The Daily Union Saturday, April 14, 2018 Title: Health Benefits of Gardening

It's that time of year when the daffodils are blooming, the tulips are peaking out, and the leaves are on the verge of setting on. Some people are working up their garden space in preparation for planting their favorite vegetables and herbs. I have shared many times that eating fresh fruits and vegetables is a great choice for your health. However, it's not just your nutritional health that has proven to be a benefit of gardening. There are physical, mental, emotional, and spiritual health benefits as well.

**Physical Health:** Gardening is considered a moderately intense physical activity. According to the Centers for Disease Control and Prevention (CDC), 2.5 hours of this level of exercise each week can reduce the risk of obesity, high blood pressure, type 2 diabetes, osteoporosis, heart disease, stroke, colon cancer and premature death. If you choose to garden at the moderately intense level, you are also more likely to increase your overall physical activity level to 40-50 minutes more per week. This adds even more benefit to your physical health. Exercising both the arms and legs is recommended to help prevent illnesses like coronary disease. With most everyday activities only involving the arms, gardening is a great way to incorporate the entire body while exercising. There are benefits for gardening across the life span. Researchers in our own back yard at Kansas State University have already shown that gardening can offer enough moderately intense activity to keep older adults in shape, as well. Yet another study reports that their 16 years of research on gardeners who were in their 60s and 70s showed that there was a 36% lower risk of dementia compared to folks of the same age who did not garden. A North Carolina Cooperative Extension study reported that children involved in gardening showed an increase preference in vegetables such as broccoli, carrots, snow peas, and zucchini. This same study reported that this increased preference remained in place when they conducted a follow-up survey six months later.

**Mental and Emotional:** In recent years, research has shown that gardening is proven to relieve stress. Although stress is a mental and emotional response to the environment (work, home, family, etc.) in which we live, stress shows up in our body through irritability, headaches, stomach aches, and heart attacks. It can also worsen pre-existing conditions already present in your body. In an 2010 experiment published in the *Journal of Health and Psychology* (Agnes E. Van Den Berg & Mariette H.G. Custers, authors), the stress-relieving effects of gardening were compared to that of reading. The research showed that, although both activities reduced stress, people who gardened had a much more dramatic decrease in their stress levels compared to those who read.

The journal *Biological Psychology* published an article in 2013 reporting that some experts have found that fresh air (a common condition when gardening) can help prevent Attention Deficit Hyperactivity Disorder (ADHD) and result in higher test scores of students.

Historically, gardening was a necessity. People raised their own food so that they had access to it as needed to sustain their bodies. In our world today, many people opt for gardening primarily for satisfaction, relaxation, and peace of mind as their primary reason and growing their own food comes in right behind that.

There is a large body of research that supports the mental health advantages from a chemical and biological perspective, as well. *Mycobacterium vaccae* is a harmless bacteria found in soil that has been found to stimulate the immune system in mice and boost the animals production of serotonin, a mood-regulating brain chemical. With that research in mind, further research in this area is hypothesized to produce the same effects on humans who garden. When researchers have interviewed people about their mood and mental outlook, a notable response from gardeners is that gardeners have a positive mental outlook.

Spiritual Health: Because gardening connects us with the earth and environment around us, many people report that this activity provides them with a harmonious place to relax, unwind, reflect, and restore themselves. Gardening gives you the opportunity to show creativity and ingenuity in your efforts to raise everything from peonies to pumpkins. The aromatic plants such as mint and sage can also have a soothing and calming effect on your body. Fresh flowers like roses and lavender can also emit some of the same responses. I am fortunate to have a large garden spot on my farm. When I have questions about variety selections or pest control, I step out of my office right in to Chuck Otte's to get my questions answered about garden preparation, plant selection and care and production tips. There's no doubt, he's one of the best in his field! However, when it comes to picking, preserving, or preparing the fruits and vegetables we get from our garden and fruit trees, I have my own knowledge and experience to rely on as well as the great research-based resources provided by Kansas State University Research and Extension. Regardless of what area of gardening you need assistance with, you can contact the Geary County K-State Research and Extension office at (785) 238-4161 to get your guestions answered. Until next time, keep living resourcefully!