

## **FITNESS FOR DANCE**

For dancers, the whole body (both physical and psychological) is the instrument, their means for artistic expression. Good fitness is instrumental in reducing the risk of injury as well as increasing the range of potential choreography. Setting a measurable and attainable fitness goal is an important part of your training in the art of dance. You will work towards your goal as homework each week, and we will complete a dance journal reflection at the end of each week to note progress towards your goal.

**WHOLE BODY HEALTH** – refers to the development of the body, the mind, and the spirit in complete coordination with each other. Joseph Pilates wrote that Whole Body Health could be achieved through exercise, proper diet, good hygiene and sleeping habits, plenty of sunshine and fresh air, and a balance in life of work, recreation, and relaxation. Whole body Commitment is mental and physical discipline, a work ethic, an attitude towards oneself and assuming a lifestyle that is necessary to achieve Whole Body Health.

### **WHAT TYPES OF FITNESS ARE IMPORTANT FOR A DANCER?**

**AEROBIC FITNESS**- associated with moderate, longer lengths of activity that use large muscle groups to elevate the heart rate continuously for a minimum of 20 minutes. (Center for Disease Control: Recommends 1 ¼ hours per week of vigorous aerobic activity in any configuration.)

**ANAEROBIC FITNESS**- associated with high intensity, maximal, short bursts of activity. This is most activity in dance.

**MUSCULAR ENDURANCE**- the ability of a muscle to produce continuous movement without fatigue.

**MUSCULAR STRENGTH**- the ability of a muscle to produce maximal contractile force against a resistance in a single contraction.

**POWER**- the explosive (speed related) aspect of strength (think jumps and leaps).

**FLEXIBILITY**- the range of motion at a joint associated with the pliability of the muscle.

**NEUROMUSCULAR COORDINATION**- associated with balance, agility, coordination and skill. This is the primary focus of class.

**BODY COMPOSITION**- the make-up of body weight percentage by muscle and fat.

**REST**- a period of no activity to allow for recovery and regeneration. Sleep is an important component of this.

### **FACTORS INFLUENCING FITNESS**

**FREQUENCY**- how often you perform an activity. Most activities such as aerobic capacity, muscular strength and endurance should be performed 3X/week to see improvements relatively quickly. 1-2X/week are better than nothing but seeing results will be slower. Stretching/flexibility training should be done a minimum of 3-5X/week to see results. Intense anaerobic training should be done 1X a week and no more than 2X/week.

**INTENSITY**- how much effort you put into your activity. Aerobic activity should be performed in your target heart zone, which is 60-80% of your maximum predicted heart rate. Your maximum predicted

heart rate is calculated by subtracting your age from 220. Intensity for anaerobic activity should be maximal effort that cannot be sustained for more than 1 minute. Intensity for muscular strength is what fatigues you in 3-5 repetitions or sometimes calculated as 60-70% of a 1 rep max. Intensity for muscular endurance should be fatigue at 8-12 repetitions of an exercise. Intensity for flexibility should be dictated by being in a position where you can feel a stretch and still breathe comfortably. If you cannot breathe comfortably, you are in too far.

TIME- how long the activity needs to be done for. Aerobic activity should be sustained for a minimum of 20 minutes per episode. Intense anaerobic activity should be from 30 seconds to 1 minute. Strength training should be heavy enough or intense enough that 3-5 reps is fatiguing. Endurance training should be at an intensity that 8-12 repetitions is the starting place. To increase flexibility you should hold a stretch for a minimum of 45 seconds to one minute. Longer is acceptable as long as you apply the concept of reciprocal inhibition which is an active stretch. AS A TEENAGER, DYNAMIC STRETCHING IS THE SAFEST.

An easy way to remember this is the acronym of FIT (Frequency, Intensity, Time). If you want to be fit, you must apply the principles of FIT!!

### OTHER IMPORTANT CONCEPTS

RECIPROCAL INHIBITION-the muscle group that is being stretched is “supported” by the opposing muscle group being active (versus passive) which allows that muscle and the nervous system to send a message saying “it’s ok to stretch”. This is the only way to maintain a healthy flexibility. For example: to stretch your hamstrings you need to firm the quadriceps. This prevents injuries.

