

## CARDIO-BASED BODYWEIGHT EXERCISES DURING SELF-QUARANTINE





#### <u>General rules to build your circuit training workout routines with</u> cardio-based bodyweight exercise

- **Exercise order.** It is key to allow opposing muscle groups to alternate between rest and work in consecutive exercise stations. For example, alternating between upper and lower body exercises. If a particular exercise is significantly intense (usually dynamic lower body or whole body exercises), the following exercise is intended to slightly decrease the heart rate. For example, planking exercises or crunches may follow a jumping squats station.
- **Number of exercises**. There is no ideal number, although the original circuit training protocols required 9-12 exercise stations. However, it is important that all muscles are used at an appropriate intensity during a training session.
- **Individual exercise bout time**. Generally, the longer the duration, the lower the intensity achieved. To maximize the metabolic impact of exercise, effort time should allow for proper execution of at least 15-20 repetitions. An effort duration of 30 seconds makes it easier for most participants to reach and maintain the appropriate intensity during that time. During movement execution, maintain a fast pace in the concentric phase (overcoming gravity or load) but carefully control the eccentric phase (resisting gravity or load), thus increasing the metabolic impact.
- Recovery between exercise bouts. Recovery periods should be short, providing incomplete breaks; ≤30 seconds of rest increase the metabolic impact. If you are aiming at maximum time efficiency, it is recommended to minimize (≤15 seconds) the rest time.
- **Session time**. Training session should last at least 20 minutes. This may require multiple repetitions (or rounds) of a multi-station exercise circuit, usually 2-4 rounds.
- Exercise selection.
  - Include variety in terms of type, intensity and duration of exercises, rather than training with only one form of exercise (such as burpees) Use technically simple, low-demand neuromuscular exercises when individuals are beginners or they are untrained.
  - Use large muscle groups to create adequate resistance and aerobic intensity, for example, using complex or whole-body exercises.
  - Be safe and appropriate for participants in the training space provided.
  - Allow easy transition to accommodate minimized rest time.





### <u>Proposals of circuit training workout routines with cardio-based</u> <u>bodyweight exercise</u>

Effort time is the same and everyone should perform as much repetitions as possible with proper technique, regardless of the practitioner profile, but the recovery time varies.

<b>Parameters</b>	Beginner	Intermediate	Advanced
Frequency (days/week)	2-3	3-4	5
External load			
Effort time	30"	30"	30"
Recovery time	45"-60"	20"-30"	10"-15"
Session time	20-30'	20-30'	20-30'
Repetitions	Maximal <sup>a</sup>	Maximal <sup>a</sup>	Maximal <sup>a</sup>
Internal load			
% of HRmax <sup>b</sup>	65%-80%	~ 80%	$\geq 80\%$
RPE (score)	6-7	~7	> 7

<sup>a</sup>Maximal number of repetitions during effort time.

<sup>b</sup>Percentage of your maximum heart rate.

RPE, rating of perceived exertion scale (0-10).







Circuit example 1					
1 Jumping jacks	2 Wall sit	3 Push-up	4 Bicycle crunch		
Whole body	Lower body	Upper body	Core		
5 Mountain climbers	6 Hip thrust	7 Inverted row	8 Crunch		
Whole body	Lower body	Upper body	Core		
9 High knees	10 Lunge	11 Triceps dips	12 Push-up and rotation		
Whole body	Lower body	Upper body	Core		

**2 rounds** (12 exercises + 12 exercises)

Exercise time: 30" / Recovery between exercises: 45" / Recovery between rounds: 60" Total effort time: 12' / Total recovery time: 17'30"

Total session time: 29'30"







Circuit example 2					
1 Bear crawl	2 Side leg raises	3 Wall push-up	<b>4</b> V-sit up		
Whole body	Lower body	Upper body	Core		
5 Fingertip to toe jacks	6 Bent knee glute kickback	7 Table rows	8 Sitting twists		
Whole body	Lower body	Upper body	Core		
9 Crab walk	10 Lunge step-ups	11 Pike push-up	12 Dead bug		
Whole body	Lower body	Upper body	Core		

**3 rounds** (12 exercises + 12 exercises + 12 exercises)

Exercise time: 30" / Recovery between exercises: 25" / Recovery between rounds: 30"

Total effort time: 18' / Total recovery time: 14'45"

Total session time: 32'45"





Circuit example 3					
1 Jump rope	2 Step-up onto chair/box	<b>3</b> Shoulder taps	4 Side plank crunch		
Whole body	Lower body	Upper body	Core		
<b>5</b> Burpees	6 Glute bridge	7 Narrow to wide push-up	8 Bird dog		
Whole body	Lower body	Upper body	Core		
9 Squat jump	10 Single leg squat	11 Superman	12 Reverse plank		
Whole body	Lower body	Upper body	Core		

#### ~ • •

**4 rounds** (12 exercises + 12 exercises + 12 exercises + 12 exercises)

Exercise time: 30" / Recovery between exercises: 15" / Recovery between rounds: 15"

Total effort time: 24' / Total recovery time: 11'45"

Total session time: 35'45"





# STANDARD QUALITY GLOBAL CONNECTION

International Basketball Federation FIBA Route Suisse 5 - PO Box 29 1295 Mies Switzerland

Tel: +41 22 545 00 00 Fax: +41 22 545 00 99