Harnessing the mood-boosting power of gardening

How can gardening improve my emotional wellbeing?
Ever thought that gardening could change the way you feel? Ask any gardener why they enjoy gardening and time and time again they will say that it “makes them feel good”. Could you find the feel-good factor with gardening too?

This booklet provides information for anyone interested in harnessing the benefits of gardening for emotional wellbeing. Read on to find out how gardening could help you on the path to better emotional and physical health.

Why gardening?

Our research shows that gardening can help people through a specific period of difficulty in their lives. Gardening can help you get back on top of things and restore balance when it feels like your life is veering out of control. Gardening can help you to feel happier, more confident and healthier.

“I leave the garden bursting with endorphins and feeling on top of the world.”

Derek

Gardening can help because:

- it can be great physical exercise – which in turn helps to boost your mood – even though it can make you ache!
- you can work at your own pace and in ‘small steps’ – doing as much or as little as you like
- you can learn new skills – which might be useful in other areas of your life, such as volunteering or employment
- it can provide a great opportunity to meet people if you want it to – for example by joining a horticultural society, gardening club or allotment group
- it can offer an opportunity for self-expression and a chance to explore your creativity
- nurturing growing things can literally give you a reason to get out of bed in the morning – and the satisfaction of knowing that you have made it happen
- if you are finding everyday life hard to cope with, gardening outside could even help you to take a first step out of the house.
At Thrive, we know that ‘gardening is good for you’ but we go further than that. We undertake research into the real and measurable benefits of gardening. Recent research published by Thrive showed that nearly one in three disabled people (31%) believe that gardening has ongoing health benefits, while almost one in five (19%) report that it has helped them through a period of mental or physical ill-health.¹

Physical activity has been shown to be helpful in the treatment of anxiety, depression² and dementia³. Also, the mental-health charity Mind recently studied the views of people who regularly take part in ‘green’ activities:

- 90 percent said it was the combination of nature and exercise that had the greatest effect on them
- 94 percent said that green activities had benefited their mental health, lifting depression.iv

Could gardening really work for me? Getting started

If you are feeling down or depressed, finding the motivation to start something new can be difficult. Gardening with someone else – maybe at a set time and place – might help. You could also try and set yourself small goals. For example, if tackling an already overgrown garden is too much, could you start in just one area of the garden?

Here are a few ideas – which you don’t even need a garden for – to help you get started:

- **Houseplants** are a cheap and easy way to experiment with growing things. Try local plant sales and car boot sales or ask a friend or neighbour for a cutting.
- Most health food shops and garden centres now sell seeds and beans for sprouting – try growing your own beansprouts, which will be ready for eating in as little as a week.
- A **chilli plant** will thrive on a sunny windowsill – look out for ‘plug’ plants in garden centres or seedlings at plant sales in the springtime.

Of course you won’t get the exercise of more strenuous gardening but you’ll still benefit from the pleasure of seeing something that you have nurtured grow – and you can garden inside if the weather is bad or you just don’t feel up to venturing out.

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Frances
Volunteering at a garden project or in conservation is a great way to get involved in your local community and enjoy working outdoors. It can also be a way of meeting people and making new friends whilst having fun and getting some exercise. You don’t necessarily need specialist skills – but you might learn some! – and you may not need to make a long-term or regular commitment. Some volunteering projects offer the flexibility to just pop along for a couple of hours.

Contact Thrive to find out about gardening volunteering opportunities in your area. What have you got to lose?

Could volunteering be for me?

“...being in the garden gave me a sense of calm that I hadn’t felt before. Working in the garden helped me to open up and talk about my feelings, difficulties, and hopes of getting better…”

Catherine

Want to find out more?

Thrive is a national charity which promotes the benefits of gardening. We have 30 years’ experience of using gardening to make a real difference to people’s lives. We offer information and advice to anyone who wants to harness the benefits of gardening and support health and education professionals who use gardening in their work.

Call 0118 988 5688, email info@thrive.org.uk, see www.thrive.org.uk or visit our easier-gardening website at www.carryongardening.org.uk

Always consult your GP before making significant changes to your lifestyle, such as commencing a new exercise regime.

“I used to get bad mood swings but going into the garden and having a purpose in life has helped to reduce those.”

Gavin

Thrive is grateful for the assistance of Mind in the preparation of this booklet.
References

i  Research commissioned by Thrive from Mintel Custom Solutions, 2006.


iv  Mind (2007), Ecotherapy: the green agenda for mental health. A study undertaken by the University of Essex involved 108 service users, who have a variety of mental health problems, completing questionnaires about their experience of ecotherapy.
How is gardening good for us?

1. Gardening burns calories.

Good news for those who already spend hours planting perennials: Gardening is considered moderate- to high-intensity exercise. You can burn up to 330 calories during just one hour of light gardening- more than lifting weights for the same amount of time. Heavier rounds of gardening (like hauling soil, or gravel, hoeing weeds) can actually increase this calorie burn by 50% or more, that is 500 or more calories per hour!

