

# On the ball

The Swiss Ball may be the latest must-have sports accessory, but it's no fad. Physiotherapists and sports trainers alike are putting their clients on a revolutionary roll, says **Lisa Doust**

Anyone who has visited Sydney's Bondi Beach any time over the past few months will have noticed a handful of personal trainers encouraging their clients to sit, lie, kneel or stand on an oversized ball. Far from being a frivolous and fun way to get through an exercise routine, the Swiss Ball is a rigorous workout tool designed to promote core body strength, improve posture and increase physical stability. It can support several times your body weight and is ideal for rehabilitating any weak spots in the body.

Paula Alach, a personal fitness trainer with a background in occupational therapy, has been incorporating the Swiss Ball into her exercise programs for the past two years. Paula uses the ball with each of her clients, irrespective of their fitness level, but finds it particularly useful for people with injuries or a limited exercise history.

"People that aren't necessarily into exercise generally have sedentary lifestyles, so they are sitting for long periods of time, which tends to result in muscle imbalances and weaknesses in the core postural muscles," explains Paula. "When I talk about core musculature, I mean the deeper abdominal muscles — the transverse abdominus, the oblique abdominals and the deeper back muscles. In my experience, people that haven't had any athletic background don't have awareness of these particular muscles."

To put her clients in touch with their "core", Paula starts them off with a few basic exercises. "The easiest way to make someone aware of their core muscles is to get them working on the floor, on all fours, with gravity bearing down on them. They can let the abdominal muscles relax into the viscera of their stomach and pull the base into their spine — similar to 'cat position' in yoga. Lying face up or face down on the floor and pulling the stomach muscles in also gives the body an idea of where it needs to build strength."

Once contact with these muscles has been made, Paula introduces the Swiss Ball, getting clients to repeat a set of three or four exercises as they sit upright on the ball. "It takes a little while to build up confidence, balance and co-ordination," she says. "And because the exercises are postural and postural muscles are trained for endurance, you have to spend a lot of time building up strength before moving on to more dynamic movements on the ball."

As well as training clients in the great Aussie outdoors, Paula has recently become part of the Physiotherapy, Posture and Fitness Clinic in Sydney's Randwick, where she works with physiotherapist and sports scientist Francine St George, author of *Body Works* (ABC Books, rrp \$19.95). Over the past two years Francine has been running 'Posture and Fitness' classes designed to rehabilitate people with injuries using yoga stretching, pelvic stability exercises and the Swiss Ball.

Francine believes the classes are an ideal way for people that feel they are unable to exercise due to injury to regain stability using the Swiss Ball. "In a group situation I can push people to do the exercises they need to do but often wouldn't do properly at home," she explains. "By watching the way people move I can see what they need to be doing to improve the stability of the smaller postural muscles that support their joints. The ball serves as a pre-conditioning step to getting people that don't exercise regularly to start exercising and it has become common practice for physiotherapists working with patients on injury rehabilitation to use the ball."

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Bradley Wilson is managing director at Newcastle-based AOK Health, which produces and distributes the 'mediBall Pro' (its own version of the Swiss Ball). Bradley, who designed and developed the mediBall with assistance from the University of Newcastle, supplies the Australian Institute of Sport and claims that more and more professional athletes are acknowledging the benefits of the ball. "Training in an unstable environment improves your athletic performance by challenging and enhancing your body's stabilisation and co-ordination systems," he says. "The mediBall effectively lets you utilise a greater percentage of your muscular potential through a greater range of motion, which is impossible to achieve when free-standing or on a gym machine."



Bradley points out, however, how essential it is that the correct techniques are used when working with a ball. He suggests that coaches, fitness leaders and health professionals who incorporate ball training into their routines sign up for structured training programs with massage and remedial therapist Paul Chek, the renowned authority on Swiss Ball training and corrective exercise in Australia. Paul runs a range of seminars in conjunction with AOK Health.

For athletes in training, Paula says the ball helps to strengthen the prime mover muscles and stabilisers, while keeping the core postural muscles "switched on". "The prime mover muscles are the major muscles used for each exercise. If you were doing a chest press, the prime mover muscles would be those in the chest and triceps, and the stabilisers would be those stabilising the pelvis and shoulder." The neutraliser muscles, which ensure the exercise being performed occurs in the correct movement pattern, are also strengthened, so they stop any extra movement.

"By using the Swiss Ball as a bench, you can take the muscles to a greater range of motion, which is going to enhance your performance and prevent injury. Also, when you are working out on the Swiss Ball you can't cheat because as soon as you start to cheat your balance is affected," explains Paula.

The Swiss Ball is also becoming a popular alternative to a chair for those work at computers all day long. Bradley says that corporate use of AOK's mediBall is expanding, with companies such as Macromedia, BHP, Telstra and Optus using balls in their offices. Vodaphone has even gone as far as fitting out its new call centres across Australia with mediBalls. As Paula points out, it is the ultimate ergonomic chair. "When you are working in a balanced and co-ordinated fashion, when your core is strong and your neutralisers are keeping you in place, you are not wasting as much energy on unnecessary movement," she says. "You are, therefore, going to have a lot more energy for your given activity, whether you work in an office or in the athletics arena." ■