

# **Victory Garden Revival**

A Guide to Making Your Own Garden at Home Prepared by Colby-Sawyer College's 2019-2020 Community-Based Research Project

How to Prepare a Garden

#### Site selection:

Find a sunny spot that is receiving 8-hours of full sunlight. If you are unable to find a spot with direct sunlight consider growing more shade tolerant crops, such as greens, lettuce and spinach. Try to avoid low lying areas or areas that tend to accumulate rainwater because plant roots need oxygen. Avoid planting around the perimeter of old houses or buildings. Before 1978, there was no regulation on lead paint. If there are any paint chips in the surrounding soil it would contaminate the soil. Make sure that your vegetable garden is easily accessible for both you and the watering system.

#### **Choose the Garden Format:**

This plan is for a 52.5 square foot garden that contains tomatoes, onions, winter squash, summer squash, potatoes broccoli, lettuce, marigold, dill, bush beans, thyme, and chives. This garden will be broken up into three different sections: a Pizza Garden, a Roots and Greens Garden, and a Brassicas and Squash Garden, as seen on the next page



### **BOX 1. Pizza Garden**



Tomatoes x4 Potatoes x4 Summer Squash x1 Bush beans x6 Basil x6 Marigolds x2

## **BOX 2. Roots and Greens**

Onions x50 (3 inches apart, 6 inches between rows) Lettuce.

Beets x20 (Transplant 3 inches apart)

# BOX 3. Brassicas and Squash

Winter squash x4 (plant on a mound, 18 inches apart) Dill x 3 (plant between squashes) Broccoli x 4 Herbs. Parsley and/or Cilantro

#### Test the Soil:

Test the soil for pH if you are able too; vegetable grow best in a pH of 6.5-6.8. The soils in New Hampshire tend to be more acidic (pH 4.5-4.8).

### **Prepare Ground for Planting:**

Most vegetable gardens start out as a lawn and, therefore, grass and any weeds will need to be removed. There are two simple and effective ways to remove perennial weeds and grasses: tillage and mulching. These are both most effective in the early spring before the grass starts to grow again, or after it has been cut very short. Pest from the lawn (insects) may live in the garden that is immediately planted after the lawn is tilled. It is best to start the tilling process the summer before you would want to plant. The extra time would allow for the grasses and weeds to die and the insects would be less intrusive. You can till the soil in the same year you want to plant if you start before the grass beings to grow.

#### Tillage:





A. DIG FIRST TRENCH; PILE SOIL ALONGSIDE TRENCH OR INTO WHEELBARROW

B. BREAK UP BOTTOM OF TRENCI WITH FORK AND WORK IN SOME COMPOST



#### The Double Digging Technique (Courtesy of UMN Extension)

You can remove the weeds by hand or with the use of equipment. A shovel, spade or metal rake can be used for a small plot, using the double digging method. This method can be time consuming for larger plots but will work well in this 52.5 square-foot plot. Plan to till the soil for 2-3 weeks before you start planting, this will ensure that all of weeds and grass has been killed.

#### **Mulching:**



#### Mulching technique using newspaper, mulch, and dirt.

You can remove weeds through mulching by covering them, preventing the weeds to receive sunlight. The grasses and weeds have root systems that allow them to grow back easily and invade your garden. Mulching requires that you block out sunlight reaching the plot for a period of several weeks to a few months to kill the root system. Mulching can be done using a heavy (6-mil) piece of black plastic or organic materials such as newspaper, leaves, straw, wood chips, etc. The layer of organic material must be thick enough to block light. Avoid using glossy papers or pages with colored ink as the cover. When using organic material, wet them so they will create a unified layer that is less likely to blow away. Before you remove the mulch check that all the grass is dead. The mulch can be removed or left depending on personal preference.

