SMARTMILES

Garmin Data Decoded

The 5 Metrics That Actually Matter for Marathon Runners

BB	HRV	RHR	SLP	TL
Body Battery	HRV	Resting HR	Sleep Score	Training Load

A free guide from SmartMiles

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Introduction

Your Garmin watch collects 50+ metrics every single day. Training Effect. Body Battery. VO2 Max. Respiration rate. Stress score. Sleep stages. Intensity minutes. The list keeps going.

Most of it is noise.

Not because the data is bad. Because without context, more data just means more confusion. You end up checking your watch, seeing a wall of numbers, and still making the same training decisions you would have made without it.

That changes today.

Five metrics move the needle for marathon runners over 30 who are chasing PRs and BQs. These are the numbers that tell you whether to push, hold, or back off on any given day. No fluff. No sports science lectures. Just the practical stuff.

You'll learn what each metric actually measures, what most runners get wrong about it, and exactly how to use it when you're standing in your kitchen at 5 AM deciding whether to lace up for that tempo run or swap to easy miles.

Let's get into it.

1. Body Battery

What It Measures

A single number (0-100) that estimates your body's energy reserves based on heart rate variability, stress, sleep, and activity combined.

What Most Runners Get Wrong

Everyone checks their Body Battery at the wrong time.

You wake up, glance at your watch, see "75" and think that's your recovery score. Or worse, you check it at midnight before bed and use that number to plan tomorrow. Both are wrong.

The midnight value is meaningless. Your body is mid-charge at that point. It's like checking your phone battery at 30% while it's still plugged in and deciding whether you'll make it through tomorrow.

Here's what actually matters: two numbers and the gap between them.

Wake-up value. This is your peak after overnight charging. It represents your recovery ceiling for the day. This is the number that tells you what you have to work with.

Bedtime value. This is what you drained down to after a full day. It tells you how hard the day actually was on your body.

The delta. Wake-up minus bedtime. That's your daily energy cost. A big delta on a rest day? Something is off (stress, poor nutrition, getting sick). A small delta on a hard training day? You're handling the load well.

One more thing most people miss: sleep duration alone doesn't determine your wake-up Body Battery. You can sleep 9 hours and wake up at 45. You can sleep 6.5 hours and wake up at 85. Sleep quality and timing matter far more than raw hours. Deep sleep percentage, sleep consistency, and when you stopped eating and drinking before bed all play a role.

How to Actually Read It

- **Wake-up BB 70-100:** Full green light. Your body recharged well. You can execute whatever is on the training plan.
- **Wake-up BB 50-69:** Caution zone. You recovered, but not fully. Easy and moderate work is fine. Think twice before a hard session.
- **Wake-up BB 30-49:** Your body is telling you something. Accumulated fatigue, poor sleep, or external stress. Consider swapping the workout.
- **Wake-up BB below 30:** Hard stop. Something is significantly off. Easy movement only, or take the day off entirely.

Track your wake-up BB for two weeks. You'll quickly learn your personal range. Some runners consistently charge to 80. Others peak at 65. Your baseline is yours. The trend matters more than any single number.

Decision Framework

If wake-up BB > 70: Execute the planned workout as written.
If wake-up BB 50-69 AND it's an easy day: Run as planned.
If wake-up BB 50-69 AND it's a hard day: Reduce intensity by one tier (tempo becomes easy, intervals become tempo).
If wake-up BB < 50 AND trending down over 2+ days: Swap to easy or rest. Do not push.
If wake-up BB < 30 AND RHR trending up 3+ days: Skip the workout or swap to a walk. No negotiation.

2. HRV (Heart Rate Variability)

What It Measures

The variation in time between your heartbeats, measured in milliseconds. Higher HRV generally means your nervous system is more recovered and adaptable. Lower HRV means your body is under more stress.

What Most Runners Get Wrong

HRV is the metric that sends runners down the deepest rabbit holes. You see a low number one morning and panic. You see a high number and think you're invincible. Both reactions are wrong.

