

COOKING

WITH *Curiosity*

Fall Recipes from
Our Family to Yours



National Inventors
Hall of Fame®

With this collection of fall recipes,

we invite your family to come together and explore STEM (science, technology, engineering and mathematics) concepts in the kitchen.

A few of these dishes also provide opportunities to learn fun facts about our National Inventors Hall of Fame® (NIHF) Inductees – innovators who have helped make the world a better place.

Go ahead and get creative, experiment with ingredients and make these recipes your own! From everyone here at NIHF, we hope these recipes create memorable moments for you and your family.

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“Cooking is a form of chemical reactions. You take vegetables, meat, and all kinds of spices and ingredients. You mix them together. You are creating chemical reactions. Oftentimes, that’s what we do in chemistry labs. You mix different ingredients, you use different times and temperatures to make different compounds. In cooking, it’s the same thing.”

NIHF INDUCTEE MARGARET WU

pumpkin FLUFF DIP



INGREDIENTS:

- 1 (16 oz.) container frozen whipped topping, thawed
- 1 (5 oz.) package instant vanilla pudding mix
- 1 (15 oz.) can solid pack pumpkin
- 1 tsp. pumpkin pie spice

DIRECTIONS:

1. In a large bowl, mix instant vanilla pudding mix, pumpkin and pumpkin pie spice until well blended.
2. Fold in the thawed frozen whipped topping and stir until smooth.
3. Chill in the refrigerator for at least 30 minutes.
4. Try the dip with fruit, graham crackers, pretzels or any other dippable snack!

Estimated time: 10 minutes | Difficulty: 🍁

Recipe adapted from allrecipes.com

STEM IN THE KITCHEN

See how fluffy the whipped topping used to make this dish is? This is made possible thanks to a process called “emulsion.” When cream containing 30-40% fat is whipped, lactose and other proteins in the mixture become trapped in the spaces between fat and air. Because the molecules in this mixture are attracted to water on one end and repelled on the other, they become suspended and create the foamy texture we all love.

halloween PUPPY CHOW



INGREDIENTS:

- 1 box (9 cups) Rice Chex™ Cereal
- 1/2 cup white chocolate chips
- 1/2 cup milk chocolate chips
- 1/2 cup peanut butter
- 1/2 cup butter or margarine
- 1 tsp. vanilla
- 1 1/2 cups powdered sugar
- Variety of fall candy favorites (i.e. candy corn)

DIRECTIONS:

1. Split cereal equally into two bowls and set aside.
2. In a saucepan, heat white chocolate chips, 1/4 cup peanut butter, 1/4 cup butter or margarine and 1/2 tsp. vanilla. Stir continuously until melted.
3. Remove mixture from heat and pour over one of the bowls of cereal until evenly coated.
4. Pour into a gallon bag with 3/4 cup powdered sugar. Seal bag and shake until well coated.
5. Repeat that same process for the milk chocolate Chex.
6. Combine white chocolate and milk chocolate Chex into one bowl.
7. Add candy corn and any other fall candies to make your puppy chow come to life!

Estimated time: 15 minutes | Difficulty: 🍁

Recipe adapted from Lil Luna

DID YOU KNOW?

As you mix in the peanut butter, you can thank NIHF Inductee George Washington Carver for developing 325 different uses for peanuts, from cooking oil to ink. That's a lot of great ideas!

pumpkin patch MARSHMALLOW BITES



INGREDIENTS:

- 1 bag campfire marshmallows
- 12 oz. of milk chocolate melts
- 1 package Oreo® cookies
- Pumpkin soft candies (or any other small, fall candy)

DIRECTIONS:

1. Pour the chocolate melts into a microwave-safe bowl. Microwave until smooth (1 to 2 minutes).
2. Place Oreo cookies into a zip-top bag and roll with a rolling pin until crushed; add crushed pieces to their own bowl.
3. Set out a large sheet of wax paper.
4. Dip the marshmallows into the melted chocolate until they are halfway covered.
5. Dip the chocolate covered portion into the crushed cookies.
6. Set the marshmallow down, chocolate side up, on the wax paper.
7. Top with a candy pumpkin, or candy of choice.
8. Repeat until you've made all your marshmallows into pumpkin topped treats and enjoy!
9. Display your creations on a nonstick pan.