#### **Cover the soil:**

If you started your garden the summer before preparing the soil and the site, you have open soil that will need to be protected from potential soil loss (erosion). You can prevent this from happening by planting a winter cover crop. Oats are a widely used, inexpensive cover crop and can be purchased at any feed store or ordered online. Plan to plant between early August and mid-September to get maximum growth during the fall. In the winter oat plants will die and cover the soil adding a layer of mulch. In the spring this layer of oats can be tilled into the soil. You can also use straw which would be raked off in the spring.

# How to Cultivate and Care for Your Plants

#### **Tomatoes:**

**Starting:** Start the tomato plants indoors 6-8 weeks before the last frost. You can also purchase tomato plants that have been started at a local plant store or a farm. Before planting them in the garden make sure they harden to the outside conditions. This can be done by growing seeds indoors 6-8 weeks prior to planting outside.

**Planting:** Dig a hole that is 2x the size of the root ball (the part that is in the container). Make sure that the hole is deep, so the root ball is level with the ground. Take the plant and gently break apart the bottom of the root ball. This will help the roots take hold and the plant to grow. Next, gently fill in the hole with the surrounding soil. Make gentle indents at the base of the plant. Theses indents remove any air pockets in the soil. Next, you want to take your tomato cage and place it, so the plant is in the center. Now, water your plant and be sure to create a little puddle of water around the plant.

**Spacing:** Plant each tomato plant 4 feet apart and in rows that are 5-6 feet apart.

**Watering:** Make sure that you water frequently and keep the soil moist.

**Fertilizer/Compost:** Prefers soil with a pH of 5.8 – 7. Prefers heavy amounts of fertilizer that is low in Nitrogen and Potassium

**Harvest:** Tomatoes will be ready to harvest when the fruit is a deep red.

**Storage:** Tomatoes should be stored at room temperature in a place away from sunlight. They have optimal flavor when not refrigerated but should be refrigerated if not used within a week of harvest.

#### Cabbage

**Starting:** You can grow cabbage in the spring or the fall. Start by sowing the seeds directly into the soil of your garden. You can also start your cabbage indoors 4-6 weeks prior to planting outside.

**Spacing:** Space the cabbage seeds 24 inches apart as this will allow for air to circulate around the plant, which reduces disease and insect problems.

**Watering:** Make sure to keep your garden well-watered. Make sure that your garden soil is loose and well drained.

**Fertilizer/Compost:** Prefer soils with a pH of 6.5-7.5. They also prefer heavy fertilization. This can be done by adding compost/manure to soil. Add a balanced 10-10-10 fertilizer 2 weeks after transplanting, and a nitrogen rich fertilizer three weeks later.

**Harvest:** The inner heads will be ready to harvest in about 90-100 days.

**Storage:** Can be refrigerated fresh for upwards of 1-2 weeks. If kept in cool, root cellar conditions, cabbage can store for up to 3 months.

#### Onions

**Starting:** Can be started indoors 6-10 weeks before the last frost. Sow in the soil and cover with ¼ inch of seed starting formula. Keep the temperature between 60-65 degrees F.

Onions can be started directly in the garden after the last frost.

**Spacing:** Sow the seeds sparingly in rows that are spaced 1-2 feet apart. Cover the seeds with a thin layer of soil.

**Watering:** Make sure to water the plants regularly and keep the soil moist.

**Fertilizer/Compost:** Add manure to garden prior to planting onions. When planting, add nitrogen rich fertilizer. Apply nitrogen rich fertilizer every few weeks to raise larger onions

**Harvest:** Plants will be ready about 100 days from sowing seeds. Bend tops down. Pull the bulbs and cover with foliage to avoid them getting sun burned. Allow the onions to cure in the garden for a week. Bring the onions inside and have them cure in a warm dry place. Cut the tops of the onions leaving about 1 inch above the bulb.

Storage: Store in a cool dry location.

#### Winter Squash (butternut)

**Starting:** Sow the seeds into the soil. Sow 1-2 seeds and gently cover with soil. Seeds can also be started 3-4 weeks prior to planting outside

Spacing: Sow 1-2 seeds about 36 inches apart.

