



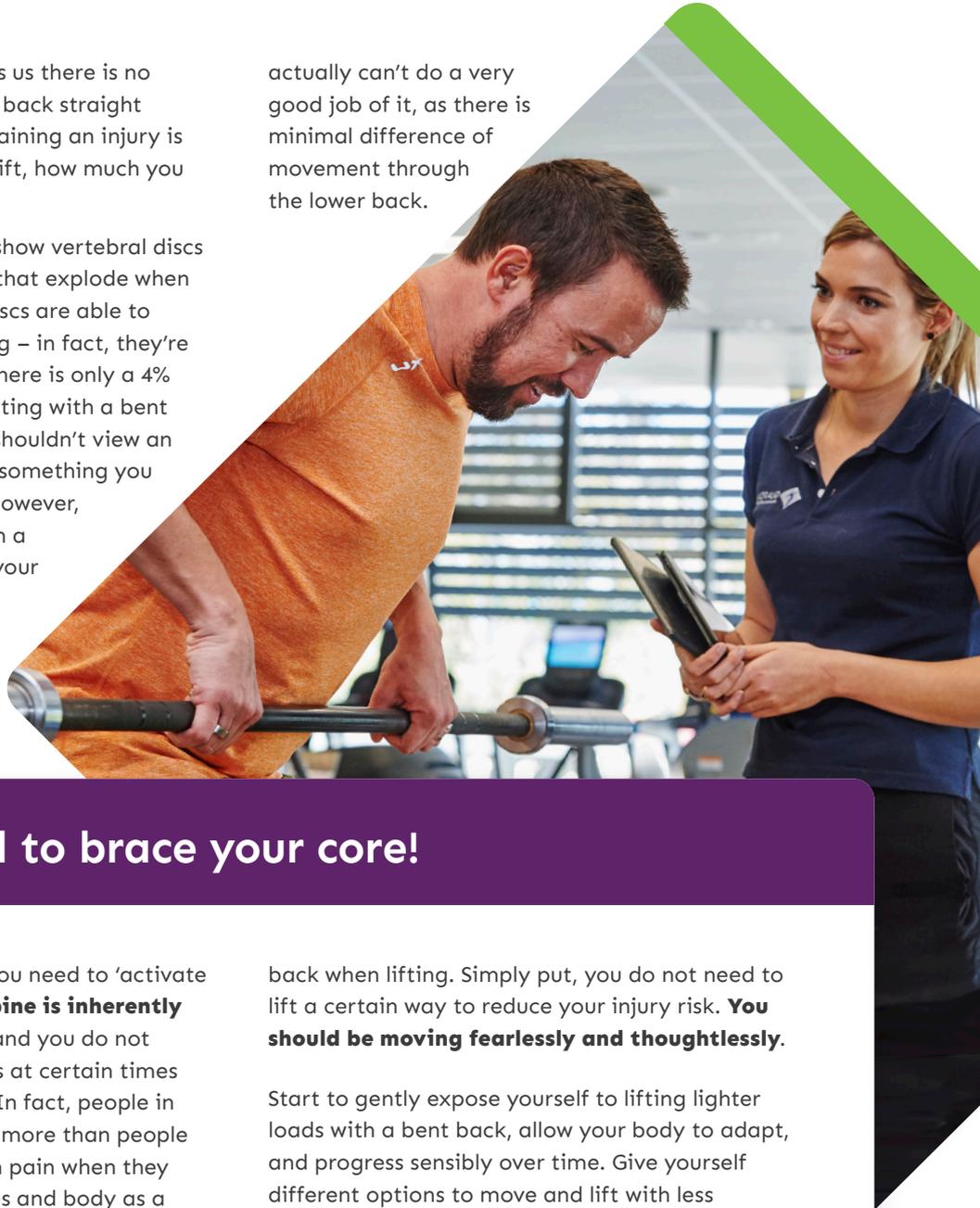
Occupational Lifting Advice

Despite popular belief, research shows us there is no strong evidence that lifting with your back straight actually prevents injury. Instead, sustaining an injury is more likely related to how often you lift, how much you lift, and if you are conditioned to lift.

Traditional manual handling courses show vertebral discs being represented as jam doughnuts that explode when loaded. That is not the case, as the discs are able to tolerate bending, twisting and loading – in fact, they're designed to. Research also shows us there is only a 4% difference in disc pressure between lifting with a bent back versus a straight back. We also shouldn't view an increase in load as a bad thing – it is something you can adapt to, making you stronger! However, you must be exposed to these loads in a progressive way, over time, allowing your body to adapt. You simply cannot do too much, too soon.

There is also evidence to show that even if we try to keep a straight back when we squat, we

actually can't do a very good job of it, as there is minimal difference of movement through the lower back.



You do not need to brace your core!

Another common myth is that you need to 'activate your core' before you lift. The **spine is inherently strong and incredibly robust**, and you do not need to activate certain muscles at certain times to make the spine more stable. In fact, people in pain generally 'brace their core' more than people without pain, yet they are still in pain when they bend and lift. Your spine, muscles and body as a whole need to be strong and tolerate loads, but you do not need to brace your core to lift safely.

We cannot say that you need to bend your back when you lift, or that you need to straighten your

back when lifting. Simply put, you do not need to lift a certain way to reduce your injury risk. **You should be moving fearlessly and thoughtlessly.**

Start to gently expose yourself to lifting lighter loads with a bent back, allow your body to adapt, and progress sensibly over time. Give yourself different options to move and lift with less 'constraints' and 'rules' – it's liberating and safe! Have a discussion with your Exercise Physiologist about a personalised plan for you to help increase your capacity to lift in different ways, while having confidence in your back!

References:

Saraceni, N et al. (2019). To Flex or Not to Flex? Is There a Relationship Between Lumbar Spine Flexion During Lifting and Low Back Pain? A Systematic Review With Meta-Analysis. *Journal of Orthopaedic & Sports Physical Therapy*.

Villumsen, M et al. (2015). Are forward bending of the trunk and low back pain associated among Danish blue-collar workers? A cross-sectional field study based on objective measures. *Journal of Ergonomics*.