SPECFICITY OF EXERCISE- this concept basically says you get good at what you repeatedly do. If you want to be good at tap dancing, you will need to tap, preferably 3X/week. So, you will need to take class plus do 2 practices. If you want to be more flexible, you will need to stretch 3-5X/week the muscles that you want to be more flexible.

MUSCULAR BALANCE- is when all muscle groups are equally strong and flexible. This is a challenge in dance because of choreography and the need to do repetitive practice of specific sequences that may not repeat on the other side. To decrease the risk of injury this is extremely important. *This is one of the goals of Pilates, to create a uniformly developed body.*

Reflection in Dance Journal (answer the following in complete sentences):

1. What is “Whole Body Health”?
2. Why is physical fitness and the concept of “whole body health” important to your dance training?
3. What is the difference between Aerobic and Anaerobic Exercise? Is Dance considered aerobic or anaerobic?
4. What is the definition for “F.I.T.”?
5. What is the definition of Reciprocal Inhibition?
6. Record the Fitness Goal you have selected from the attached list. Describe with specific detail what you will do to work on your goal, when you will do your exercises, how frequently, and with what level of intensity. Be as specific as you can be in describing your fitness plan.

## FITNESS GOALS (Select ONE):

- Increase Aerobic Exercise: Elevate the heart rate continuously for a minimum of 20 minutes through vigorous walking, swimming, jogging, bicycle riding, aerobics class. Minimum total of 1 hour 15 minutes per week (e.g. 25 minutes x3 days per week).
- Improve Turnout:
  - Lie on back with both knees bent, pelvis neutral. Exhale as you open both knees while pelvis stays perfectly still. Repeat 5 times. On the 5<sup>th</sup> one hold open and breathe 5 breaths. To get out of stretch push heels away from your torso until legs are straight.
  - Repeat same exercise, done opening one leg at a time. The challenge of the exercise is to keep the pelvis still, **not** allowing the hip to follow the knee open. Only go as far as the pelvis **does not move**. Repeat 5-8x each side moving slowly.
  - Progression: repeat the exercises with a band around knees.
- Improve Hamstring Flexibility:
  - Practice hinging from the hips with a straight spine, weight more to the balls of the feet, making sure knees are not locked out. Can be done in parallel and turn out. Repeat often thru out the day.
  - Progression: same but do with one leg in front of the other. Head should be in a straight line with the spine and abdominals pulled up to support the spine.
  - Bonus: sit with good posture and stretch one knee straight. Only straighten the leg as far as the pelvis stays upright. Repeat multiple times a day
- Increase Lower Abdominal Strength/Stretch Hip Flexors:
  - Stand in a lunge position, feet hip distance apart, both knees bent, back heel off the ground and pelvis upright. Start to straighten both legs and only come up as far as the pelvis stays upright. Repeat 5x on each side.
- Be Able To Do Push-Ups:
  - Start by being able to hold a good plank for 30 seconds.
  - Go to a countertop or barre and get into plank on the diagonal. Hands are just slightly wider than shoulder distance apart. Bend the elbows and lower only as much shoulders stay away from ears and the spine does not change from good posture.
  - Regression: in standing, good posture. Have t-band around back and holding in hands, elbows lined up with side body. Push the band forward and up slightly, hold, then return to start keeping elbows in front of side seam of body. Repeat 10x Do daily and try to mimic this movement when trying push up at the barre.
- Improve Spine Mobility:
  - Bridging: lie on back with knees bent, feet hip distance apart. Exhale as you tilt pelvis towards head and continue rolling up to bridge position, no arch in the back, but rather a straight line from armpits to hips. Breathe in at top, then exhale as you roll down one vertebrae at a time. Repeat 5-7x
- Be Able To Do A Roll Up:
  - Start seated, one leg bent, holding it from under the thigh, other leg straight out on floor. Start to roll back by tilting pelvis and pushing bent leg into hand as much as necessary to assist rolling down to your waist line. Pause, take a breath in and on the exhale, push leg into hand and roll back up. Repeat 3-4x each leg.
  - Progression: Same exercise, both legs at the same time.