**Watering:** Keep soil well-watered, squash need about 1-2 inches of rain or water every week during the growing season. The soil should be moist.

**Fertilizer/Compost:** Winter Squash are heavy feeders. Add compost to soil prior to planting/transplanting. Fertilize occasionally after harvest begins. Misshapen fruit could be indicators of not enough water/fertilizer

**Harvest:** Harvest once the fruit is matured (about 75 days). The skin will be dull and hard to puncture with your fingernail. To harvest cut stem with shears. Leave a 2-3 inch steam on the fruit.

**Storage:** Leave in the sun to allow for the skin to harden. Store in a cool dry place.

Kale

**Starting:** Sow the seeds in early spring and again in midsummer for a fall crop. Plant seeds directly into soil and cover with soil or begin indoors 4-6 weeks prior. Water seeds gently after planting.

Using a plant that has already been started you can purchase these at a local garden store.

Take plant out of container and gently break apart the root ball. Dig a hole deep enough to encompass the entire root ball. Place the plant in the hole and cover the roots with soil. Firmly press the soil around the base of the plant.

Spacing: Place plants 1-2 feet apart.

**Watering:** Thoroughly water the plants when first planted and continue watering through the season. The soil should be moist but not soggy and saturated.

**Fertilizer/Compost:** Kale prefers soil with a pH of 6.5-6.8. Nitrogen rich compost should be added to soil prior to planting. When planting, add 1.5 cups of 5-10-10 fertilizer or blood meal for every 25 feet of garden. Continuous feed plant food should be added regularly

**Harvest:** Pick the outer leaves when the7 reach 6-8 inches long about 55-60 days after planting. Leave the central bud to continue to grow.

**Storage:** In a plastic bags or containers in the refrigerator, you can add a moist paper towel to help keep the plants fresh.

#### Lettuce

**Starting:** Sow Lettuce directly in so the soil in early spring or late summer as a fall crop. Seeds can also begin indoors 4-5 weeks prior. In late summer, sow in a protected area that is below 75 °F.

Sow seeds thinly in rows 12 inches apart and cover with a 1/4 inch of soil.

**Spacing:** Follow directions on seed packets as spacing changes depending on the seed variety.

**Watering:** Keep plants well-watered during the growing season.

**Fertilizer/Compost:** Add compost one week prior to planting/transplanting. Add nitrogen rich compost 3 weeks after transplanting.

**Harvest**: Pick lettuce early to avoid having it become bitter and tough. Harvest loose-leaf any time the leaves are large enough. Harvest butterheads anytime the heads are large enough. Cut butterheads below the crown.

**Storage:** In a plastic bags or containers in the refrigerator, you can add a moist paper towel to help keep the plants fresh.

#### Dill

**Starting:** Sow after the last frost outside sow from spring to early fall. Sow seeds and cover with ¼ inch of soil. Can be planted indoors 6 weeks prior. When using dill that has been

started: dig a hole that is deep enough for the root ball. Gently break the root ball apart and place the plant into the hole. Cover roots with the soil and press around the base of the plant.

Watering: Water daily, make sure the soil stays moist.

**Fertilizer/Compost:** Dill prefers soil with a neutral/ moderately acidic pH. Add compost to ensure soil contains healthy amounts of organic material.

Harvest: Pick fresh leaves as needed from the dill plants.

**Storage:** Leaves can be dried or used when fresh. Store seeds in an air-tight container in a dark cupboard.

#### **Bush Beans**

**Starting:** Plant seeds directly into the garden make the rows two inches deep.

**Spacing:** Place each row 1.5-2 feet apart. Place the seeds 2-3 inches apart in the rows.

**Watering:** Gently water the seeds once they have been planted. Continue to water through-out the season. Bush Beans will not produce blossoms if they don't receive enough water

