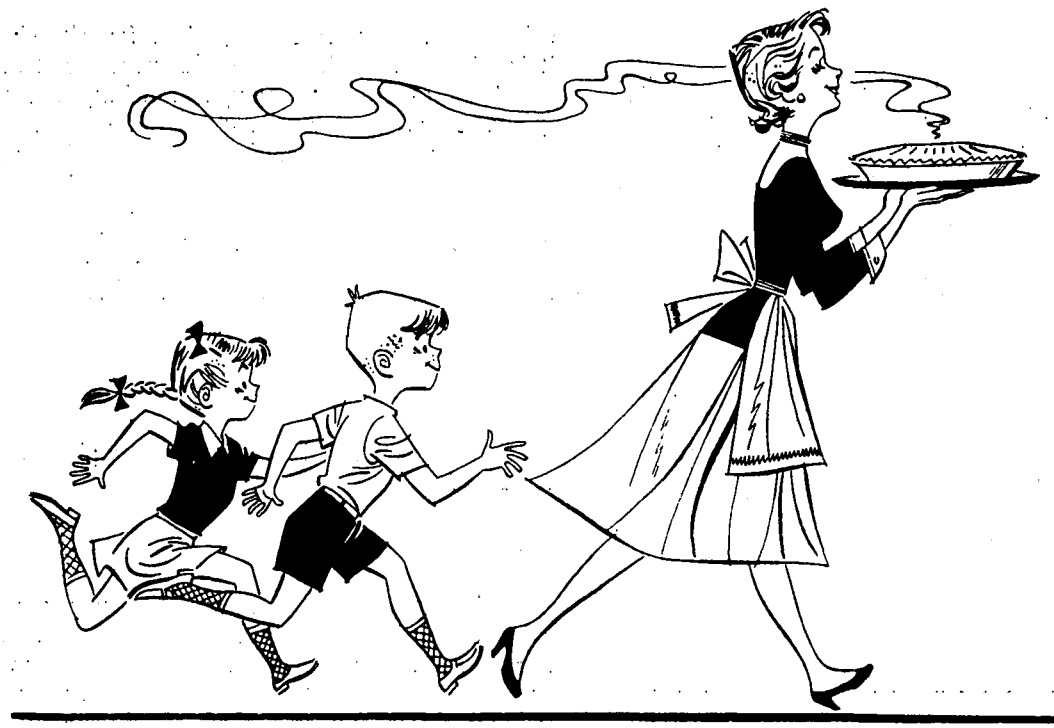
Make mine PIE



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Make Mine Pie

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Oregon State University

"I like any dessert so long as it's pie," say many American men. Nothing will distinguish a person as a good cook faster than the ability to turn out high quality pies. Few things seem more difficult to the beginner; yet the most inexperienced cook can produce excellent pies by following recipes carefully and knowing the "why's" of the directions.

What is a good piecrust? Piecrust is a combination of flour, fat, salt, and liquid, mixed to produce an edible, flat sheet of baked dough, neither brittle nor crumbly. Ideally it is flaky, tender, and golden brown, with a mild, pleasant flavor.

Ingredients Needed for Good Pastry

Flour

Excellent pastry can be prepared from all-purpose, pastry, or cake flours. Because hard-wheat bread flour contains a high percentage of gluten-forming properties it is seldom used. Soft-wheat flour (cake flour) contains little gluten and makes high quality piecrust. All-purpose flour is generally used because of its lower cost and ready availability in most kitchens.

Liquid

Usually, water is used in piecrust. Iced water is often recommended because it helps keep the fat in particles, resulting in a flakier product. Milk or fruit juices may be substituted, but special directions always accompany the recipe when these liquids are used.

