

# AlterG treadmill

KIT

It's a treadmill Jim, but not as we know it!

**A**n exercise machine designed to help astronauts walk on the moon is now the hottest bit of gym kit in the UK. Called the AlterG treadmill, it allows you to exercise while reducing the force of gravity - a person's body weight can be reduced by up to 80 per cent. The technology behind the state-of-the-art treadmill is simple - compressed air is pumped into a plastic chamber over the treadmill creating 'lift'. Inspired by NASA the AlterG is used by Manchester United, marathon runner Paula Radcliffe and by the US Army to treat injured soldiers. But with a whopping £27,000 price tag there are only five in the UK available for public use - with one of them in Cheltenham.

Personal trainer Dan Fivey purchased one for his personal training studio - situated above the Up and Running shop in the High Street, the studio is the antidote to big gyms. "There is no membership fee, no loud music or videos, no mirrors, just you and your personal trainer," said Dan. "People find they work harder and are achieving great results in a shorter time." Dan spends a lot of time working with people recovering from injuries. When he read about the AlterG he felt it was the ideal piece of equipment for the studio.

The user is sealed from the waist down inside the chamber and a computer panel allows patients to take up to 80 per cent of their body weight off their joints. "It sounds so bizarre because we live everyday in a 100% bodyweight environment. To run or exercise without your body weight seems a bit odd," said Dan. "But don't be fooled. You still get the cardio-vascular workout, but without the pounding through your joints, so your ankles and knees are 'saved' from a lot of pressure." This means that an 114kg/18 stone man can wind up effectively feeling like he weighs just 25kg/4 stone. 'Carrying' this reduced weight is also important when you are recovered from an injury. As Dan comments, "This is crucial for someone who is recovering from an injury and does not want to lose their fitness. It can be particularly beneficial for someone recovering from injuries to the hips, lower back, ankles or knees." The machines are also used to help obese patients - not

just for training, but also to give them an incentive by showing them how their feet and knees would feel if they lost weight.

The idea of using advanced differential air pressure technology for weight support was conceived by Robert Whalen, a NASA researcher who was studying the biomechanics of exercise in space. The first version arrived in 2007, developed by the namesake company in California. A second-generation commercial version came out in October 2009.

The treadmill can also benefit runners (without injury problems) - as they do not suffer from cramps when using the AlterG - by reducing body weight, muscles produce

less lactic acid which causes cramp.

"A lot of people worry that they're not going to be as fit if they're on the AlterG," said Dan. "However, by altering the intensity of the run, we give them the same workout. I have clients who are running marathons who are training on the AlterG. They use it to build their pace while easing the stress on their joints. There's nothing else that can do what this machine can. You can have normal gait mechanics at a reduced body weight. It's quite amazing." **UF**

**A 30min session on the AlterG costs £25. To find out more, log on to [www.danfiveypersonaltraining.co.uk](http://www.danfiveypersonaltraining.co.uk) or phone Dan Fivey on 07709 169997**

