Effective Ways to Improve Cycling Cadence and Enhance Performance

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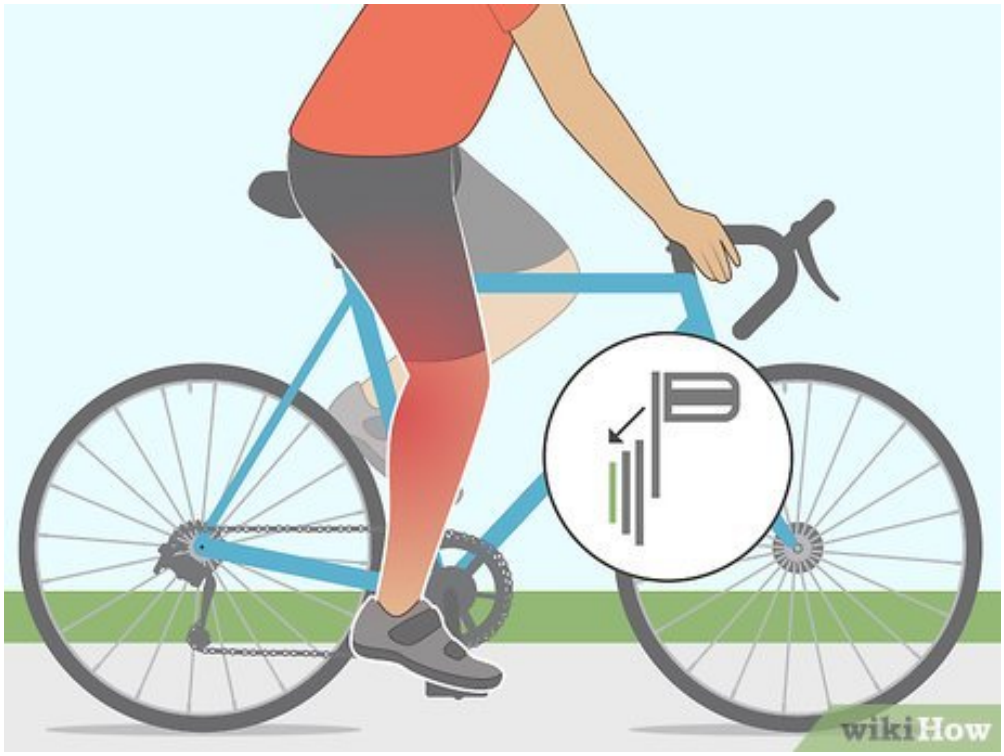
When you're biking, you probably notice that you're getting more tired when you constantly change how fast you're pedaling. If you want to build up your endurance so it's easier for you to maintain or change speeds, training with cadence drills can really help out. Your cadence is how fast you move the pedals and can make your bike trips feel easier and consistent.[1] While your cadence really depends on what you're comfortable with, there are still many ways to train so you're more efficient. With these tips and drills, you'll be able to endure longer and more intense rides!

Method 1

Method 1 of 3: Gear Adjustments

1 **Ride in a comfortable gear and cadence when you're just starting out.** Don't feel like you need to push yourself really hard right away. Shift into an easier gear that gives you slight resistance when you're pedaling. The gear you choose depends on what you're comfortable with and if you can maintain a consistent speed, so find what works best with your riding style.[2] Keep biking regularly until you don't feel winded after your rides.[3]

- Try to sustain the same speed throughout your entire ride.



2 **Switch to a lower gear and higher cadence if your legs feel exhausted.** If you're pushing down on your pedals too hard, it can waste a lot of energy and make you slower. If your legs start feeling tired on your ride, downshift your gears and try to increase your pedaling speed. With an easier gear and higher cadence, you won't work your muscles as intensely so you won't feel as fatigued.[4]