Fat

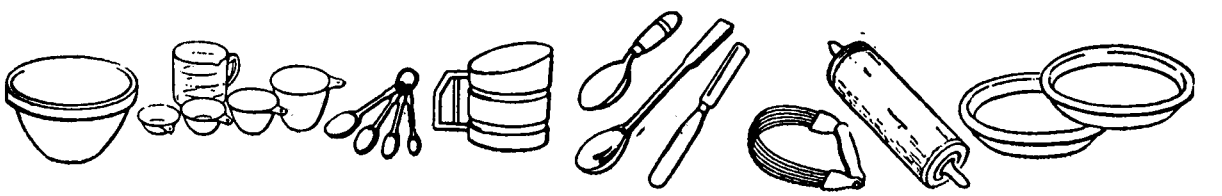
Many fats are available. Solid fats have particular value because they tend to remain in small particles. During baking these pieces melt and the spaces are filled with steam, causing a layering effect and a flaky crust. Lard is a favorite since it has high shortening power. However, lard that has been modified to prevent rancidity has no greater shortening power than any other solid fat. Butter may be used for flavor, but only in small amounts due to its quick browning time. Oils have become popular because liquids are easy and fast to use. Recipes using oil normally will call for less other liquid, since the oil itself is in a fluid form. These crusts are generally more mealy than those made with solid fats.

Salt

Salt is used for flavor. Without it piecrust is too bland.

Other ingredients

Spices, particularly cinnamon, curry, and nutmeg, are occasionally used for variety. Some recipes recommend small amounts of baking powder to help puff the pastry. Cheese can be grated and substituted for some of the fat in the recipe, while special texture and flavor effects can be gained by adding nuts, seeds, or dry cereals.



Methods

Measuring

Careful measuring is extremely important. Although many recipes allow a small range in amounts of liquids to use, the novice may want to choose a recipe specifying a definite amount of water, rather than try to determine the correct quantity.

Work quickly

After carefully measuring the ingredients, mix them according to recipe directions. The standard method involves cutting the fat into the flour. A pastry blender is good because it won't melt the fat as warm fingers might.

Work quickly and mix completely, but don't overwork the dough. Add water in small amounts, mixing until the flour is just wet. Make a ball by pressing lightly together or pile on waxed paper, bring corners together, and then press into a ball. Chilling for a short time makes it possible to use a softer, richer dough.

Use a pastry cloth and a stockinette on the rolling pin. Flatten the ball slightly, rolling from the center just to the edge. Do not turn the crust over. If it tends to stick, raise the pastry gently—with a spatula—and sprinkle flour underneath. Roll to a diameter one inch larger than the pie plate to be used. Easy ways to transfer the dough to the tin are by rolling it around the pin, lifting, and then unrolling over the tin or by gently folding the

dough in fourths and placing it in the plate.

When making a shell, do not stretch the dough or it will shrink badly. Pricking with fork tines allows more even baking. If the shell does puff badly during early baking, pierce it with a fork so the steam can escape.

Covers for two-crust pies should be slit to allow steam to escape. Many gadgets are available for making attractive patterns. Most home bakers use a slashing pattern which is almost a trademark, handed down to new generations along with favorite recipes. Brushing the top with slightly beaten egg white will give a rich brown color. Using milk in the same way will cause the top to develop a shiny glaze.

Fillings and Toppings

Fruit

Various fruits have long been favorites for pie fillings. They add flavor without being overly sweet. Fresh, frozen, cooked, or canned fruit can be used to good advantage. Three cups of prepared fruit are usually enough for a 9-inch pie. "Deep-dish" desserts will require at least 4 cups of fruit. Tapioca, cornstarch, or flour may be used as thickening agents, with 2 to 3 tablespoons per pie as a good average. Extremely juicy fruits may require more.

"Soft" pies

Pies with custard or pudding bases are favorites. These are often single-crust pies, filled with a cooked, cooled pudding and topped with a meringue. Many satisfactory recipes can be found in any cookbook.

Custard pies present a special problem, since the crust is usually unbaked and will absorb the custard and become soggy. This can be prevented by baking the crust for 5 minutes in a 425° F. oven, then adding *hot* custard. Bake at 425° F. for another 10 minutes, and then at 325° F. until done. Or, custard and crust may be baked separately in identical pie pans and the custard slipped into the shell. Many restaurants, famous for their custard pies, use this latter method.