2. Gardening lowers your blood pressure.

Just 30 minutes of moderate-level physical activity a few times a week can prevent and control high blood pressure. Many gardeners view their hobby as the perfect antidote to the modern world, a way of reclaiming some of the intangible things we have lost in our busy, dirt-free lives. A recent study in the Netherlands (by Andrea Faber-Taylor) suggests that gardening can fight stress even better than other relaxing leisure activities. In the study, after completing a stressful task, two groups of people were instructed to either read indoors or garden for 30 minutes. Afterwards, the group that gardened reported being in a better mood than the reading group, and they also had lower levels of the stress hormone cortisol.

3. Gardening strengthens your immune system.

While outdoors basking in the sun, you will also soak up plenty of vitamin D, which helps the body absorb calcium. In turn, calcium helps keep your bones strong and your immune system healthy. Sunlight also promotes the production of serotonin in the brain, a lack of which can lead to reduced activity of nerve cells in the brain, leading to low mood.

4. Nurturing and care giving.

The process of growing and caring for plants, being responsible for growth and blossoming life, can help people to feel worthwhile and purposeful, which can in turn improve mood.

5. The benefits of soil.

Studies looking at the effect of harmless, naturally occurring bacteria, Mycobacterium vaccae, in soil can increase the release and metabolism of serotonin in parts of the brain that control cognitive function and mood -- much like serotonin-boosting antidepressant drugs do. The argument is that because humans evolved along with M. vaccae and a host of other friendly bugs, the relative lack of these "old friends" in our current environment has thrown our immune systems out of whack.

Our bodies also absorb negative ions through the skin when in contact with the soil. These negative ions energise us, relieve stress and strengthen our immune system.


The effortless attention of gardening may even help improve depression symptoms. In a Norwegian study, people who had been diagnosed with depression or persistent low mood
spent six hours a week growing flowers and vegetables. After three months, half of the participants had experienced a measurable improvement in their depression symptoms.

7. Gardening offers a safe form of exercise.

Gardening gets you out in the fresh air and sunshine - and it also gets your blood moving. There are lots of different movements in gardening, so you get some exercise benefits out of it as well. Gardening is hardly pumping iron, and unless you're hauling wheelbarrows of soil long distances every day, it probably will not do much for your cardiovascular fitness. But digging, planting, weeding, and other repetitive tasks that require strength or stretching are excellent forms of low-impact exercise, especially for people who find more vigorous exercise a challenge, such as those who are older, have disabilities, or suffer from chronic pain.

8. Brain health from gardening.

Some research suggests that the physical activity associated with gardening can help lower the risk of developing dementia. Two separate studies that followed people in their 60s and 70s for up to 16 years found that those who gardened regularly had a 36% and 47% lower risk of dementia than non-gardeners, even when a range of other health factors were taken into account. These findings suggest that the combination of physical and mental activity involved in gardening may have a positive influence on the mind. And for people who are already experiencing mental decline, even just walking in a garden may be therapeutic. Many residential homes for people with dementia now have "wander" or "memory" gardens on their grounds, so that residents with Alzheimer's disease or other cognitive problems can walk through them without getting lost.


The food you grow yourself is the freshest and healthiest food you can eat. Several studies have shown that gardeners eat more fruits and vegetables than their peers. People who are growing food tend to eat healthy food. Studies of after-school gardening programs suggest that children who garden are more likely to eat fruits and vegetables. Not to mention that homegrown produce simply tastes better. Research has also shown that picking fruit and vegetables, either from the garden or the wild, triggers the release of the feel-good neurotransmitter dopamine.
10 of the best mood boosting garden plants!

Swiss Chard

Eat it: All types of chard are packed with magnesium, a nutrient essential for the biochemical reactions in the brain that boost your energy levels. In fact, magnesium deficiency is a common condition among people diagnosed with clinical depression.

Grow it: Chard is a hardy crop that, if planted even as late as summer, will produce until early winter. Pick a spot that gets a fair amount of sunlight; it can tolerate shade but produces best with lots of sun. Or choose a container that’s about 12 inches wide and 12 inches deep and fill it with a good all-purpose potting compost. Sow between 2 and 3 seeds per pot. You can start harvesting leaves as soon as they appear, but harvest from the outside so as not to kill the entire plant.

Blue Potatoes

Eat it: The anthocyanin antioxidants in rare--but tasty!--blue potatoes reduce inflammation that can lead to bad moods. Their skin is also packed with iodine, which helps stabilize thyroid hormone levels, thus warding off mood swings.

Grow it: Potatoes are about the easiest crops to grow. You can even grow them in a bag of potting soil, without really dirtying your hands. To do that, cut a few drainage holes at the bottom of a bag of potting compost, then stand the bag somewhere sunny. Bury two "seed potatoes" about 4 inches deep, and wait about 3 months for them to grow. When flowers start to appear, tip the bag over and dig out the potatoes.

