

Grow Well Missouri Orientation



Grow Well Missouri partners with food pantries, local organizations, and volunteers to establish food gardening programs that reach out to food pantry customers. The primary goal is to offer a selection of seeds, educational materials, and one-on-one advice to help pantry customers reap the many benefits of gardening.

From the Beginning: Seed Repacking

After the orientation, you will have most of the materials needed to repackage seeds. Bins will include the following:

- Vegetable seeds in bulk
- Tape dispensers
- Scotch tape
- Measuring spoons
- Coin envelopes
- Plastic bags
- Seed Repack Chart, with measurements for each variety
- Bowls
- Sharpie markers
- Blank labels
- Label templates

To complete the set-up, you will need to print the labels using the blank labels and label templates. Do this at least a week before your scheduled repacking event just in case you run into any issues.

As demonstrated in the orientation, seed repacking requires at least one person who is running the show. This person will be responsible for setting out the materials, instructing workers, keeping workers supplied with materials, monitoring quality control, and packing up and storing finished bags of seeds.

The seed repacking process is simple. It involves three basis steps: **sticker, scoop, and tape**. Below are a few tips to help the process move smoothly:

- The bigger the group, within reason, the better. I try to enlist 20-25 volunteers for a three hour period. If you can get more people, you will likely finish sooner. If you have fewer people, it may take you the whole time or you may have to arrange to do some additional packing at a later date.
- The job works best when people work in groups of three. However, If people want to work in twos or fours, that will work fine too.
- Limit each work group to one variety at a time. Have them completely finish one variety before moving on to the next.
- Encourage people to use level measures when possible. For larger seeds, slightly mounded scoops are fine. For smaller seeds, a level measure will ensure there is enough seed to fill all of the envelopes.
- When storing seed before and after the seed repack, find a cool and dry location (not freezing and not in a refrigerator).

The Display

The cardboard boxes with dividers and little signs provided are an efficient way to display seed packs for distribution. Keep the seed packs stored in plastic bags until you need them. Prior to your first distribution, file seed packs long side up into the display boxes. At the end of any given distribution, restock the seed packs in the display boxes to be ready for the next distribution.

Use a table with a table cloth for the display. Chairs are nice to have if volunteers or customers want to sit down. Educational materials and paper bags are also set out on the table. Educational materials can be found at the Grow Well Missouri Resources webpage at <http://foodsecurity.missouri.edu/projects/grow-well-missouri/resources/>.

Showtime! Running the Table

- Be ready when the door opens. Have volunteers show up before the start of distribution to set up the table and have everything ready to go.
- As people pass by the table, feel free to engage them with a bit of conversation to see if they are interested in picking up seeds. Once engaged, and if they are interested, you may politely mention that they are welcome to take one of each variety.
- Some people may ask to take more than one of each variety. I normally tell them that a couple of each is fine, or a couple of their favorites is fine. You may wish to explain the reason why you limit how many people can take – to have enough for everyone. If seeds remain towards the end of the season, extras can be taken at that time.
- If people ask, you can tell them there should be enough seed in each packet for a small to medium size garden.
- Some people will say they can't garden for various reasons or "no thanks." That is okay. You can thank them for their consideration.
- Some people will tell you that they live in an apartment. You are welcome to mention that container gardening might be an option and give them the *Container Gardening* handout. If your area has a community garden, let people know about it with a flier or sign-up sheet.
- Give everyone a brown paper bag with your main handout. This is your primary way of keeping count of participants (see below for more details).
- To further the conversation, as people are picking out seeds, you can ask how long they've been gardening or what are their favorite things to grow. This is just a little something to get a conversation going.
- Don't assume that everyone is new to gardening. On average, about half of Grow Well Missouri participants have gardened for 11 or more years.
- Keep extra seeds under the table or nearby. If any varieties run low during the shift, restock them.