Making and using meringue

Meringue is made with egg whites, sugar, flavoring, and sometimes salt and cream of tartar. For best volume, the egg whites should be at room temperature.

Beat the egg whites, salt, and cream of tartar until the foam will not slip when the bowl is inverted. This is the "stiff foam" stage. Then add the sugar, a tablespoon at a time, and continue beating after each addition to dissolve the sugar. Most meringue failures are the result of not dissolving the sugar at this stage. Pile the finished

meringue on a cooled filling, making sure the meringue touches the crust in all places. Bake in a 400° F. oven until golden brown—8 to 10 minutes. Cool away from drafts.

Meringue crusts are favorites for party dessert pies or for serving ice cream. They are made as other meringue topping except more sugar is used. The meringue is piled on a cookie sheet that has been lined with brown wrapping paper, and actually dried in the oven with the temperature as low as possible. The final baking may be done by simply leaving the meringue in the oven after the heat is turned off. To obtain sugary, crisp meringues, the egg whites must be thoroughly dried. These concoctions are best if made fresh the day they are to be used.

Baking Procedures

Pans to use

Various types of pans may be used. All will give satisfactory results if used correctly. Glass containers will retain heat and cause more browning, so bake in these at a 25° F. lower temperature. Dark pans absorb heat rapidly, bake more quickly, and provide more browning than do shiny metals which reflect the heat. Pie plates are from ¾ to 1½ inches deep and come in 4-, 5-, 8-, 9-, and 10-inch sizes. Unless otherwise stated, recipes will always be for a 9-inch pie.

Pastry shells or tarts

Bake at 425° F. for 10 to 12 minutes, or until golden brown.

Two-crust pies

Uncooked fillings are usually baked at 425° F. for 10 minutes: then bake at 350° F. for 25 to 30 minutes, or until the fruit is tender.

Cooked fillings are baked at 425° F. for 25 to 35 minutes. Pumpkin and other custard-type pies are usually baked at 450° F. for the first 10 minutes and then at a lower temperature, depending upon the specific filling used.

Pie Problems

Soggy bottom crusts

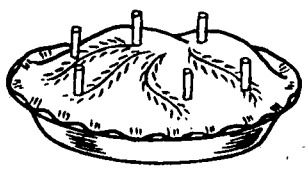
For fruit pies it is often a good idea to start the baking at 450° F. to set the crust, or sprinkle a flour and sugar mixture on the bottom crust before adding the filling. A third alternative is to cook the filling to thicken it slightly before making the pie.

Edge browns too quickly

If the edge browns too quickly, it may be overly high or thick. You can prevent further browning by removing the pie from the oven and crimping a 2-inch strip of aluminum foil around the edge. This will reflect enough heat to allow the pie to finish baking before the edges become too brown.

Fruit fillings boil over

The pans may be too full—measure the amount of filling. Be sure to seal the edges tightly. Stick 3-inch pieces of cellophane straw or uncooked macaroni into the steam vents to act as tiny chimneys. Juice will boil up into the chimneys rather than over the edges.



Never enough

About the only solution to this difficulty is to bake at least two while you are at it.

Recipes

Standard pastry recipe

2 cups flour	⅔ cup shortening
1 teaspoon salt	4 to 6 tablespoons water

Mixing methods

1. *Standard*—Sift flour, measure, add salt and sift again. Using a pastry blender, cut half of the shortening into the mixture until it resembles coarse corn meal; work the remaining shortening in until particles are about the size of peas.

Sprinkle water over mixture, and with a fork, mix until it holds together. Do not stir. Use only enough water to hold pastry together. Press mixture lightly into a ball with fingers or form with waxed paper.

2. *Paste*—Sift flour and salt as for standard method. Remove ⅓ cup of this mixture to a bowl and add ¼ cup water to form a paste. Cut shortening into dry flour mixture, then stir this into

the paste to form a dough. Gather into a ball and chill.

