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The Art of Pie Making



**Easy
as
pie!**

Contents

- Pie Making Basics
- Pie Recipes



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Pie Making

High quality pastry usually includes four basic ingredients that contribute to the characteristics of tenderness, flakiness, crispness and color: namely flour, fat, salt and water. These characteristics depend upon those ingredients, their proportions, and the way they are manipulated.

Flakiness results when small particles of fat are coated with moistened flour/dough then flattened into thin layers as the dough is rolled out. When baked, the fat melts and is absorbed by the dough.

Flakiness in pastry depends on:

- Character of the fat (solid versus melted or liquid fat)

- Consistency of solid fat

- Type of flour used

- Proportion of water

- Degree of mixing

- Method of mixing

- Number of times the dough is rolled

Tenderness in pastry depends on:

- The amount and distribution of gluten

- Type of flour

- Temperature of ingredients

- Type of fat

- Proportion of fat & liquid to flour

- Amount of stirring of the dough

Crispness in pastry depends on:

- Thickness of the dough

- Length of baking time

- Whether it is an upper or lower crust

Flour

Flour is the main ingredient in pastry and comes in two different forms: all-purpose and pastry flour. All-purpose flour has a higher protein and gluten content. Pastry flour does not have as much gluten. Each of these flours requires a different amount of fat for optimum tenderness.

Basic Recipe

(from *Traditional Meat Pie* by Gaston Cloutier and *Miss Hilda's Meat and Potato Pie* by Emeril Lagasse, from www.foodnetwork.com)

Basic Pie Crust for a Savory Pie

3 cups plus ¼ cup all-purpose flour

1 teaspoon salt

2 sticks cold unsalted butter, cut into 1/2-inch pieces

¼ cup cold solid vegetable shortening

5 to 6 tablespoons ice water

Sift the flour and salt into a large bowl. Using your fingertips, work the butter and shortening into the flour until the mixture resembles small peas. Work the ice water into the mixture with your fingers until the dough just comes together; be careful not to over mix. Divide the dough into 2 disks, 1 slightly larger than the other*, and wrap each disk tightly in plastic wrap. Refrigerate for at least 30 minutes and up to overnight before rolling out.

* The larger portion of dough should be used for the bottom crust of the pie.

Yield: 1 (9 or 10-inch) double pie crust



Making Traditional Meat Pies

Meat pies are an easy, filling dinner, lunch, or snack for your family. You can use whatever ingredients you have on hand and play with a variety of spices and vegetables to please your family. Meat pies can be made using a basic pie crust on top and bottom or top only; or you can use a basic biscuit recipe as the pie topper (if using biscuits, make sure the filling is very hot before topping with biscuits and bake immediately). Below are some suggestions for ways you can change up traditional meat pie recipes, use your food storage ingredients, and save money, all while filling your family with wholesome and delicious food.

The Ingredients

Meat, ground or in small pieces: pork, beef, veal, turkey, chicken or combination

Potatoes: mashed, blanched and sliced, cubed, grated

Onion, chopped: white or yellow

Celery, chopped (optional)

Garlic cloves (optional) – roast or cook with potatoes

Other root vegetables: Butternut squash (cubed), rutabaga (cubed), carrots (sliced)

Bread: crumbs or cubes – can mellow the flavor, or use flavored croutons instead

Spices: ground allspice, Worcestershire sauce, onion soup mix, garlic powder, Cajun spices, or Accent

Meat Extender: oatmeal, wheat berries, white or brown rice. Don't pre-cook oatmeal; DO pre-cook whole wheat berries, white and brown rice.

Other additions & flavor changes (as desired): crumbled bacon, chopped bell peppers, mushroom pieces, diced tomatoes (canned), Worcestershire sauce, garlic powder (if not using garlic cloves), jalapeño pepper, Cajun spices, etc.

Salt

Salt seasons the flour and omitting it makes no difference except for taste.

½ teaspoon per cup of flour is recommended

Fat

Fats tenderize the pastry as well as contribute to its flakiness. Fats waterproof the particles of flour so water has a difficult time mixing with the flour and inhibits the development of gluten.