Keep it Fresh

Try to have something new every month. For example:

- March: Cool season seeds plus the *Garden Planning* and *Planting Calendar* handouts
- April: Cool season seeds and warm season seeds plus *Managing Weeds* and *Insects* handouts (optional: broccoli, cabbage, kale transplants)
- May: Warm season seeds plus *Making Compost* handout (optional: tomato or pepper transplants)
- June: Warm season seeds plus *Planting Sweet Potatoes* handout (optional: sweet potato slips)
- July – September: Optional (e.g. cooking/food demos, food preservation, etc.)

Alternatively, you may consider offering both cool and warm season seeds from the beginning. This may give gardeners a better chance to do some planning and save space for some of their favorite crops.

Cool season seeds include beets, carrots, dill, kale or collards, lettuce, radish, spinach, and turnips. **Warm season seeds** include basil, cucumber, green beans, okra, summer squash, Swiss chard, and zucchini.

Grow Well Missouri educational materials are found at <http://foodsecurity.missouri.edu/projects/grow-well-missouri/resources/>.

Record Keeping

Please have volunteers keep a count of the number of people who pick up seeds and other materials. Instructions and a version of the record keeping sheet follow:

1. Record the date (Column A).
2. Start with a known quantity of paper bags and/or handouts. Your starting number will be based on how many people you anticipate picking up materials (plan for at least 50% of the total food pantry customer households for that day) (Column B).
3. **Be sure to give everyone who picks up seeds a paper bag and your primary handout.**
4. At the end of the shift, count how many paper bags or handouts remain (Column C).
5. Do the math to calculate how many bags were distributed (Column D = Column B minus Column C).
6. Check with the person doing registration/intake at the food pantry to find out how many **households** attended the pantry during your shift (Column E).
7. Record any notes or observations you think are important. If you are running short on supplies, record it here and tell someone about it.

A blank template is provided in the packet. Please email or fax a copy of the sheet to Bill (McKelveyWA@missouri.edu, Fax #: 573-882-5127) on a monthly basis. [I'll send an email reminder.]

Grow Well Missouri Participant Count

A	B	C	D	E	F
Date	Start (# of handouts/bags to start)	Finish (# of handouts/bags remaining)	Total handouts/bags distributed (Start minus Finish)	Total # of families attending pantry	Notes

Training and Scheduling Volunteers

Volunteer training will help people feel comfortable when it is their turn to set up and operate Grow Well Missouri. Consider hosting a **semiformal training** which can be as simple as a short meeting with volunteers before the start of the season or **on-the-job training** during the shift where an experienced volunteer is paired with a new volunteer. Consider covering the following topics in a training:

- Logistics, including start and finish time, where things are stored, and where to set up.
- The Display, Running the Table, Keep it Fresh, and Record Keeping (from above).
- Basic expectations about how to interact with customers.
- Anything else that seems important.

Creating and sharing a schedule at the beginning of the season will help volunteers know what to expect. Scheduling two people per shift is ideal.

When you get home after the orientation

After our orientation you will be equipped to go home and get started with Grow Well Missouri in earnest. Below is short to-do list:

- Schedule a meeting with your leaders and partners; consider additional activities if applicable.
- Schedule and host your seed repacking party. Make it fun with music and food.
- Print labels.
- Disassemble your box to become familiar with your materials.
- Make additional preparations for getting started.
 - Schedule and hold a volunteer training
 - Recruit volunteers and create a schedule
 - Find educational materials at <http://foodsecurity.missouri.edu/projects/grow-well-missouri/resources/>
 - Print educational materials as you need them
 - Purchase brown paper bags

In Closing

I hope that you enjoy Grow Well Missouri. For me, the chance to share gardening supplies and information and make new gardening friends is very rewarding. In addition to helping people grow good food, I believe the program helps build community by creating bonds between food pantry customers and volunteers.

There are many ways to run the program. The tips provided above are the result of four plus years of experience in a variety of settings. However, I encourage you to be creative and adapt the program to your local setting. You will likely find ways to streamline or enhance the program. If you come up with something good, I'd like to know about it. Your experience counts.