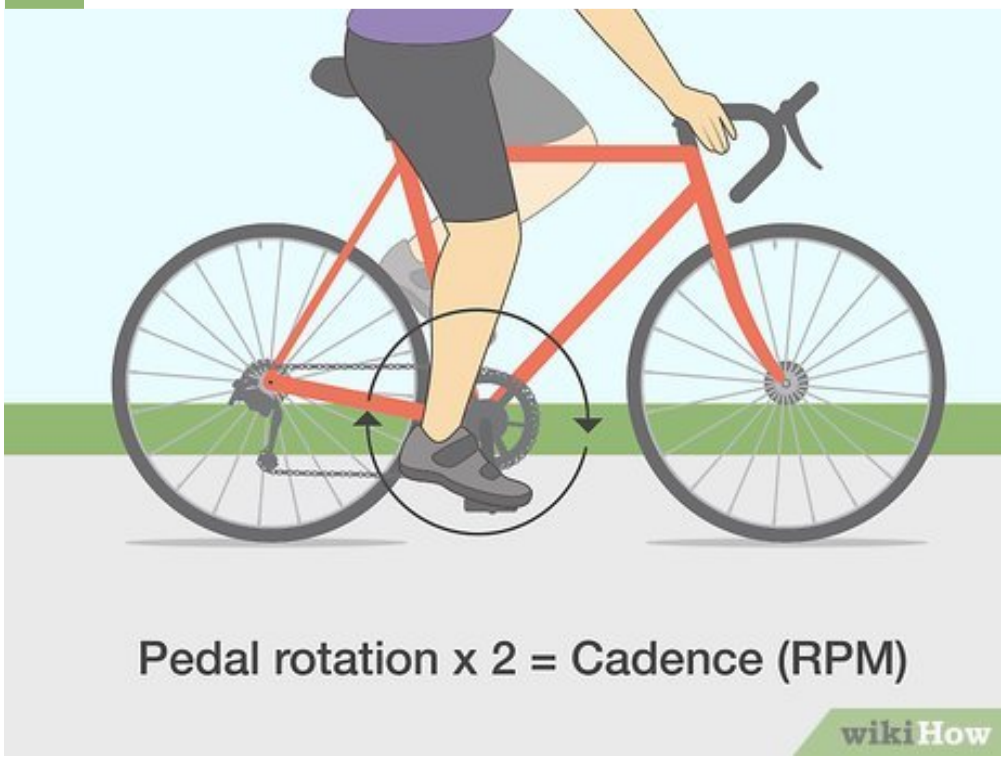
- You'll probably start feeling a little winded as you switch to a higher cadence, but that's normal.

3 **Try raising your gear and slowing your cadence if you're short of breath.** If you're struggling to catch your breath but your legs are fine, shift into a more difficult gear and slow down how fast you're pedaling.[5] You'll start feeling the burn more in your legs, but it will help build strength so you're able to maintain a faster cadence later on.[6]

- You'll probably end up switching back and forth between your gears depending on the terrain and how you're feeling. For example, you'll probably slow down your cadence as you bike uphill and increase it when you go downhill.

