

# Knowledge @ Noon

## *“Under Pressure”*



*Wednesday, March 15, 2017*

*12:00 - 1:00 p.m.*

104 S. Brayman, Paola, KS  
Marais des Cygnes Extension District, Paola Office

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&  
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## **PRESSURE COOKING IS.....**

### **FAST**

The contents of the cooker cook at a higher temperature than what can be achieved at a conventional boil—so more heat means more speed. Pressure cooking is about twice as fast as conventional cooking. Saves on prep time - is 70% faster than conventional ovens! The secret is the air-tight lid. It locks into place, trapping super-heated steam inside.

### **HEALTHY**

Pressure cooking is one of the healthiest cooking methods. According to a study published in the Journal of Food Science pressure cooking preserves 90-95% of the vitamins. The extra speed and heat of pressure cooking practically flash-cooks vegetables allowing them to retain more vitamins than boiling which only keeps 40-75%, or even conventional steaming (75-90%). Its flavor infusion technology retains almost all of the natural moisture, flavor, nutrients of every ingredient and you can incorporate the liquid into your meal also.

### **GREEN**

Pressure cookers need less energy/electricity to operate during the cooking process. Less heat and less time translate to a 70% energy savings over conventional cooking.

### **EASY**

Pressure cooking isn't complicated at all. Push a button to reach pressure and flip a switch to release it. It's really as easy as 1, 2, 3, and 4. Using only one appliance makes life easier. Just put your ingredients in the pot and then let the pressure cooker do its work.

### **CLEAN**

No more spillovers in the oven or splatter on your cooktop. Pressure cooking contains all of the splatters you would ordinarily get from conventionally boiling food. As long as the lid is secure on your pressure cooker, there will be no splashing, boiling over or escaping steam. Also only one pot to clean when you're done!

### **SAFE**

Modern pressure cookers have redundant safety systems to ensure that if one should fail, another will kick in.

### **VERSATILE**

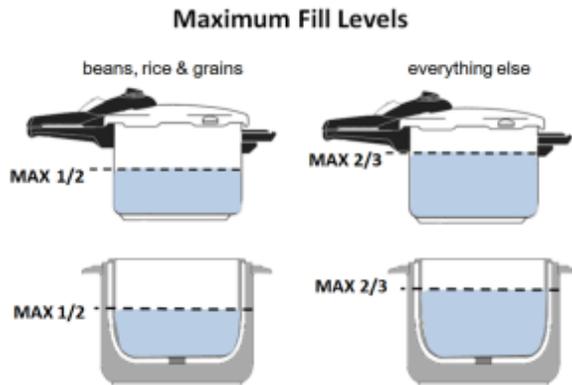
Many appliances in one as it works as an electric pressure cooker, slow cooker, rice cooker, yogurt maker, steamer, warmer, and sauté pan all in one

### **MONEY-SAVING**

You can save money by buying cheaper cuts of meat because it add moisture and causes your meats to soften and become very tender during the pressure cooking process.

## Maximum Filling Guidelines

Always respect the filling guidelines – not following them could affect the pressure cooker's safety mechanisms! This rule applies to both electric and stovetop pressure cookers.



**Max 1/2 Full for Beans, Rice, Grains, Dehydrated Foods and Fruit** – These foods either expand during cooking or generate lots of foam (or both). Beans can swell to twice their size during cooking and some grains even more. They also generate lots of foam and bubbles – which climb up the sides of the cooker to block or spray out of the valves.

**Max 2/3 Full for Everything Else** – Foods that don't generally get any larger during cooking, bubble or foam are in this category and this includes meats, vegetables, soups and stocks.

If your recipe has lots of *different* ingredients, say a soup with vegetables and some beans, then you can go up to 2/3 full but if you're cooking only one primary ingredient, say a bean chili, then you should respect that ingredient's maximum capacity – 1/2 full .

## Releasing Pressure in an Electric Pressure Cooker: 2 methods Quick and Natural

**When should we use Quick Pressure Release?** Quick Pressure Release is great for quickly stopping the cooking process to prevent overcooking.

**Ideal for food such as:** Quick-cooking vegetables (e.g. Broccoli, Corn on the Cob, Bok Choy)  
Delicate seafood (e.g. Salmon, Crab, Lobster)

**When should we use Natural Pressure Release?** Natural Pressure Release is great for keeping your kitchen nice and clean. Since the pressure is gradually released, there is less movement in the Instant Pot. Your stocks and soups come out cleaner and food are more likely to stay intact.

