

Interval Training

Interval training (not to be confused with [HIIT](#) or [SIT](#)) is an advanced technique to be used only after at least 6 weeks of a general conditioning program. During interval training, stroke volume reaches higher levels more often because of the numerous relief intervals. Stroke volume is highest during the recovery period from exercise (Cummings 1972).

Stroke Volume	Rest	Exercise	Recovery
ml/beat	78	93	107.5

Example

- Set 1: 8 x 200 @ 0:35 (1:45)
 - 8 = repetitions
 - 200 = distance (m)
 - 0:35 = training interval time (min:sec)
 - 1:45 = relief interval time (min:sec)

Running	
Interval Training Distances	Interval Training Times
100m	1-5 seconds more (slower) than best time
200m	3-5 seconds more (slower) than best time
400m	1-4 seconds less (faster) than 400m segment of a 1600m (1 mile) run
800-1200m	3-4 seconds more (slower) than 400m segment of a 1600m (1 mile) run
Swimming	
Interval Training Distances	Interval Training Times
25m	1-5 seconds more (slower) than best time
50m	3-5 seconds more (slower) than best time
100m	1-4 seconds less (faster) than 100m swim segment of a 400m swim
150-300m	3-4 seconds more (slower) than 100m segment of a 400m swim

- Training Volume
 - sets x reps x distance
 - 2.4 - 3.2 kms (1.5 - 2 miles) per session
 - Note: Swimming is approximately 1/4 of distances used for running.
- Relief interval (Work:Rest) time

- 200 m: 1:3
- 400 m: 1:2
- Frequency
 - 2-3 times per week
- Progresion
 - Decrease work interval time
 - Decrease relief interval
 - Increase Reps
 - Increase Sets
 - Walk faster and later jog instead of walk during relief interval
 - Combination of above

Sample Beginning Workout

- 200m
 - 200m best time (running start) = A
 - Training time = $A+5 = C$
 - Work:Relief ratio (1:3) = $C:(3xC)$
- 400m
 - 1600m (1 mile) best time = B
 - Training time = $(B/4)-4 = D$
 - Work:Relief ratio (1:2) = $D:(2xD)$
- 200m & 400m combined workout
 - **Set 1:** $4x400m @ D:2xD = 1600kg (1 \text{ mile})$
 - **Set 2:** $4x200m @ C:3xC = 800 \text{ kg } (1/2 \text{ mile})$
 - Total Volume: 2.4 kg (1.5 miles)
 - Workout Duration: under 30 minutes