Please feel free to contact me anytime. I'm happy to visit by email, phone, or in person. I'll be in touch about visiting sometime this spring or summer.

Thank you for your involvement!

Bill McKelvey

Email: McKelveyWA@missouri.edu – Office: 573-882-4973 – Cell: 573-746-0770 – Fax: 573-882-5127

Website: <http://foodsecurity.missouri.edu/projects/grow-well-missouri/resources/>

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Grow Well Missouri Seed Repacking Chart 2017

Vegetable	Amt./Pack
Basil - Genovese	1/8 tsp.
Beets - Detroit Dark Red	2 tsp.
Carrot - Red Core Chantenay	1 tsp.
Collard – Georgia	1/4 tsp.
Cucumber – Marketmore 76	1/2 tsp.
Dill - Bouquet	1/4 tsp.
Green bean (bush) – Contender	2 Tbs.
Kale – Improved Siberian	1/4 tsp.
Lettuce - Black Seeded Simpson	1 tsp.
Mustard – Southern Giant	1/4 tsp.
Okra - Clemson Spineless	1 tsp.
Radish - German Giant	1 tsp.
Spinach - Bloomsdale	1 tsp.
Summer squash - Early Straightneck Prolific	1/2 tsp.
Sunflower – Autumn Beauty	1/8 tsp.
Swiss chard - Rainbow	1/4 tsp.
Turnip - Purple Top White Globe	1 tsp.
Zucchini - Black Zucchini	1/2 tsp.



Contact Bill McKelvey with questions – McKelveyWA@missouri.edu or 573-746-0770 (cell)

The Garden \$aver

Welcome to Issue 1 of the Garden \$aver! This issue kicks off another growing season for Grow Well Missouri. Throughout the season, we'll do our best to offer timely and practical advice for gardeners at all levels – whether you are brand new to gardening or have been gardening your whole life. Have an idea for us? Please let your local Grow Well Missouri volunteers know about it or contact Bill McKelvey, Project Coordinator, at 573-882-4973 or McKelveyWA@missouri.edu. Good gardening to you!

Spring is Near

The first official day of spring is March 20, the Spring Equinox, when the length of day and night is about the same. This also marks nearly the earliest you can begin planting **cool season crops** in the garden. For most areas of the state, it is best to wait until late March or early April.

One thing to think about when starting to plant outside is **soil temperature**. Vegetable seeds sprout within a range of temperatures, and each has an ideal temperature when it will sprout the fastest. See the chart below for a list of **Cool Season Vegetables** and the best soil temperatures for sprouting.

Vegetable	Ideal Temp (F)	Range (F)
Beet	75	65-85
Carrot	80	45-84
Kale/Collards/Mustard	85	45-95
Lettuce	75	40-80
Pea	75	40-75
Radish	85	45-90
Spinach	70	45-75
Swiss Chard	85	50-85
Turnip	85	60-105

The main way to know the soil temperature is to use a simple cooking for food safety thermometer (*Only use it for this purpose. Don't reuse it in the kitchen*). Insert to a depth of 2 inches during the middle of the day and record the temp for a few days. Then take the average. Soil temps in the 40s-50s generally mean it is safe to plant lettuce, peas, carrots, radishes, spinach, kale, collards, mustard, and Swiss chard. Temps in the 60s are good for beets and turnips.

You can also check the soil temp in your county (or nearby) at this MU Extension website:

<http://agebb.missouri.edu/weather/reports/soilTemp2.asp>.

Spring Garden Prep

Spring into action **before** the garden season to make your planting easier.

- **Do some planning** and make a rough sketch of where and how much to plant. Don't forget to leave room for warm season/summer vegetables.
- **Get your tools in order.** Clean and sharpen hand tools. If you have a tiller, make sure it is ready to go when you need it.
- **Rake off old, dead plants and debris.** This will allow the soil in your garden to warm and dry faster.
- **Get compost**, well-aged manure, or check your own compost pile to see if yours is ready. Keep this on the side of the garden until you are ready to dig or till.

