Preparation great tasting, healthy meals can be a time consuming task, but pressure cooking is a great way to prepare them in just minutes! Although they may seem old fashioned, pressure cookers are making a comeback because they can cook tough cuts of meats such as corned beef and stew beef to perfection and take far less time and energy than using standard boiling or steaming methods. This is a great option for today's busy families who are trying to save both time and money! Pressure cooking is also a healthy cooking option as it maintains the natural flavor and nutrients of food. Delicious, healthy meals are just minutes away with this handy device!

How Pressure Cookers Work
The pressure cooker works by creating steam to build pressure. A small amount of water or other liquid is placed in the bottom of the pot and heated to boiling. The boiling liquid produces steam, which is trapped under a tightly sealed lid. This raises the pressure and temperature to very high levels so that food cooks thoroughly in just minutes. Most pressure cookers have a pressure gauge that allows you to adjust the pressure within the cooker. They also contain a release valve for releasing the pressure. The newest generations of pressure cookers have a spring loaded valve that pops up when the correct pressure is reached within the cooker. There are many different pressure cookers on the market so be sure to refer to your owner's manual before using your model.

The Benefits of Pressure Cooking
The following benefits make learning how to use a pressure cooker worth it!

Cook meals in less time. While meals prepared in crock pots or ovens can take hours to cook, pressure cooked meals are usually ready in a half hour or less.

Save money. With shorter cooking times, families can save money on their energy bills every month. Grocery bills can also drop since cheaper cuts of meat can be used in pressure cooker recipes. This can lead to big savings over the year!

Figure 1. Pressure cookers are a great option for today's busy families interested in making quick, healthy meals on a budget. Credits: Photo by FotoosVanRobin. CC BY-SA 2.0. http://flic.kr/p/65hrZ6
Make healthier meals. Certain traditional cooking methods can destroy some of the vitamins and minerals in food. Pressure cooking preserves these nutrients because the food is cooked quickly in a sealed environment. This results in healthier meals.

Use Your Pressure Cooker Safely
Not every pressure cooker operates exactly the same way, so before using your pressure cooker, read the owner’s manual for specific instructions and follow them carefully. Here are some tips to make sure pressure cooked meals are prepared safely:

- Make sure the vent pipe is free of any bits of food or other blockage. A blocked vent can result in unsafe pressure levels.
- Lock the lid properly so that it does not come open during use. Check the lid locking mechanism thoroughly.
- Always use cooking liquid when you are using pressure to cook the food. Although you can brown meats in the bottom of the cooker first, you must then add liquid before sealing the lid and building pressure. Operating the pressure cooker without liquid or allowing the cooker to boil dry will damage the unit and can be dangerous.
- Never fill the cooker more than two-thirds full of liquid. You need enough head space for the pressure cooker to function properly and safely. Leaving adequate space helps prevent boiling liquid from seeping out of the pot.
- Brown meats before adding liquid or other ingredients to develop good flavor. Do NOT open the lid of the device until the pressure has completely dropped.
- Do not leave the pressure cooker unattended during use. Check the pressure gauge occasionally to be sure everything is working well.

Pressure and Cooking Time
It is important to pay attention to both the cooking time and pressure of your device while preparing meals. Specific cooking temperatures and cooking times will vary for different pressure cookers. Foods cook very rapidly under high pressure, so increasing the pressure will cook food faster and you may end up with overcooked food if you leave the food in too long. Before following any recipe you should always read your owner’s manual for specific instructions on temperature, time, and pressure. We have provided a general cook time chart for some common foods.