**Fertilizer/Compost:** Bush Beans prefers soil with a pH of 6.0 to 7.0

**Harvest:** Beans should be harvested when green and pods break when bent.

**Storage:** Beans can be stored for about a week fresh. Store refrigerated in a plastic bag/container. Avoid using nitrogen rich fertilizers during bloom as this will create heavy foliage and a lack bean pods. Add compost halfway through the growing season

#### Thyme

**Starting:** Sow thyme seeds indoors for 6-8 weeks before the last frost. Plant seeds about ¼ inch deep in the seed starting formula. Keep the soil at 70°F. They will need to receive 16 hours of light from a plant light. Before planting outdoors, the seedlings need to harden off to the outdoor conditions. Move the seedling to a sheltered place outdoors for a week to reduce the transplant shock.

To plant thyme seedlings, break apart the root ball and place the plant in the hole. Make sure the hole is deep enough that the plant base is level with the ground. Cover the root ball and press the soil down firmly with your hand.

**Watering:** Wait for the soil to become completely dry, and then water heavily.

**Fertilizer/Compost:** Thyme does not require much fertilizer, but compost can be added to the soil to boost nutrients.

Spacing: Place the plants 12 inches apart.

Harvest: Pick the leaves as needed throughout the season.

**Storage:** Thyme can be dried and stored in an air-tight container and stored in a dark location such as a cupboard.

#### Chives

**Starting:** Start the plants indoors 8-10 weeks before the last frost. Plant the seeds ¼ inch deep in the seed starting kit. Keep the soil moist and at 70°F. Before transplanting into the garden chives should be place in a shelter place outside for about a week to harden to the outdoor conditions.

Dig a hole that will allow the root ball to fit. Carefully break up the root ball and place into the hole. Gently fill in the hole. Press down around the base of the plant and water until a small pool of water forms.

**Watering:** Keep the soil moist but not wet and avoid having the soil dry out.

**Fertilizer/Compost:** Add 4-6 inches of compost prior to planting/transplanting. Add nitrogen rich fertilizer if needed.

**Harvest:** Clip the leaves about 1 inch above the ground and the plants will continue to generate new growth.

**Storage:** Can be stored fresh or dried. To dry, cut into ¼"- ½" pieces. Place in well ventilated, dry location away from sunlight.

#### Summer Squash

**Starting:** Summer Squash prefers to be direct seeded into soil that is 60°F. Plant in late spring to midsummer. Seeds can be begun indoors 2 to 4 weeks prior to last frost and then transplanted into the garden.

**Spacing:** Plant seeds/seedlings 2 to 3 feet apart. Squash can be planted on mounds as well. Place 3 to 4 seeds/seedlings close together at the top of a mound, allowing the plants to grow downhill.

**Watering:** Water frequently, particularly once plant starts producing fruit. Water deeply at least once a week, allowing soil to pool about an inch of water.

**Fertilizer/Compost:** Squash are heavy feeders. Add compost to soil prior to planting/transplanting. Fertilize occasionally after harvest begins. Misshapen fruit could be indicators of not enough water/fertilizer

**Harvest:** Harvest when squash is yellow in color with a glossy appearance. Cut or twist squash off plant, avoiding denting or scratching of fruit as this will shorten shelf life.

**Storage:** When stored in a cool place (50°F-60°F) Squash can last for 4-6 months.

#### **Potatoes**

**Starting:** To avoid frost damage, plant potatoes about 2 weeks after the last spring frost. Place seedlings or cut potato pieces directly into the soil. If using cut potatoes, make sure to cut potatoes one day prior to allow them to cure. Once plants are established, create/maintain hills around base of plants. This will prevent potatoes from becoming exposed to sunlight. Sunlight exposure makes tubers inedible.

**Spacing:** Plant potatoes approximately 12-14 inches apart and cover with approximately 3-4 inches of soil.

**Watering:** Potato plants require 1-2 inches of water per week. Too much/not enough water can cause potatoes to become misshapen

Fertilizer/Compost: Mix in compost prior to planting.