**Ideal for food such as:** Foamy food, food with large liquid volume or high starch content (e.g. Porridge, Congee, Soup)

**Accessories:** The items on this page are accessories recommended for use with your electric pressure cooker:

- Extra Silicone Sealing Ring – 1 for savory and 1 for sweet foods. They retain the odor of the foods that are cooked with them.
- Instant Read Food Thermometer – to check temperatures of foods
- Stainless Steel Mesh Basket – to hold eggs, chicken bones, vegetables – just lift out!
- Round 64 oz. freezer containers – used to freeze foods and then dump into cooker.
- Spring form or Cheesecake Pan – to make cheesecake or other products
- Stainless Steel/Silicone Steamer Basket – Steam veggies or cook fish or to stack.
- Others: glass bowls, metal bowls and/or mini loaf pans to cook a variety of foods in your electric pressure cooker.

A **digital timer** is also needed for keeping track of pressure cooking minute, by minute, especially for quick-cooking vegetables and fruits. The cooking time listed is sometimes divided into High and Low pressures. Each manufacturer has their own specific High and Low pressures, consult your manual to be sure.

Check your owner's manuals for pressure cooker charts. There are some available at the following website: <https://www.hippressurecooking.com/pressure-cooking-times/>

### Safety Tips:

1. Don't cover or obstruct the Pressure Cooker Vent during the pressure release. This is a problem because the steam release vent is the cooker's main safety system and the obstruction could cause it to fail or trigger one of the last resort safety systems causing damage to the appliance and a messy clean-up for the operator.
2. Placing the cooker under the range hood and/or using a cutting board to stabilize to operate and release the pressure valve under the hood is a method used by some.
3. When releasing the pressure valve, make sure the valve is pointing away from you and that the steam has room to escape. (Don't operate under your cabinets – move out to front half of countertop.)
4. **Read your instruction manual before using** for further safety tips/operating instructions.

## QUICK TIPS:

### Measure Grains

To keep your pressure-cooked grains from getting mush, pay very close attention to the liquid to grain ratios in a recipe---they should be measured exactly. This can be done without a measuring cup—just be sure to use the same glass or container to measure both the grain and the liquid.

### Half full for Beans and Grains

Never fill the pot more than half-way with beans or grains and their cooking liquid—they need room to expand

### Don't Spray Foam—go Natural

Whenever possible, use the natural release when pressure cooking beans and grains—they generate lots of foam and releasing pressure through the valve may spray that foam out. If you are in a hurry use the Quick release but do it slowly and stop immediately when foam exits the pressure release valve—then begin again after waiting 30 seconds

### Forget to soak beans?

Get the same benefits of an overnight soak (less gas and better looking beans) by quickly pre-cooking the beans.

Put rinsed dry beans in the pressure cooker. For each cup of beans add four cups of water and one tsp of salt. Pressure cook in manual mode for 4 minutes and then do not open until the “keep warm” timer has reached 10 minutes. Strain and rinse the beans (discard the liquid). They may look a little wrinkled but can be used in recipes calling for “soaked” beans.

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From: USDA and National Center for Home Food Preservation

Some manufacturers may offer process directions for smaller pressure cookers. Consumers using this equipment will need to discuss processing recommendations with those manufacturers; the USDA and National Center for Home Food Preservation recommendation is to not use them for canning with our processes. At this point there has not been any testing done on the electric pressure canners and they are not recommended to use with our tested recipes. I have attached information from the National Center for Home Food Preservation on the safety of canning in electric canners.

<http://nchfp.uga.edu/publications/nchfp/factsheets/pressurecookers.html>

**Low-Acid foods:** USDA does not have recommended processes for canning in a small pressure cooker. The recommendation for using USDA pressure processes for low-acid foods is to use a canner that holds at least four (4) quart-size jars standing upright on the rack, with the lid in place. The research for USDA pressure processes for vegetable and meat products was conducted in pressure canners that are most similar to today's 16-quart or larger pressure canners.

Pressure cookers have less metal, are smaller in diameter, and will use less water than pressure canners. The result is that the time it takes a canner to come up to processing pressure (that is, the come-up time) and the time it takes the canner to cool naturally down to 0 pounds pressure at the end of the process (known as the cool-down time) will be less than for the standard pressure canner. The come-up and cool-down times are part of the total processing heat that was used to establish USDA process times for low-acid foods. If the heat from the come-up and cool-down periods is reduced because these times are shortened, then the heat from the process time at pressure alone may not be enough to destroy targeted microorganisms for safety. That is, the food may end up under processed. ***Under processed low-acid canned foods are unsafe and can result in foodborne illness, including botulism poisoning, if consumed.***

[www.extension.org](http://www.extension.org)

## **FOR MORE PRESSURE COOKER RECIPES and TIPS visit these WEBSITES:**

There are many more websites with recipes and tips for you to learn more. The recipes are endless – you just have to be willing to try them. There are also several Facebook groups you can join and blogs out there to read on these new electric pressure cookers. Everyone is learning and willing to share their knowledge.