<table>
<thead>
<tr>
<th>Food</th>
<th>Cooking Time in Minutes</th>
<th>Amount of Cooking Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beef, corned, 3 pounds</td>
<td>50–60</td>
<td>2 cups</td>
</tr>
<tr>
<td>Pork roast, 3 pounds</td>
<td>40–45</td>
<td>1½ cups</td>
</tr>
<tr>
<td>Pork, ham shank, 3 pounds</td>
<td>30</td>
<td>1½ cups</td>
</tr>
<tr>
<td>Chicken, whole, 2–3 pounds</td>
<td>15–20</td>
<td>1 cup</td>
</tr>
<tr>
<td>Chicken, pieces, 2–3 pounds</td>
<td>8–10</td>
<td>¾ cup</td>
</tr>
<tr>
<td>Corn on the cob</td>
<td>3</td>
<td>½ cup</td>
</tr>
<tr>
<td>Potatoes, new, small whole</td>
<td>5</td>
<td>1 cup</td>
</tr>
<tr>
<td>Turnips, quartered pieces</td>
<td>3</td>
<td>½ cup</td>
</tr>
<tr>
<td>Okra, small pods</td>
<td>2–3</td>
<td>½ cup</td>
</tr>
<tr>
<td>Collard greens, chopped</td>
<td>5</td>
<td>1 cup</td>
</tr>
</tbody>
</table>

Conclusion
Learning how to use a pressure cooker may take some time, but in the end it will save you more than time. Pressure cooked food can be delicious and nutritious. Tasty meals can be prepared in very little time while preserving nutrients and saving energy. So get creative and get cooking… pressure cooking that is!

Learn More
To learn more about pressure cooking, contact your local UF/IFAS Extension Family and Consumer Sciences (FCS) Educator (look in the blue pages of your telephone book). In Florida find your local UF/IFAS Extension office at http://SolutionsforYourLife.ufl.edu/map.

Resource

Recipes for the Pressure Cooker
Pot Roast
INGREDIENTS
¾ teaspoon black pepper
¾ teaspoon table salt
¼ teaspoon garlic powder (not garlic salt)
1 beef chuck roast (about 3 pounds), boneless
2 tablespoons canola oil
1 medium onion, chopped fine
1 small carrot, cut into small dice
1 small rib celery, cut into small dice
1 cup low-sodium chicken broth
3 medium red potatoes, peeled and cut into eighths
Perfect Meals with Pressure Cooking

4 medium carrots, peeled and cut into 2-inch chunks

INSTRUCTIONS
Rub the salt, pepper, and garlic powder into the roast. Heat oil in pressure cooker over medium-high heat. Put roast in pot and brown thoroughly on all sides, maintaining heat so fat sizzles briskly but does not smoke, about 15 minutes. Transfer the roast to a dish. Add onion, small diced carrot, and diced celery to pot and sauté 2 to 3 minutes or until softened. Add the broth and increase heat to high. Lower rack into pot; set browned roast on rack. Cover the cooker and fasten the lid then bring to high pressure. Reduce heat to maintain high pressure and cook 1 hour. Quick-release the pressure according to the instructions for your cooker.

When pressure has dropped, carefully remove lid, tilting it away from you, and test the meat. It should be fork-tender. Remove the meat, wrap in aluminum foil and set aside. Remove rack from cooker and reserve vegetables that were cooked with meat. Add potatoes and medium carrots to the cooker. Once again cover cooker and fasten the lid. Bring to high pressure. Reduce heat to maintain high pressure and cook 4 minutes. Quick-release the pressure according to the instructions for your cooker. When pressure has dropped, carefully remove lid, tilting it away from you. Transfer vegetables to large dish; cover with foil. Cut pot roast into thin slices. Arrange on platter and surround with vegetables.

Mixed Vegetable Stew

INGREDIENTS
3 tablespoons olive or vegetable oil
1 large onion, chopped
¼ tsp garlic powder
2 medium red potatoes, peeled and diced
2 large carrots, peeled and diced
1 cup peas, fresh or frozen
1 pound lima beans, shelled
½ pound fresh green beans, trimmed and cut in half
2 teaspoons flour
1 cup chicken broth or vegetable stock
Salt and pepper to taste

INSTRUCTIONS
Heat oil over medium-high heat. Add onion and garlic and sauté 4–5 minutes, or until onion is soft. Stir frequently so that onions do not brown. Add the other vegetables and cook 2 minutes, continuously stirring. Sprinkle in the flour, salt, and pepper and stir; add the stock. Position the lid and lock it in place. Raise the heat to high and bring to high pressure. Adjust the heat to stabilize the pressure and cook for 4 minutes. Remove from heat and lower pressure using the cold water-release method. Open the pressure cooker and add salt and pepper to taste.