



PERFORMANCE 101: How to Improve Aerobic Fitness

How do you improve aerobic fitness? Key Points: To increase initially aerobic fitness perform aerobic activity (walking, running, biking, stair climbing elliptical etc.) moderately for 20-30 minutes when starting an aerobic program (base training). This can be split in two multiple sessions. Try to do most days of the week. After a few weeks of base training perform aerobic activities vigorously at points where the intensity is Somewhat Hard to Difficult for 30 seconds or more seconds (working to preferably 60 seconds). **Bottomline: To improve aerobic fitness you need to work vigorously than what you are use to.**

Vigorous activities may cause the heart to beat faster, sweating, muscle burn, breathing to become labored, and talking to become difficult. Vigorous activity can be performed with most forms of aerobic activities. One of the best forms of vigorous activities is interval training (some call it High Intensity Interval Training). It is a sequence of 2 or more intervals of high and low intensity aerobic activity.

Two to no more than four sessions of vigorous activity is suggested per week in combination with two or more sessions of moderate activity. I typically suggest 2 to 3 per week.

The best way to judge exercise intensity if through RPE (rating of perceived exertion)

Vigorous activity is relative to the individual and should not approach a RPE of 10 (extremely hard) unless highly fit.

When adding vigorous activity initially keep RPE to a 4-5 (somewhat hard to hard) is suggested for most. It is always important when doing vigorous activities to warm up before and could down after

Why Vigorous exercise?

Studies have shown just few minutes a day of vigorous activities like stair climbing and interval training can improve aerobic fitness. One study found vigorously climbing three-flight stairwell, three times per day, separated by one to four hours of recovery three or more days a week increased aerobic fitness. Another found that a stair climbing test predicts the risk of death from cardiovascular disease, cancer, and other causes. Good performance on the test equates to climbing three floors of stairs very fast, or four floors fast, without stopping. See the benefits of interval training below.

What is the difference between Moderate and Vigorous Activities?

Moderate and Vigorous Activities are all relative.

Example: A fit person may find walking 2.8 mph very light while someone who is unfit might find it vigorous. Therefore try to meet the suggested requirements and progress at your pace

These charts works for many, but not for all.

RPE	Talking	Breathing
1	Normal	Normal
2	Normal	Normal
3 Moderate	Easy	Comfortable
4 VT-1 Somewhat Hard	Somewhat Difficult	Noticeable
5-VT2 Hard	Difficult	Deep but Steady
6-VT2	Difficult-Very Difficult- Lactic Acid Burn	Deep and Somewhat Rapid
7-VT3	Very Difficult	Deep and Rapid
8-VT3	Extremely Difficult	Very Deep and Very Rapid
9	No	Very Deep and Very Rapid
10	Impossible	Breathlessness

Vigorous/HIT Zone

	HOW YOU'LL FEEL	EXAMPLES
Moderate physical activity	heart beating faster sweating can still talk can't sing	walking fast, cycling, hiking, pushing a lawnmower, doubles tennis, basketball, water aerobics
Vigorous physical activity	heart beating faster sweating a lot breathing hard can't talk	jogging, swimming fast, riding a bike on hills, football, rugby, singles tennis, aerobics, martial arts

Moderate-intensity Physical Activity (Approximately 3-6 METs)	Vigorous-intensity Physical Activity (Approximately >6 METs)
Requires a moderate amount of effort and noticeably accelerates the heart rate.	Requires a large amount of effort and causes rapid breathing and a substantial increase in heart rate.
Examples of moderate-intensity exercise include:	Examples of vigorous-intensity exercise include:
<ul style="list-style-type: none"> • Brisk walking • Dancing • Gardening • Housework and domestic chores • Traditional hunting and gathering • Active involvement in games and sports with children / walking domestic animals • General building tasks (e.g. roofing, thatching, painting) • Carrying / moving moderate loads (<20kg) 	<ul style="list-style-type: none"> • Running • Walking / climbing briskly up a hill • Fast cycling • Aerobics • Fast swimming • Competitive sports and games (e.g. Traditional Games, Football, Volleyball, Hockey, Basketball) • Heavy shovelling or digging ditches • Carrying / moving heavy loads (>20kg)