[www.HipPressureCooking.com](http://www.HipPressureCooking.com)

[www.MoaomaoMom.com](http://www.MoaomaoMom.com)

[www.TheVeggieQueen.com](http://www.TheVeggieQueen.com)

[www.PressureCookingToday.com](http://www.PressureCookingToday.com)

[www.EatUnprocessed.com](http://www.EatUnprocessed.com)

[www.InstantPot.com](http://www.InstantPot.com)

[www.powerpressurecooker.com](http://www.powerpressurecooker.com)

<http://www.anointedwithoilofjoy.com/>

There are many Facebook groups for those using the electric pressure cookers. They share operating tips and recipes with those who belong to them. Some are:

*Pressure Cooking Fun*

*Under Pressure*

*The Pressure is On*

YouTube has a variety of videos showing and telling how to use an electric pressure cooker. Some are advertisements and others are more educational – check them out to learn more about these new appliances! Just search “How to Use Electric Pressure Cooker” and you will see all kinds.

## **NOTES:**



## Black Bean Soup

Serves 4

### Ingredients

1. 1½ cups dry black beans, quick soaked or soaked overnight
2. 1 tablespoon oil
3. 1 cup coarsely chopped onion
4. 3 cloves garlic, minced
5. 1 tablespoon ground cumin
6. ¼ teaspoon chipotle powder
7. 6 cups vegetable broth
8. 1 large bay leaf
9. 2 teaspoons dried oregano leaves or
10. 2 tablespoons fresh
11. ½–2 teaspoons salt, to taste
12. Soy yogurt or sour cream and chopped cilantro, for garnish

### Instructions

1. Drain the soaking liquid from the beans and set the beans aside.
2. Heat the oil in the cooker using the saute feature.
3. Add the onion and sauté for 2 minutes.
4. Add the garlic, cumin and chipotle powder.
5. Add the beans, broth, bay leaf and oregano and stir well.
6. Turn the heat up to high. Lock the lid in place. Turn the steam valve to "sealed" position.
7. Click the "manual" to time adjustment button and reduce the time to 7 minutes.
8. Let the pressure come down naturally.
9. When down, carefully remove the lid, tilting it away from you.
10. Remove the bay leaf. At this point, you can mash the beans with a potato masher or use an immersion blender, or just keep the soup, as is.
11. Add salt, to taste.
12. Garnish with a dollop of soy yogurt or sour cream and a sprinkle of cilantro.

Source: This recipe can be found on page 79 of Jill Nussinow's book - *The New Fast Food*. It is shared with her permission.

# Corn on the Cob - Pressure Cooker Recipe

Author: Laura Pazzaglia, hip pressure cooking

**Prep time: 5 mins**

**Cook time: 11 mins**

**Total time: 16 mins**

## INGREDIENTS

- 8 ears corn                      2 cups water

## INSTRUCTIONS

1. Husk the corns, cut off the bottom "stub" and wash well.
2. To the pressure cooker base add the water, and arrange the corn vertically, with the larger end in the water and the smaller end up - if the ear is too tall lay it diagonally or snap it in half and put the wider end onto the base of the pressure cooker. Do not crowd the corn cobs - leave space around ears for steam to get there and cook the kernels evenly.
3. Close and lock the lid of the pressure cooker.
4. **Electric pressure cookers:** Cook for 2 minutes at high pressure.  
**Stovetop pressure cookers:** Turn the heat up to high and when the cooker indicates it has reached high pressure, lower to the heat to maintain it and begin counting 1 minute pressure cooking time.
5. When time is up, open the pressure cooker with the Normal release - release pressure through the valve.
6. Serve with butter and salt if desired.

# Applesauce

**Prep: 25 mins**

**Cook: 5 mins**

**Total: 30 mins**

**Serving: ~800 ml**

5 mins. prep + 6 ingredients to make this Easy Applesauce. Imagine a sweet, warm, cinnamon-spiced homemade apple pie filling. Enjoy this smooth applesauce as a side or dessert.

