Stability Ball Exercises

By

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MEDICAL DISCLAIMER

This program is for educational and informative purposes only and is not intended as medical or professional advice. Always consult your doctor before making any changes to your fitness regime. The purpose of this program is to help healthy people reach their cosmetic fitness goals by educating them in proper exercise guidelines. No health claims are made for this program. This exercise program will not help cure, heal, or correct any illness, metabolic disorder, or medical condition. The author is not a medical doctor, registered dietician, or clinical nutritionist; the author is a fitness consultant.

If you have been sedentary and are unaccustomed to vigorous exercise, you should obtain your physician's clearance before beginning an exercise program. The American College of Sports Medicine (ACSM) recommends that apparently healthy individual who are male and over 40 or female and over 50 to have both a physical exam and a diagnostic exercise test prior to starting a vigorous exercise program.

A diagnostic exercise test and physical examination is also recommended in individuals of any age who exhibit two or more of the major coronary risk factors (smoking, family history of heart disease, elevated blood cholesterol, elevated blood pressure, and diabetes). Any individual with a known history of heart disease or other heart problems should be required to have a medical evaluation including a graded exercise test before engaging in strenuous physical activity.

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INTRODUCTION

What Is A Stability Ball?

The Stability ball, also called the Swiss ball, Exercise ball, Flexibility ball or other names, is a large, inflated, rubber ball. The Stability ball was originally created in Italy in the 1960's and provides instability or resistance which requires the user to rely on 'core' muscles to retain balance - thus improving strength and flexibility of those muscles.

A Swiss doctor studied its use in a clinical setting by incorporating the ball in rehabilitation therapy. While it is still used in physiotherapy it has also become known in the general fitness world as an adaptable and enjoyable addition to routines building strength, flexibility and proper posture.

Who Can Use The Stability Ball?

Because the Stability ball is so easy to use and enjoyable, it is able to be used by almost everyone, young or old. However, because the Stability ball is designed to create instability (thus forcing the body's own muscles to be employed) there is a need for caution. The elderly, injured, pregnant women or anyone otherwise subject to a lack of stability or increased risk of falling, should not use the Stability ball without personal instruction and care.

When choosing a Stability ball it is important to choose the size appropriate to your height as well as the intended use. Determine what technique you plan to use the Stability ball for before purchasing your own ball.

How Do You Use A Stability ball?

If you are concerned about lower back pain or posture you can use the Stability ball as an alternative to a regular chair. Sedentary workers find that certain muscles in the back become weak over time and are easily strained. Sitting on the Stability ball will improve your 'core strength' by forcing the unused muscles to maintain balance.

STABILITY BALL BENEFITS

Besides providing balance training, (an often overlooked component in most exercise programs) stability balls work your core in almost every exercise that is performed, and work multiple muscles at one time while forcing your body to balance itself. So your core will be better prepared to support the rest of your body in whatever activity you do. They are versatile too:

- 1. The ball can be used at home or at your gym.
- 2. All ages, and levels of fitness can benefit from stability ball training.
- 3. An exercise ball is portable and light weight.
- 4. An exercise ball is inexpensive.
- 5. Requires little if any maintenance.

Training the core

Core training is best done when the body is placed in an unstable environment. Stability ball exercises require constant activation of the core muscles, which translates to a more functional core as well as sculpted abdominal and back muscles. Using the Stability ball with free weight exercises will help develop the extremities while training the core at the same time.

Improved Posture.

It takes more energy to move the body when you have poor posture not to mention an increase of stress to the joints and stabilizer muscles. An athlete is always searching for the edge over the competition and simply improving posture will help the body function more effectively and efficiently. Stability ball training is an excellent form of posture training. Postural muscles have to work in the unstable environment, unlike supported exercises such as machine training.

Improved Balance/Stability.

The human body moves in three planes or a combination of planes and for improved balance and stability, an individual needs to perform exercises that allow them to train in these multiple planes. Traditional machine weight training takes the balance out of the picture and the machine actually becomes your stabilizer. Stability ball training places you in an unstable environment forcing you to

utilize your neutralizer and stabilizer muscles to stay balanced in a given position or through a particular motion. The result is improved sports performance since you are able to apply more power and strength to any situation, especially out on the golf course, when you need to balance and stabilize your body on a hill or unstable position.

Improved Nervous System Activation.

The benefit of improving your nervous system activation is that you are able to transform the strength you developed from your training program to real life situations, whether they are sport related or everyday activities.

As you will quickly learn, you just don't get on the Stability ball and begin your exercises; there are several rules to follow in order to perform the exercises correctly and safely. Seeking the help of a qualified personal trainer experienced in stability training will be beneficial.

