

# Warming Up and Warming Down

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## Introduction

Warming up is an essential pre-requisite before taking part in any sport or physical activity. Taekwon-Do is no exception to this rule. The following essay covers reasons for warming up, elements of a warm up, and some general comments on warming down.

## The Importance of a Warm Up

During a typical Taekwon-Do training session, we employ a variety of our body parts and put these parts through a diverse range of motions. Therefore, it is important that we prepare the body for the activity ahead. We can best do this by conducting an appropriate warm up.

There are several reasons for warming up. Here are a few of them:

- To warn the muscles, joints and tendons of the forthcoming activity, and ensure that they are ready for any sudden movements.
- To increase the body's temperature. The higher our body temperature, the more flexibility we are able to achieve.
- Increase the workload on the heart and lungs (gradually).
- Maximise the level of performance we are able to attain.
- Prevent or reduce the possibility of injury.

An appropriate warm up pays special attention to the part(s) of the body that is about to be worked. For example, sprinters will pay attention to their legs during warm up, while weightlifters will devote more time to their arms and upper body.

The same holds true for Taekwon-Do. A training session may focus on a different aspect than the last session, so it's important that the warm up be tailored to the upcoming session. For example, if the session is about to focus on leg techniques, then it is vital to place more emphasis on the legs during the warm up. However, this does not mean we should ignore the upper body (it is necessary to warm up the entire body)

## Elements of a Warm Up

A warm up consists of three stages.

The first stage of the warm up is made up of aerobic activity. The purpose of this stage is to increase the body temperature and to gradually increase the workload of the heart and lungs.

An important thing to note about this stage of the warm up is the difference between aerobic and anaerobic activity. Aerobic activity consists of light exercise over longer periods of time (than anaerobic), whereas anaerobic activity consists of more intense exercise over a shorter period.

As a result, aerobic activity is more suited to this stage of the warm up, as the goal is to gradually increase the heart and pulse rates. Anaerobic activity is too strenuous at this stage and can result in injury. For example, jogging is a better exercise than sprinting to gradually increase the pulse rate.

However, the level of activity should not be so light that the body temperature is not sufficiently increased. A good form of measurement is sweat. Mild sweating is desirable, while heavy or no sweat is not.

The next stage of the warm up is stretching. Stretching is performed to lessen the possibility of injury; maximise the body's range of motion; and prepare the muscles for sudden, extreme movements.

Stretching is a very broad topic and much can be written about it. I will just cover some basic rules of stretching:

- Always warm up before stretching.
- Initially, stretch the muscle until you begin to feel some tension. Hold this position until the muscle begins to relax, then stretch a little further and repeat the process.
- Never over-stretch to the point that you experience pain.
- Breathe normally while stretching.
- Stretch for a minimum of 10 seconds.
- Never bounce while stretching or stretch suddenly. Over time, this can tear the muscle.
- Stretch your muscles evenly. For example, stretching- your quadriceps but ignoring the hamstrings can lead to back problems.
- Try to relax during the stretch. If there is a particular muscle that needs extra attention (perhaps it has just recovered from injury), focus on it before training starts. Remember, the main objective at this stage is to prevent injury. Increasing your flexibility is not important.

The third stage of the warm up involves basics. Once, the muscles have been stretched, practicing basic techniques is a good way of putting the body through the movements of Taekwon-Do at a light pace.

When practicing basics, start off lightly. Gradually increase the power and intensity of the techniques until they reach the desired level.

A common routine in practicing basics is executing basic hand techniques (punching, blocking, etc) in sitting stance. There is no need to shift stances, so the arms and upper body can be focussed on. Following this, basic kicks can be executed from parallel ready stance, focussing on

the legs. Start off kicking/punching/blocking lightly and gradually increase the power of the techniques.

### Warming Down

As warming up is important at the beginning of the session, warming down is also important at the conclusion of training.

A warm down helps to gradually lower the body temperature and also to flush any lactic acid from the muscles. Lactic acid is produced by anaerobic activity and causes the muscles to feel sore the following day(s).

Generally, light aerobic activity and stretching are adequate for warming down.

### BIBLIOGRAPHY

The material in this essay was researched from:

- "ITFNZ Instructors' Course Manual"
- "Safer Stretching" by Graham Patterson