**101 Ways to Completely Transform Your Entire Cycling Life -** by Jason Sumner *Ride better, get stronger, be happier, go faster, look nicer, stay safer, get fitter, smile wider, and lots* 

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Want to be a better cyclist? Just ride. Every time you turn the pedals, you naturally improve a little. Of course, one well-placed tip, trick, or nugget of wisdom can help you achieve something you might otherwise not learn for years. Drawn from my *Bicycling* book, *1,100 Best All-Time Tips*, here is a generous helping of wisdom from the most skilled and knowledgeable coaches, physiologists, and cyclists in the world. (*photos by Joe Pugliese*)

### NO. 1

To avoid <u>muscle soreness and fatigue</u>, don't hunch your shoulders. Tilt your head every few minutes to stave off tight neck muscles. Better yet: Stop to admire the scenery.



### NO. 2

By sliding rearward or forward on the saddle, you can emphasize different muscle groups. This is useful on a <u>long climb</u> as a way to give various muscles a rest while others take over the work. Moving forward accentuates the quadriceps, while moving back emphasizes the hamstrings and glutes.

### NO.3

If you're not comfortable taking both hands off the bar, after pulling an <u>arm warmer</u> down with the opposite hand, use your teeth to pull the bundled fabric the rest of the way over your wrist and off.

# FREE SPEED: Three easy ways to go faster in a sprint

- NO. 4 Don't move your upper body too much. Let your back serve as a fulcrum, with your bike swaying from side to side beneath it.
- NO. 5 Keep your shoulders behind the front wheel axle. Too much weight forward makes the bike hard to handle and could cause the rear wheel to skip up into the air.
- NO. 6 Pull on the bar with a rowing motion to counter the power of your legs. This helps transfer your energy to the pedals rather than into wasted movement.

If you don't have a chance to slow for an obstacle such as railroad tracks or a pothole, quickly pull upward on the handlebar to lift your front wheel. You may still damage the rear wheel, or it might suffer a pinch flat, but you'll prevent an impact on the front that could cause a crash.

### NO.8

Beware of creeping forward on the saddle and hunching your back when you're tired. Shift to a higher gear and stand to pedal periodically to prevent stiffness in your hips and back.

### NO. 9

Relax your grip. On smooth, traffic-free pavement, practice draping your hands over the handlebar. This not only will help alleviate muscle tension, but also will reduce the amount of road vibration transmitted to your body.



# NO. 10

Periodically change hand position. Grasp the drops for descents or high-speed riding and the brake-lever hoods for relaxed cruising. On long climbs, hold the top of the bar to sit upright and open your chest for easier breathing. When standing, grasp the hoods lightly and gently rock the bike from side to side in sync with your pedal strokes. But always keep each thumb and a finger closed around the hood or bar to prevent yourself from losing control if you hit an unexpected bump.

## NO.11

Handlebar width should equal shoulder width. A wider bar opens your chest for breathing; a narrower one is generally more aerodynamic. Pick the one that favors your riding style. Position the angle of the bar so the bottom, flat portion is parallel to the ground, or else points just slightly down, toward the rear hub.



### NO. 12

If you're leading a paceline up a hill, keep your cadence and pedal pressure constant by shifting to a lower gear.

### NO. 13

Keep your arms in line with your body, not splayed elbows out. This is an easy way to make yourself more aerodynamicand go faster with no extra energy.

### NO. 14

As your effort becomes harder, increase the force of your breaths rather than the frequency.

### NO. 15

When riding in a group, always keep your hands in contact with your brakes, either in the drops or on the hoods. That way, you are always prepared to slow.

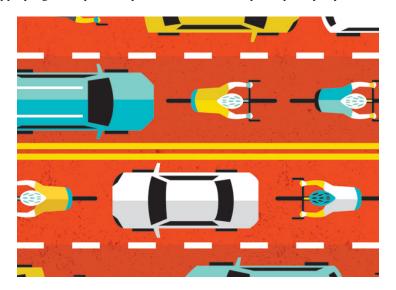
### NO. 16

Cross railroad tracks near the side of the road. It's usually smoother there than in the center.

Don't stare at the rear wheel you're following in a paceline. Let your peripheral vision keep tabs while you look a couple of riders ahead to see what they're doing. Then you'll be prepared if something happens to make them veer or change speed. A paceline is like a Slinky: Little movements at the front magnify and speed up as they flow to the back of the pack.