A single HRV reading means almost nothing. Your HRV can swing 20-30% day to day based on what you ate, when you drank alcohol, how hot your bedroom was, or whether you had a stressful conversation before bed. One low reading is noise.

Three consecutive days trending down? That's a signal.

The other mistake: treating Garmin's "Balanced" HRV status as a green light to hammer. "Balanced" is the baseline. It means your body is in its normal operating range. It does not mean "go crush intervals." It means "proceed as planned." There's a difference.

"Low" status means something is suppressing your recovery. "Favorable" or above means your body is genuinely primed for hard work.

How to Actually Read It

Stop looking at daily values. Open your Garmin Connect app and look at the 7-day HRV trend line.

- **Trend steady or rising over 7 days:** Your body is absorbing training well. Stay the course.
- **Trend flat with one dip:** Ignore the dip. Normal variation.
- **Trend declining over 3+ days:** Fatigue is accumulating faster than you're recovering. Time to add recovery or reduce volume.
- **Trend declining AND you feel fine:** This is the trap. HRV drops before you feel it. Trust the data over your legs for the next 48 hours.

For context, many runners over 30 see overnight HRV values between 30-70ms (Garmin's scale). Your absolute number depends on age, fitness, and genetics. A runner with a baseline of 42ms doesn't need to chase 70ms. They need to watch their own trend.

Decision Framework

If HRV status is "Balanced" or above AND 7-day trend is stable: Execute training plan as written.

If HRV status is "Low" but only 1 day: Note it. Proceed with planned workout but monitor how you feel in the first mile.

If HRV has trended down for 3+ consecutive days: Reduce training load. Swap a hard session for easy. Add an extra rest day this week.

If HRV is declining AND sleep quality is also declining: Address sleep first. The HRV problem is likely a sleep problem.

3. Resting Heart Rate

What It Measures

Your lowest heart rate during sleep, measured in beats per minute. It reflects your cardiovascular recovery state and overall fatigue level.

What Most Runners Get Wrong

Two big mistakes here.

First, obsessing over the absolute number. "My RHR is 52, my training partner's is 44, so they're fitter than me." No. Your RHR is determined by genetics, age, fitness, medication, caffeine habits, and a dozen other factors. Population averages are irrelevant to your training decisions. Your number is your number.

Second, reacting to a single day's reading. You had two beers and your RHR jumped from 48 to 55? That's just alcohol doing what alcohol does. It tells you nothing about your training state.

What matters is the 3-day trend relative to your personal baseline.

How to Actually Read It

Establish your baseline first. Look at your last 30 days of RHR data. Find the range you typically sit in. For most trained runners over 30, this is somewhere between 42-58 bpm, but again, your range is what matters.

Now watch the short-term trend:

- **RHR within 1-2 bpm of baseline:** All clear. Body is in its normal recovery state.
- **RHR elevated 3-5 bpm above baseline for one day:** Probably nothing. Could be alcohol, dehydration, a hot night, or a late meal.
- **RHR elevated 3-5 bpm above baseline for 3+ days:** Fatigue is accumulating. Your body is working harder to maintain basic functions. Respect it.
- **RHR elevated 5+ bpm for 3+ days:** Red flag. This is early overreaching territory, or you might be fighting off an illness. Pull back significantly.

The beauty of RHR is its simplicity. No complicated interpretation needed. Number goes up and stays up? You're not recovering. Number stays stable? You're handling the load.

Decision Framework

If RHR is within 2 bpm of your 30-day baseline: Full green light. Train as planned.

If RHR is 3-5 bpm above baseline for 1 day: Proceed, but pay attention to Body Battery and how you feel during warmup.

If RHR is 3-5 bpm above baseline for 3+ consecutive days: Cut intensity. Keep volume moderate. Prioritize sleep this week.

If RHR is 5+ bpm elevated for 3+ days: Take a full rest day. Consider whether you're getting sick. Do not do any hard training until the trend reverses.