**Harvest:** For smaller potatoes, harvest 2-3 weeks after plants stop flowering. These potatoes should be eaten a few days after harvest. For larger, mature potatoes, harvest 2-3 weeks after foliage dies. Cut dead foliage back and wait another 10-14 days. This will allow the skin to harden **Storage:** Allow skin to cure after harvest by storing in a cool dry place for 2 weeks. Can be stored for 5-10 months when in a cool, location with high humidity. Do not store with apples, as they release ethylene gas that causes potatoes to go bad. Do not store in a refrigerator, and do not wash dirt off until potatoes are being used.

#### Basil

**Starting:** Seeds can be begun indoors 6 weeks prior to the last spring frost. If planting Basil directly outside, soil should be 50°F-70°F and outside temperatures stay above 50°F at night.

**Spacing:** Seeds/seedlings should be planted approximately 10-12 inches apart

Watering: Soil should remain moist to the touch, as Basil likes moisture

**Fertilizer/Compost:** Compost soil prior to planting basil. Basil can be fed plant food every 1-2 weeks

**Harvest:** Harvest as soon as plants are 6-8 inches tall. Harvest leaves regularly to encourage plant growth. Leaves are their juiciest in the morning.

**Storage:** Basil can be frozen or dried in a well ventilated area.

#### **Beets**

**Starting:** Beets are frost tolerant and can be begun directly in the soil. Plant the first planting in early spring.

**Spacing:** Plant seeds every 1-2 inches in rows that are a foot apart from each other. When beet seeds grow to be 4 inches tall, thin plants to be 3-4 inches apart.

Watering: Beets require moist soil. Water heavily once a week

**Fertilizer/Compost:** Beets prefer soil that has a pH of 6.0-7.0. Avoid using fertilizers/compost with high levels of nitrogen. This will create a lot of foliage and small bulbs.

**Harvest:** Beets will be mature about 2 months after planting. Harvest beets when they are golf ball sized or larger.

**Storage:** Beets can be stored 5-7 days in a refrigerator. Beets can also be stored in a root cellar environment for longer term storage. Make sure to clean dirt off of the roots and cut the greens off the tops. The greens can be eaten as well

# How to Seed Save for the Next Season

#### \*To seed save make sure the vegetables are heirloom varieties of vegetables. You cannot save seeds from hybrid varieties.

#### **Tomatoes**:

Cut off any bruises or damaged parts of the tomato. Cut open the tomato and squeeze the seeds into a bucket or a bowl. Pull the seeds and gelatinous material out of the tomato. Transfer the seeds to a container with a lid. Label the container and store for 3 days at a temperature that is not above 70°F. Stir the juice once or twice a day this prevents mold from building up. Put seeds into a bucket or large bowl and add two to three times more water. Useable seeds will sink to the bottom. Carefully pour off the pulp water but not the seeds at the bottom. Pour the seeds onto a fine mesh sieve or window screen. Use water to spread out the seeds because the seeds will stick to your hands. Allow seeds to dry on the screen. Label screen with the type of tomato and harvest date. Allow seeds to dry for 5-6 days at room temperature in a well-ventilated area. Stir seeds to avoid having them clump. Store in a labeled envelope in a cool dark, dry place. Do not freeze seeds.

#### Cabbage:

Before the first frost dig up a cabbage plant and avoid damaging the root system. Replant in containers with moist potting soil or sand. Place in a garage shed or other unheated structure. Replant in garden in the spring. After the cabbages go to seed pick the pods off the cabbage and place in a container. Gently roll the seed between your hands, so the pod breaks open and you can store the seeds. Store cabbage seeds in an air-tight container and in a cool, dry, dark place.

#### **Onion:**

Large flowers will grow of the onion stocks. The flowers will be umbel shaped. Cut the flower off and place on a screen and allow the seeds to dry for 2 weeks. Seeds should be rubbed off the head easily. Store in a labeled container and keep, in a dark, dry cool place.