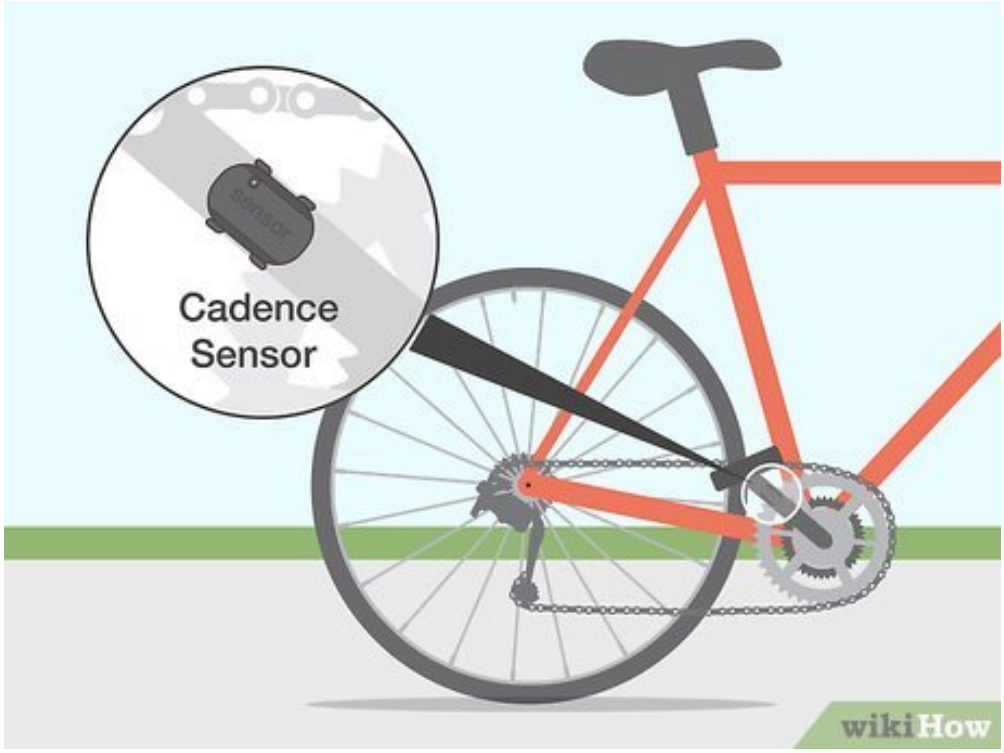
Method 2

Method 2 of 3:
Cadence Measurement and Ideal Ranges



1 **Find your cadence by doubling how much you pedal over 30 seconds.** If you don't know your cadence already, you can calculate it really easily without special equipment. Start biking at a regular and comfortable pace in any gear on a flat strip of road. Over 30 seconds, count how many times you pedal a full rotation on one side. After that, multiply the number by 2 so you know your cadence in rotations per minute (RPM).[7]

- For example, if you pedal 25 times, your cadence would be 50 RPM.
- It's easiest to count when your pedal is at the top of the rotation and you raise your knee.



2 **Attach a cadence sensor to your bike for a more accurate measurement.** If you don't want to take the time to count, you can also get a sensor that connects to your bike and tracks your cadence automatically. You'll usually place the sensor on your pedal crank, but