When you are ready to dig in, be sure to **test the soil for wetness** by picking up some soil and making a soft fist. If the soil breaks apart when you poke at it, it is ready to be worked. If it stays in a clump, the soil is too wet. Give it a few days to dry.

Use compost when you work up the garden. Spread a 2-3 inch layer across the planting area. Mix it in. It doesn't have to be dug in deeply.

For those with soil in good condition, or with existing gardens, **minor tilling and digging may be all that is needed**. See what you can do without doing a major till or dig. You might be surprised.

CONTACT INFORMATION

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Growing Spinach

Spring is for spinach. This vegetable is relatively easy to grow and can be cooked or used raw in many dishes. It is one of the earlier vegetables to plant. Think mid- to late-March for Central Missouri; late-March to early-April for the Ozarks and North, South Central, and Southwest Missouri. It grows well in soil that has compost or aged manure added.

Planting: Plant spinach seed ½ inch deep.

- **Traditional in-ground garden with rows** – Space seeds approx. 3 inches apart within the row. Space rows 12-18 inches apart.
- **Raised bed garden** – Use directions above for a traditional garden or scatter the seeds over the surface of the soil and gently rake or chop them in. The seeds need to be covered with soil. Once the seeds have sprouted and grown for a couple of weeks, remove enough plants so that the remaining plants are about 8-12 inches apart on all sides.
- **Container garden** – Spinach is great for containers. Use the seed scattering method described above.



Harvesting: Pick or pinch off individual leaves anytime they are more than 3 inches long. Leave the rest of the plant to grow. You can also harvest whole plants once the largest leaves are 3-5 inches long. Use a knife to cut the base of the plant just beneath the surface of the soil. The plant will not regrow in this case.

Small Plot Gardening

If you garden in a small raised bed or container, you may be able to space your vegetables closer than what is suggested on most seed packets. Directions on seed packets are usually for more traditional gardens with rows and room to walk between rows.

With small plots or containers, people often use **square foot or intensive gardening** methods to save space and get more plants per square foot. Look for books at your local library or tips on the internet.

With these methods, you'll need to provide more water and compost/fertilizer. This is because plants will be crowded and there will be more competition for water and nutrients. You'll also need to weed by hand since there may not be room to use a hoe or other weeding tool.

Taste it at home! Spinach Scramble

ALL YOU NEED:

- Fresh spinach (about ¼ pound per serving)
- 2 eggs per serving
- ¼ onion per serving
- 2 cloves minced garlic per serving
- Vegetable oil for light pan frying
- Salt and pepper
- Optional: Grated cheese and herbs

ALL YOU DO:

- Wash spinach by dunking in cold water. Drain in a colander. Chop. Then, chop onion and garlic.
- Heat one tablespoon of oil in pan over medium heat. Add onion and cook for a couple of minutes.
- Add garlic and cook for one minute.
- Add chopped spinach and cook for a couple of minutes until it is wilted.
- Crack eggs into veggies. Mix and cook until firm.
- Add salt, pepper, cheese, and herbs to taste.



Brought to you by the University of Missouri. Funding in part comes from the Missouri Foundation for Health, a philanthropic organization whose vision is to improve the health of the people in the communities it serves



















Garden Planting Guide - Southwest Missouri

- Direct Seed** - growing plants from seed sown right in the garden.
- Transplant** - a young plant grown to about 6 weeks old in a greenhouse or other heated, protected environment.
- Crowns** - the part of the plant where the stem and roots grow from.



