Once you start adding stability training into your program, you will quickly see how it will improve other activities in your life as well as your performance on the golf course. No matter what your fitness level may be, anyone can utilize a Stability ball due to the vast variety of exercises from beginner to advanced level.

FINDING THE CORRECT SIZE BALL

Unfortunately it is not as simple as to have one ball for all participants. Each participant should make sure the ball they are using is not only the correct size for their height but also that it is filled with the correct amount of air, in some exercises a ball that is very full and hard will make the exercise harder, in other exercises a flatter ball with less air can make the exercise easier or harder.

Ball size is determined by a person's height and weight, intended exercise position (prone, supine, sitting etc) and the goals of the exercise. A smaller ball (30cm or 45cm) has less surface area, requiring more energy and strength to maintain balance.

A larger ball has a greater surface area and therefore may be indicated for the overweight or inactive client.

A fully inflated or firm ball has less contact area on the floor, therefore it moves quicker, therefore challenging balance and reactions more so than an under inflated ball, which moves more slowly and requires less balance.

Below is a chart that enables you to find the correct size ball for your participants. Generally in clubs are balls are 45 cm, 55cm or 65cm.

Ball Diameter	Height of participant
45cm	Under 5"
55cm	5'1" - 5'7"
65cm	5'8" - 6'0"
75cm	6'1" – 6'3"

Proper inflation techniques

Allow the ball to reach room temperature before inflating. The ball inflates to a variety of sizes; the diameter is usually printed on the side of the ball. The differing ball diameters allow inflation of balls to approximately the same rigidity. It is important that balls are not over inflated past the recommended diameter.

They are many methods to inflating the balls:

- 1. Air mattress pump
- 2. Hand pump
- 3. Electric pump (my favourite!)
- 4. Air compressor
- 5. Tire pump with a trigger nozzle adapter.

BEGINNER STABILITY BALL WORKOUT

	Set 1	Set 2	Set 3	Set 1	Set 2	Set 3	Set 1	Set 2	Set 3
Workout A									
A1 Wall Squat									
A2 Press ups with ball under the thighs									
B1 Supine hip Extensions									
B2 Stability ball Crunch									
C1 Flutters 7 of each version									
C2 Supine Leg Curl									

Guidelines

Perform each exercise in a superset fashion. For example perform A1, then A2, rest 30-60 secs then repeat A1 again then A2. Then progress onto B1 and B2.

During the first week of the routine, perform only one set. During the second week perform 2 sets, and then 3 sets during week 3

INTERMEDIATE/ADVANCED ROUTINE

	Set	Set	Set	 Set	Set	Set	Set		Set
Workout B	1	2	3	1	2	3	1	2	3
A1 Wall									
Squat									
A2 Press ups with ball									
under the									
feet									
B1 Supine									
hip Extensions									
B2 Plank on									
the ball raising									
alternate									
legs									
C1 leg drops for 1 minute									
C2 Single									
Supine Leg									
Curl									
D1 Pike									
D2 Stability Ball Crunch									
D3 Side									
Crunch									

STABILITY BALL EXERCISES

Use your Stability ball for a total body workout. You can work your legs, arms, chest, back, and abdominals. Try some of these in your stability ball training:

Back Raise

Muscle/s worked	Coaching points
Erector Spinae Hamstrings Glutes	 With your feet against a wall place the ball underneath your hips.
	 Place your hands by your ears, keeping your elbows back.
	 Lower your body over the ball into the start position.
	 Clenching your glutes, lift your torso up, using the muscles of your lower back.
	Return back to the start position



Stability Ball Crunch

Muscle/s worked	Coaching points
Abdominals	 Place the ball underneath your lower back. The futher the back is towards your hips the harder the exercise.
	 Place your hands by your temples.
	 Keeping your hips up, use your abs to curl up. Hold at the top of the movement and return to the start position.
	 Make sure you use a full range of motion and make sure you use your abs and not your neck or shoulders.



Stability Ball Crunch level 2

Muscle/s worked	Coaching points
Abdominals	 Place the ball underneath your lower back. The further the back is towards your hips the harder the exercise.
	Place your hands over your head.
	 Keeping your hips up, use your abs to curl up. Hold at the top of the movement and return to the start position.
	 Make sure you use a full range of motion and make sure you use your abs and not your neck or shoulders.
	 To further progress this exercise you could hold a weight as you curl up.