follow the installation directions for the specific model you bought. Go for a ride and check the sensor after your ride to find your average cadence.[8]

- You can buy a cadence sensor online or from bike shops for around $40 USD.
- Some high-end bikes might have a cadence sensor built into them. Check your bike's manual to find out if you already have one installed.

3 **Start around 50–70 RPM if you don’t feel comfortable pedaling fast.** It can be a little difficult to maintain a high cadence if you’re first starting off. As you’re getting comfortable on your bike, don’t feel like you need to overexert yourself. Choose a gear that’s low enough where you can comfortably maintain 50–70 RPM. Try to ride really often so you can continue building up your endurance and improving up toward 70 RPM.[9]

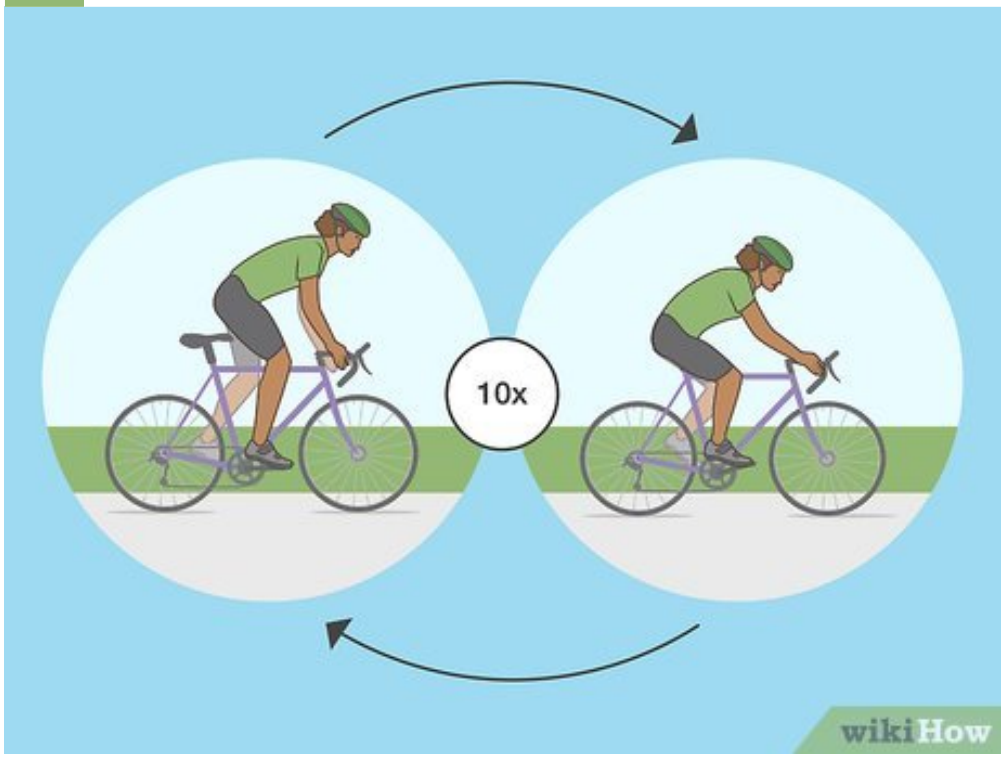
- If you pedal any slower than 50 RPM, it can actually make you less efficient and make you feel more tired out.

