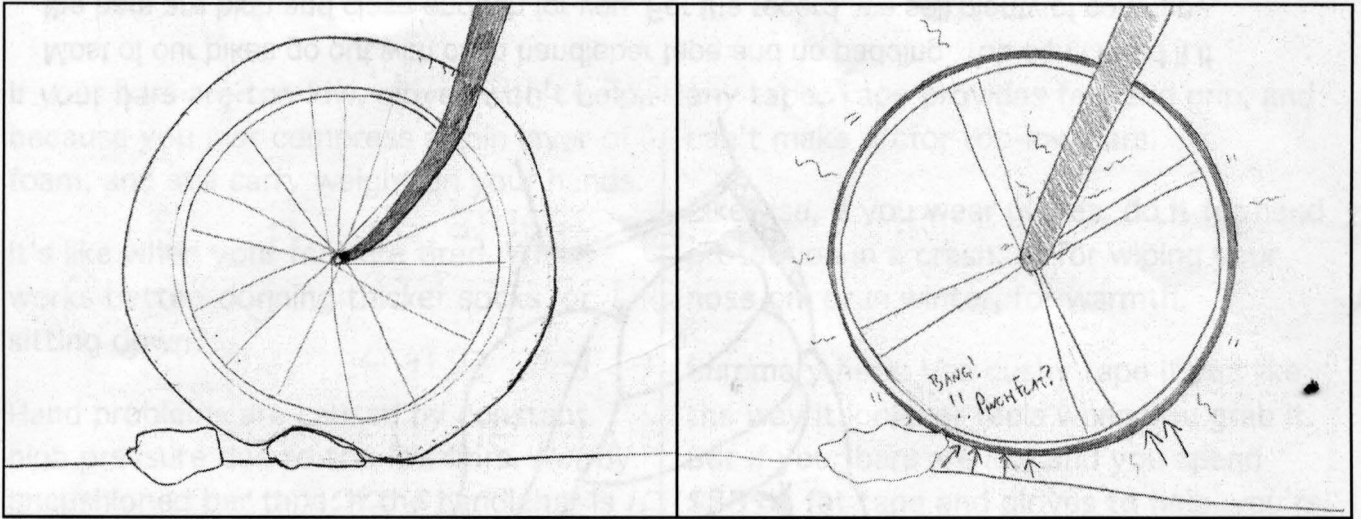
Likewise, if you wear gloves, do it for hand protection in a crash, or for wiping your nose on, or in winter, for warmth.

Summary here: Use cushy tape if you like the way it looks or feels when you grab it. But if your bars are low and you spend \$35 on fat tape and gloves to help, you're throwing money down a rat hole.



Most of our bikes go out with cloth handlebar tape and no padding. You don't need it if the bars are high and close enough for you. For the record, we sell plenty of cork tape, too, and sometimes pad it with neoprene. But mostly for diameter, not cush.

## 7. Chubby, schmooshy tires



Soft tires soak up bumps like a balloon. Soft works only when the tire is fat, and fat only works when the tire is soft. A two-inch tire inflated to 50psi feels like a 25mm tire inflated to 90. For max cush, ride the fattest tires your bike can take at the lowest mfr-recommended psi. (We usually subtract another 15psi, but that's just us.)

## 8. Summary of comfort

1. Raise your handlebars
2. Flatten the ramp
3. Raise the brake levers
4. Shorter, higher stem?
5. Saddle at least 6 5/8-in wide
6. Don't count on cushy tape or gloves
7. Big, soft tires