#### Squash (Butternut & Summer):

Cut the mature fruit of the squash in half. Remove the seeds and place them in a bowl with water. Work the seeds with your hands. The seeds and stringy material of the fruit will be separated. Wash the seeds. Spread the seeds out on a screen or tray. Let the seeds dry for a week. Go through the seeds and discard any that are flat; only round seeds are viable. Store the seeds in a jar and check for moisture. If the seeds are moist dry them out for an additional day or two.

#### Kale:

Once the plant has gone to seed, wait until the seed pod has turned brown. You can cut the main stem and harvest all the seeds, or you can remove the pods promptly. Place the pods on a screen for a week to dry. Once the pods are dry, place them in a paper bag. Close the opening of the paper bag and shake it vigorously. This will release any mature seeds from the pods. Remove the seeds from the paper bag. Label the seeds and store in a container or bag in a cool, dry place.

#### Lettuce:

Once the plant goes to seed, it has small yellow flowers. Lettuce seeds are usually collected in September or October. The seeds look like small dandelion seeds; they have a small fluffy section on top. Wait until about a third of the seeds are ready to be harvested. Take the flowering stock add turn it upside down and shake the stock into the container. Spread the seeds out on a screen and dry for a day or two. Store in a container in a dry, cool, and dark place.

#### Dill:

Dill will spread quickly because it will self-seed be careful where you plant it. The plant will go to seed and produce umbel shaped flowers. Let the flowers dry and the seeds should rub right off. Store in a labeled container in a dry, dark cool place.

#### **Bush Beans:**

Drying down happens when the plants lose their leaves and only the pods are left. These processes occur between June and October. Some pods dry and you can hear the seeds move around, pods are ready to be harvested when your nail can no longer dent the seed. Pick the pods and place them in a container while you are picking them. Take the pods and spread them onto trays or screens allowing them to dry for an additional day or two. The seeds will dry better in the pods. Open the pods by rubbing them against a hard surface. To get the beans out of the pods you can pick them out of the pods. A second method is that you can soak the pods in water and the viable beans will sink to the bottom. Once you have separated the beans and pods, dry the beans again. Store in an air-tight container and in a cool, dry dark, place.

#### Thyme:

Remove the seed head. Place the pods on a screen inside to dry completely. The pods will need to be removed and the seeds will need to be cleaned. Using a fine mesh cloth or colander to sift the seeds and separate them from the debris (dried plant material). Take the seeds and repeat the sifting process several times. The seeds should be labeled and stored in a cool, dry dark place

#### **Chives:**

The flowers will be a purple puffy flower. Once the flower begins to dry out, cut the flower from the plant and place it on a screen or tray allow it to dry completely. The seeds should be removed easily from the dried flower and fall out. Store the seeds in a container, in a cool, dry dark place.

#### Potatoes

Potatoes can be grown from themselves. Potatoes can be stored in cool, dry conditions for months. 3-4 weeks before planting, move potatoes to a sunny place. This will cause the potatoes to sprout. Cut the potatoes so that each piece has 2-3 eyes. These pieces can be placed into the ground and will form into potato plants.

#### Basil

Take the flowers and allow them to dry in a warm, dry location. Once dry, crush flower heads to remove seeds. The chaff (outside of seed capsule) can then be blown away. Basil seeds can be stored for upwards of 5 years.

#### **Beets**

To save seeds from beets, plant beets to leave in the ground over the winter. Once seeds have dried on the greens before harvesting. Seeds be rubbed off the greens and stored for 5 years.

the soil is too basic, organic material can be added to lower pH. If soil is too acidic, then lime can be added to the soil at this stage.

- > Till soil over again to mix in nutrients
- To prevent the growth of weeds, cover garden in black plastic or cardboard. Leave this cover down until spring.