4 **Aim to reach a cadence of 80–90 RPM for most of your ride.** While everyone's cadence varies slightly, you really should try to maintain this sweet spot. Biking at this speed evenly works your muscles so you don't feel as fatigued from your ride. As you get more comfortable with a slower cadence, try to boost your pedaling speed so you can get within the ideal range.[10]

- Your cadence all depends on what feels best for you, but keeping a cadence higher than 90 RPM makes you rock your pelvis so you're less efficient.[11]

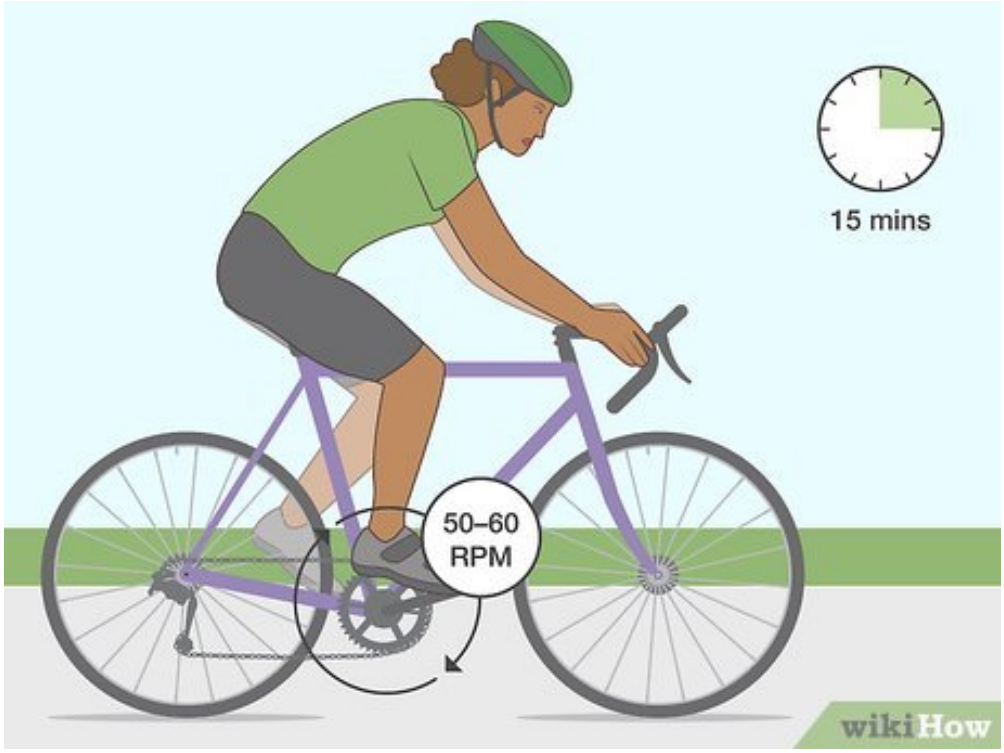
Method 3

Method 3 of 3: Cadence Drills



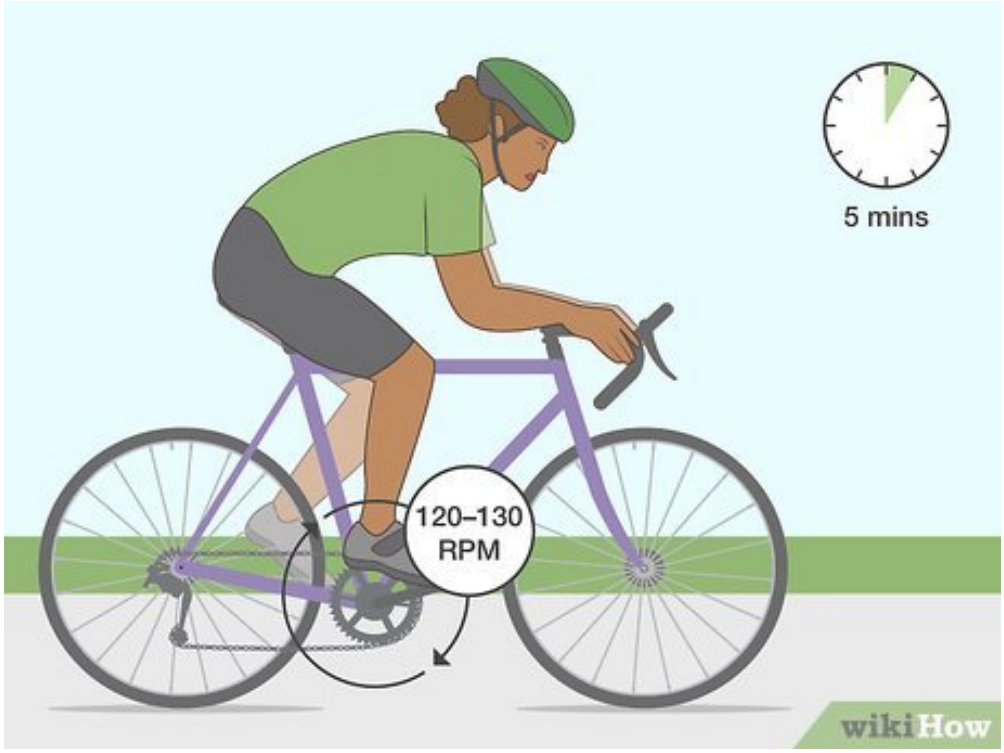
1 **Pedal as hard as you can in high gear from a stop to build muscle.** Shift your bike to the largest gear so it's more difficult to accelerate. From a dead stop, get on your bike and start pedaling as hard as you can without sitting down on your seat. Once you get up to full speed, sit down on your seat and coast to a stop so you have some time to recover. Try to do this about 10 times for a full set.[12]

- Being on the largest gear helps increase your endurance so it's easier to maintain a high cadence.