Planting
Dates

	How to Plant	Spacing (in.) Within Row (Between Rows)	Mar 25-31	Apr 1-14	Apr 15-30	May 1-14	May 15-31	Jun 1-14	Jun 15-30	Jul 1-14	Jul 15-31	Aug 1-14	Aug 15-31
 Asparagus	Crowns	18 (48)											
 Beets	Direct Seed	3 (18)											
 Black-Eyed Peas (Cowpeas)	Direct Seed	3 (24)											
 Broccoli	Transplant	24 (30)											
 Brussels Sprouts	Transplant	24 (30)											
 Cabbage	Transplant	24 (24)											
 Cantaloupe	Direct Seed	60 (48)											
 Carrot	Direct Seed	3 (18)											
 Cauliflower	Transplant	24 (30)											
 Collard Greens	Direct Seed	12 (24)											
 Corn, Sweet	Direct Seed	10 (36)											
 Cucumber	Direct Seed	48 (36)											
 Eggplant	Transplant	24 (24)											
 Green beans	Direct Seed	3 (24)											
 Kale	Direct Seed	12 (24)											
 Kohlrabi	Direct Seed	4 (24)											

Garden Planting Guide - Southwest Missouri

Planting
Dates

	How to Plant	Spacing (in.) Within Row (Between Rows)	Mar 25-31	Apr 1-14	Apr 15-30	May 1-14	May 15-31	Jun 1-14	Jun 15-30	Jul 1-14	Jul 15-31	Aug 1-14	Aug 15-31
 Lettuce	Direct Seed	6 (18)											
 Mustard	Direct Seed	3 (18)											
 Okra	Direct Seed	12 (30)											
 Onions	Bulbs/sets	3 (18)											
 Peas, snap & snow	Direct Seed	3 (24)											
 Peppers	Transplant	18 (30)											
 Potatoes	Potatoes	12 (30)											
 Radishes	Direct Seed	3 (18)											
 Rhubarb	Crowns	36 (48)											
 Spinach	Direct Seed	3 (18)											
 Summer/Winter Squash & Zucchini	Direct Seed	48 (48) 60 (48)											
 Sweet Potatoes	Transplant	12 (48)											
 Swiss Chard	Direct Seed	3 (18)											
 Tomatoes	Transplant	36 (48)											
 Turnips	Direct Seed	3 (18)											
 Watermelon	Direct Seed	96 (96)											



PLAN YOUR GARDEN!

There are no green thumbs. Trial and error makes a great gardener! Small steps are all it takes to get started.

1. Start small

Gardens can be as small as a container on your porch or a 4ft. by 4ft. raised bed in your yard. If things are going well, you can always make your garden bigger.

