No Not HIIT

Time efficient cardio for lifters (that's not just HIIT)

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Defining our terms

“Strength and conditioning” is a slippery term. Some of us in Gen X and older use more dated terms just as vague. Here’s what I mean in what follows…

- **Strength training** – as it sounds; it’s what we do, often to the detriment of…
- **Conditioning** – preparing the body for specific work or a range of demands; strength training is a subset of conditioning, as is…
- **Cardio** – training to improve cardiovascular performance, from lowered resting heart rate to oxygen delivery at muscles under hard loads.

HIIT isn’t always best

If you’re a busy person (and who isn’t?), it’s tempting to just blast a couple of weekly high intensity interval training (HIIT) sessions on top of strength training, as a way to save time. This isn’t the best idea for all goals. Strength training will provide plenty of high intensity cardiovascular (CV) work.

HIIT sessions will likely decrease harmful arterial stiffness in the long term[1], but likely lead to short term arterial stiffening by inflammation[2]. **This is fine** so long as you’re not doing it all the time, as your only CV work.

The main problem with HIIT, *especially* for lifters short of time, is that it can steal energy from training and recovery. It can even reduce appetite, for training and for food[3].

If you’re short of ideas for HIIT, and perhaps feeling a little masochistic, you could try the free ebook by user Dumb Boy (Oats) from the 531 Discussion Discord: *The Book of Oats*.

What you know about “Tabata” is wrong, btw

This is as good a place as any to bust myths about the most misunderstood of all HIIT, the “Tabata” protocol.

Sometime during my lifting life, lifters got the idea that Izumi Tabata trained Japanese Olympians using only a protocol of 20 seconds’ maximal work and 10 seconds’ rest, repeated eight times. Internet articles further stated that this 4 minutes’ work gave the speed skaters equal cardiovascular fitness to those that trained multiple weekly hours of low

[1] Way et al., 2019, https://doi.org/10.1016/j.jsams.2018.09.228

[2] *Cells* **2022**, *11*(22), 3544; https://doi.org/10.3390/cells11223544

[3] *Mingzhu Hu, et al., Appetite, V182, 2023,106427, https://doi.org/10.1016/j.appet.2022.106427*.

intensity steady state (LISS) work. In short, people came to believe that 4 minutes' work could replace all other conditioning, if they just trained hard enough.

There's a lot wrong here. It shouldn't pass the sniff test for even the moderately inquisitive lifter.

First, what Olympians consider maximal work and what the average recreational lifter considers maximal work are *vastly* different. Second, Olympians have been formally and informally screened for cardiovascular issues many times; in garage athletes the protocol as described is a great way to find heart problems the hard way.

Lastly, actually reading Tabata's papers instead of secondhand internet posts about them will confirm that the protocol didn't replace LISS work. It replaced *some* LISS work, making training far more efficient. The athletes still trained LISS, and so should you.

Train a range of modalities (LISS isn't dead)

There's a whole, excellent book on this subject of fitting conditioning into a strength training program: *Tactical Barbell II: Conditioning* by K. Black. In it, K. Black describes the value of training in different ways for a range of conditioning effects, and how to fit them around lifting.

HIIT trains lactic threshold and anaerobic systems very well. But LISS cardio is needed for increased capillarisation and lower resting heart rate. Between these are the realms for cardiac hypertrophy and increased cardiac strength.

Lifters should try to include one or two low-to-moderate intensity sessions each week, on the off days. These are 45 minutes or more at a conversational pace. The standard advice is, "get a dog and walk it daily" but not all of us want to do that. The easiest way is to find a moderate activity you enjoy (it's karate club for me), or take a brisk walk.

The best time-efficient cardio for lifters (GXP)

You've read the arguments for training a mix of modalities, but you really, genuinely, honestly *don't have the damn time*. This is the place for the Graduated|Graded[4] Exercise Protocol (GXP). I don't know where the GXP truly started. I got it from Clarence Bass, who got it from Dick Winnett. Before that, I can't trace it.

GXP sessions are very brief – around 9 to 11 minutes – but the intensity won't leave you

[4] It's originally "Graded" but "Graded Exercise Protocol" is also the process health professionals use for injury and surgery recovery, so I prefer "Graduated".

feeling wrecked. The effect on VO_2 max and other markers is very gradual, but GXP will get you close to the limits of your VO_2 max improvement, given time.

Determine your maximum heart rate (MHR) using [220 minus age] or something more complex like Tanaka formula. If you have a heart rate monitor the software will have calculated maximum heart rate when you input your age and sex.

On a treadmill, exercise bike, or some other activity spend a couple of minutes warming up to 80% of MHR. This is where you can speak but just beyond the level where conversation would be possible. Keep heart rate between 80% and 85% MHR for 5 minutes. Spend a minute or two cooling down.

If you do this before lifting there's little need to cool down and if if you do it after lifting there's little need to warm up.

Colophon

- I do not use A.I in writing my programs. I was using em-dashes, semicolons and bulleted lists properly long before A.I stole everyone's work and I have writing samples from the 1980s to prove it. :0)
- To improve this program email ideas to personalwebsite.unnoticed059@passinbox.com
- If this was useful, buy me a coffee!