## Ingredients

3 pounds (1.36 kg) your favorite apples, quartered, peeled or unpeeled  
1 – 2 cinnamon stick(s)  
¼ cup (60 ml) water  
¼ - ½ teaspoon (0.5 g - 1 g) nutmeg  
A pinch of salt  
Honey to taste

## Instructions

1. **Pressure Cook the Apples:** Place cinnamon stick(s), ½ (1 g) teaspoon of nutmeg, ¼ cup (60 ml) of water and 3 lbs. (1.36 kg) quartered apples into the pressure cooker. Close the lid and cook at High Pressure for 5 minutes. Turn off the heat and Natural Release. Open the lid carefully.
2. **Blend & Season:** Remove cinnamon stick(s) and blend the applesauce into desired consistency with an immersion blender. Taste the applesauce and add a pinch of salt. Add honey to taste.

**Taste Test & Adjust:** Apples vary widely in their texture & flavors, be sure to adjust the sweetness/tartness to your liking.

# Yogurt

## Ingredients:

1 gallon of milk (you can use whatever milk you prefer)

Yogurt starter, either powdered starter 1/2 cup or store-bought or homemade yogurt from previous batch

## Instructions:

First you need to sterilize your pressure cooker. Add 1-2 cups of water. Turn the steam release handle to sealed, hit the steam button and set the time for 1 minute.

1. Your cooker will take a few minutes to come to pressure and then will steam the water for one minute. Once it beeps at you that it's done, do a quick release to release the pressure. After the steam has stopped releasing, open the lid and dump out the water.
2. Add your gallon of milk to the pressure cooker. Turn the steam release handle to sealed. Hit the yogurt button and push the adjust button until the displays say "boil."
3. The pressure cooker will now boil your milk. This usually takes about 45 minutes for me, but may take a little longer or shorter for you.
4. After the milk has boiled, your cooker will beep and the display will read "yogt."
5. You now need to cool your milk down to 110 degrees. In my opinion, this is the only semi-annoying part of the process. Take the lid off and remove the pot to somewhere on your counter. Stick a liquid thermometer into the pot so you can keep an eye on the temperature.
6. To speed up the cooling process, you can wrap some ice packs around the pot and periodically stir your milk. Cooling the milk usually takes a couple hours for me, but it may take longer or shorter for you.
7. Once your milk has cooled to about 110 degrees, add your yogurt starter. (If you're using a powdered starter (follow quantity directions on the box.) Stirring continuously, slowly add your yogurt starter to your milk. Make sure that the starter is thoroughly and evenly mixed throughout the milk.
8. Return your pot to the cooker and put the lid back on. Hit the yogurt button again and then hit the adjust button until it displays a number. This is the number of hours that your yogurt will culture. You can use the "+" and "-" buttons to adjust how long you want your yogurt to culture. Some ferment for 24 hours in order to make a lactose-free yogurt. If you do not have lactose issues, you can ferment your yogurt for a shorter amount of time. I'd suggest starting with 8 hours and then experimenting with longer times if you desire.
9. After you've selected the number of hours, your cooker will beep and then display 0:00. It will then start counting up as it cultures.
10. When your yogurt is done culturing, the cooker will beep a final time and then display "yogt." You can now transfer your yogurt to your preferred storage containers. I like to put my gallon of yogurt into four wide mouth quart jars.
11. Store finished yogurt in the fridge. It should keep for several weeks.

## 'CRACK' CHICKEN

6-8 slices cooked bacon

2 pounds boneless chicken breast

1 packet ranch seasoning

4oz cheddar cheese

8 oz cream cheese

1 c. water

3 T. corn starch

Place chicken and cream cheese in the pressure cooker. Sprinkle the packet of ranch seasoning over the top. Add one cup water. Place your pressure cooker on Manual high pressure for 25 minutes. Do a quick release. Remove chicken only and shred. Keep your cooker on low and mix in cornstarch with a whisk. Add cheese and shredded chicken to the mixture. Stir in bacon and enjoy. Makes wonderful sandwich filling or topping for a barbeque pizza or to eat with chips for a snack/appetizer.

## **'BAKED' ZITI**

Using the 'sauté' feature, cook one small onion, chopped, until tender. Brown 1 lb. of hamburger in the cooker still using the sauté feature. Drain and rinse if desired or necessary. Add 18-24 oz. of spaghetti sauce and about half that much water. Add up to 16 oz. of dried ziti noodles. Stir and set to 'Steam' for 5 minutes. When done, add 4 oz. Mozzarella cheese to top and serve.