### NO. 18

Be extra cautious during the first 10 minutes of a rainstorm, when oil and dust float to the pavement's surface but haven't yet washed away. However: Painted road lines and steel surfaces (manhole covers, grates, railroad tracks, bridge decks, and expansion joints) get slippery right away and stay treacherous until they completely dry.



# SURF LESSONS: How to flow through turbulent streets

- NO.19 Ride well into the lane when traffic is stop-and-go. You can usually move at least as fast as cars in heavy traffic, and if you hug the curb, you're less visible and drivers will be tempted to squeeze by you.
- NO.20 Stay far enough in the traffic lane to avoid being struck if doors on parked cars suddenly open. You'll likely hear some honks from motorists who don't understand why you won't pull to the right to let them pass—a honk in your ear hurts less than a door in your face.
- NO.21 When you stop at a light, move to the center of your lane. This prevents drivers from edging forward, trapping you between them and the curb. When the light changes, accelerate to your cruising speed before moving right to allow them to pass.
- NO.22 When you see cars stopped at cross streets, watch the front wheels for the first hint of forward movement. If you see any, get ready to brake, and yell to get the driver's attention.
- NO.23 On a road with no shoulder, ride in the right wheel track of motor vehicles to ensure you don't blend into the scenery along the edge of the road. This also gives you 3 to 4 feet of space from the edge of the pavement to let you dodge potholes or deal with wind gusts.
- NO.24 Scan the rear windows of parked cars for someone who might suddenly pull out into your lane or throw open a door. You can also spot pedestrians about to step out from between cars.
- NO.25 When you're in a bike lane and a car is making a right turn in front of your path, do not swerve out to the left and around. Slow down, stay in the lane, wait for the car to turn, then proceed.
- NO.26 Hold a straight line past cars that are intermittently parallel parked—don't weave in and out of empty spaces. Drivers might not be ready for you to suddenly reemerge into the traffic lane.



# SILENCE! Quiet all those mysterious ticks, squeaks, rattles, and miscellaneous noises

- NO. 27 If you hear a metallic click during every crank revolution, grease the pedal threads (and tighten firmly when reinstalling).
- NO. 28 A squeak is from a pedal rather than the chain if it occurs at the same place on each stroke. For conventional pedals, spray lubrication where the cage and body connect. For clipless pedals, clean all cleat contact points, then apply a silicone spray to these points and wipe off the excess. Also make sure the cleats are tight.
- NO. 29 A chirp is almost always from the chain—it is crying out for lubrication.
- NO. 30 If a chain clicks, it has a tight link. Turn the crank backward by hand and watch the chain as it winds through the rear derailleur pulleys. The inflexible link will jump. Grasp the chain on either side of the stiff link, bend it laterally to loosen it, then apply lube.
- NO. 31 If the handlebar or stem creaks during sprints or climbs, tighten the binder bolts (in front). If the noise persists, loosen the binder bolts and spray a light lubricant between the bar and stem, wipe it away to leave a thin film, then retighten firmly.
- NO. 32 Buzzing occurs when a cage, frame pump, or some other add-on vibrates, or when a cable housing quivers against the frame. To find the culprit, touch these areas while riding, then tighten, shorten, reroute, or tape as necessary.
- NO. 33 Rattles and jingles often come from a seat bag. Secure items with rubber bands or rags.
- NO. 34 Thumping is usually felt as much as heard. Common causes: dented rims and bulging or improperly seated tires.
- NO. 35 Clicks during out-of-saddle climbing and sprinting sometimes come from two spokes rubbing. Put a drop of oil on each spoke intersection.
- NO. 36 Never trust your ear. Frames transmit noises. You might swear a sound is coming from your cranks, but it could be your saddle rails. Check all possible points.

# NO.37

When you start to feel stressed and overwhelmed by a hard pace, try this breathing technique: Instead of actively drawing air into the lungs then passively letting it out (our normal pattern), push the air out and let it naturally flow back in. Bonus: Because of how you activate your lungs to do this, it also helps you get into a low riding position and maintain a flatter back.

## NO. 38

On descents, your bike is much more stable when you're pedaling than when you're coasting.

Whenever you make the transition from standing to sitting, gain a few free inches by pushing the bike forward as you drop to the saddle.

# NO. 40

Put your left foot down when stopping to prevent greasy chainring "tattoos" on your right calf.

