The 25 Golden Rules of Running

25 of the most universally accepted rules of running.

By [Bob Cooper](#)

In most cases, these rules started out as a lightbulb over one runner's head. After a while, that runner told a few running buddies (probably during a long run), word spread, and before you know it, coaches were testing it, sports scientists were studying it, and it evolved from idea to theory to accepted wisdom. Along with each of the rules we present, however, we list the exception. Why? Because, as you also learned in grade school, there's an exception to every rule.

1. The Specificity Rule

The most effective training mimics the event for which you're training.

This is the cardinal rule of training for any activity. If you want to run a 10-K at seven-minute-per-mile pace, you need to do some running at that pace. "Runners are best served by running at goal pace and in the expected environment of that race," says Ann Snyder, Ph.D., director of the human performance lab at the University of Wisconsin-Milwaukee.

The Exception: It's impractical to wholly mimic a race--particularly longer distances--in training because it would require extended recovery. So, when doing race-specific training, keep the total distance covered shorter than the goal race, or run at your race pace in shorter segments with rest breaks (interval training).

2. The 10-Percent Rule

Increase weekly training mileage by no more than 10 percent per week.

Joe Henderson, the first editor of Runner's World, and Joan Ullyot, M.D., author of three women's running books, first popularized the 10-percent prescription in the 1980s. "I noticed that runners who increased their training load too quickly were incurring injuries," says Dr. Ullyot.

The Exception: If you're starting at single-digit weekly mileage after a layoff, you can add more than 10 percent per week until you're close to your normal training load.

3. The 2-Hour Rule

Wait for about two hours after a meal before running.

"For most people, two hours is enough time for food to empty from the stomach, especially if it's high in carbohydrate," says Colorado sports dietitian and marathoner Cindy Dallow, Ph.D. "If you don't wait long enough, food will not be properly digested, raising the risk of abdominal cramps, bloating, and even vomiting."

The Exception: You can probably run 90 minutes after a light, high-carb meal, while you may need up to three hours after a heavy meal that's high in protein and fat.

4. The 10-Minute Rule

Start every run with 10 minutes of walking and slow running, and do the same to cool down.

"A warmup prepares your body for exercise by gradually increasing blood flow and raising core muscle

temperature," says Jerry Napp, a Tampa Bay running coach. "The cooldown may be even more important. Stopping abruptly can cause leg cramps, nausea, dizziness, or fainting."

The Exception: It takes less than 10 minutes to rev up on warm days.

5. The 2-Day Rule

If something hurts for two straight days while running, take two days off.

Two straight days of pain may signal the beginning of an injury. "Even taking five days of complete rest from running will have little impact on your fitness level," says Troy Smurawa, M.D., team physician for USA Triathlon.

The Exception: If something hurts for two weeks, even if you've taken your rest days, see a doctor.

6. The Familiar-Food Rule

Don't eat or drink anything new before or during a race or hard workout.

Stick to what works for you. "Your gastrointestinal tract becomes accustomed to a certain mix of nutrients," says Dallow. "You can normally vary this mix without trouble, but you risk indigestion when prerace jitters are added."

The Exception: If you're about to bonk, eating something new is probably better than eating nothing at all.

7. The Race-Recovery Rule

For each mile that you race, allow one day of recovery before returning to hard training or racing.

That means no speed workouts or racing for six days after a 10-K or 26 days after a marathon. The rule's originator was the late Jack Foster, the masters marathon world record holder (2:11:18) from 1974 to 1990. Foster wrote in his book, Tale of the Ancient Marathoner, "My method is roughly to have a day off racing for every mile I raced."

The Exception: If your race effort wasn't all-out, taking fewer recovery days is okay.

8. The Heads-Beats-Tails Rule

A headwind always slows you down more than a tailwind speeds you up.

So expect to run slower on windy days. "I disregard the watch on really windy days because headwinds cost me 15 to 25 seconds a mile, and I only get a portion of that back after I turn around," says Monte Wells, a longtime runner in Amarillo, Texas, America's windiest city. "The key is to monitor your effort, not your pace. Start against the wind, so it's at your back in the second half."

The Exception: On point-to-point runs with the wind at your back, you'll fly along faster than usual.

9. The Conversation Rule

You should be able to talk in complete sentences while running.

A recent study found that runners whose heart and breathing rates were within their target aerobic zones could comfortably recite the Pledge of Allegiance. Those who couldn't were running faster than optimal.

The Exception: Talking should not be easy during hard runs, speedwork, or races.

10. The 20-Mile Rule

Build up to and run at least one 20-miler before a marathon.

"Long runs simulate the marathon, which requires lots of time on your feet," says Gina Simmering-Lanterman, director and marathon coach of the Denver Fit training program. "And knowing that you can run 20 miles helps you wrap your head around running 26.2."

