



get active

# Nurture core

Ergonomics in the dental surgery isn't just about having the right kind of chair. **Dean Hodgkin<sup>1</sup>** shows you how to combat back problems before they occur.

## A stable spine

Although right up there with the honeycomb as a masterpiece of engineering design, our spines have struggled greatly to cope with the transition from all fours into hunting and finally into today's comparatively sedentary lifestyle.

Accounting for a quarter of the UK's sick-leave, a worrying four out of five people (including a startling one in ten teenagers) will be plagued by backache at some time. Though occasionally caused by kidney or other internal organ problems, the sad fact is that we were just not designed to spend all day sat down and crouched over patients. Unfortunately, working from one side has been specifically identified as a contributing factor to back malaise.

Clearly, prevention is better than cure, so here's a simple prescription to keep your back in pristine condition, and to help to reduce the risk of problems in later life due to the repetitive twisting and bending demands associated with the dental profession.

Here are some simple core training exercises you can do at home that will strengthen the deeper, postural muscles and so lend stability to the spine, helping to keep it healthy and to keep you on the move.

## Lean times

From a kneeling position take one leg out straight to the side and lean in the other direction with the hands by the sides. Focus on keeping the abs tight throughout. To increase the intensity reach overhead with one or both arms. As strength develops, try holding a dumbbell while doing this exercise.

## Catch

Standing on one leg, focus on tightening the abdominals and try to maintain an active balance while throwing and catching a ball against a wall (this will take practice!) The important aspect of this exercise is that where possible there is minimal movement of the trunk. To progress your core strength still further, try the same exercise with a weighted ball.

## Working the plank

Lying flat on your front on an exercise mat or towel, tuck elbows under your chest, feet under so balls of toes are in contact with the floor. This exercise has three phases:

1. Firstly squeeze the shoulder blades back and down, lifting the chest off the forearms
2. Now pull the tummy off the floor
3. Finally, using the large muscles of the lower body, lift the legs up so only the

# your strength

get active!

forearms and balls of feet are now in contact with the floor.

The aim is to maintain a flat line with a small arch in your lower back, not tummy dropped down or backside in the air. Maintain the position for as long as is comfortable and aim to increase the time you can do this before the body begins to shake.

## Cat stretch

Assume the all fours position, hands directly under shoulders, knees directly under hips. Without moving the line of the arms or legs, slowly contract the abdominal muscles aiming to hunch the back, lower spine shifting upwards. Hold for a second at maximum height then slowly release and lower the spine to exaggerate the lumbar curve, abs down to the floor.

## Roll with it

Lie on an exercise mat (or towel) on your back with your head in a neutral position so as not to unduly stress the cervical vertebrae. Lift one knee and then the other to your chest, heels down by the bum. Keeping your lower back in contact with the floor, wrap the arms around the legs and pull the thighs in towards the chest and hold for 15 seconds. If comfortable, gently roll backwards and forwards.

## Let's twist again

Again, flat on your back, knees to chest but this time arms out to the side. Slowly lower both knees to the left side and simultaneously take the left arm to meet the right and look right. Hold for 15 seconds, return to middle position, then repeat on the opposite side.

## General Tips

- Ensure active relaxation forms part of your exercise regime as flopping in front

of the television does not count as a stress buster. Reduce tension by using breathing techniques, such as those found in yoga and tai chi. Maybe even pay (or persuade!) someone to give you a good massage.

- Develop postural awareness by taking a class in either Alexander, Pilates or Feldenkrais techniques which can be found at health clubs or dance studios.
- Always bend your knees, not your back, when lifting and keep your abdominals pulled in tight as you exert.
- Carry a rucksack rather than a hand held bag, to evenly distribute the load.
- If you are a health club member ensure you are exercising safely by asking an instructor to observe your technique in the gym.
- Since working on a flat surface, such as a desk, has been highlighted as possibly predisposing problems, a writing slope is a good idea. It's a simple Perspex/wooden device allowing you to work at a more comfortable angle. Of course, every decent work station should also have a seat with adjustable height and back.

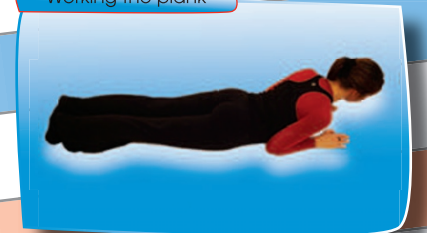
Dean Hodgkin is a health and fitness expert based at spa resort Ragdale Hall. He was three times world karate champion, was voted Best International Fitness Presenter in New York and has written articles for a wide range of publications including *The Times* and *Men's Health*. He has also appeared on TV, including resident slots on the Terry Wogan and Gaby Roslin show. See [www.why-weight.com](http://www.why-weight.com).



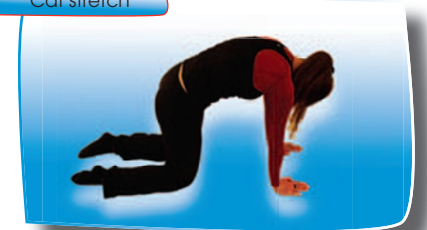
Lean times



Working the plank



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