Vegetable oil pastry

- 2 cups all-purpose flour, sifted
- 1 teaspoon salt
- ½ cup vegetable oil
- 5 tablespoons ice water

Sift together the measured flour and salt. Measure oil and water, and whip to consistency of whipped cream. Pour all at once over flour. Mix with fork until flour is all coated. Form into two balls. Roll on pastry cloth or between layers of wax paper. If using paper, peel off top paper, flip into pan, and remove bottom paper. Bake shells at 425° F. 10 to 12 minutes; bake two-crust pie at 425° F. for 10 minutes, then 350° F. for 25 to 30 minutes.

Soft wheat flour pie crust*

- 2½ cups cake or pastry flour (sift before measuring)
- ⅔ cup vegetable shortening
- 1 teaspoon salt
- ⅓ cup water

All ingredients should be room temperature for easy mixing. Cut shortening into flour and salt; add water and mix thoroughly. Cut through the dough 10 to 15 times with a fork. Chill dough 20 to 30 minutes. Work with the hands until plastic. Divide dough into two parts. Roll and place in pan.

Oregon walnut pie*

Beat:

- 2 eggs

Add:

- 1 cup white corn syrup
- ½ cup sugar
- ⅛ teaspoon salt
- 1 teaspoon vanilla
- 2 tablespoons butter

Mix thoroughly and pour into uncooked pie crust. Pour 1 cup of nuts on top and bake at 450° F. for 10 minutes, then reduce temperature to 325° F. and continue baking for 30 minutes.

Lemon meringue pie

- 1 cup sugar
- 1¼ cups water
- 1 tablespoon butter
- ¼ cup cornstarch
- 3 tablespoons cold water
- 6 tablespoons lemon juice
- 1 teaspoon grated lemon peel
- 3 egg yolks
- 2 tablespoons milk
- 1 (8-inch) baked pastry shell

Combine sugar, water, and butter; heat until sugar dissolves. Add cornstarch blended with cold water; cook slowly until clear, about 8 minutes. Add lemon juice and peel; cook 2 minutes. Slowly add egg yolk beaten with milk; bring to boiling. Cool. Pour into cooled baked shell.

Soft meringue

- 3 egg whites
- ¼ teaspoon salt
- ¼ teaspoon cream of tartar (if desired)
- 6 tablespoons sugar
- 1 teaspoon vanilla extract or lemon juice

Add salt, flavoring, and cream of tartar to egg whites and beat to a stiff foam. Stiff foam is achieved when the air cells are very small and the foam will slip very slightly if the bowl is tipped; it is still glossy, smooth, and moist in appearance. Add the sugar in one tablespoon portions, beating after each addition. Beating helps to dissolve the sugar which is an essential step. After the last sugar is added, beat until the sugar dissolves and the mixture piles well but is still shiny. The peaks should be fairly stiff and slightly rounded when beater is removed.

Spread small amounts on the cooled filling, around the edge of the pie, fixing it firmly to the edge of the dish or the pastry. This helps prevent wateriness. Spread the rest of the meringue over the surface so it is ¾ to 1½ inches thick. Bake in a hot oven, 400° F., for 8 minutes. For ease in cutting the finished pie, dip the knife in cold water or butter it.

Meringue shells

(Serves 16 to 24, depending on size)

- 4 egg whites
- 1 teaspoon cream of tartar
- ½ teaspoon salt
- 1 teaspoon vanilla
- 1 cup sugar

Add the cream of tartar, salt, and vanilla to the egg whites and beat to a stiff foam. Add the sugar gradually, one tablespoon at a time. Beat thoroughly after each addition. Beat until stiff. Drop by spoonfuls onto heavy, ungreased paper on a cookie sheet. Bake in a slow oven, 225° F. to 275° F., for 40 to 60 minutes. The time depends on the size of the meringues.

Crumb crusts

Graham cracker pie crust

- 1½ cups crushed graham crackers
- ⅓ cup powdered sugar
- ½ cup butter

Mix crumbs with butter and sugar. Pat mixture into pie pan. Place pie pan in refrigerator or cold place. Allow to stand for several hours; then fill with pie filling.

