

Advanced Stability Exercises for the Core

Originally published 7 April 2019 · fatchfitness.com



A functional core is more than just strong.

Like any physical adaptation to training, there can be two aspects to these changes.

1. The muscle/joint gets stronger allowing it to generate more force (general force) not specific to any movement or requirements, just a raw/general improvement in strength.
2. Specific muscular adaptation that improves some specific actions or movements – these actions or movements could be the improved performance of lifting, throwing, jumping, etc.

The core is no different in this regard – if you go to the gym and spend a heap of time getting your core strong, it will end up being strong specific to the demands that you placed on it during this exercise time.

The transfer of “Functional Strength” from the gym to the real world has been a point of contention for well over 40-years – with modern day sports science now realising that you can’t create a super athlete in the weights room (unless they are a weight lifter!).

So we now know how to get the core strong – but we want the core to be more than just generally strong – the core also provides substantial proprioceptive control when we perform most day to day movements. So it makes sense that once you are well down the path to developing a strong core, that you would want to add some instability into your routine to force your core to now start working on more finer movement control (most core work is based on gross movements).

The ability to support the total body when balance/stability is required is a key function.

The core (combined with the pelvic region) provides the vast majority of the balance/proprioception/stability components for functional movement in the real world. As such we should look to challenge these body parts in a way that is both engaging & challenging.

Of course, one way of achieving this is to get out into the real world and do real world activities whilst training the core in a more standard format in a gym setting, but if you want to vary your routine in the gym and add some fun aspects to your training, you could look to add a combination of exercises which early on will challenge you at a high level.

I find that most of my gym clients can't do the majority of these exercises, and it is only after some time getting the core strong and working on the proprioceptive/balance aspect of these exercises that they can complete them as required.

A nice combination of training is to add some raw core training (as outlined in several of my previous articles) with these more balance/proprioception based exercises.

One key aspect to all these exercises is that we are not isolating the core, we are working all body parts, with a focus on the core keeping all sections working in a stable functional manner.

Progression exercises for core proprioception.

These exercises range from challenging to downright impossible!!

You don't have to use a medicine ball, any ball will do (as you can see in these images, I am using a basketball).

An important note for the use of any balls (medicine, swiss, basketball), is that the more pumped up the ball is, the harder it is to maintain stability – so we want the balls to be as pumped up as possible when performing these exercises.

1. Hands on ball feet shoulder width apart.



Hands on ball feet shoulder width apart.

Technique pointers

- Keep your core tight.
- Pelvis posteriorly rotated.

- Chest over hands/ball.
- Push away from the ball so you are engaging your chest & back.

Variations

- Try to walk around the ball (360°) whilst maintain this posture.
2. Hands on ball – one foot in the air.



Hands on ball – one foot in the air

Technique pointers

- Do not allow your hips to move or rotate to the grounded leg – this is important.

Variations

- Try to swap legs without adjusting your posture.
- After lifting up your leg, try to keep it high and move it laterally away from you.
- Try to draw circles with your raised leg.

3. Feet on ball



Feet on ball

Technique pointers

- Start with one foot on the ground and one on the ball.
- Slowly lift the 2nd foot and place it on the ball.

- Keep your chest over your hands.
- Ensure you keep your toes on the ball, not tops of your feet.

Variations

- Try to walk the ball into your hands and out.
- Try to move sideways with both ball and hands.
- Complete a 360° rotation around the ball or around your hands.
- Try pushups

4. Feet on Ball – One leg in air



Feet on Ball – One leg in air

Technique Pointers

- Slowly lift the leg off the ball.
- Focus on keeping your core still and keeping your chest over your hands.

Variations

- Try to lift one leg and then keeping it high, take it out to the side.
- Rapidly swap from one foot to the other foot.
- Try pushups.

5. Feet & Hands on single ball



Feet & Hands on Single Ball

Technique Pointers

- Ensure you keep as much weight on your hands as you do on your feet.
- Start with a larger ball and reduce the ball size as you improve.

Variations

- Try to lift one leg off the ball.
- Try to lift a leg and extend it out behind you.



Feet on Ball & Hands on Ball

6. Feet on ball and hands on ball

Technical Pointers

- Start with your hands on the ball then one leg then the other.
- Keep your hands wide on the ball to improve balance early on.

Variations

- Super advanced, try to lift a foot off the ball.



Swiss Ball - Kneeling (Hands & Knees) - Leg in air

7. Swiss ball – kneeling (hands & knees) – Leg in air.

Technical Pointers

- Ensure your weight is evenly distributed over your hands and knees.
- When you start to lift one leg, ensure you increase the weight distribution to your hands and opposite knee.

Variations

- Try to move your raised leg around (sideways, circles).
- Try to lift an arm off the ball.
- Try to lift a leg and opposite arm off the ball.

8. Squat on Swiss ball



Squat on Swiss Ball

Technical Pointers

- Try to crouch on the ball (feet & hands).
- Ensure you have your weight evenly balanced b/w your hands and feet.
- Try to get your backside down close to your feet.

Variations

- Try to roll the ball about and stay balanced.



Squat on Swiss Ball - leg in air

9. Squat on Swiss ball – Leg in air

Technical Pointers

- Try to crouch on the ball (feet & hands).
- Ensure you have your weight evenly balanced b/w your hands and feet.
- Try to get your backside down close to your feet.

Variations

- Try to lift a leg off the ball.
- Try to move the lifted leg laterally or swing it about to increase instability.

These above exercises will be very challenging early on and I would suggest you start with the initial exercises listed and progress to more difficult versions as your core proprioception improves.

Once you are able to perform the most difficult of these exercises, congratulations as your core is now not only strong, but is well prepared for most day to day proprioceptive functional movements.

For a series of challenging Swiss Ball exercises to challenge your core - check out this youtube clip ([Top 10 Stability Exercises](#))

© Fatch Fitness. More articles and videos at fatchfitness.com