

# GO ON, GET YOUR HANDS DIRTY!

Has a bit of gardening always seemed like the perfect way to calm your mind? Well, guess what? Turns out that this belief is supported by science. Research shows that a soil bacterium called *Mycobacterium vaccae* can act as an antidepressant in mice. Mice injected with *M. vaccae* showed higher levels of cytokines. This, in turn, leads to higher levels of serotonin production in their brains. Serotonin, as you may know, is a neurotransmitter that reduces depression and regulates anxiety.

We are likely to come into contact with these bacteria while working with healthy soils, or even inhaling it. So the next time you feel down in the dumps, remember that getting your hands dirty with a bit of gardening might actually improve your mood. In fact, even just a walk in a garden may help!



#### Read more here:

- Antidepressant microbes in soil: how soil makes your brain happy.  
URL: <https://realfarmacy.com/antidepressant-soil/>
- Immunization with a heat-killed preparation of the environmental bacterium *Mycobacterium vaccae* promotes stress resilience in mice.  
URL: <https://www.pnas.org/content/pnas/113/22/E3130.full.pdf>.



**Ramgopal (RamG) Vallath** is a motivational speaker. He is also the bestselling author of the children's science fiction, 'Oops the Mighty Gurgle'. He delivers motivational talks and science workshops in schools. He can be contacted at [ramg@azimpremjifoundation.org](mailto:ramg@azimpremjifoundation.org).