Wall Squat

Muscle/s worked	Coaching points
Quads Glutes	 Place the stability ball by your lower back
	 Place your hands either by your head or by your hips, and your feet hip distance apart.
	 Brace your abs and squat down to the finish position, keeping your knees over your toes.
	 Push through your heels and return to a standing position.



Flutter version 1

Muscle/s worked	Coaching points
Rhomboids	 This is an excellent exercise for the rhomboids and to re-educate the stabiliser muscles to work properly.
	 Lie face down on the stability ball, with your feet hip distance apart.
	 Take your hands out by your sides and palms facing down.
	 Squeeze your shoulder blades together and raise your arms.
	 Hold and return to starting position.
	 To progress this you can add a small dumbbell in each hand.



Flutter version 2

Muscle/s worked	Coaching points
Rhomboids	 This is an excellent exercise for the rhomboids and to re-educate the stabiliser muscles to work properly. This version works the stabilisers in a slightly different way.
	 Lie face down on the stability ball, with your feet hip distance apart.
	 Take your hands out by your sides and thumbs pointing down to the floor.
	 Squeeze your shoulder blades together and raise your arms.
	 Hold and return to starting position.
	 To progress this you can add a small dumbbell in each hand.



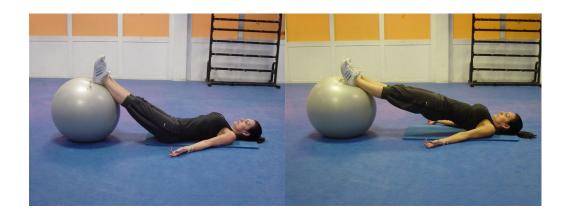
Flutter version 3

Muscle/s worked	Coaching points
Rhomboids	This is an excellent exercise for the rhomboids and to re-educate the stabiliser muscles to work properly. This version works the stabilisers in a slightly different way.
	 Lie face down on the stability ball, with your feet hip distance apart.
	 Take your hands out by your sides and thumbs pointing to the ceiling.
	 Squeeze your shoulder blades together and raise your arms.
	 Hold and return to starting position.
	 To progress this you can add a small dumbbell in each hand.



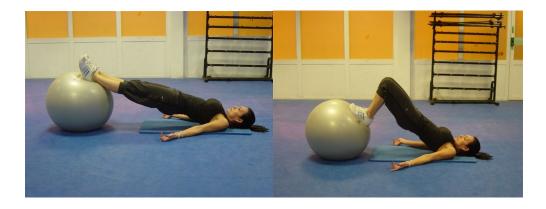
Supine Hip Extension

Muscle/s worked	Coaching points
The core muscles Glutes	Lie on your mat, with your arms by your sides on the floor and palms facing up
	 Place your feet on the stability ball. This is the starting position.
	 Raise your hips off the floor so that your body is aligned from your heels to your hips to your shoulders.
	Return back to the start position.
	 To make this harder, when you return to the start position, keep your hips an inch from the floor.



Supine leg curl on the ball

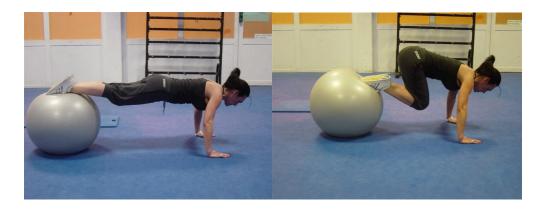
Muscle/s worked	Coaching points
Core Hamstrings Glutes	 Lie on your mat, with your arms by your sides on the floor and palms facing up
	 Place your feet on the stability ball. This is the starting position.
	 Raise your hips off the floor so that your body is aligned from your heels to your hips to your shoulders.
	 Bring your heels into your glutes as far as possible. When you are in this position your body should be in a straight line from your knees, through to your shoulders.
	Return back to the start position.
	 To make this harder you can perform a single leg curl





Prone Jacknife

Muscle/s worked	Coaching points
Core Pecs Lower Abs	 With your feet on the stability ball place your hands shoulder width in the floor.
	 Your shoulder blades should be together and your body should be in a straight line from your shoulders to your feet.
	 Bracing your abs, draw your knees into your chest, making sure that your back remains in its natural alignment.
	Return to the start position



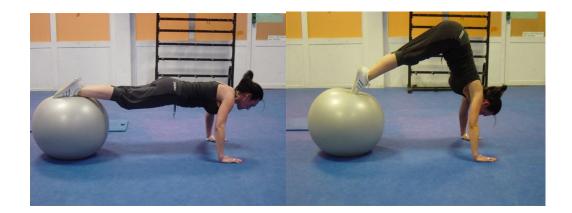
Press Up

Muscle/s worked	Coaching points
Pecs Triceps Anterior Deltoid	 With your feet on the stability ball place your hands shoulder width in the floor.
	 Your shoulder blades should be together and your body should be in a straight line from your shoulders to your feet.
	 Brace your abs, and lower your shoulder to your hands.
	 Hold for a second, breathe out and return to the starting position.
	 To make this exercise easier you can roll the stability ball closer to your hips so that the ball is supporting more of your weight.



