

I. Introduction

A. Tell me statements

II. Warm up and cool down training

- A. A brief physical warm-up should be done before the stretching.
- B. Stretches allow the muscles to stretch to the maximum. Also use deep breathing and visualization in stretching.
 - 1. Hold each stretch for at least 30 seconds and repeat 2 or 3 times
 - 2. Avoid bouncing during the stretch. Bouncing can cause small micro-tears in the muscle that can lead to injury.
 - 3. All stretching should be pain free. If you start to feel pain while you stretch, release your stretch slightly so that you feel a stretch while avoiding pain.
 - 4. Relax and breathe freely while stretching.

III. Dancers should be physically fit

- A. Cross training important to increase stamina and counter injuries caused by fatigue
- B. Do not push until you are really ready to

IV. Eat, drink, and live for a performer's NEEDS

- A. Avoid Smoking
- B. Athletes tend to change their eating and drinking habits, but dancers tend to be slow with changing their habits.
- C. A dancer's diet needs to be carefully planned and structured to fit into work, class, rehearsal, and performance schedules, but provide adequate nutrition.
 - 1. A dancer's long term nutritional needs resemble those of any athlete; an adequate supply of fluids, calories matched to work demands, good quality protein, and vitamins and minerals in the correct amounts.
 - 2. RESOURCE: <u>www.mypyramid.gov</u>

V. Injuries

- A. A **sprain** is a stretching or tearing of ligaments. Ligaments are tough bands of fibrous tissue that connect one bone to another. Common locations for sprains are your ankles and knees.
 - 1. A sprain occurs when you overextend or tear a ligament while severely stressing a joint. Ligaments are tough bands of fibrous tissue that connect one bone to another. They help to stabilize joints, preventing excessive movement. You may sprain your knee or ankle when walking or exercising on an uneven surface. A sprain also may occur when you land awkwardly, either at the end of a jump or while pivoting during an athletic activity.

- B. A **strain** is a stretching or tearing of muscle or tendon. People commonly call strains "pulled" muscles. Hamstring and back injuries are among the most common strains.
 - 2. A muscle becomes strained or pulled or may even tear when it stretches unusually far or abruptly. This type of injury an acute strain often occurs when muscles suddenly and powerfully contract. A muscle strain may occur when you slip on ice, run, jump, throw, lift a heavy object or lift in an awkward position. A chronic strain results from prolonged, repetitive movement of a muscle.
- C. Risk Factors:
 - 1. Poor Conditioning Lack of conditioning can leave your muscles weak and more likely to sustain injury.
 - 2. Poor Technique The way you land from a jump may affect your risk of injury to a ligament in your knee called the anterior cruciate ligament (ACL). Past research has shown that landing with an inward rotation at the knee ("knock-kneed" position) can predispose you to an ACL sprain.
 - 3. Fatigue Tired muscles are less likely to provide good support for your joints. When you're tired, you're also more likely to succumb to forces that could stress a joint or overextend a muscle.
 - 4. Improper Warm-up -Properly warming up before vigorous physical activity loosens your muscles and increases joint range of motion, making the muscles less tight and less prone to trauma and tears.

VI. Less pressure and overwork

- A. Injuries can be prevented by allowing sufficient rest in your schedule to prevent fatigue.
- B. Appreciate your physical limitations.

VII. Anatomy awareness

- A. Dancers must learn how to relax and pace themselves, allowing time for rest, managing time, and stress.
- B. The high stress in performers may be related to the highly competitive nature of the profession and the fact that our livelihoods are dependent on our bodies as our instruments.
- C. If tension is held in the body flexibility may be affected unless specific countermeasures are taken.

VIII. Breathing

- A. Dancers are not generally known for their aerobic fitness. Most dance classes are anaerobic in nature.
- B. Muscles can work this way for a short period of time but over the long haul (20 min is a long haul) then the body must replace the oxygen. With insufficient oxygen, lactic acid can accumulate causing fatigue or aching and cramps.
- C. Good breathing techniques can aid the proper execution of dance movements, add dynamics, and add a pleasing quality to the upper body.

IX. Conclusions

A. Questions

- B. RESOURCES
 - 1. <u>www.danceanddrummer.com</u>
 - 2. <u>www.getupanddosomething.org</u>
 - 3. www.mayoclinic.com

Helpful Hints:

Quadriceps (front of thigh): Stand up straight. Bend one knee while standing on the opposite foot. Grab your foot of the leg you are bending and pull your foot back so that it touches your butt. This should be repeated with your other leg. If you have trouble keeping your balance, you can do this while lying on your side. You want to make sure you are lying on the side not being stretched.

Hamstrings (back of thigh): Sit down on ground with legs out in a V-position. Bend one knee so that the foot of that leg is touching the inner thigh of your opposite leg. Next, lean to the side and try to touch the toes of the foot of your straight leg. Repeat for the opposite side. Don't worry if you can't touch your toes immediately; just go as far as you can without pain

Calf (back of lower leg): Stand about 24 inches in front of a wall. Next, place one leg further back behind where you are standing while keeping your other foot in place. Finally, lean forward towards the wall to feel a stretch in the back of your lower leg. This stretch should be done with your knee kept straight and then with your knee bent slightly. Doing the stretch both ways stretches both of your calf muscles.

Biceps (front of arm): Stand in a doorway or alongside a pole. Stand about an arm's length away from the doorway or pole. Place one hand on the object so that your arm is parallel with the ground. Next, while keeping your hand on the object, step forward away from the object until you feel a stretch in the front of your arm

Triceps (back of arm): Place one hand behind your head as if you are trying to touch your upper back. Next, put your other hand on the elbow of the arm that is behind your head and push down slightly. You should feel a stretch in the back of your arm.