### NO. 41

Normally, applying the front brake harder than the rear is the most effective way to stop. On slick surfaces, however, braking hard up front invites a front-wheel skid, which will almost always result in a crash. Better to emphasize the rear brake. It's much easier to keep things under control if it's the back wheel that momentarily locks and slides.



# NO. 42

Always ride with your elbows bent and your arms and shoulders relaxed. This prevents fatigue caused by muscle tension. It also allows your arms to absorb shock instead of transmitting it to your body.

### NO. 43

When taking the lead position in a paceline, as the former leader drops to the back, don't accelerate. Maintain the same speed as when drafting so you don't cause gaps to open between the other riders.

### NO. 44

If a headwind finally defeats you, don't let it ruin your day Accept the slower speed, shift to an easy gear, and work on your pedaling form and your ability to stay relaxed. (And don't feel bad that you pooped out: In terms of pedaling effort, a cyclist who travels 18 mph through calm air would have to work about twice as hard to maintain that speed into a mere 10-mph headwind.)



# NO.45

To build your confidence in a paceline, start by staying one bike length from the rider in front of you, then gradually close the gap as your experience and ability increase. Once you can ride comfortably within a wheel's length, you'll be getting most of the benefit of drafting, which can reduce by up to 35 percent the effort it takes to maintain a given speed.

# NO. 46

To make a wet corner less treacherous, make your turn as shallow as possible. Set up wide so



you enter from a shallow angle, steer straight through the turn, then exit wide. In effect, this transforms one tight turn into two shallow ones.

### NO. 47

Occasionally take one hand off the bar and shake it. This relaxes your shoulder and elbow and encourages blood flow to your hand to prevent numbness.

# NO. 48

When riding one-handed for any reason, grip the bar on top, next to the stem. If your hand is farther out (such as on the brake-lever hood), the bike is more likely to veer dangerously should the front wheel hit a rock, bump, or pothole.

### NO. 49

To stave off muscle fatigue during hard, sustained pedaling, learn to "float" each leg every three or four strokes. Simply let your foot fall without exerting force.



HOW TO HEAL: Road rash—patches of abraded skin that result when you crash and slide across pavement—is painful but rarely serious, long-lasting, or likely to horrifically scar if you follow these six tips

- NO. 50 Quickly get to a place where you can thoroughly clean and disinfect the wound. It is less painful if done within 30 minutes of the crash, because nerve endings are still numb from the trauma.
- NO. 51 To prevent infection and scarring, scrub the wound hard with a rough washcloth or a medium- or soft-bristle brush. Apply a liberal amount of an antibacterial surgical cleaner such as Hibiclens or Betadine.
- NO. 52 Pat the wound dry, then apply an antibacterial ointment such as *Neosporin* (which, like the products mentioned previously, is available without a prescription).
- NO. 53 Cover the cleaned abrasion with a nonstick sterile dressing such as *Telfa* or *Second Skin*. To prevent leakage on clothes or sheets, cover the dressing with a layer of absorbent gauze for the first few days.
- NO. 54 Change the dressing each morning and night. Apply more antibacterial ointment before covering the wound, and check for signs of infection: tenderness, swollen red skin, or a sensation of heat. If you detect any of these, consult a doctor.
- NO. 55 To minimize scarring, keep the wound moist so a hard scab can't develop. As new skin starts to form, apply *Saratoga ointment* or *Brave Soldier ointment* and light gauze. This zinc-oxide-based salve prevents scabbing. Then use a moisturizer on new skin for at least a week.

When you cast a crisp shadow on the road, take the opportunity to check your position—are your elbows bent, back flat, knees slightly bent at the bottom of the pedal stroke, head up without being torqued at the neck?

### NO. 57

As tempted as you might be, don't take a day completely off the bike after the week's hardest effort. The best way to recover is with a short, easy spin—30 to 60 minutes at a pace that always allows effortless talking.

# NO. 58

On intermittently trafficked roads, take special care with a crosswind from the left. You'll naturally lean into it in order to ride a straight line. Then, when motorists pass and momentarily block the wind, you might veer left into the lane—and into danger. You can prevent this by anticipating it and keeping your elbows and grip relaxed to enable quick responses to changing wind velocity and direction.

### NO. 59

If your floor pump is more than a couple years old, the pressure gauge is likely giving inaccurate low readings (which leads to greater rolling resistance and a higher risk of flat tires due to underinflation). Keep the pump in action for about \$20 by buying an air-pressure gauge that is made specifically for bicycles.