The Exception: Some coaches believe experienced marathoners can get by with a longest run of 16 to 18 miles, while other coaches suggest runs up to 24 miles.

11. The Carbs Rule

For a few days before a long race, emphasize carbohydrates in your diet.

"Carbo-loading" became the marathoner's mantra after Scandinavian studies in 1967 suggested cramming down carbs following a period of carb depletion produced super-charged athletes. Experts now say simply emphasizing carbs a few days before a race over two hours works just as well.

The Exception: There's a word for carbo-loading during regular training or before a short race: gluttony.

12. The Seven-Year Rule

Runners improve for about seven years.

Mike Tymn noticed this in the early 1980s and wrote about it in his National Masters News column. "My seven-year adaptation theory was based on the fact that so many runners I talked to ran their best times an average of seven years after they started," he recalls.

The Exception: Low-mileage runners can stretch the seven years to well over a decade before plateauing.

13. The Left-Side-Of-The-Road Rule

To keep safe, run facing traffic.

"While running, it's better to watch the traffic than to have it come up from behind you," says Adam Cuevas, a marathoner and chief of the Enforcement Services Division of the California Highway Patrol. It's the law in California and many other states to run on the left side unless you're on the sidewalk.

The Exception: The right side of the road is safer when running into leftward blind curves where there's a narrow shoulder. The right side can also be safer if there's construction on the left side.

14. The Up-Beats-Down Rule

Running uphill slows you down more than running downhill speeds you up.

So, you can expect hilly runs to be slower than flat runs. "You don't get all of the energy that you expend going uphill back when you run downhill," explains Nimbus Couzin, Ph.D., a marathon-running physics instructor at Indiana University Southeast. "That's because when your feet strike the ground on a descent, a lot of energy is lost."

The Exception: When you run point-to-point with a net elevation drop, your average pace should be faster than on a flat course.

15. The Sleep Rule

Sleep one extra minute per night for each mile per week that you train.

So if you run 30 miles a week, sleep an extra half hour each night. "Sleep deprivation has a negative impact on training," says David Claman, M.D., director of the University of California-San Francisco Sleep Disorders Center. "The average person needs seven and a half to eight hours of sleep, so increase that amount when you're training."

The Exception: The extra sleep may not be necessary for some high-energy folks.

16. The Refueling Rule

Consume a combination carbohydrate-protein food or beverage within 30 to 60 minutes after any race, speed workout, or long run.

"You need an infusion of carbs to replace depleted muscle glycogen, plus some protein to repair and build muscle," says Nancy Clark, R.D., author of Food Guide for Marathoners. "Ideally, the carb-protein ratio should be 4-to-1. Some examples would be 150 to 300 calories of low-fat chocolate milk, a recovery-sports drink, flavored yogurt, or a bagel and peanut butter."

The Exception: Immediate refueling is less important if you aren't running hard again within 24 hours.

17. The Don't-Just-Run Rule

Runners who only run are prone to injury.

"Cross-training and weight training will make you a stronger and healthier runner," says TriEndurance.com multisport coach Kris Swarthout. "Low- and nonimpact sports like biking and swimming will help build supporting muscles used in running, while also giving your primary running muscles a rest."

The Exception: The surest way to run better is to run. So if your time is limited, devote most of it to running.

18. The Even-Pace Rule

The best way to race to a personal best is to maintain an even pace from start to finish.

Most of the 10,000-meter and marathon world records set in the last decade have featured almost metronome-like pacing. "If you run too fast early in the race, you almost always pay for it later," warns Jon Sinclair, the U.S. 12-K record holder and now an online coach (anaerobic.net).

The Exception: This doesn't apply on hilly courses or on windy days, when the objective is to run an even effort.

19. The New-Shoes Rule

Replace running shoes once they've covered 400 to 500 miles.

"But even before they have that much wear," says Warren Greene, Runner's World gear editor, "buy a new pair and rotate them for a while. Don't wait until your only pair is trashed." Consider shoes trashed when the spring is gone.

The Exception: A shoe's wear rate can vary, depending on the type of shoe, your weight, your footstrike pattern, and the surfaces you run on.

20. The Hard/Easy Rule

Take at least one easy day after every hard day of training.

"Easy" means a short, slow run, a cross-training day, or no exercise at all. "Hard" means a long run, tempo run, or speed workout. "Give your body the rest it needs to be effective for the next hard run," says Todd Williams, a two-time U.S. Olympian and online coach at pushthepace.com. Apply the hard/easy rule to your monthly and yearly training cycles by treating yourself to one easy week each month, and one easy month each year.

The Exception: After the most exhausting long runs and speed workouts, especially if you're 40 or older, wait for two or even three days before your next tough one.

21. The 10-Degree Rule

Dress for runs as if it's 10 degrees warmer than the thermometer actually reads.