# **End of Season Garden Clean-Up**

After a productive growing season, your garden will have to be prepared for the next season. The following steps will help prepare your garden for another productive season

- ➤ Remove all weeds and other debris from the garden.
- Till the soil just as you had at the beginning of the season. (See How To Prepare Garden Section) This will help to remove insects and other pests that may disrupt the garden from the soil.
- Cover the tilled garden with compost, manure, and or leaves. This is a great time to restore soil health. If

# **Nutritional Values of Vegetables**

#### **Tomatoes**

**Vitamins:** Vitamins A, Vitamin C, Vitamin E, Folate, Pantothenic Acid, Choline, Betaine.

**Minerals**: Calcium, Iron, Magnesium, Phosphorus, Potassium, Sodium, Zinc, Copper, Manganese, Selenium, Fluoride.

Sterols: Phytosterols.

Calories: 25 calories per 148 gram serving



#### Cabbage

Carbohydrates: Fiber and Sugar.

**Vitamins:** Vitamin A, Vitamin C, Vitamin E, Potassium, Thiamin, Niacin, Vitamin B6, Folate, Pantothenic Acid, Choline, Betaine.

**Minerals:** Calcium, Iron, Magnesium, Phosphorus, Potassium, Sodium, Zinc, Manganese, Selenium, Fluoride.

Sterols: Phytosterols.

Calories: 25 calories per 84 gram serving



#### Onions

Carbohydrates: Starch, Sugars, and Fiber.

**Vitamins:** Vitamin A, Vitamin C, Vitamin D, Vitamin E, Vitamin K, Thiamin, Riboflavin, Niacin, Vitamin B6, Folate, Vitamin B12, Pantothenic Acid, Choline, Betaine.

**Minerals:** Calcium, Iron, Magnesium Phosphorus, Potassium, Sodium, Zinc, Copper, Manganese, Selenium, Fluoride.

Sterols: Phytosterols.

Calories: 45 calories per 148 gram serving



Winter Squash (Butternut)

Carbohydrates: Starch and Sugars and Fiber.

**Vitamins:** Vitamin A, Vitamin C, Vitamin E, Vitamin K, Thiamin, Niacin, Vitamin B6, Folate, Pantothenic Acid, Choline, Betaine.

**Minerals:** Calcium, Iron, Magnesium, Phosphorus, Potassium, Sodium, Zinc, Copper, Manganese, Selenium.

Calories: 50 calories per 120 gram serving



#### Kale

Carbohydrates: Fiber.

**Vitamins:** Vitamin A, Vitamin C, Potassium, Thiamin, Riboflavin, Niacin, Vitamin B6, Folate, Pantothenic Acid.

**Minerals:** Calcium, Iron, Magnesium, Phosphorus, Potassium, Sodium, Zinc, Copper, Manganese, Selenium.

Calories: 20 calories per 65 gram serving

#### Lettuce



Vitamins: Vitamin A, Vitamin C, Vitamin K, Folate, Choline.

**Minerals**: Calcium, Magnesium, Phosphorus, Potassium, Sodium.

Sterols: Phytosterols

Calories: 15 calories per 85 gram serving



#### Dill

Carbohydrates: Fiber.

Vitamins: Vitamin A, Vitamin C, Niacin, Folate.

### Marigold

Contains anti-inflammatory, anti-wheal, and antioxidants.



**Minerals:** Calcium, Iron, Magnesium, Phosphorus, Potassium, Sodium, Zinc, Copper, Manganese.

**Vitamins:** Vitamin A, Vitamin C, Vitamin D, Vitamin E, Vitamin K, Thiamin, Riboflavin, Niacin, Vitamin B6, Folate, Pantothenic Acid, Choline, Betaine.

**Minerals:** Calcium, Iron, Magnesium, Phosphorus, Potassium, Sodium, Zinc, Copper, Manganese, Selenium, Fluoride.

Calories: 20 Calories per 83 gram serving

#### **Chives:**

Carbohydrates: Fiber, Starch and Sugars.

#### **Bush Beans**

Carbohydrates: Fiber and sugars.



Vitamins: Vitamin A, Vitamin C, Potassium, Folate, Choline.