## **OREO™ CHEESECAKE**

CRUST: 12 Oreos, crushed, 2 T. melted salted butter (serves 6-8)

CHEESECAKE: 16 oz. cream cheese at room temperature, ½ c. sugar, 2 large eggs at room temp, 1 T. flour, ¼ c. heavy cream, 2 t. vanilla extract, 8 Oreos chopped

TOPPING: 1 c. whipped cream, 9 Oreos chopped, chocolate sauce(optional)

### **DIRECTIONS:**

Tightly wrap the bottom of a 7 inch spring form pan in foil and spray the inside with non-stick cooking spray. In a small bowl, stir the crushed Oreos and butter and press into the bottom of the prepared pan. Place in freezer for 10-15 minutes.

In a large bowl beat the cream cheese until smooth. Add sugar and mix until combined. Add eggs, one at a time and mixing well. Add in the flour, heavy cream and vanilla and mix until smooth. Fold in 8 chopped Oreos and pour into prepared pan. Cover top of pan with a piece of foil that has been sprayed.

Pour 1 ½ c of water into the pressure cooker and place a trivet in the bottom of the pot. If your trivet has handles put them up and place the spring form pan on the trivet. If it doesn't create a sling, make one from folded aluminum foil and place under pan and up sides of pot. Lock lid and make sure vent is closed. Press 'Manual' and cook on high pressure for 40 minutes. When the pot beeps, press the 'Keep warm/Cancel' button to turn off pressure cooker. Allow the pressure to release naturally for 10 minutes and then do a quick release to get any remaining pressure out. Take off lid and carefully remove cheesecake from the pot to a cooling rack. Uncover and allow to cool to room temperature. Once it has cooled, refrigerate for at least 8 hours.

Before serving, top with whipped cream, chopped Oreos, and chocolate sauce.

## **CHICKEN AND STUFFING**

4 large frozen chicken breasts  
1 cup chicken broth  
1 large can (23 oz) Cream of Chicken soup (or two small cans)  
Optional: 1 cup sour cream

1 bag of cornbread stuffing  
12 oz. green beans (drained if canned)

Place the frozen chicken breasts on the bottom of the electric pressure cooker. Pour the broth over and pressure cook on high for 15 min. Quick release the pressure and open the cooker. Pour green beans on top of chicken, pour stuffing on top, and finally, add the chicken soup (with sour cream if desired). Cook on 'manual' for another 4 minutes. Remove from pot and stir. Chicken will probably start to shred which is what you want. If you want your beans less crunchy, you can cook them for a little bit before adding the stuffing and soup. Other stuffing types can be used but will be mushier in texture.

## CHICKEN WITH BROWN RICE SOUP

### Ingredients

- 2 frozen chicken breasts
- 6 cups broth (I add a bouillon chicken base to warm water, it's a money saver)
- 2 cups **cooked** brown rice
- 1 cup diced carrots
- 1 cup chopped celery
- 1 cup chopped onion
- 1 cup frozen peas
- 1 teaspoon thyme
- 1/2 teaspoon garlic powder
- salt and pepper to taste
- 1 teaspoon coconut oil

### Instructions:

Turn electric pressure cooker onto sauté, add teaspoon of coconut oil.

Add in onions, celery and carrots. Sauté for several minutes until veggies start to soften.

Place chicken breasts in the pot.

Add broth, peas and seasonings to pot. Stir in rice. I added mine straight from the freezer.

Stir gently, making sure chicken breasts stay at the bottom.

Set pressure cooker for 12-15 minutes high pressure, longer if the breasts you are using are larger.

Allow the pressure to release naturally, about 20 minutes. Take the breasts out and shred them easily, returned the meat to the pot, stir and serve.

Yield: 7 - 1.5 cup servings. 153 calories, 2.5 g. fat, 11 g. protein and 21g. carbohydrate per serving.

Source: <http://www.anointedwithoilofjoy.com/>

## Apple BBQ Pork Loin

- 2.5 lb pork loin or 6 - 7 boneless pork chops
- 1 cup barbecue sauce
- 21 oz can apple pie filling
- 2 Tbs minced dried onions

### Slow Cooker -

1. Empty contents into slow cooker.
2. Cook on low for 6-8 hours or on high for 3-4 hours.
3. Serve over rice or noodles or with a baked potato.

### Power Pressure Cooker –

1. Add pork to the pressure pan.
2. Add apple pie filling and BBQ sauce and dried minced onion
3. Place the lid on and lock and switch the pressure release valve to closed.
4. Press the Chicken/Meat button mode and press the TIME Adjustment button until you reach 30 minutes,
5. Once the time reaches 0, the cooker will automatically switch to KEEP WARM. Switch the pressure release valve to open. When the steam is completely released, remove the lid.
6. Serve over rice, pasta or noodles or with a baked potato. Enjoy!