Aerobic Substitutions

Exercise Substitutions · https://www.fitnessacademy.com/help-center/aerobic-substitutions/

This page is a reference for aerobic movement substitutions used in our training programs. Use it to keep the intended intensity and time domain when a specific machine or movement isn't available.

For exact conversions across all machines and distances, use the interactive Aerobic Substitutions Calculator.

Run (meters)	Shuttle Run* (reps)	Double Unders (reps)	Burpees (reps)	Row/Ski (meters)	Row/Ski/Bike (calories)	Air Bike (calories)	Bike (meters)	Time (min/sec)
100	5	20 - 30	5 - 10	125 / 100	10 / 8	8 / 6	250 / 200	0:30
200	10	40 - 60	10 - 15	250 / 200	20 / 16	15 / 12	500 / 400	1:00
300	15	60 - 90	15 - 25	375 / 300	30 / 24	22 / 18	750 / 600	1:30
400	20	80 - 120	20 - 30	500 / 400	40 / 32	30 / 24	1000 / 800	2:00
600	30	120 - 180	30 - 45	750 / 600	60 / 48	45 / 36	1500 / 1200	3:00
800	40	160 - 240	40 - 60	1000 / 800	80 / 64	60 / 48	2000 / 1600	4:00
1000	50	200 - 300	50 - 75	1250 / 1000	100 / 80	75 / 60	2500 / 2000	5:00

The first number is the suggested distance or calorie count for males, the second for females.

Double under and burpee ranges reflect skill and capacity in the movement. Everyone is different. As a general guideline, test how many you can do at moderate effort in one minute when fresh, then use that pace to convert. Land where the effort matches the time domain.

*One shuttle run rep is 50 feet (15.24 meters): 25 feet down, 25 feet back.

If equipment, skill, or physical limitations prevent a listed movement, use the time column. Choose any aerobic movement you can sustain at moderate effort for the indicated time. Toe taps, high knees, stair running, and running in place all work.

Our conditioning sessions target specific energy systems. The tool is flexible, but the movement pattern and intent are often specific. Double unders train rhythm, coordination, and plyometric endurance, not just cardio. Swapping them for air bike sprints hits the lungs but misses the skill element. Shuttle runs build agility through rapid direction changes. Replacing them with a straight run changes the workout's purpose.

Double Under Substitutions

Some programs double or triple single unders to replace double unders. We recommend a 50% increase (1.5x) to preserve the intended aerobic effect. Going higher drags out the workout and throws off the pace. If a 3-minute interval includes 100 double unders and 20 deadlifts, tripling to 300 single unders will likely eat the whole interval and shift the workout away from its intended intensity.

For jumping jacks, use the same rep count as the double unders. Both use arm and leg motion together, so the energy cost is similar. For pogo jumps and line hops, apply the same 1.5x rule as single unders.

Double Unders	Jumping Jacks	Single Unders	Line Hops	Pogo Jumps
10	10	15	15	15
20	20	30	30	30
30	30	45	45	45
40	40	60	60	60
50	50	75	75	75
60	60	90	90	90
100	100	150	150	150

Don't overthink the math. These are coordination-based movements, and the ideal substitution varies with your ankle strength, jump mechanics, and plyometric endurance.

If you can't do double unders yet, don't treat the workout as practice time. Choose an alternative that keeps you moving. Skill development belongs in separate, focused sessions.