Solid fats results in a flakier crust than melted or liquid fats, but you can still obtain an acceptable crust with these fats. Too much fat can result in a crumbly, greasy pastry. Too little fat makes it difficult to stir in the water, and too much mixing develops excessive gluten and makes a tough pastry. Do not soften butter to room temperature; make sure it is cold.

Solid fats: lard, hydrogenated shortening

Liquid fats: edible oils

Softer fats: butter, margarine

¼ to 1/3 cup for each cup of flour

Mixing

Sift salt with the flour to distribute the salt evenly. Distribute the fat: pastry blender, fork, two knives, etc. Cutting the fat increases its surface area so that more of the flour particles make contact with it. The mixture should resemble coarse cornmeal when cut sufficiently. Uniform mixing of fat and flour produces a more uniformly tender crust. Stir the mixture at once with a wide circular motion and stop when the dough adheres in large lumps. Distribution of the fat is the key to flakiness and tenderness. After mixing, wrap the dough and chill it, ideally for 1-2 hours. This allows the fat to reharden and the gluten to relax. For large batches, you may want to chill overnight.

Rolling the Pastry

Allowing the dough to stand for a few minutes increases the elasticity of the dough and makes it easier to handle or to roll. Rolling flattens out the small masses of gluten and the fat into very thin layers. For pies, roll to a thickness of 1/8 inch.

The bottom crust of a pie should be about 2 1/2 inches larger than the diameter of the top of the pan.

Rerolling of pie crusts may over-develop the gluten and result in a crust with greater shrinkage during baking.

Over-stretching the pastry dough also may result in excessive shrinkage.

Two crust pies require small openings near the center of the crust to allow steam to escape; otherwise, there may be breakage due to the pressure from the steam. The crusts of two crust pies adhere to each better if the edge of the lower crust is moistened before placing the top crust.

Baking the Pastry

An oven temperature of 425° F. is the usual recommendation for baking pastry. The baking time can be influenced by the type of baking pan used. Pastry bakes in less time and browns less evenly when baked on a dark or dull metal pan or one made of glass.

Helpful Hints & Techniques

- Refrigerate all ingredients prior to making the dough – even the flour.
- Sugar in a pastry dough sweetens and tenderizes.
- Enhance flavor of dough by adding spices such as nutmeg, cinnamon, or ginger.
- Prevent meringue from “weeping” by mixing 1 teaspoon of cornstarch into the sugar before beating it into the egg whites.

Coconut-Oil Pie Crust

3/4 cup unbleached white flour

1/2 cup whole-wheat pastry flour

1/2 tsp baking powder

2 Tbs. maple sugar or cane sugar

1/4-1/2 tsp. salt

1/4 cup coconut oil (measure it in solidified form, in a dry measure)

2 Tbs. butter, chilled or frozen

1 tsp. apple cider vinegar

3-5 Tbs. ice water

Sift or mix dry ingredients together in a medium bowl.

Cut the solidified coconut oil and butter with the dry ingredients, coating the hardened pieces with flour, which makes the pieces easier to break up and work in.

Work into the flour with your fingers or (preferably) a pastry blender. The coconut oil and margarine should be distributed into different-size pebbles, all of them small.

Break up any large clumps or pebbles into smaller pebbles; no pieces should be larger than a pea.

Add the vinegar to the ice water. Drizzle the water into the dough a spoonful at a time, mixing in each as you go. You have enough water in the dough when the dough holds together well when pinched. Do not add any more water than absolutely necessary.

Gather the dough into a ball and flatten it into a disk.

Wrap disk in plastic. Chill for about 15 minutes.

Roll out on floured board with floured rolling pin — or even easier, just press into pie pan evenly.

Bake according to desired recipe.

(Adapted from: <http://www.cocobuko.com>)

Basic Pie Crust

1½ cups sifted flour
 ½ teaspoon salt
 ½ cup shortening
 ¼ cup ice cold water

Sift flour and salt. Cut in shortening until pieces are about the size of small peas. Add enough water until all the flour is moistened and then form into a ball. Roll into desired crust.

YIELD: 1 single crust or 4-6 tart shells

Rich & Flaky Pie Crust

(Adapted from *Lion House Recipes*.)

