

THE SCIENCE BEHIND

Gelatin-Set Custards

What sets them apart Like eggs, gelatin contains proteins that bind liquid. But powdered gelatin is a much more powerful thickener than eggs, so it gives the custard enough body to hold its shape when sliced. This type of custard needs to be chilled in order to set.

Delicious examples Gelatin-set custards start with a basic custard (such as crème anglaise), which may be flavored with fruit purée or chocolate. When gelatin is added to this mixture, it becomes firm enough to set in a crust for an icebox pie. Fold whipped cream into the gelatin-set custard and you have a fluffy, melt-in-your-mouth Bavarian. Bavarians can be poured into decorative molds to set, or used to fill a cake-lined pan. (A classic example is charlotte russe, which is a Bavarian cream set in a mold lined with lady fingers and garnished with whipped cream.) When egg whites are used to lighten the custard, you've got a chiffon filling, which makes lighter-than-air pies.

Getting them right To ensure that the gelatin dissolves evenly without forming grainy lumps, allow it to "bloom," or soften, by sprinkling it onto a liquid and letting it sit for 5 minutes before heating to dissolve.

Certain fruits, such as figs, pineapple, kiwi, papaya, mango, and guava, should be cooked before being used in a gelatin-set custard to denature enzymes that can break down the gelatin. (This isn't necessary for canned fruit, which is pasteurized at a high enough temperature to denature the enzymes.)

For maximum volume, let a gelatin-set custard cool and thicken slightly before folding in any whipped cream or beaten egg whites.

chocolate chiffon pie

Although it may appear dense and rich, this pie feels light and fluffy in your mouth. It's not difficult to make and has won raves every time I've served it. (This recipe contains uncooked eggs; if that's a concern, use pasteurized.) **Serves 8**

FOR THE CRUST

6½ oz. (about 30) chocolate wafer cookies, such as Nabisco's Famous Chocolate Wafers

2½ oz. (5 Tbs.) unsalted butter, melted

FOR THE FILLING

¼ cup chocolate liqueur, such as Godiva or Lejay-Lagoute

1 envelope (¼ oz.) unflavored powdered gelatin

4 oz. unsweetened chocolate, finely chopped in a food processor

3 large eggs

½ cup granulated sugar

¾ cup whole milk

½ tsp. table salt

½ cup chilled heavy cream

1 tsp. pure vanilla extract

FOR THE TOPPING

1 cup chilled heavy cream

2 Tbs. granulated sugar

2 oz. chunk of bittersweet chocolate (optional)

MAKE THE CRUST

Position a rack in the center of the oven and heat the oven to 350°F.

Pulse the cookies in a food processor until very finely ground. With the processor running, pour the melted butter through the feed tube and process until combined. Transfer the mixture to a 9-inch glass pie plate and press it firmly into the bottom and up the sides. Bake until the crust is firm in the center and fragrant, 10 to 12 minutes. Transfer to a wire rack to cool completely.

MAKE THE FILLING

Fill a 3-quart saucepan with about 1 inch of water and bring to a simmer over medium-low heat. Put the chocolate liqueur in a small bowl. Sprinkle the gelatin over the top and let stand at least 5 minutes.

Meanwhile, put the chocolate in a medium bowl. Separate the eggs, putting the whites in another medium bowl and the yolks in a large metal bowl.

Whisk ¼ cup of the sugar into the yolks until combined, then whisk in the milk and the salt. Set the bowl over the pot of simmering water (the bottom of the bowl should not touch the water) and cook, stirring constantly with

a wooden spoon, until the mixture coats the back of the spoon and holds a line when you draw your finger through it, 4 to 6 minutes. (The custard should reach at least 160°F on an instant-read thermometer and should not go over 180°F.) Remove from the heat.

Whisk the gelatin mixture into the hot custard until completely melted. Pour the custard over the chocolate and let stand 1 minute. Whisk until the chocolate is melted, then whisk in the heavy cream and vanilla.

Prepare an ice water bath by filling a large metal bowl with a few inches of ice and water. Put the bowl of chocolate custard in the ice water bath and whisk constantly until the mixture is just thick enough to hold a ribbon when drizzled over itself, about 3 minutes. Immediately remove from the ice water bath.

Beat the egg whites with an electric mixer on medium speed until soft peaks form, 2 to 3 minutes. Beat in the remaining ¼ cup of sugar, 1 Tbs. at a time, and continue to beat just until stiff peaks form, 1 to 2 minutes more.

Gently whisk a third of the egg whites into the cooled chocolate custard to lighten it. Fold in the remaining whites. Spoon the mixture into the chocolate crust and refrigerate until firm, at least 4 hours and up to 24.

MAKE THE TOPPING

Put the cream and sugar in a chilled medium bowl and beat with an electric mixer on medium-high speed until soft peaks form, about 2 minutes. Spoon the whipped cream on the pie.

If you like, decorate the pie with chocolate shavings by slightly heating the chunk of chocolate (30 to 50 seconds in the microwave, or pass a side briefly over a flame) and shaving it with a vegetable peeler onto the pie. Serve chilled. (The pie can be topped up to 1 hour ahead; refrigerate until ready to serve.)

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