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INTRODUCTION:

As we watch the snowy, cold days of winter melt into the warm, crisp days of spring, many gardeners have one thing on their mind, pulling out the gardening boots and gloves and digging into that freshly tilled soil. There is nothing more rewarding than biting into freshly picked produce that you grew yourself.

Although this luxury is one many people still enjoy, for some this is not an option. So, what if you can’t grow a traditional garden, but you still want the fresh taste of homegrown produce? The answer is container gardening! Container gardening allows gardeners to produce fruits and vegetables in pots, boxes, barrels, baskets, or anything you choose. The biggest advantage to container gardening is it can be done with very limited space versus a traditional garden. You can also overcome problems you may face in a traditional garden such as pests and disease.

This guide to container gardening can assist you in moving your garden from the back yard to the back porch.
CROP SELECTION:

Practically any plant you can grow in your garden can be grown in a container. When you choose crops for your garden, you examine labels for important details, and you should do the same when starting your container garden. Here are a few questions to ask yourself when selecting plants for your container garden:

• How much space do you have? Remember . . . plants such as cucumbers and beans will vine out. Tomatoes will grow tall and spread. It is important to leave sufficient space for growth.

• How much time and effort do you want to spend on your garden? Some plants are more “high maintenance” than others and will require additional care. For example, your plants may require staking, pruning, fertilizing, or insect and disease control.

• In what conditions will the plant be grown? Where will containers be placed? Closely examine plants’ light and temperature requirements. If plants are inside, they may require additional light. Depending on your climate, it may be too cold to grow certain plant varities outdoors. Read plant and seed labels.
CHOOSING CONTAINERS:

Choosing the right container for growing your plants is a very important step. The good news is that almost any container can be used in your container garden. Use these helpful tips listed below to assist you in choosing your container:

- Be creative! Choose containers that create a pleasant atmosphere. Children of all ages enjoy painting and decorating containers. Remember, container gardening is supposed to be fun and rewarding.

- The size of the container is very important. Make sure your container is large enough to allow your plant to produce mature roots. Although a shallow pot may be sufficient for growing many plants, if you are growing carrots, radishes, or other plants that grow under the soil, choose a pot that is deep enough to allow for the plant’s growth.

- Clean feed sacks or other large, cloth-type bags are great for growing potatoes and other plants that grow under the soil.

- Hanging baskets are ideal for growing plants that have vines that will hang down. For example, both strawberries and tomatoes can be grown in hanging baskets.

- Good drainage is important. Adding gravel to the bottom inch of your container can aid in draining. Also, adding drainage holes in the bottom of the container will allow your plant to drain. Remember . . . setting a saucer or plastic protector under your plant will prevent the plant drainage from staining the surface it is setting on.

- The material the container is made of is also important to consider. Some containers dry out more quickly than others and will require you to water the plant more frequently. Also, some container materials are more durable than others. Consider choosing more durable containers for plants with longer growing seasons. Using treated wood boxes should be avoided, because the chemicals may seep into the soil.
LIGHT:

A majority of vegetables will grow better in full sunlight. However, leafy vegetables can tolerate more shade than root crops. Fruit bearing plants require the most sun of all the vegetables. One advantage to growing in containers is you have the ability to move them to different locations to allow them to get more or less sunlight. If you have any doubt about the light requirements check the label to determine your plants’ light needs. The following is an explanation of light requirements you may find on your plants’ label:

• Full Sun: Between 6-8 hours of direct sunlight per day.

• Partial Sun: 4-6 hours of sunlight a day, preferably in the morning and early afternoon.

• Shade: Less than 4 hours of direct sunlight per day, with filtered sunlight during the rest of the day.
WATERING:

Watering your plants properly is a key factor in their successful growth. The list below offers some useful information about watering your plants:

• One watering per day is usually adequate for your plants.

• Plants should be well drained. If the soil holds too much water, the plant will suffer due to lack of oxygen.

• Excess water on leaves and in soil increases chance for disease.

• Mulches are a useful way to reduce water loss in your plants. Choose mulches such as those you would use in your garden. Example: straw, grass clippings, etc.

• Hydrogels are starched based gels that can absorb at least 100 times their weight in water. The gel will then slowly release the water into the plant as it dries.
FERTILIZERS:

Most of us understand in order to achieve optimal plant growth it is necessary to use some kind of fertilizer to help our plants grow, but what does 20-20-20 even mean on those bags? These three numbers offer valuable information in helping the grower decide which fertilizer will best meet their needs.

- The first number is for Nitrogen (N). Nitrogen promotes growth and should be lower on fertilizers for flowering plants than it is for foliage plants.

- The second number is Phosphorous (P). Phosphorous should be higher for flowering plants, because it promotes good flower, seed, and root production.

- The third number is Potassium (K). Potassium is for the general vigor and as a general rule should be relatively in balance with nitrogen to keep strength in the new growth. Fertilizers for foliage plants generally require additional nitrogen.

- Fertilizers for garden plants will be available in time-release or water soluble. Time release fertilizer is mixed with the potting soil at planting time. Water soluble fertilizer is added to the water and administered to the plants during active growth.

- It is ideal to weekly give the plant enough water to allow extra fertilizer to drain out of the soil.

- The easiest way to fertilize the plant is to prepare a nutrient mix and pour it over the soil. There are many types of synthetic fertilizers available. Carefully follow the directions on the label to mix and apply the nutrient mix.

- Signs of over fertilization include: decreased rate of growth, stunted plants, burned or dried leaf margins, loss of lower leaves, browned roots, wilted, or dead plants.
PEST CONTROL:

• Inspect plants frequently. Closely examine the underside of the leaves and the stems.

• Remove and discard infected leaves or plant material. Remove any yellow or dying leaves or plant material.

• Manage serious infestations with commercial products. Identify the pest, and then carefully check labels to assure the pesticide is made to control that particular pest. Begin with the lowest dose of least toxic product available to protect the environment and not harm beneficial insects such as the honeybee. Read labels thoroughly before administering the product. Store products in a safe location out of the reach of children and pets.

• Isolate infested plants from healthy plants to avoid spreading the pest. Plants should be isolated long enough that you are sure there is no longer a problem.
DISEASES:

Commonly the “diseases” that plants grown in container gardens suffer from is their environment. Many of these problems have been addressed throughout this brochure. If you are experiencing problems with your plant, one of the following could be the diagnoses:

Light:

*Not Enough Light* – plants are tall, spindly and unproductive.
*Too Much Light* – scald, browning of exposed surfaces.

Water:

*Not Enough Water* – plants appear dull and limp.
*Too Much Water* – plants yellowing from bottom, lack vigor, poor color.

Plant Disease:

*Plant Diseases* – plant leaves with spots, dead dried areas, or powdery or rusty areas.

Temperature:

*Too High* – brown or yellowing of the leaves, leaf drop, bud drop, dry crumbly leaves, loss of foliage color, pale weak growth, collapse of plant, wilting.
*Too Low* – plants stunted in growth, sickly, discolored.

Container:

*Too Big* – plant will exhibit the same symptoms as too much water.
*Too Small* – plant slows in growth, wilts, loses leaves, often will not flower. Plant becomes root bound.

Humidity:

*Too Much Humidity* – fungi grows on leaves, stems, and sometimes on soil.
*Too Little Humidity* – leaves brown off from the tip back to the stem. Leaves drop from some plants.
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