4. Sleep Quality Score

What It Measures

A composite score (0-100) from your Garmin that evaluates how restorative your sleep actually was, based on sleep stages, duration, restlessness, and SpO2 data.

What Most Runners Get Wrong

"I got 8 hours, I'm fine."

No. You can log 8 hours in bed and score a 40. You can log 6.5 hours and score an 85. Duration is one input. It is not the score.

What actually drives sleep quality:

Deep sleep percentage. This is where physical recovery happens. Growth hormone release, tissue repair, immune function. Most adults need 15-20% of their sleep in deep stages. If you're consistently under 10%, your body isn't rebuilding from training, no matter how many hours you log.

REM sleep percentage. This is where cognitive recovery and memory consolidation happen. For runners, it's where your brain processes motor patterns and training adaptations. Target is roughly 20-25% of total sleep.

Restlessness and wake events. Tossing and turning, brief wake-ups, bathroom trips. Even if you don't remember them, they fragment your sleep cycles and reduce quality.

The other thing runners miss: poor sleep quality shows up in your Body Battery the next morning. If your sleep score was 35 last night, your wake-up BB is almost certainly going to be lower than usual. They're connected. Sleep quality is the leading indicator. Body Battery is the result.

How to Actually Read It

- **Sleep score 80-100:** Excellent recovery night. Your body got what it needed.
- **Sleep score 60-79:** Decent but not great. Fine for easy and moderate days. Be cautious with high-intensity sessions.
- **Sleep score 40-59:** Poor recovery. Something disrupted your sleep (alcohol, screen time, stress, late eating, inconsistent schedule). Adjust today's plan.
- **Sleep score below 40:** Your body barely recovered. Treat today as a forced easy day regardless of what the plan says.

When your sleep score is consistently below 60, stop looking for training solutions. Look for sleep solutions. Consistent bedtime, dark room, no screens 30 minutes before bed, no food within 2-3 hours of sleep. Fix the input and the output fixes itself.

Decision Framework

If sleep score > 80 AND wake-up BB > 70: Best possible setup. Great day for a hard workout.
If sleep score 60-79: Proceed with the plan but cap effort at moderate if BB is also in the caution zone.
If sleep score < 60 for 1 night: Reduce today's intensity. Don't skip entirely unless other metrics are also flagged.
If sleep score < 60 for 3+ consecutive nights: Your training problem is a sleep problem. Prioritize fixing sleep hygiene over any workout.

5. Training Load and Training Effect

What It Measures

Training Effect is a per-workout score from your Garmin. Aerobic Training Effect (1.0-5.0) measures how much the session stimulated your aerobic system. Anaerobic Training Effect (1.0-5.0) measures the same for high-intensity energy systems.

Training Load is the rolling 7-day accumulation of your Training Effect scores, weighted by intensity and duration. It's the big-picture view of how much total stress you've applied.

What Most Runners Get Wrong

The biggest mistake: chasing "Productive" status every single day.

Garmin's Training Status labels ("Detraining," "Recovery," "Maintaining," "Productive," "Peaking," "Overreaching") confuse a lot of runners. They see "Maintaining" and feel like they're failing. They see "Productive" and feel validated. So they keep pushing for "Productive" and end up "Overreaching."

Here's the reality: "Maintaining" is the right status for most of your training cycle. It means you're holding your fitness while recovering. That is the job of easy days. That is the job of recovery weeks. It is not a bad thing.

"Productive" should show up after hard sessions and quality blocks. If it's showing up every day, you're probably pushing too hard.

"Peaking" is great in the 1-2 weeks before a goal race. It's a red flag if it shows up in base building.

The other mistake: ignoring the aerobic vs. anaerobic split. Marathon runners should see aerobic Training Effect values of 3.0-4.0 on their key workouts and 2.0-2.5 on easy days. If your easy runs are hitting 3.5+ aerobic effect, you're running them too hard. And if your anaerobic Training Effect is consistently above 3.0, you're doing too much high-intensity work for marathon training.