Estimated time: 15 minutes | Difficulty: 🍁

Recipe adapted from Kid Friendly Things To Do

STEM IN THE KITCHEN

Ready, set, melt! A melting point is the temperature at which a substance changes from a solid to a liquid. For chocolate, this typically occurs at around 93° F. You can try experimenting with different types of chocolate (milk, dark or white) to see which melts the fastest!



pumpkin
**WHITE HOT
CHOCOLATE**

INGREDIENTS:

- 6 cups milk of choice (whole or 2% recommended)
- 2 cups heavy cream
- 1 can (14 oz.) sweetened condensed milk
- 1 can (15 oz.) pure pumpkin puree
- 1 tbsp. pumpkin pie spice
- 4-oz. bar of white chocolate
- Optional garnish - whipped cream, mini marshmallows, cinnamon

DIRECTIONS:

1. In a 5- or 6-quart slow cooker, whisk together the milk, heavy cream and sweetened condensed milk.
2. Add the pumpkin puree and pumpkin pie spice; mix until well blended and smooth.
3. Chop the white chocolate bar and stir into the slow cooker.
4. Set the slow cooker to low and cook for 3 hours, stirring occasionally.
5. Garnish and serve warm.

Estimated time: 5 minutes (3-hour cook time)

Difficulty: 🍂

Recipe adapted from My Heavenly Recipes

DID YOU KNOW?

Hall of Famer Gail Borden Jr. invented the process for condensing milk. By using a vacuum pan with a heating coil, he was able to remove the water from milk, so it could be stored safely without refrigeration. Condensed milk is a popular ingredient used to make sweet treats.



apple pie MUFFINS

INGREDIENTS:

- 2 cups flour
- 2 tsp. baking powder
- 1 tsp. baking soda
- 1/3 cup maple sugar (or granulated sugar)
- 1 tsp. cinnamon
- 1/8 tsp. nutmeg
- 1 cup unsweetened applesauce
- 2 tbsp. melted butter
- 1/3 cup milk
- 1-2 apples, chopped

DIRECTIONS:

1. Preheat oven to 400° F.
2. In a large mixing bowl, combine dry ingredients: flour, baking powder, baking soda, sugar, cinnamon and nutmeg.
3. Add in applesauce, melted butter, milk and chopped apples. Stir until well combined.
4. Divide the batter evenly among muffin cups.
5. Bake for 15-20 minutes, or until golden brown.
6. Allow to cool before eating.

Estimated time: 30 minutes | Difficulty: 🍁🍁

Recipe adapted from Momables

STEM IN THE KITCHEN

To make sure recipes turn out just right, it's essential to use correct measurements. After baking a batch of Apple Pie Muffins using the ingredients and quantities we've listed here, why not try an experiment? You can change up some measurements, try to make some predictions about what your changes will do, and then see what happens! It will only take one bite to taste the difference and realize the importance of math in making great food.



halloween BARK

INGREDIENTS:

- 1 package of Oreo cookies (Halloween themed)
- 1 cup pretzels broken into pieces
- 1 lb. chocolate melts (we recommend white chocolate)
- 1 1/2 cups candy corn
- 20-30 candy eyeballs or any other spooky candy
- Variety of Halloween food sprinkles

DIRECTIONS:

1. Pour the chocolate melts into a microwave-safe bowl.
2. Microwave until smooth (1 to 2 minutes).
3. Cover a large cookie sheet with wax or parchment paper.
4. Spread broken cookies, pretzels and majority of your candy onto the cookie sheet.
5. Drizzle the melted chocolate over the cookie mixture, spreading with spatula to coat evenly.
6. Quickly sprinkle remaining candy, eyeballs and food sprinkles over the chocolate while it is still wet.
7. Place cookie tray into refrigerator or freezer until set.
8. Break into small pieces and enjoy!

Estimated time: 10 minutes (1 hour to cool)

Difficulty: 🎃 🎃

Recipe adapted from Family Fresh Meals

DID YOU KNOW?

We can easily change chocolate from a liquid to a solid by freezing it – and Hall of Famer Beulah Henry made this possible! She developed many inventions that have made life easier. Her first was a vacuum-sealed freezer, which revolutionized kitchens forever.

pumpkin pie PANCAKES



INGREDIENTS:

- 1 egg, beaten
- 1 1/4 cups milk
- 2 cups Bisquick™ pancake mix
- 1/2 cup canned pumpkin (not pumpkin pie mix)
- 1 tsp. cinnamon
- 1/2 tsp. pumpkin pie spice
- Optional: Maple syrup

DIRECTIONS:

1. Mix all ingredients (except syrup) in a bowl, until smooth. Batter should be thick.
2. Spray griddle with cooking spray; heat over medium-high heat.
3. For each pancake, pour about 1/4 cup batter onto hot griddle.
4. Cook until bubbles form around edges.
5. Turn pancakes; cook about 3 minutes or until golden brown on bottom.
6. Serve pancakes with syrup, or toppings of choice.