Cherry Tomatoes

Eat it: Tomato skin is rich in lycopene, a phytonutrient that actually stops the build up of pro-inflammatory compounds linked to depression. Because lycopene lives in tomato skins, the best way to get it is through cherry tomatoes, whose smaller size means you’ll eat more skin than if you eat the same amount as a full-size tomato.

Grow it: Cherry tomatoes are good choices for containers, and they'll produce more fruit than larger varieties. The pots should be large and placed in a sunny spot. Tomatoes grow easily from seed and like to be planted deep, so that the first row of leaves is covered by soil. Depending on the variety you grow, cherry tomatoes can take about 2 to 3 months to start bearing fruit.

Source: http://www.rodalesorganiclife.com/food/good-mood-food
Oregano

**Eat it:** Oregano is rich in caffeic acid, quercitin, and rosmarinic acid, all components that combat depression, fatigue, and anxiety.

**Grow it:** Oregano, like most herbs, is easy to grow from seed or a cutting. Water sparingly, leaving the soil on the dry side. It thrives better in containers, but make sure your pot is fairly large—at least 12 inches across—as this plant can grow pretty quickly.

Black-Eyed Peas

**Eat it:** Black-eyed peas have some of the highest levels of folate of any vegetable. It's thought that folate plays a role in creating dopamine, serotonin, and norepinephrine, three brain chemicals that, when absent, can make you forgetful, irritable, and unable to sleep.

**Grow it:** Black-eyed peas need long summers with temperatures averaging between 60° and 70°F, which is why they're so commonly grown in warmer climates. They need warm days and warm nights, with lots of sun and water. After you plant them, they'll be ready to harvest in a little over three months. You can eat them fresh off the vine, or leave them on the vine until they dry (you'll hear seeds rattling around in the pods) and save them to eat all winter.

Sunflower

**Eat it:** Sunflower seeds are a great source for the antidepressant phenylalanine, an amino acid the body turns into norepinephrine.

**Grow it:** Sunflowers like sun, obviously, but be sure to plant them in a sunny spot on the north edge of your yard or garden so they don't cast too much shade on other sun-loving plants. Plant your seeds after the last frost. Towards the end of summer, the flowers start to wilt and the seed heads ripen and droop. When the seeds in the seed heads start to turn brown, cut them along with 2 feet of stem and hang upside down in a dry, well-ventilated place, such as a garage or attic, until fully dry; store in plastic bags for birds and animal food. To eat, soak overnight in water (or strong salt water, if a salty flavour is desired), drain, spread on a shallow baking sheet, and roast for 3 hours at 90°C or until crisp.

Chamomile

**Drink it:** There's a reason a cup of chamomile tea just before bed helps you sleep. Just like oregano, it's rich in stress-reducing caffeic acid and quercitin, but it tastes much better in the form of tea, which you can make from your garden herbs by steeping chamomile flowers in boiling water for about 10 minutes.

**Grow it:** German chamomile is best for teas, as opposed to other varieties that can taste bitter. Since it can grow wild and take over your garden, it's best suited for containers. A small container about 6 inches wide by 6 inches deep will suffice, but a bigger pot will yield a bigger harvest. It prefers full sun and should be planted in late spring, when there's no risk for frost.
Evening Primrose

**Eat it:** Evening primrose is technically a wildflower. Its seeds have the highest levels of tryptophan (which your body uses to make mood-boosting serotonin) of any plant. In the Autumn, when the flowers mature, the flowers' seed pods begin to fill up. Harvest a few and grind them as you would flaxseed into your favourite dishes.

**Grow it:** Evening primrose is drought-tolerant and easy to grow either in containers or in the ground. You can find varieties with flowers ranging from deep reds to light yellows. Sow the seeds in groups of four. They'll start to appear in 14 to 28 days.

Lavender

**Smell it:** Gardens don't have to be all about edibles (even though you can eat lavender). Aromatherapy treatments involving lavender and a few other herbs are often used to supplement depression treatments, because the scent is so relaxing.

**Grow it:** Plant a lavender seedling in a container made from a material that breathes, such as terra-cotta, and choose a pot about 12 inches wide by 12 inches deep. Place your pot in an area that gets lots of sunlight; lavender loves dry, sunny areas. English lavender is both fragrant and edible, if you feel like adding some lavender flowers to your cooking.

St. John's Wort

**Drink it:** The most famous herbal antidepressant, St. John's wort contains compounds similar to those found in Prozac. The flowers and leaves are the most valuable part of the plant and can be brewed into a tea that will calm you down and boost your mood. Just note that St. John's wort has many adverse drug interactions, so check with a pharmacist if you're on any medications.

**Grow it:** Another herb that's often viewed as a weed, St. John's wort should be grown in containers to keep it from spreading where you don't want it. It's pretty easy to grow. Just find a seedling or some seeds and plant them in a small container placed in a partially sunny/partially shady area. Plant the herb in spring, and by July you'll start to see leaves. But flowers won't show up until the second year (St. John's wort is a perennial, so you can leave it in its pot all winter and it'll grow back on its own).