

Power Plate® Healthy Bones

It is generally understood that movement and resistance training favorably influences the bone remodeling process. If bone is subject to disuse through lack of exercise for example, the remodeling process ceases. To avoid low bone mineral density in old age and prevent osteoporosis therefore, it is recommended that people perform weight bearing exercise to elevate and retain sufficient bone density and bone mass.

Exercising on Power Plate can help build bone mineral density, and prevent bone mineral density loss, by mechanically adding high load to the bone via the muscle and tendons, which is essential to the stimulation of bone mineral growth. It can be used by people of all ages and physical abilities to help make bones more healthy.

Power Plate Level: Beginner

Modalities:	Number of Exercises
Stretch	4
Balance	3
Core	2
Strength	5
Massage	3

General Class Guidelines

All exercises must be progressed slowly.

How to progress an exercise:

1. Change the joint angle
2. Phase out handle use
3. Increase time duration of exercise
4. Decrease rest period
5. Increase frequency (Hz)
6. Increase amplitude (low or high)
7. Add extra weight (load)

Hydration

Remember to always stay hydrated. Drink plenty of water before, during and after exercises.



POWER PLATE®

Definitions:

Sets/Duration:	Number of times exercise is performed and the amount of time each exercise is executed
Frequency/Amplitude:	The number of Hz to set your machine and the level of amplitude, either low or high
Execution Options:	
Passive:	Hold the exercise position indicated without creating muscle tension
Static:	Hold the exercise position indicated at the point where most muscle tension is created
Dynamic:	Move throughout the exercise
Explosive:	Move rapidly throughout the exercise
Relaxed:	Adopt position and relax muscles
Format Options:	
Station:	Rest after each exercise is performed
Circuit:	Complete each exercise in the order indicated
Super Set:	Perform each exercise in the superset without rest

1. Stretch

Stretch is the essential way to start any workout as it helps prepare the body's systems for optimal movement, as well as mentally preparing you for training. It can also help reduce muscle stiffness and the risk of injury.

Instruction: Perform each stretch exercise once.



1. Hamstring Stretch - Single Leg

Execution: Static



30Hz



30 Sec



Low

Coaching Key:

- Keep back straight, supporting knee slightly bent
- Push hips back to reach desired tension
- To increase tension flex the foot on plate



2. Kneeling Hip and Quad stretch

Execution: Static



30Hz



30 Sec



Low

Coaching Key:

- Back straight, shoulders relaxed
- Push hips forward to create tension in the hip
- Raise arms to increase the stretch



3. Inner Thigh Stretch

Execution: Static



30Hz



30 Sec



Low

Coaching Key:

- Sit back to reach desired tension
- Maintain good posture and shoulders relaxed



4. Lat Stretch - 2 Arm

Execution: Static



30Hz



30 Sec



Low

Coaching Key:

- Maintain neutral spine
- Reach forward with arms and push hips back to reach desired tension

2. Balance

Balance exercises keep the body's proprioceptive system functioning optimally. This helps to reduce the risk of falling, by improving the body's ability to control and maintain posture and position, whether moving or stationary.

Instruction: Perform each balance exercise once.



1. 4-Point Stance with Arm Raise

Execution: Dynamic



30Hz



30 Sec



Low

Coaching Key:

- Kneel on the platform, hands and knees hip width apart
- Reach forward slowly. Hold position for 1-2 seconds and return to start position
- Repeat on other arm
- Maintain neutral spine
- Engage abdominals



2. 4-Point Stance with Leg Lift

Execution: Dynamic



30Hz



30 Sec



Low

Coaching Key:

- Kneel on the platform, hands and knees hip width apart
- Slowly raise leg off the platform and extend backwards. Hold for 1-2 seconds and return to start position
- Maintain neutral spine
- Repeat on other leg
- Engage abdominals



3. Single Leg Balance

Execution: Static



30Hz



30 Sec



Low

Coaching Key:

- Engage abdominals and relax shoulders
- Maintain stability in knee and ankle
- Keep standing knee slightly bent

3. Core

Core strength is the foundation for all movement. Good stability in the hip, core and shoulder provide a central axis from which to move. Benefits of core training include improved stability and core function, reduced risk of injury and enhanced performance.

Instruction: Perform 2 sets per core exercise.



1. Front Plank

Execution: Static

 35Hz

 30-45 Sec

 Low

Coaching Key:

- Feet hip width apart
- Draw hips inwards
- Align from neck and feet
- Keep back straight and shoulders relaxed
- Engage abdominals



2. Glute Bridge

Execution: Static

 35Hz

 30-45 Sec

 Low

Coaching Key:

- Push hips upwards
- Engage hamstrings and glutes

Note: This exercise can also be performed without a step

4. Strength

Strength is defined as the ability of your muscles to produce force. Strength training can help you maintain function in later life, improve bone density and cope better with the demands of daily life.

Instruction: Perform 2 sets per strength exercise.



1. Deep Squat

Execution: Static

 35Hz

 30-45 Sec

 Low

Coaching Key:

- Sit back until desired depth is reached
- Maintain neutral spine
- Shoulders relaxed
- Engage abdominals



2. Bent Over Row

Execution: Static/Dynamic

 35Hz

 30-45 Sec

 Low

Coaching Key:

- Maintain neutral spine
- Pull handgrips up towards the side of the chest
- Engage upper back, shoulders and arm muscles

Note: Perform using straps as an alternative if necessary



3. Lunge

Execution: Static

 35Hz

 30-45 Sec

 Low

Coaching Key:

- Maintain neutral spine
- Bend standing knee to reach desired tension



4. Push Up

Execution: Dynamic

 35Hz

 30-45 Sec

 Low

Coaching Key:

- Bend elbows to engage chest muscles
- Maintain straight back
- Optional Regression: perform on knees

4. Strength (continued)



5. Standing Shoulder Press

Execution: Dynamic



35Hz



30-45 Sec



Low

Coaching Key:

- Keep knees slightly bent and shoulders relaxed
- Start by holding the handgrips at the side of the shoulders, palms facing up
- Engage abdominals

Note: Perform lateral side raises or front raises using the straps as an alternative if necessary



5. Massage

Massage is the essential way to end any workout, as it can help dissolve lactic acid and reduce the potential for delayed onset muscle soreness (DOMS), as well as encouraging the heart rate to return to its normal resting rate. Massage can also help increase circulation and reduce cellulite. Massage exercises can be performed daily on the Power Plate® machine.



1. Hamstring Massage

Execution: Relaxed



35-40Hz



60 Sec



Low/High

Coaching Key:

- Roll legs slowly and push down into platform



2. Quad Massage

Execution: Relaxed



35-40Hz



60 Sec



Low/High

Coaching Key:

- Roll legs slowly and push down into platform



3. Back Relaxer

Execution: Relaxed



35-40Hz



60 Sec



Low

Coaching Key:

- Relax upper body