Pretzel crust

("Different" for unbaked cheese pies)

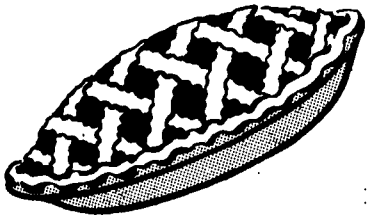
- ½ large package pretzels, crushed
- ½ cup butter
- ¼ cup sugar

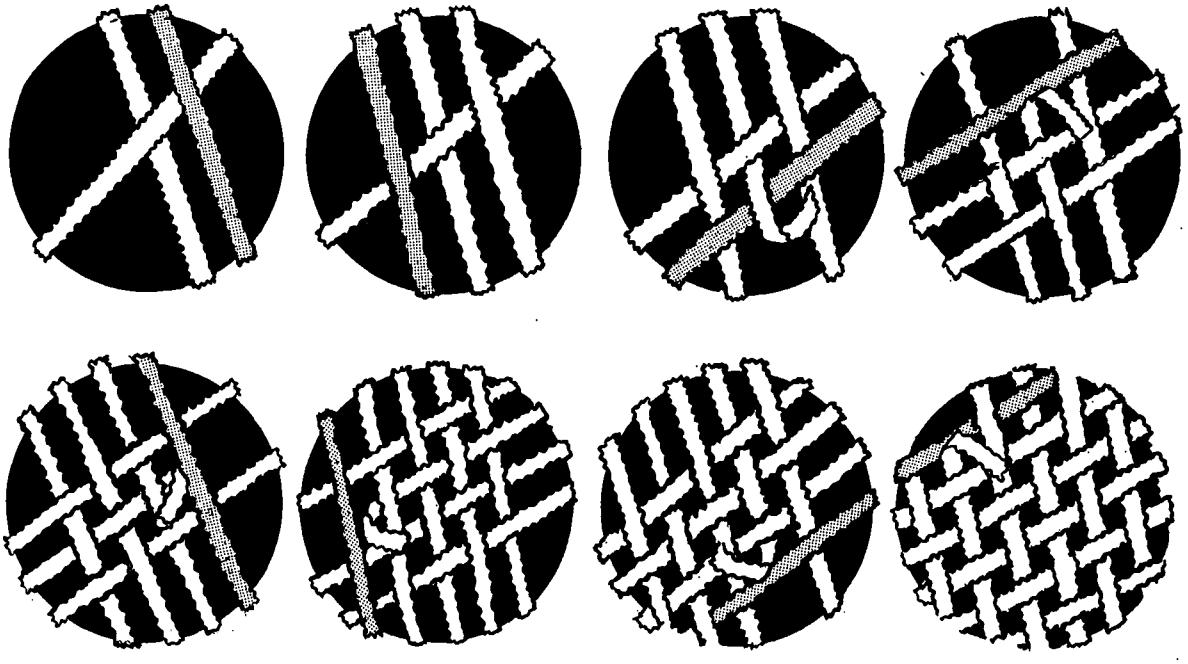
Mix and press into pan. Chill and fill.

* Recipes developed by Andrea Mackey and Joy Stockman, Oregon State University, School of Home Economics.

For That Extra Special Touch

Ever try weaving a piecrust? Then you know the problems—stubborn strips that break or fall into the filling. Try this easy way for an attractive lattice topping.





Making lattice tops is easy when you follow the simple method illustrated above. Trim the lower crust, leaving ½ inch of crust extending over the rim of the pan. Cut 10 pastry strips ½ inch wide and 2 inches longer than the width of the pie plate. Start by forming an X with the first two strips. The cross should be in the center of the pie and the ends about 3 inches apart. The success of this method depends on making this first cross correctly.

Each successive step involves placing two strips at once—one on either side of the center. No more than three strips are ever crossed by one strip. Simply fold back the center strip each time (as in picture 4) and lay the new strip on the two remaining pieces. Replace the ends that were turned up. This prevents messy weaving, yet gives a woven appearance.

Continue laying two strips at a time until all 10 strips are in place. This completes the lattice. Trim the ends and seal to the bottom crust. Flute the edge and bake as for two-crust pies.