

Ergonomics Tips for Home Gardening

Many see gardening as pleasurable and a nice form of exercise. Beautiful flowers blooming, fruits and vegetables growing and tranquillity amongst the birds. To help you enjoy the process of gardening while staying healthy, warm up before you start, use safe body mechanics to complete the tasks, protect your knees, wear good gloves, use well maintained tools and take frequent rest breaks. The following ergonomics tips will help pave the way to being a happy and healthy home gardener.



Warm Up:

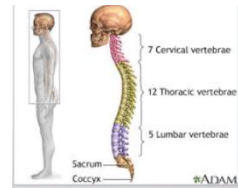


Gardening is a physical activity and, just like playing sports, it is important to warm up the entire body before you start. After a 5-minute warm up, like walking or riding a bike, try some of these stretches to get your muscles ready to go:

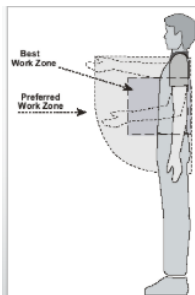
<https://uhs.berkeley.edu/sites/default/files/gardenstretches.pdf>

Use Safe Body Mechanics:

Your back is designed with 4 curves, and although you can move in many ways, if you maintain these curves while lowering and raising your body, lifting, reaching and using your hands and arms you will have less risk of injury. When you bend over to complete a task, this action puts 8-10 times more compressive force on your low back area. Repetitively using this



awkward posture can lead to low back pain. Try using the larger butt and hip muscles to squat or go on one knee when raising and lowering your body to lift and do other tasks.



The safe working zone is located between the shoulders and hips with the arms bent at the elbow or extended forward and to the side. When the tasks are located outside this zone you should use mechanical aids and/or change your body's position to stay safe. This in turn will reduce the risk of injury by keeping the arms close to the body and maintaining the curves of the back.

Protect Your Knees:



The knee is the largest joint in the body. To help prevent inflammation to this joint use a foam kneeling pad or portable kneeler, change postures often and use ice after gardening if you experience discomfort.



Gloves:



Wear a good pair of gloves that are thinner and fit well to allow for hand dexterity and strength. Gloves defend the hands against splinters, scratches, scraps, dirt and exposure to the sun.



Tools:



Using tools and equipment in the garden will help your hands and make the work easier. From a garden trowel to pruners, from a rake to a hedge trimmer, all of these make gardening more enjoyable. Sharpen blades and oil as needed. Clean and wipe tools dry before storing.

Things to Watch Out For



Check the weight of the load prior to lifting. Break down heavier items, bags of soil/fertilizer, into smaller containers to reduce the weight being lifted and carried. Use a wheelbarrow or other mechanical aid to make the task more manageable.



Minimize repetitive fine motor motions of pinching and pulling with the thumb and index finger. Try using a tool to remove weeds, alternate using the right and left hand and reduce the time spent to break up repetitive stress.



Work with your thumbs pointing up so your elbows don't wing out. This can happen when the task is too high in relation to the body's position, like pruning. Use a ladder so your arms stay closer to the body.





Minimize looking up and tilting your head back. Take frequent breaks and rotate the tasks. Stand on a ladder, use a longer handled tool or try a tool with a pivoting head and rechargeable battery for residential hedge trimming tasks.



Rack the leaves onto a canvas tarp or into a collapsible container, positioned on its side, to reduce repetitive lifting. Slide or pull to different garden locations.



Take Frequent Rest Breaks:



To stay happy and healthy while gardening, take frequent rest breaks. Instead of clearing an entire area of weeds or pruning the whole tree in one afternoon, take breaks and switch between different tasks to use different muscles and break up repetitive and awkward postures. Enjoy the journey and pace yourself for

maximum enjoyment.

Resources:

<https://uhs.berkeley.edu/bewellatwork/ergonomics>

<https://uhs.berkeley.edu/facstaff/ergonomics/back-injuries>