

## An Efficient Warm Up Based on Anatomical Principles

1. When a plie is performed efficiently, the weight of the body is held, as we say, 'out of the legs' by the psoas system, minimizing tension in the leg muscles and allowing the feet to relax on the floor. The knee and ankle act as simple hinges, there is a strong stretch on the Achilles tendon, and the tibia anterior is not prominently protruding.

The primary use of plie is to initiate and cushion the landing from jumps. The height of a jump or leap is the direct result of power generated from the preparatory plie

When you see the tibialis anterior contract during a plie, you know the dancer is engaging muscle groups that ought to be released, and this in turn means that the student is relying on the legs and feet to do the work rather than using the psoas system to maintain control in the pelvis.

2. Let's consider the case of a student who is having trouble achieving full extension from developpe; either the leg cannot lift higher than 90 degrees, or there is popping and grinding that is painful in the hip socket.

This is perceived as a positioning problem: the gesture leg is not moving in the proper plane relative to the position of the pelvis. A high, graceful, stress-free extension requires proper positioning.

There is also the problem of overuse of improper muscles. When the quadriceps are over-engaged, they contract all the tendons surrounding the hip socket. This actually *pulls down* the leg. This is a classic example of how the body can work against itself.

3. Some students, after hearing 'lift up' enough times, start to believe the ribcage will literally lift them up. Raising a leg in extension, for example, is sometimes initiated by the rib cage. This is another self-defeating strategy. Yes, you are working very hard, but the displacement of the ribcage affects the alignment, which works against you.

Your teacher really wants you to release the rib cage, thereby enable you to **decontract** the back muscles, and bring the psoas fully into play.

### Task

1. Find 3 exercises that encourage the release of the muscles that impede movement in the spine, and 3 exercises that encourage the engagement of the muscles that enhance support.

## General Principles of the Warm Up

*Warming up increases elasticity in the muscles, decreases friction in the joints, facilitates transmission of nerve impulses into the muscle fibres, and improves reflexes.*

1. Begin on the floor. This helps unload the bones and joints we want to articulate and to reduce tension in the muscles that support them. This also minimizes concern with balance.
2. Perform movements that fulfill the need to raise the heart rate, increase blood flow through the muscles, and lubricate the joints.
3. Use vocalization with the breath accompanying audible sound. A clear, strong sound demonstrates that the centre is being used in an uninhibited manner; a weak, constricted sound indicates that tension is limiting the movement flow. This is also great practice to not hold the breath.

## Task

1. Create a floor warm up of 10 separate exercises that satisfies the following criteria:
  - It is performed on the floor
  - It is performed with enough vigour that it raises the heart rate; you actually feel warm
  - It is performed with purposeful vocalization and breath