2. Grow what you like to eat

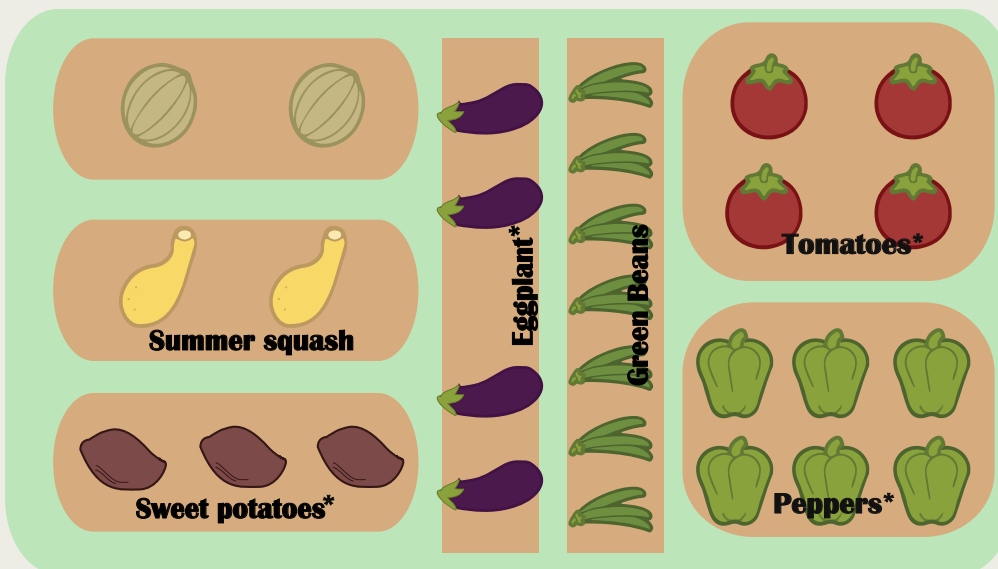
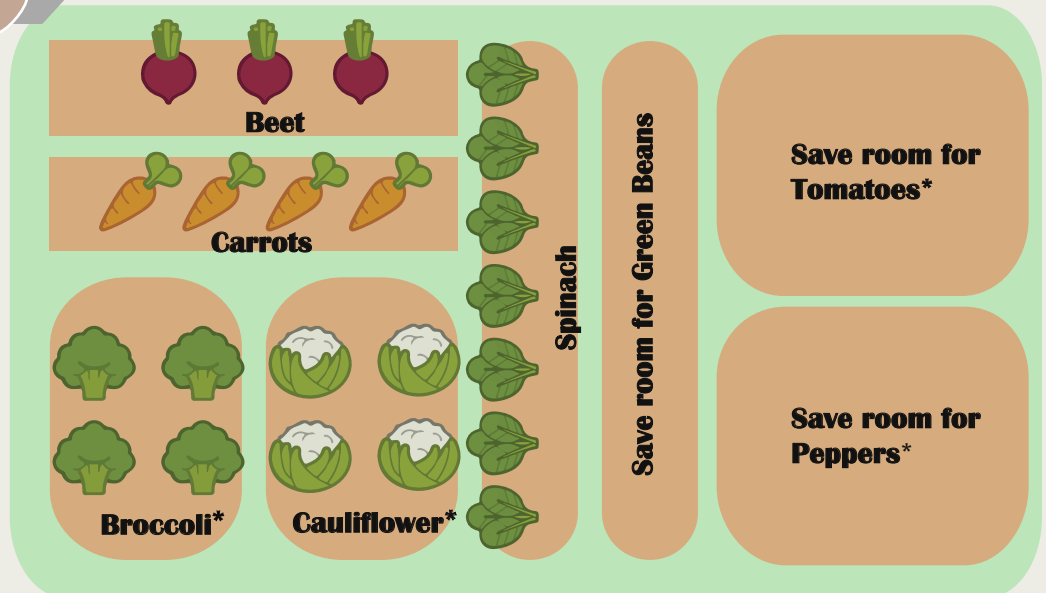
Choose the seeds and plants you and your family enjoy eating.

3. Provide enough space for plants

Plants need room to grow. Refer to the *Garden Planting Guide* for spacing ideas.

Cool Season vegetables

Cool season vegetables are planted in late March and early April, and can handle frost and light freezing temperatures. These vegetables include beets, broccoli, cabbage, carrots, cauliflower, collards, kale, lettuce, onions, potatoes, radish, spinach, swiss chard, and turnips. Many can be planted in late July or early August for a fall garden.



Warm Season vegetables

Warm season vegetables are planted in May after all danger of frost has passed. They include cantaloupe, corn, cucumber, eggplant, okra, peppers, squash, sweet potatoes, tomatoes, and watermelon.

***Use transplants**

4. Stay seasonal

No matter what the weatherperson says, plants really do grow best according to season. Check the *Garden Planting Guide* for the best planting dates for a variety of vegetables.

5. Map it out

When you know what you want to plant, draw it out. Choose what you will plant where and at what time. Having a plan that's right for you and your garden can go a long way to gardening success.

Managing Weeds

Weeds - every garden has them. Follow these tips and you can manage your garden's weeds effectively and without much effort.

Is It A Weed?