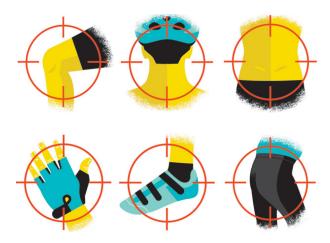
### NO. 60

Get more life from your tires by switching them from one wheel to another. The rear wears more than twice as fast as the front, so swapping every 500 miles or so significantly extends their longevity.



### NO. 61

For safety, don't brake in a paceline. Doing so will slow you too much, open a gap, and possibly cause a chain reaction. Instead, if you begin to overtake the rider in front, ease your pedal pressure, sit up to catch more wind, or move out to the side a bit. Once you've lost enough speed, tuck back in line and smoothly resume pedaling.



# PAIN KILLERS: Simple solutions for six of the most common aches, twinges, tingles, and discomforts

- NO. 62 KNEE PAIN: If the pain is in the front of your knee, raise your saddle in 2mm increments until the knee stops complaining. If the pain is in the back, lower your seat instead.
- NO. 63 CRIMPED NECK: You're most likely being forced to reach too far to the handlebar, so try a shorter stem or raise the bar by adding spacers under the stem.
- NO. 64 ACHY LOW BACK: You're probably too stretched out, so try the same fixes recommended for neck pain. If these don't work, you may have a leg-length discrepancy—see a fit specialist for help.

- NO. 65 NUMB HANDS: You're probably putting too much weight on your hands. Raise your handlebar or shorten your stem (or both). Also check the saddle—if it angles down, you could be sliding toward the bar.
- NO. 66 BURNING FEET: The simplest—and often overlooked—fix is to try riding with straps, buckles, or laces looser (but still secure). Next, move your cleats backward 2mm or less, which shifts pressure off the balls of your feet.
- NO. 67 SORE NETHERS: Make sure the saddle is level and straight. A low handlebar can cause your pelvis to rotate forward and down, so try raising it with spacers. Finally, test seats of different widths, lengths, firmnesses, and shapes.

# SURVIVE THE DREADED SWITCHBACK: How to negotiate one of the hardest trail features for novice mountain bikers

- NO. 68 As you arrive at the turning point, look over your shoulder, in the direction you want to go. You'll be amazed how well your bike follows your head around the switchback.
- NO. 69 In the turn, stay off your front brake; use the rear only if necessary. Try to do all braking before.
- NO. 70 If it's a left turn, enter with your right foot forward (vice-versa in a right turn). If you start to fall to the inside, one powerful pedal stroke can stand you back upright.

### NO. 71

If you have difficulty riding in a straight line, focus your vision about 20 feet ahead when riding at 10 to 15 mph, and extend this one foot farther for every additional mph. This gives your body time to automatically correct for changes in the road—naturally directing you to where you want to go instead of constantly reacting to where you already are.

### NO. 72

Break up long rides with a 15-second sprint every 30 minutes or so—adding variety to a monotonous pace is better training, relieves saddle pressure, and stretches and relaxes your body.

### NO. 73

After a cold, muddy, or gritty ride, resist the temptation to dash into the house. Instead, hose your bike while it's still wet (when it's easiest to get clean), dry any moving parts with a towel, and lube the chain. The entire process takes five to 10 minutes, and saves you at least 30 later on.



**NO. 74** - Ride like a jockey to get safely over rough railroad crossings, stretches of pothole-infested roads, or any other surfaces that could cause flats, damage to the rims, or even crashes: Stand slightly, with bent knees and elbows, and let the bike float up and down beneath you to absorb the shocks.

### NO. 75

After you grab your water bottle, don't tilt your head to drink. Tilt the bottle and squeeze the water in. You'll have more control.

# NO.76

How long of an event can you handle? Most cyclists can go about three times the distance (or time) of their average rides without struggling so much they risk falling to pieces.

# NO.77

When climbing, visualize pedaling across the stroke rather than simply up and down.



Strive to apply power horizontally through the bottom and top of the stroke.

### NO.78

The key to smooth, reliable, non-damaging gear changes when you're pushing hard is to ease your pedal pressure at the instant you move the shift lever. You need to lighten the load on the chain for about one revolution so it won't balk, crunch, or possibly break. Then hit the power again.