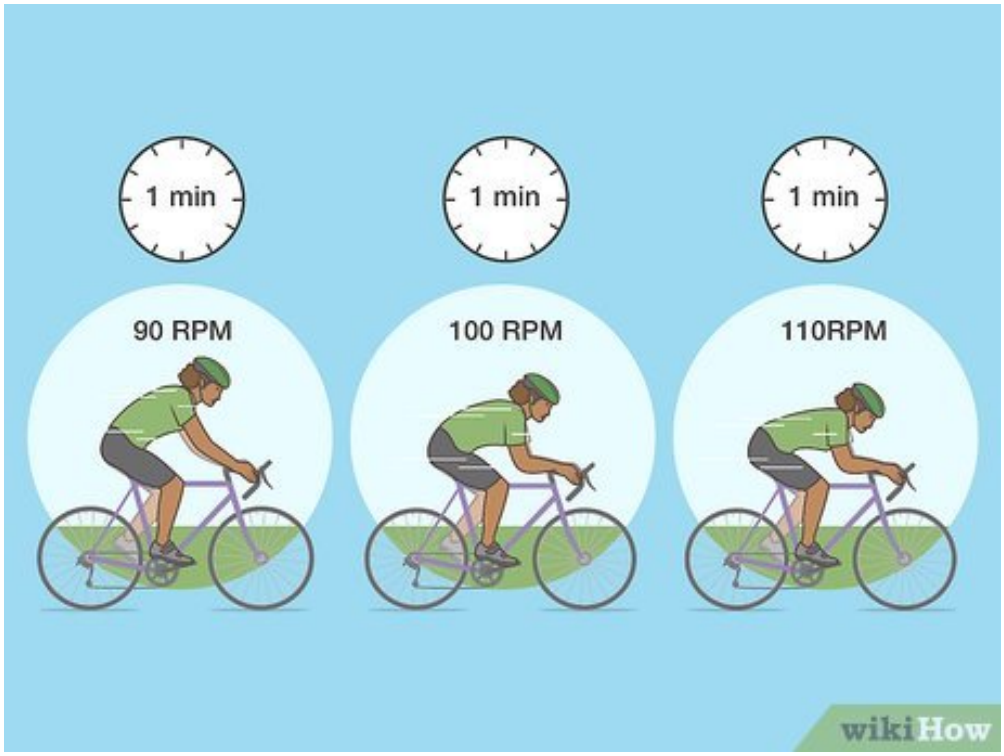
2 **Try an intense 15-minute ride at 50–60 RPM for a low-cadence workout.** Put your bike into a gear where you can pedal at this cadence while still feeling the burn in your legs. Maintain your speed and cadence for at least 15 minutes to help you build up your endurance. After that, switch to a comfortable gear and pace for 10–15 minutes to recover. Do this twice during your drill.[13]

- As you get comfortable with the intense sections of your ride, try going into a higher gear or decreasing the speed of your cadence even more.



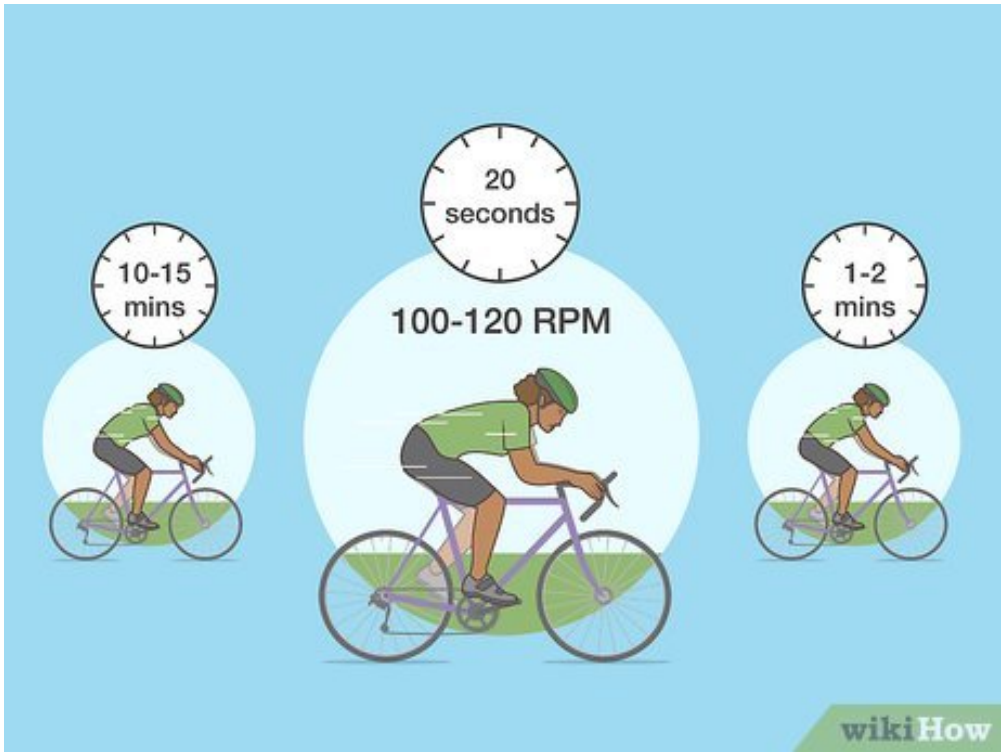
3 **Spin in an easy gear at 120–130 RPM if you want a high-cadence exercise.** Bike on a flat section of road so you don't feel as tired. Switch to the smallest gear you need so you easily maintain a 120–130 RPM cadence. Try to keep up your pace for 5 minutes before slowing down and resting for a 5- to 10-minute recovery period.[14]

- Even though the smallest gear will give you a low-intensity workout, you might still get really fatigued. If you can't maintain the cadence for the full 5 minutes, just go as long as you can.



