

## Gardening Is Good For You - James Wong

A spot of gardening not only gives you a good physical workout but reduces pain and anxiety, too

A Sunday afternoon of pottering round the garden – a bit of weeding here, mulching a bed there – doesn't exactly seem like an arduous workout. Yet a 2006 study by Pennsylvania's University of Scranton suggests otherwise. The team found that prolonged light exercise, such as gardening, can burn more calories than a gym session, despite feeling much easier to do. How does this work? The key is the duration of the session. Gardening tends to be much lower intensity, but last twice or even three times as long as a trip to the gym, meaning the cumulative effect of this more modest rate of calorie-burning starts to add up.

When gardening, you are also exposed to more stimuli than the flashing monitor of the treadmill. The sights, the sounds, the decision-making can all serve to distract you from the intensity of physical work you are doing. Images and recordings of natural environments have been shown to reduce feelings of pain and anxiety, help to lessen the need for anaesthesia and even improve healing times in hospital wards.

But it is when these are used in tandem with exercise that even more intriguing results are uncovered. One trial in the *International Journal of Environmental Health Research* reported that while exercise alone helped lower blood pressure, improve mood and self-esteem, exercising with a view of the natural world could have a synergistic effect, with subjects reporting significantly greater positive effects on their mental wellbeing after such sessions than after exercise alone.

Perhaps the most unexpected potential benefit of getting your hands dirty, however, comes from researchers at the University of Bristol, who reported that bacteria commonly found living in soil may have a positive effect on our mood. Mice exposed to *Mycobacterium vaccae* performed better in tests designed to assess the performance of antidepressant drugs, and were shown to have higher levels of serotonin – the brain's "happy" chemical.

Of course people aren't mice, and the finding has only been partially replicated in human tests. In one trial in the *Annals of Oncology*, cancer patients were treated with the same bacteria (along with conventional chemotherapy) to see if this could help improve survival rates. It didn't. But subjects did report side-effects of an increased sense of vitality, appetite, sleep quality, cognitive function and decreased pain – a significant overall improvement in the quality of life.

In the words of the lead researcher of the Bristol study: "They also leave us wondering if we shouldn't all spend more time playing in the dirt." And that is exactly what I, for one, will be doing this weekend.