¼ cup butter
 ¼ cup butter-flavored shortening
 ⅓ cup vegetable shortening
 1-2 tablespoons sugar
 1 teaspoon salt
 3 cups flour

⅓ cup lard
 ½ teaspoon baking powder
 1 tablespoon non-fat dry milk
 ½ cup+ ice cold water

Cream together the fats. Add sugar, baking powder, salt and dry milk. Add half the flour and mix well. Add water and remaining flour. Mix just until dough forms into a ball. Roll out desired crusts. Bake according to individual pie recipe.

YIELD: About 3 single pie crusts

Trouble Shooting!

Problem	Solution
Soggy Crust	Do not let the pie sit too long before baking. Keep the amount of water in the crust to a minimum. Preheat the filling. Spread the surface of the lower crust with melted butter. Chill the dough for about 30 minutes to 1 hour before adding the filling. Set pie pan on a metal baking sheet during baking.
Flour and butter mixture becomes pasty (butter starting to melt)	Proceed as quickly as possible to moisten the dough and force the dough to accept at least ¾ of the liquid called for by gently stirring the liquid in with a fork. The dough may be excessively soft. Flour the outside of the dough generously, wrap and chill.
Large lumps of butter left in dough after moistening	Flour work surface and turn out dough. Press dough into a rectangle about 3/8" thick. This will help flatten the lumps of butter. Fold dough over on itself; gently mold it into a ball, wrap and chill.
Dough is still dry after moistening	Return the dry dough to the bowl; gently tear into pieces using two forks. Scatter drops of water on it and toss with a fork till the dough adheres better. Wrap and chill.

Whole Wheat Pie Crust

(Adapted from Bob's Red Mill Whole Wheat Pastry Flour)

2 cups whole wheat pastry flour
 3/4 cup unsalted butter, chilled
 1 tsp. salt (if using salted butter, reduce to 1/2 tsp.)
 5 to 8 tablespoons ice water

Sift flour and salt into a large mixing bowl. Cut butter into small pieces and rub into dry ingredients until the mixture resembles a coarse meal with some pea-size pieces. Sprinkle water over mixture, one tablespoon at a time and knead lightly just until a dough forms. Form into two balls, flatten and wrap in plastic wrap and refrigerate for 30 minutes to 1 hour.

YIELD: Two 9-inch crusts

Delilah's Pie Crust

3 cups flour	1/4 teaspoon baking powder
1 1/2 cup shortening	1 egg
1/2 teaspoon salt	1 tablespoon vinegar
	About 7 tablespoons ice water

Combine dry ingredients and cut shortening in with a pastry blender or two knives. In electric blender: mix egg, vinegar and water. Add to other ingredients, stirring with a fork until pastry forms a ball. **DO NOT OVERMIX!** Divide dough for crusts and form into balls. Allow to rest in refrigerator, if desired, but warm to room temperature before rolling. Roll 1/8" thick, starting from center using light strokes. Roll pastry over rolling pin; unroll over pie plate, fitting loosely onto bottom and sides. Trim and crimp edges as desired.

YIELD: 3-4 single crusts

Lard Pie Crust

(Adapted from Morrell Snow Cap Lard)

2 cups flour	2/3 cup lard
1 teaspoon salt	5 to 7 tablespoons ice water

Sift flour and salt together in bowl. Cut in lard until pieces are the size of small peas. Add cold water a little at a time until particles just hold together. Knead slightly and form into ball. Chill for 30 minutes to an hour. Roll into desired crusts.

YIELD: Two single crusts or 6-8 tart shells

Trans Fat Free Pie Crust

2 cups flour	2/3 cup oil
1 teaspoon salt	1/3 cup milk

Gently mix all ingredients together being careful not to over mix. Form into two balls and flatten each ball slightly. Roll dough between 2 pieces of waxed paper. Peel off top sheet and fit dough, paper side up, into pie plate. Remove paper.

For single crust pie, trim 1/2 inch beyond edge of pan, fold under, and flute edge. Prick bottom and sides well with fork. Bake at 450° for 10-12 minutes or until golden.

For double crust pie, trim lower crust even with rim of pie plate. Tuck top crust under edge of lower crust. Flute edge of pastry as desired. Cut slits in top crust to allow steam to escape. Bake according to individual recipe.