To put it another way, dress for how warm you'll feel at mid-run--not the first mile, when your body is still heating up. This means choosing the right apparel. (See the "Dress for Success" table) "On cold days, the new soft-shell tops and tights are light, warm, and breathable," says Emily Walzer, fabrics editor for Sporting Goods Business Magazine. "On warm days, wear a lightweight performance fabric next to your skin, which will disperse sweat through evaporation."

The Exception: There's a limit to how many clothes you can take off without getting arrested, so if it's in the 70s or warmer, wear minimal lightweight, light-colored apparel.

Dress for Success	
Here's a cheat sheet to help you dress appropriately for your runs, no matter what the thermometer says. This chart factors in the 10-Degree Rule but doesn't account for a significant windchill. On very windy days, you may need to dress warmer.	
TEMP (in degrees)	**BASIC APPAREL**
above 70	Lightweight/light-colored singlet and shorts
60 to 69	Tank top or singlet and shorts
50 to 59	T-shirt and shorts
40 to 49	Long-sleeve shirt and tights or shorts
30 to 39	Long-sleeve shirt and tights
20 to 29	Two upper-body layers and one lower-body layer
10 to 19	Two upper-body layers and one lower-body layer
0 to 9	Two/three upper-body layers, one/two lower-body layers
below 0	Three upper-body layers, two lower-body layers

22. The Speedwork-Pace Rule

The most effective pace for VO2-max interval training is about 20 seconds faster per mile than your 5-K race pace.

The best way to increase your aerobic capacity and long-distance speed is through VO2-max interval training. A pioneer of VO2-max training is Jack Daniels, Ph.D., coach at the Center for High Altitude Training in Flagstaff, Arizona. "By stressing your aerobic system," he says, "this pace optimizes the volume of blood that's pumped and the amount of oxygen that your muscle fibers can use."

The Exception: The exact pace is closer to 10 seconds faster per mile than 5-K race pace for fast runners, and 30 seconds faster per mile for slower runners.

23. The Tempo-Pace Rule

Lactate-threshold or tempo-run pace is about the pace you can maintain when running all-out for one hour.

This pace is about 20 seconds slower per mile than your 10-K race pace, or 30 seconds slower per mile than 5-K race pace. "The key benefit of this pace is that it's fast enough to improve your threshold for hard endurance running, yet slow enough that you don't overload your muscles," says Daniels. The ideal duration of a tempo run is 20 to 25 minutes.

The Exception: The exact pace is less than 20 seconds slower per mile than 10-K race pace for faster runners and slightly more than 30 seconds slower per mile than 10-K race pace for slower runners.

24. The Long-Run-Pace Rule

Do your longest training runs at least three minutes per mile slower than your 5-K race pace.

"You really can't go too slow on long runs," says RW "Starting Line" columnist Jeff Galloway, "because there are no drawbacks to running them slowly. Running them too fast, however, can compromise your recovery time and raise your injury risk."

The Exception: Galloway says you should run even slower on hot days.

25. The Finishing-Time Rule

The longer the race, the slower your pace.

How much slower? Jack Daniels and J.R. Gilbert spent years compiling a table (see "Predict Your Performance") that shows how much you should expect to slow down from one race distance to the next. "We did some curve-fitting to come up with a formula that generates a pseudo-VO2-max for each race time," says Daniels. They sweated the math; now you just need to sweat the race.

The Exception: Terrain, weather, or how you feel on race day could all throw off the table's accuracy.

Predict Your Performance				

Want to know how fast you should be able to run a marathon without actually running one? Look for your most recent race time in one of the columns on the left, then follow it across to your predicted marathon finish time. The chart is based on the best times from runners of various ability levels.

1-MILE	5-K	10-K	HALF-MARATHON	MARATHON
4:20	15:00	31:08	1:08:40	2:23:47
4:38	16:00	33:12	1:13:19	2:33:25
4:56	17:00	35:17	1:17:58	2:43:01
5:14	18:00	37:21	1:22:38	2:52:34

5:33	19:00	39:26	1:27:19	3:02:06
5:51	20:00	41:31	1:31:59	3:11:35
6:09	21:00	43:36	1:36:36	3:21:00
6:28	22:00	45:41	1:41:18	3:30:23
6:46	23:00	47:46	1:45:57	3:39:42
7:05	24:00	49:51	1:50:34	3:48:57
7:24	25:00	51:56	1:55:11	3:58:08
7:42	26:00	54:00	1:59:46	4:07:16
8:01	27:00	56:04	2:04:20	4:16:19
8:19	28:00	58:08	2:08:53	4:25:19
8:37	29:00	1:00:12	2:13:24	4:34:14
8:56	30:00	1:02:15	2:17:53	4:43:06

Source: "Oxygen Power: Performance Tables for Distance Runners," by Jack Daniels and J.R. Gilbert.