How to Actually Read It

Per-workout Training Effect:

- **Aerobic TE 1.0-2.0:** Minor impact. Recovery jog territory.
- **Aerobic TE 2.0-3.0:** Maintaining fitness. Perfect for easy runs.
- **Aerobic TE 3.0-4.0:** Improving fitness. This is your long run and tempo zone.
- **Aerobic TE 4.0-5.0:** Highly improving. Hard intervals, race effort. Use sparingly.

7-day Training Load trend:

- **Trend slowly increasing over 3-4 weeks:** Progressive overload. Exactly what you want in a build phase.
- **Trend flat:** Maintenance. Fine during recovery weeks or taper.
- **Trend sharply increasing:** You added too much too fast. Back off before your body forces you to.
- **Trend declining when you don't intend it:** You're either tapering or getting inconsistent. Check which one.

Decision Framework

If Training Status is "Maintaining" during a recovery week: Perfect. Stay the course.
If Training Status is "Productive" after a hard session: Good sign. Don't chase it again tomorrow.
If Training Status is "Overreaching": Mandatory recovery. Drop volume 30-40% this week. Add an extra rest day.
If easy runs show Aerobic TE above 3.0: You're running your easy days too hard. Slow down. Check your heart rate zones.
If 7-day Training Load jumped more than 15-20% week over week: Too much too soon. Flatten the load for the next week before adding more.

Putting It Together: A Morning Decision Framework

You just woke up. You have a workout on the plan. Here's how to make the call in 60 seconds.

Step 1: Check Wake-Up Body Battery

- **BB 70+?** Proceed to Step 2.
- **BB 50-69?** Proceed to Step 2, but you're on a yellow light.
- **BB below 50?** Skip to the Easy Day protocol below. Do not pass Go.

Step 2: Check HRV 7-Day Trend

- **Stable or rising?** Proceed to Step 3.
- **Declining 3+ days?** Downgrade today's workout by one tier (hard becomes moderate, moderate becomes easy).

Step 3: Check Resting Heart Rate 3-Day Trend

- **Within 2 bpm of baseline?** Green light. Execute the planned workout.
- **Elevated 3-5 bpm for 3+ days?** Swap to easy regardless of what the plan says.
- **Elevated 5+ bpm for 3+ days?** Rest day. Full stop.

Quick Reference Table

Wake-Up BB	HRV Trend (7d)	RHR Trend (3d)	Decision
70+	Stable/Up	Normal	Execute plan as written
70+	Declining	Normal	Proceed, but monitor feel
70+	Any	Elevated 3+ days	Swap to easy
50-69	Stable/Up	Normal	Moderate effort max
50-69	Declining	Normal	Easy day
50-69	Any	Elevated	Rest or walk
Below 50	Any	Any	Rest day

The Key Principle

No single metric tells the whole story. Body Battery gives you today's snapshot. HRV gives you the 7-day recovery trend. RHR confirms or contradicts both. Sleep quality explains why the other numbers look the way they do. Training Load tells you whether the overall plan is sustainable.

When two or more metrics are flagged, listen. One metric off can be noise. Two metrics off is a pattern. Three metrics off is your body asking for a break.

The runners who stay healthy and keep improving are the ones who respect these signals. The runners who end up injured are the ones who override them.

What's Next?

You now have the framework. You know which 5 metrics matter, what they actually mean, and how to use them every morning.

But checking all of this manually every day gets old. You'll do it for a week, maybe two. Then life gets busy and you're back to guessing.

What if someone did this analysis for you?

SmartMiles Weekly Training Report

Every week, we analyze your Garmin data and deliver a personalized report with:

- Your recovery trend analysis (BB, HRV, RHR, sleep patterns)
- Training load assessment with specific recommendations
- Week-ahead training guidance based on your actual data
- Early warning flags before fatigue becomes injury

No guesswork. No staring at charts. Just clear, actionable guidance every week based on your numbers.

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