

Extreme Interval Training

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Introduction

Have fun in this intense workshop that brings back the work in workout! Maximize your time and results with interval training. Learn a variety of interval formats combining strength, cardio conditioning, plyometrics and functional movements that can be mixed and matched to create a challenging workout for your participants. Bump up your intensity with these innovative and energetic exercises.

Interval Training

Originating in the 1930 with German coach, Woldemar Gerschler, interval training is a system of conditioning involving repeated work stress interspersed with periods of relief. Premise is that the athlete can perform greater volume of work by breaking the workout into intense bouts of work interspersed between bouts of recovery.

Terms:

<i>Work Interval:</i>	segments of high intensity work effort usually lasting between 10 seconds to 3 minutes. The work interval should involve an effort of 80% MHR and above depending on the goal.
<i>Recovery</i>	low-moderate intensity rest or recovery segment between work intervals
<i>Cycles</i>	number of work/recovery intervals
<i>Sets</i>	number of groups of intervals completed per workout
<i>Work/rest ratio</i>	a work/rest ratio of 1 to 3 means that the recovery period is three times as long as the work interval. For instance; a 1 - minute work interval of high intensity followed by a relief interval of light jogging for 3 minutes has 1:3 work to rest ratio.

Benefits of Interval Training

- ◆ Increased caloric expenditure
- ◆ Develops aerobic and anaerobic energy systems: It appears that an individual can produce a greater amount of work in a single training session if the work bouts are spaced between periods of rest or recovery. For instance, a highly motivated athlete may be able to maintain near maximal intensity exercise for 10 minutes before becoming too exhausted to continue. Yet, if the athlete were to work at near maximal intensity for 3 minutes interspersed with 3 minutes recovery periods the pace may be maintained for a hour before experiencing the same degree of fatigue (MacDougall et al, 1981)
- ◆ Provides sports specific conditioning
- ◆ Improves cardio-respiratory fitness and the ability to manage lactic acid
- ◆ Ease of design or multi level abilities
- ◆ Less potential for overuse injury
- ◆ Variety

Types of Intervals

1. Cardiovascular

Interval Guidelines

Energy system	Work time	Cycles	Work/relief	Type or recovery
ATP-Pc	0-30 sec	1-8	1-3	Passive
Glycolytic	30-60 sec	5	1-3	Active
Glycolytic	60-120 sec	5	1-2	Active
Oxidative	3-4 mins	4-6	1-2	Active
Oxidative	4-5 mins	3-4	1-1	Active

2. Strength (circuit)

3. Combination Cardio and Strength (circuit)

Interval Variations

Extensive – not enough recovery for each interval

Intensive – enough recovery for each interval

Fartlek - random

Pyramid – increasing work phase with consistent recovery

Ladder – increasing work and recovery phases

Workout variation

Sport specific

General fitness

Goal focused

Extreme Interval Training

Sample Exercises

	Combo	Cardio	Resistance
Intensive intervals:			
Extensive intervals:			
Fartlek:			
Pyramids:			
Ladder:			

Extreme Interval Training Sample Class

Warm up – 6-8 minutes

Set 1: Fartlek Training (total time 5-7 minutes)

Random intervals of:

Directional shuffle – follow instructors lead

Cariokes – follow instructors' lead

Suicide – if space permits

Hop drills

Box drills

Set 2: Intensive Intervals (30 seconds, 1:1 ratio, 6 cycles)

Ski skate – 3 skates and a jump

Hurdler knees – 3 knees quick run on spot

3 quick run with power knee

Power heel digs

Power kick front/ back

Triple jump

Set 3: Pyramid training (consistent 15 sec recovery)

15 sec. Vertical jump

30 sec. Single leg hop

45 sec. Squat jumps

60 sec. Lateral jumps
45 sec. Squat jumps
30 sec. Single leg hop (other leg)
15 sec. Vertical jumps

**Set 4: Cardio strength intervals (set up steps or BOSU in rows)
(1:00, 1:1, 8 cycles)**

Cardio - straddle runs down the line
Strength- alternate squats off top of step
Cardio – straddle run down the lines
Strength – alternate lunges
Cardio – straddle runs down the line
Strength – climbers
Cardio – straddle run down the line
Strength – burpees

Set 5: Strength Intervals (lower/ core/ upper)

Squat – 8's/4's/2's/ power
Plank roll over
Lunges – R leg only/ L leg only/ power
Walking push-ups

Set 6: Partner Work (1:00 min each)

Single leg balance – wrestle
Standing push-ups
Mirror shuffle

Set 7: Push –up Pyramid

4 plyo push-ups
8 triceps push-ups
12 staggered push-ups
16 regular
12 staggered push-ups
8 triceps push-ups
4 plyo push-ups

Set 8: Core (45 seconds each)

Flexion - curls
Extension – prone thoracic extension
Lateral flexion – side plank
Flexion – oblique curls
Extension – prone leg lifts
Lateral flexion – other side plank

Cool down and stretch

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