**Minerals:** Calcium, Magnesium, Phosphorus, Potassium, Sodium.



**Minerals:** Calcium, Iron, Magnesium, Phosphorus, Potassium, Sodium, Zinc, Manganese.

Sterols: Phytosterols.

#### Thyme:

#### Carbohydrates: Fiber.

**Vitamins:** Vitamin A, Vitamin C, Vitamin E, Folate, and Choline.

### Summer Squash

Carbohydrates: Fiber and Sugars

**Vitamins:** Vitamin A, Vitamin C, Vitamin E, Vitamin K, Vitamin B6, Thiamin, Riboflavin, Niacin, Folate, Pantothenic Acid, Choline



**Minerals:** Calcium, Iron, Magnesium, Phosphorus, Potassium, Sodium, Zinc, Copper, Manganese, Selenium

Calories: 20 calories per 98 gram serving

#### **Potatoes**

#### Carbohydrates: Fiber, Starch, Sugars

**Vitamins:** Vitamin A, Vitamin C, Vitamin K, Vitamin B6, Thiamin, Riboflavin, Niacin, Folate, Pantothenic Acid, Choline, Betaine



**Minerals:** Calcium, Iron, Magnesium, Phosphorus, Potassium, Sodium, Zinc, Copper, Manganese, Selenium

Sterols: Phytosterols

Calories: 120 calories per 148 gram serving

#### Basil

Carbohydrates: Fiber

Vitamins: Vitamin A, Vitamin C, Vitamin K, Folate, Choline

**Minerals:** Calcium, Iron, Magnesium, Phosphorus, Potassium, Sodium, Manganese





Sterols: Phytosterols Calories: 35 calories per 82 gram serving

# **Garden Statistics**

The value of having a home garden can come in many different forms. Previously we discuss the nutritional value of a garden. As seen in figure 4, the caloric value of a garden this size is approximately 7385 calories total. The possible retail price for a garden this size would be about \$85. The table below provides a full break down of calories, and market value for each vegetable grown.

#### **Beets**

#### Carbohydrates: Fiber and Sugars

**Vitamins:** Vitamin A, Vitamin C, Vitamin E, Vitamin K, Riboflavin, Niacin, Vitamin B6, Folate, Pantothenic Acid, Choline, Betaine

**Minerals:** Calcium, Iron, Magnesium, Phosphorus, Potassium, Sodium, Zinc, Copper, Manganese, Selenium



Plant	Number of Plants	Pounds/ harvest	Calories/ serving	grams/ serving	total servings grown	Calories/ harvest	Market Value/lb	Market Value
Tomatoes	4	10	25	148	31	766	3.25	\$32.50
Onions	50	14	45	148	43	1931	1.05	\$14.70
Butternut Squash	4	10	50	120	38	1890	1.29	\$12.90
Lettuce	15	4	10	89	20	204	1.99	\$7.96
Beets	20	7	35	82	39	1355	0.59	\$4.13
Potatoes	4	2	120	148	6	736	0.6	\$1.20
Summer Squash	1	2	20	98	9	185	1.22	\$2.44

Bush	6	3	20	83	16	328	1.21	\$3.63
Total:								
						То	otal Market	
				Total Calori	ies	7395 <b>V</b> a	alue	\$79.46

Table displaying produce, caloric values, and market value in our 52.5 square foot garden proposal

Plant	Number of Plants	Pounds/harvest	Calories/serving	grams/serving	total servings grown	Calories/harvest	Market Value/lb	Market Value
Kale	4	3	20	65	21	419	1.13	\$3.39
Cabbage	4	7	25	84	38	945	0.99	\$6.93

Kale and Cabbage can be substituted for broccoli in the above graph

#### References:

Images and information within this document derives from the University of New Hampshire, Burpee, United States Department of Agriculture, gardenknowinghow.com, permaculturenews.org, Have a Plant, howtosaveseeds.com, Nature and Garden, Urban Farmer, the Herb Exchange, The Old Farmer's Almanac, and Johnny Seeds. Images of vegetables and herbs are sourced from Johnny Seeds.