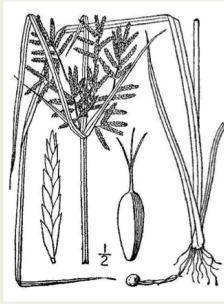
A weed is simply a plant growing in the wrong place. Not sure it's a weed? Give vegetables time to sprout so you can properly identify them. For tough weeds with large taproots (like dandelions) or ones that spread through underground stems, try to remove as much of the roots as you can. Here are a few common types:



Bermuda grass



Dandelion



Yellow nutsedge



Bindweed



Prostrate spurge



Crab grass

Be Consistent

Weeds are much easier to handle as tiny sprouts, so visit your garden often.

Make Room

Give vegetables enough room to grow and give yourself and your favorite weeding tool enough room to work.

Take Your Time

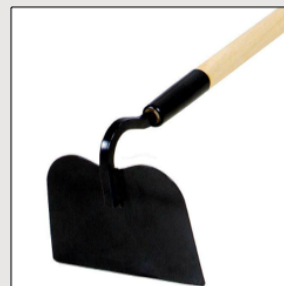
Working in the garden can be relaxing and has been shown to reduce stress.

Mulch

As weather warms and weeds are cleared, consider spreading a thick layer of old hay, straw, or dried grass to prevent future weeds.

Choose Your Tool

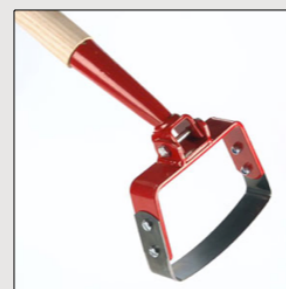
There are many examples of weeding tools. Often, inexpensive ones can be found at garage sales or auctions. Here are a few common types



Square Hoe



Triangle Hoe



Stirrup Hoe

Grow Well Missouri partners with food pantries, local organizations, and volunteers to establish food gardening programs that reach out to food pantry customers. By offering a selection of seeds, vegetable transplants, educational materials, and one-on-one advice, Grow Well Missouri helps those who use food pantries reap the many benefits of gardening.



The project stems from ongoing research of the Interdisciplinary Center for Food Security showing that rates of chronic health conditions (e.g. diabetes, hypertension, and high cholesterol) are significantly higher among food pantry clients than the general public.

Now in its fifth year, Grow Well Missouri is active in 16 communities across Missouri. Partners include:

St. James Caring Center, Help Center (Mexico), Central Pantry (Columbia), Cargill Cares Food Pantry (California), Neighbors Helping Neighbors (Boonville), Crosslines (Joplin), Share the Harvest (Greenview), Hickory County C.A.R.E.S. (Wheatland), Dallas County Neighborhood Center (Buffalo), Community Outreach Ministries (Bolivar), Master Gardeners of Greene County (Springfield), Shepherd's Nook Food Pantry (Salem), Good Samaritan of the Ozarks (Waynesville), Randolph County Caring Communities (Moberly), Independent Living Center (Joplin), Willard School District/Community Food Pantry, and the Morgan County Health Center (Versailles).

Beyond Gardening

Grow Well Missouri goes beyond gardening. It builds community capacity by helping groups establish community gardens, initiating healthy food education programs, and leveraging resources to meet community goals. It also works to assess the strengths and challenges of food pantries and develop tools to increase learning and sharing among agencies across Missouri.

The project is supported by a host of additional partners including the Health Communication Research Center, the Food Bank for Central and Northeast Missouri, University of Missouri Extension, local Master Gardener and Garden Club groups, and Feeding Missouri. Private companies including St. Louis Composting and Morgan County Seeds provide support as well.

More information can be found at <http://foodsecurity.missouri.edu/projects/grow-well-missouri/>. You may also contact Bill McKelvey, Project Coordinator, at McKelveyWA@missouri.edu or 573-882-4973.

Grow Well Missouri is a project of the Interdisciplinary Center for Food Security at the University of Missouri. Funding is provided in part by the Missouri Foundation for Health. The Missouri Foundation for Health is a philanthropic organization whose vision is to improve the health of the people in the communities it serves.



Interdisciplinary Center
for Food Security