4 **Build up your RPM multiple times during your ride to pyramid train.** Warm up at a comfortable pace for about 10–15 minutes so you're loosened up. Try to maintain 90 RPM for 1 minute, and then increase it to 100 RPM for another minute. Push yourself to a cadence of 110 RPM for 1 more minute before switching back to an easy and comfortable cadence for 2 minutes.[15]

- Then, do each interval for 2 minutes followed by another rest period. Increase the intervals to 3 minutes.
- After you finish, go back down to 2 minutes per cadence, and end with 1-minute intervals again.



5 **Cycle between 100–120 RPM for short intervals to help your acceleration.** Start your ride with a comfortable warmup that's 10–15 minutes long. When you're ready to start, switch to an easier gear and increase your cadence. Keep your pace for up to 20 seconds before going back to your starting cadence for 1–2 minutes. Try to do 5–10 reps.[16]

- If you want to make this drill even harder, stay in the same gear to really feel it in your legs. If you do this, go back to your starting for 3 minutes between each rep.

Expert Q&A

Question

Why is my cycling cadence so low?

Kyle Kenny
Master Trainer & Certified Personal Trainer
Expert Answer

Your bike might be set to a higher resistance level, which can lower your cadence overall. A typical low cadence for a cyclist is somewhere between 80 and 85, or even as low as 75.

Helpful 0 Not Helpful 0

Question

How do you pedal at high cadence?

Kyle Kenny
Master Trainer & Certified Personal Trainer
Expert Answer

Set your bike to a really high gear before you start pedaling. A higher cadence for a cyclist can be anywhere between 90 and 95 or even up in the 100s.

Helpful 0 Not Helpful 0

Question

How can I improve my low cadence?

Kyle Kenny
Master Trainer & Certified Personal Trainer
Expert Answer

Imagine that you're doing a single leg press or lunge with each stroke of the pedal. When you do a regular lunge, you're taking a big step forward and standing up with your body weight, which is similar to the motions of a low cadence cycling workout.

Helpful 0 Not Helpful 0

Question

Is high cadence training good?

Kyle Kenny
Master Trainer & Certified Personal Trainer
Expert Answer

Definitely! High cadence workouts help teach your legs to comfortably spin at a higher pace. Plus, this type of workout is a good option if you don't want a high heart rate.

Helpful 0 Not Helpful 0

Question

Is low cadence bad?

Kyle Kenny
Master Trainer & Certified Personal Trainer
Expert Answer

Not at all—it is more difficult than high cadence training, though. Low cadence workouts have a much bigger energy output since you're working with heavier resistance.

Helpful 0 Not Helpful 0

Tips

- Your cadence will vary on your riding style, size, and road conditions, so don’t worry if you sometimes speed up or slow down when you’re cycling.[17]
- Set your seat height low enough so your pelvis doesn’t rock while you’re pedaling but not so low that it’s uncomfortable.[18]

Warnings

- Biking with a cadence over 90 RPM might make you feel more tired and inefficient if you’re only biking recreationally. You can easily get to the same speed by pedaling slower.[19]

References

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This article was co-authored by Kyle Kenny and by wikiHow staff writer, Hunter Rising. Kyle Kenny is a Master Trainer, Certified Personal Trainer, and the Owner of KennyTRY Training. With more than seven years of experience, he specializes in helping people achieve their fitness goals by creating individualized meal programs, training regimens, supplementation systems, vitamin lists, and workouts. Kyle has multiple Personal Training Certifications and a Fitness Nutrition Specialist Certification through the National Academy of Sports Medicine. This article has been viewed 7,824 times.

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