



Figure 1: hip crossover a, b.
Objective: To build mobility and strength in torso by dissociating hips and shoulders.



Figure 2: scorpion on stomach a, b.
Objective: To lengthen and strengthen the core muscles, stretch the chest, quadriceps, hips, abs and activate the gluteus



Figure 3: hand walk a, b.
Objective: To build stability in the shoulders and core, to lengthen the hamstrings, calves and lower-back muscles.



Figure 4: one leg stand with forward bend.
Objective: To improve hamstring flexibility and balance, along with dynamic pillar stabilization.



Figure 5: lateral lunges.
Objective: open up the muscles of the groin and hips, also to hold pillar strength by sitting back and down.



Figure 6: forward lung - forearm to instep a, b, c.
Objective: To improve hips flexibility, hamstrings, lower back, torso, groin, hip flexors and quadriceps.



Figure 7: backward lunge with a twist a, b.
Objective: To lengthen the hip flexors, quadriceps, core and whole body from the big toes to the hands.



Figure 9: sumo squat a, b.
Objective: To improve flexibility in your hamstrings, groin, ankles and lower back.

Figure 8: sideways drop lunge a, b.
Objective: To improve flexibility in the hips, gluteus and iliotibial bands.

Abstract

This vocational article deals with pre- and post-workout exercises for several combat sports, such as judo, wrestling, karate, mixed martial arts, etc. In general, we have noticed that many combat athletes don't really know how to warm-up and stretch properly before and after the fights or combat training.

Keywords: combat sports, pre- and post-workout exercises

The problem

The aim of warm-up should be to prepare the combat athletes for sport or training performance. The warm-up should activate the cardiovascular, respiratory, motoric and nervous systems of the body. The proper general pre- work-out exercises will increase the CORE temperature and elongate the muscles actively. It will improve the balance and proprioception, and it is perfect formula for building mobility, flexibility, stability and strength (Verstegen – Williams, 2004; Číž, 2010). If it is possible try to avoid static stretching because of its inhibition effect (Fletcher – Jones, 2004; Faigenbaum et al., 2005; Little – Williams, 2006; McMillian et al., 2006; Moran et al., 2009; Vanderka 2011).

From our observations and experiences the combat athletes have also problems with correct post work-out exercises. These general post work-out exercises can be used (when executed and dosed properly) as a good compensation of unilateral loading, relaxation of muscle tension and prevention against injuries.

Our text shows-up some of the general pre- and post- work-out exercises.

Pre- workout exercises (figure 1 – figure 9)

The general principles of correct warm-up and stretching are

- duration 8 – 15 minutes
- dynamic movements and stretching with constant control
- pick-up about 9 - 10 complex exercises
- execute minimum of 8 repetitions of each exercise for both sides
- execute 1 – 3 sets of each exercise
- Hart rate should be about 120 – 130 beats per minute



Figure 10: a, b, c, d.
Objective: To stretch the whole back chain of legs (adductors, hamstrings and gluteus), lower back and oblique.



Figure 12: a, b, c, d, e.
Objective: To stretch abdominal and side trunk, to stretch chest and anterior shoulder.



Figure 13:
Objective To stretch hip and tight adductors.



Figure 14:
Objective: To stretch hip and leg adductors, hip extensors.



Figure 11: a, b, c.
Objective: To stretch leg extensors and hip flexors, iliopsoas. To stretch calves, hamstrings, gluteus and back extensor and to stretch abdominal and oblique internus / externus



Figure 15: a, b, c, d.
Objective: To stretch upper trapezius and neck muscles



Figure 16: a, b, c.
Objective: To stretch the whole back body chain (calves, hamstrings, gluteus, back extensors).

PRE AND POST WORKOUT EXERCISES FOR COMBAT SPORTS

Post- work-out exercises (figure 10 – figure 16)

The general principles of correct post- workout exercises are:

- prefer static stretching exercises
- hold the final position of each exercise for approximately 15 – 20 seconds
- execute minimum 2 – 3 sets of each exercise
- do not stretch until the pain threshold
- proper post- workout stretching exercises should improve your flexibility
- use also some of the CORE exercises as a compensation of overloading
- post- workout exercises should release the muscle tension
- duration 10 – 15 minutes

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