

A PRACTICAL GUIDE TO INTENSITY-BASED TRAINING

Train by **FEEL**



Everything you need to understand RPE and RIR...and actually use them to train smarter, not just harder.

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Why this guide exists:

Most training programs give you a weight to lift. The problem? Your body doesn't care about the number on the bar. It cares about how hard you actually worked.

RPE and RIR are tools that let your effort level – not just the load – drive your training.

This is so important because research consistently shows that for strength and hypertrophy gains to occur, we need to be training close to failure.

But how do you know if you're training "hard enough". You could be leaving results on the table every single session without knowing it...or pushing so far past your limit that recovery becomes the problem.

RPE and RIR give you a language for effort. They let you hit the right intensity on purpose, not by accident.

This guide will walk you through what these tools are, how to use them, and most importantly how to develop the self-awareness that makes them so beneficial.

A NOTE BEFORE WE START

You will not be perfect at this right away. That's expected and totally fine. RPE and RIR are skills, and skills take practice. Read this once, refer back to it often, and trust the process.

The Basics: What are RPE & RIR?

Two sides of the same coin

RPE and RIR are two different ways to describe the same thing: how hard a set was, relative to your maximum effort.

Rating of Perceived Exertion (RPE):

is how hard a set of an exercise feels to you, on a scale of 1-10 based on how challenging the weight felt and how close you were to failure.

Repetitions in Reserve (RIR):

is how many more reps you could have completed at the end of a set before reaching failure. It's an estimate of how many reps you had left in the tank when the set ended.

RPE	What it FEELS like	RIR
10	Max effort No more reps could be performed	0
9	Very hard 1 more rep could be performed	1
8	3 more reps could be performed	2
7	Moderate hard 3 more reps could be performed	3
6	4 more reps could be performed	4
5	Warm-up Set 5 more reps could be performed	5

The Basics: What are RPE & RIR?

They're essentially inverses of each other:

THE SIMPLE CONVERSION

RPE 10 = 0 RIR · RPE 9 = 1 RIR · RPE 8 = 2 RIR · RPE 7 = 3 RIR · RPE 6 = 4 RIR

Some people prefer thinking in RIR ("I had 2 left"), others in RPE ("that was about an 8"). Both are valid, use whichever clicks for you.

Why not just use percentages?

Most traditional programs prescribe loads as a percentage of your one-rep max (1RM). For example: "3 sets of 5 at 80%." On paper, that's precise. In practice, I see it fall apart all the time.

- Bad sleep, high stress, or poor nutrition can make a weight that's 80% of your max feel like 90% that day.

- When you're still developing technique, your 1RM isn't a reliable number yet. RPE works regardless of how established the movement is.

- Your 1RM was established on a good day. Percentages don't know about the bad ones.

- Missing sessions because you pushed too hard is the silent enemy of long term progress. RPE helps you find the edge without going over it, consistently, week after week.

RPE and RIR adapt automatically. When the same weight feels easier than last week, that's progress. When it feels harder, that's data. Either way, you know exactly how to adjust.

For New Lifters: Building the Skill

Honest truth: this is hard at first

Research consistently shows that newer lifters underestimate how many reps they have left. You think you have 2 reps in reserve... you probably have 5 or 6. This is normal, not a failure.

Your nervous system is still learning the movement patterns. Your brain doesn't have a reliable reference point for what "hard" looks like yet. The self-awareness develops over time, with intentional practice.

KEY MINDSET

For the first few months, treat RPE as a skill you're developing, not a precise measurement tool. You're calibrating, not calculating.

What does failure actually feel like?

Many new lifters have never truly pushed close to failure. That makes judging "how many reps left" nearly impossible; you don't have a benchmark to compare it to... so let's go over some definitions first:

TYPE	WHAT IT MEANS
Technical Failure	The point where you can no longer maintain good form. Your rep starts breaking down — hips shoot up, your back rounds, your knees cave. <i>This is the meaningful limit for most training.</i>
Absolute Failure	You physically cannot complete the rep at all, regardless of form. Usually not where you want to train.