Estimated time: 15 minutes | Difficulty: 🍁🍁

Recipe adapted from Betty Crocker

STEM IN THE KITCHEN

Check out those bubbles! One of the main ingredients in Bisquick is baking powder, and when it heats up, it releases carbon dioxide gas. That's what produces the tiny bubbles on the top of your pancake, letting you know it's ready to be flipped.



pumpkin MACARONI & CHEESE

INGREDIENTS:

- 1 box macaroni (substitute with shells or bow ties)
- 1/4 cup unsalted butter
- 1/4 cup all-purpose flour
- 2 1/4 cups milk
- 10 oz. cheddar cheese, shredded
- 1 cup pumpkin puree
- 1/4 tsp. nutmeg
- Salt and pepper, to taste

DIRECTIONS:

1. Bring water to boil in a large pot and cook pasta according to package directions. Drain and set aside.
2. Preheat oven to 350° F.
3. In an oven-safe skillet or cast-iron pan, melt butter over low heat and add flour. Stir together and cook for about 1 minute.
4. Add milk, whisking constantly, until no visible clumps remain and the sauce is thickened.
5. Add cheese (reserving 1/2 cup) and stir until it is melted into the sauce.
6. Stir in pumpkin puree, nutmeg, salt and pepper, seasoning to taste.
7. Add the cooked pasta and mix well.
8. Sprinkle reserved cheese evenly on top.
9. Bake for 30-40 minutes until the cheese is bubbly and the top is slightly brown.

Estimated time: 60 minutes | Difficulty: 🍂🍂🍂

Recipe adapted from The Tasty Bite Blog

STEM IN THE KITCHEN

The first step in making any kind of pasta is to boil water. When water reaches 212° F, gas bubbles form and quickly rise to the surface. So, when a recipe calls for boiling water, it's asking you to transform water from its liquid state into its gaseous one.

apple cider chicken WITH CARAMELIZED APPLES



INGREDIENTS:

- 2 tbsp. olive oil
- 1 medium sweet Vidalia onion, sliced into thin strips
- 1 1/2 lbs. boneless skinless chicken breasts, sliced into strips
- Salt and pepper, to taste
- 2 cloves garlic, peeled and finely minced (or find the minced garlic in a jar!)
- 3/4 cup apple cider
- 2 tbsp. Dijon mustard
- 2 tbsp. butter
- 2 red apples, cored and sliced into wedges
- 3 tbsp. light brown sugar
- 1 tsp. cinnamon, to taste
- 1 tsp. lemon juice, to taste

DIRECTIONS:

1. In a large skillet, add oil and cook the onions over medium-high heat until onions begin to soften and caramelize; stir frequently.
2. Add the chicken, season with salt and pepper, and cook for about 4 to 5 minutes, flipping and stirring intermittently so all sides cook evenly (chicken should be about 80% cooked through).
3. Add the garlic and cook for about 1 minute, or until fragrant; stir frequently.
4. In a medium bowl, add the apple cider and Dijon and whisk to combine. Add to the skillet.
5. Turn the heat to low, cover and simmer for about 7 to 10 minutes, or until chicken is cooked through.
6. While the chicken simmers, make the apples.
 - In a separate large skillet, add the butter and heat over medium-high heat to melt.
 - Add the apples, brown sugar, cinnamon and lemon juice. Stir to combine, and cook for about 5 to 7 minutes, or until apples are just tender. Stir frequently to prevent burning.
7. Taste the chicken and cider-Dijon mixture and add additional salt or pepper to taste, if desired.
8. Evenly sprinkle with sage and serve immediately. Dish is best warm and fresh but will keep airtight in the fridge for up to 5 days. Store chicken and apples in separate containers. Reheat gently as desired.

Estimated time: 30 minutes | Difficulty: 🍁🍁🍁

Recipe adapted from The Tasty Bite Blog

STEM IN THE KITCHEN

One of the fundamental chemical reactions that occur in the kitchen is the Maillard reaction – the browning that happens when meat, seafood and other protein-rich foods are heated beyond a certain temperature, rearranging the sugars and amino acids inside the food. While you're enjoying this meal with your family, you can tell them the Maillard reaction is what helps give the chicken its delicious aroma and flavor.



National Inventors Hall of Fame[®]

We hope you enjoyed these fall recipes
and, more importantly, the experiences you
had making them together!

Share your creations with us using the hashtags
#CookingWithNIHF and **#CookingWithSTEM**

For more at-home fun, visit invent.org/blog.