# NO. 79

Icky but effective: If you're going to be doing a lot of riding in cold, windy weather, don't clean your ears as often as usual. Removing the wax makes earaches more likely, because it exposes the inner ear to rushing air.

### NO. 80

Don't take the day off before a big event. If you need complete rest from riding, do so two days before, then take a short ride on the eve of the event—including a couple sprints to make sure your body (and your bike) are well oiled.



# QUICK AND IN CONTROL: Five ways to stay steady during hard accelerations

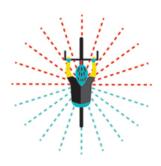
- NO. 81 Firmly grip the handlebar drops slightly lower in the bend than normal (not quite halfway between the deepest part of the curve and the end of the bar).
- NO. 82 Keep your elbows slightly bent to help you hold a straight line.
- NO. 83 Pull evenly backward and down on the handlebar with every stroke.
- NO. 84 Don't hold your breath—a common mistake during sharp efforts, even among experienced riders.
- NO. 85 Keep your head up—another frequent error in technique, because it feels natural for some reason to drop your chin.

# NO.86

Don't get down on yourself and think you're mentally weak if you feel like the wind is almost always against you—you're right. Studies have shown that only those winds within the trailing 160 degrees of an imaginary circle drawn around a cyclist provide assistance. Wind anywhere in the other 200 degrees works against you

### NO. 87

For optimal handling with 20 pounds or more of cargo, put approximately 60 percent of the weight in the rear panniers or on a rack, 35 percent on a front rack or panniers, and 5 percent in a handlebar bag.



The safest headlight setup for night riding: one that aims its beam somewhat downward (and far enough ahead to let you ride as fast as you want while being able to see and react to changing conditions in time), with a second light at the eye level of motorists, to catch their attention.

### NO. 89

Stretching on the bike helps minimize fatigue. Coast, put your left foot down, then lean far to the right to stretch your back and your left leg. Then do the right leg.

### NO. 90

To get safely through a sandy or gravel-strewn turn, straighten your bike until you're past the loose stuff, then resume turning. Avoid braking or excessively leaning while on a loose surface. Shift your weight back to help the bike track straight.

# NO.91

If you're suffering from achillies tendon pain, try raising the saddle and going for an easy spin while pedaling lightly, then see if the discomfort lessens. Increasing the distance from the saddle to the pedal seems to defy logic, but sometimes with a low saddle a cyclist's foot is in such a horizontal position, with the ankle bent at a right angle, that it causes strain on the tendon. Raising the saddle results in the foot being pointed slightly downward.





CRASH COURSE: Be extra vigilant during these traffic situations, which generate the three most common driver errors resulting in car-bike crashes

- NO. 92 When an oncoming motorist turns left in front of you while you're going straight through an intersection.
- NO. 93 When a driver fails to obey a stop sign and pulls out in front of you.
- NO. 94 When a vehicle passes you and immediately turns right, across your path.

**NO. 95** After adjustments to your saddle position, handlebar height, stem length, or cleat placement, minor discomfort is normal as your body adapts to the changes. Resist the temptation to fiddle again after just one short ride.

### NO. 96 peloton-ese vocabulary lesson

OTB is "off the back," and means you've been dropped. OTF is "off the front," and means you've attacked. OTR is "on the rivet," which comes from riders' tendency during all-out efforts to scoot forward on the saddle, where a rivet used to be. Tout adroit is "all to the right" in French. It means the chain is on the farthest-right cog and farthest-right chainring—the biggest gear combo. It's another term for an extended, hard effort.



# NO. 97

When climbing out of the saddle, if you feel your body bobbing too much, shift one gear harder. If you feel like you are excessively swinging your bike from side to side, shift one gear easier. These adjustments will give you an ideal balance of power and cadence.

# NO. 98

To keep a bottle of water from freezing on a long, frigid ride, carry it in your jersey pocket so it can absorb some warmth from your body.

# NO.99

Two easy (and most overlooked) ways to improve your bike's performance: Inflate the tires before every ride, and keep the chain lubed.



Every time you put a new tire on your bike, take it as a signal to do an otherwise overlooked but important task: Grease the quick-release and mounting-bolt threads on your car rack to prevent corrosion.

# NO. 101

Get 999 more tips on how to ride safer, have more fun, shed weight, get faster, grow stronger, properly care for your bike (and body), and more in our book 1,100 Best All-Time Tips, edited by Jason Sumner and available for \$13 at rodalestore.com.