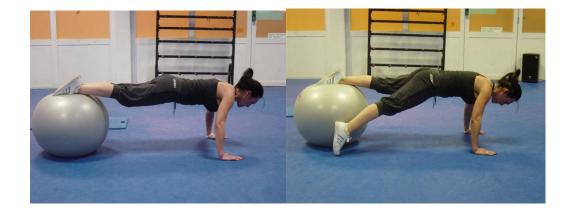
Pike position

Muscle/s worked	Coaching points
Lower abs Total Body!	 With your feet on the stability ball place your hands shoulder width in the floor.
	 Your shoulder blades should be together and your body should be in a straight line from your shoulders to your feet.
	 Using your abs and keeping you feet straight, bring the legs in towards you so that your body forms an inverted v shape.
	 Slowly and under control return back to the original position.



Leg Drop

Muscle/s worked	Coaching points
Abs Total Body	 With your feet on the stability ball place your hands shoulder width in the floor.
	 Your shoulder blades should be together and your body should be in a straight line from your shoulders to your feet.
	 Bracing your abs, lower your right leg to the floor, then replace it onto the ball.
	Repeat with the other leg.
	 Continue to alternate and try to last for up to a minute.



Plank on the ball

Muscle/s worked	Coaching points
The core	 This is a progression from the plank on the floor.
	 Place your elbows on the ball so that they are underneath your shoulders.
	 Bring your belly button into your spine and hold this position.
	 To further progress this exercise lift one leg off the floor, hold for a couple of seconds and then replace it. Then repeat with the other leg.



Roll Out

Muscle/s worked	Coaching points
Abs	 Place your elbows on the ball, and kneel behind it.
	 Bracing your abs and keeping your torso straight, roll the ball away from you.
	 Use your abs to bring the ball back to the starting position.



Shoulder Press

Muscle/s worked	Coaching points
Deltoids	 This is an advanced exercise. Place your feet on the ball, then tuck your glutes onto your heels. With your hands under your shoulders, lower your shoulders towards your hands. Use your deltoids to return to the original position.



Side Crunch Level 1

Muscle/s worked	Coaching points
Obliques	 Lie on your right side on the ball.
	 Your left leg is placed next to the wall in front of you and your right leg is placed behind (as shown in the diagram).
	 Place your hands by your ears, contract your obliques to lift your body upwards, and then lower under control to the starting position.
	 Repeat for the desired number of reps before changing sides.



Side Crunch Level 2

Muscle/s worked	Coaching points
Obliques	This is a more advanced version
	Lie on your right side on the ball.
	 Your left leg is placed next to the wall in front of you and your right leg is placed behind (as shown in the diagram).
	 Place your hands overhead, contract your obliques to lift your body upwards, and then lower under control to the starting position.
	 Repeat for the desired number of reps before changing sides.
	 To further progress this exercise you can hold a small weight or dumbbell



Supine Bridge

Muscle/s worked	Coaching points
Glutes Hamstrings	 Place your shoulders on the ball so that your head is supported.
	 Lift your hips upwards so that your body is in a straight line from your knees, to your hips and shoulders.
	 You can either hold this position which isometrically works the glutes, or lower the hips towards the floor and then lift to this position to make it a more dynamic movement.



About the Author



Lincoln has his own business, Fitness Training for Life, and has a BSc degree in Recreation Management and Sports Science. He has been involved in the fitness industry for 20 years and has presented fitness and aerobic sessions all over the world, including Italy, Spain, Holland, Germany France, Hong Kong, and Mexico.

Linx has toured the UK presenting his unique stylised sessions, and is the creator of 20 fitness videos. In between organising his own fitness and dance days, he had his own TV Slot on the popular Big Breakfast TV Show, teaching streetdance fitness.

He currently works as a lecturer at London Leisure College, and was the first instructor in the UK to gain the CYQ Level 3 Advanced Studio instructor award.

Finally he has now launched his new health and fitness website www.fitnesstrainingforlife.com which provides tons of free resources for fitness instructors and class participants. He also has a blog which aims to keep people up to date with all that is relevant in the fitness industry.