For New Lifters: Building the Skill

Practical anchors for beginners

Instead of guessing abstractly, use these concrete checkpoints after a set:

- **"Could I have done 3 or more reps easily?"** → you're probably at RPE 6 or below. Consider adding a small amount of weight.

- **"I could have done 2–3 more, but the last few would've been a grind."** → that's around RPE 7–8. Solid training zone.

- **"I had maybe 1 rep left, and it would've been ugly."** → RPE 9. This is high intensity and appropriate for some sets, not all.

- **"I gave everything."** → RPE 10. Reserve this for rare moments, like a max effort test.

EXAMPLE FOR A BEGINNER

Your program says *3 sets of 10 @ RPE 7*. You pick a weight. After set 1, you felt like you had 4–5 reps left. That's RPE 6 or below; add 5–10 lbs next set. After set 2, you had about 3–4 reps left. Closer... After set 3, 2–3 reps left. That's right around RPE 7–8. Good work! Don't forget to write it down so you can track your progress.



For Experienced Lifters: Using it as a Tool

From Estimation to Autoregulation

If you've been training for years, RPE and RIR stop being estimation exercises and become a genuine performance feedback system.

Adjusting within a session

Some days you walk into the gym firing on all cylinders....others, you're dragging. Instead of robotically following a prescribed weight and either grinding it through or phoning it in on the days that you're not 100% (which let's be real, that's most days) use RPE to calibrate in real time.

If your first warm-up sets feel heavier than usual, that's data. Scale back the working weight so your sets still hit the target RPE, rather than chasing a number at the cost of quality work.

READINESS CHECK

Before you train, check in on 5 things – *sleep, mood, energy, stress, and soreness*. Rate each one honestly on a scale of 1 to 5 (1 = poor, 5 = excellent). If your average is sitting at a 3 or below more often than not that's your body telling you that stress is accumulating. Don't stop training, but adjust accordingly.

Example:

Last week → 5 deadlifts @ 225lbs at RPE 7

This week → 5 deadlifts @225lbs feels like RPE 6, but your program says hit RPE 7

...YOU'VE GOTTEN STRONGER! Time to add load babyyy!!

Putting It Into Practice

How to actually use this in a program:

Knowing the theory is one thing. Here's how RPE and RIR show up in real-world training and what to do with them.

Reading your program

When your program says something like "3 × 8 @ RPE 7", here's the translation: perform 3 sets of 8 reps, at a weight where you could have done about 3 more reps at the end of each set. The goal is to find (and stay at) that effort level.

You pick the weight. That's the point. The program tells you the target intensity; your judgment sets the load. Over time, this develops excellent self-awareness and makes you a more independent, adaptable athlete.

What to do when sessions feel off

- **Everything feels heavier than normal:** Drop the weight 5-10% and hit the target RPE anyway. Don't chase the number on the bar.

- **Everything feels light:** Add weight until you're at the target RPE. Don't leave easy progress on the table.

- **You're feeling genuinely terrible:** It's okay to do a reduced session. Maybe you only do 1 or 2 sets and/or go lighter. Or maybe you just call it and have a recovery day. One bad session won't derail progress.

** There's always additional nuance and context to be considered with every situation, especially if rehabbing an injury. If you're really unsure what to do, reach out to a physical therapist with experience in lifting to help navigate when things get tough!

Putting It Into Practice

It's not perfect... and that's okay

Even experienced lifters misjudge sets. You'll call something a 7 and later realize you could have pushed harder and it was actually a 6. That's not a failure of the system, it's just part of it. Every rating is data that helps you calibrate better next time if you pay attention.

LAST BUT NOT LEAST...

RPE and RIR are a layer on top of your program, NOT a replacement. You still need sound programming, consistent technique work, and adequate recovery. These tools make the programming more responsive to you as an individual.

→ Remember, you can't pour from an empty cup. You also can't train like the cup is full when it isn't. RPE doesn't just measure effort, it protects it.

