

## EXERCISES AND PROBLEMS

1. Send for a seed catalogue to some firm near home.
2. Try at least two or three new vegetables that you never have had for the home table.
3. Make a drawing of a garden that you might have at home.
4. What are some of the points that you must have in mind in selecting a garden plot?
5. Notice the insects and plant diseases that are most common in your own place. Ask your teacher to discuss these at school and to help you to find the pamphlets that will tell about remedies.
6. What do you throw away if you cook spinach in a large kettle of water and drain off all the water?
7. Take the rule for potato soup, and plan for other vegetables to use in place of it.
8. Do the same thing with the tomato soup. (Notice that in one you use a pulp and in the other a vegetable juice.)
9. Why is it important to have vegetables every day?
10. Which one of the recipes in this lesson gives you a meat substitute?

## LESSON 25

## DISHERS FOR DESSERT

THERE are many desserts as nice, easier to make, and better for us to eat than pie. What are some that we can make?

Miss James explained to her class that puddings and pies contain good food material, and said once more that they are a part of a dinner or supper, not to be eaten when we are fully satisfied. The pudding or pie for dessert does not need to be expensive.

One of the schoolgirls asked if they might not have an exhibit of different desserts. This lesson has a few pictures of those that were displayed. By each plate there was a neatly printed card giving the recipe, the length of time taken to make it, and the cost. The amount of time that we put into cooking is something that we should be careful to watch. While we may enjoy eating a sweet dish at the end of the meal, how foolish it is to spend an hour or more in fancy cooking when there are other things to do that are so much more interesting and worth while. The dish may be attractive in appearance and yet quite easy to make. If you have an old-fashioned cook book at home, you will be interested to see how much time was sometimes given to the making of an elaborate dish to be eaten in a very few minutes.

How many kinds of dessert are there? Pies and tarts and puddings, both hot and cold; fruit in every shape; jellies, custards, ices and ice cream; nuts and raisins; crackers and cheese alone or with fruit. One very simple dessert for a hot day is sour-milk cheese, or cream cheese with crackers and a little jam or jelly.

Our desserts may be made of eggs, milk, cream, gelatin; stale cake and bread; baking-powder biscuit crusts, shortcakes, and pastry. We also use starchy substances,—cornstarch, arrowroot, tapioca, and maniocca; and fruit of every possible kind. The animal products important in desserts, in addition to milk and eggs, are beef suet, butter, and lard.

You will find it very amusing to study several cook books, and see how many desserts can be made from



*Courtesy of Dept. of Foods and Cookery, Teachers College.*

FIG. 105. — A gelatin mold is an attractive dessert.

these materials. We have not room for many in this little book, but there are a few to try at home and, perhaps, at school.

**Fruit desserts.** In the lessons on fruit you have learned something about its use for dessert: fruit stewed, fruit scalloped, and fruit with a baking-powder crust. Here is another kind of fruit dessert for a hot day:

**Fruit sponge, with cornstarch.**

*What and how much.*

Fruit juice	1 cup
Water	1 cup.

*or*

Lemon juice	1 or 2 lemons
Water	2 cups
Sugar	2 or 3 tablespoonfuls
Cornstarch	3 tablespoonfuls
Eggs	2 or 3

*How to make.* Cook the cornstarch and the water in a stew-pan until the mixture is clear. Add the sugar and the fruit juice, and remove from the fire to cool. Beat the whites of the eggs very stiff. When the cooked mixture has cooled off slightly, fold in the beaten whites very lightly.

Pour this mixture into small cups, one for each person, or into a larger dish. The cups or dish should have cold water standing in them, while the pudding is making. Set the sponge away to become cold; on the ice if possible. Use the yolks for custard to serve with the sponge, page 245, or use them in cake or muffins.

**Lemon jelly.**

*What and how much.*

Shredded gelatin	$\frac{1}{2}$ box
<i>or</i>	
Granulated gelatin	2 tablespoonfuls
Lemon juice	$\frac{1}{2}$ cup
Cold water	$\frac{1}{2}$ cup
Boiling water	$2\frac{1}{2}$ cups
Sugar	1 cup

*How to make.* Soak the gelatin in cold water for 20 minutes. Add the boiling water and sugar, and stir until it dissolves. Add the lemon juice and strain into a mold and set away to harden. When it is stiff, loosen from the sides of the mold (a cloth wrung out of hot water may be needed). Turn upon a plate and serve with whipped cream or soft custard.

*Remarks.* When a less acid fruit juice is used, take more juice and less water. The jelly can be made spongy by beating in the white of eggs. When the jelly is firm, beat it and fold in the whites.

**Milk desserts.** On the farm where milk is good and plentiful we cannot use too much of it. If we tire of drinking it, then we may use it with other materials, and still have all the food value of the milk. We learned about renneted milk in Lesson 4.

Milk can be made into a molded pudding, stiffened with cornstarch, arrowroot, farina, sago, rice, gelatin, bread crumbs, sea moss.

**Flavors for milk desserts.** One may use vanilla, almond, and lemon essence; grated lemon rind or orange rind; stick cinnamon, or ground cinnamon, nutmeg; cocoa, or chocolate, or coffee; caramel made from browned sugar; and even a little fruit juice, if it is not too acid (the juice of a sweet orange with the rind is delicious in a milk pudding); raisins, figs, and dates.

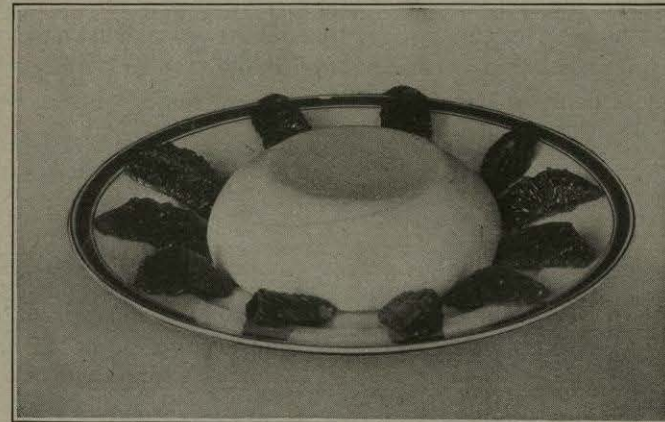
**Cornstarch pudding.**

*What and how much.*

Milk	2 cups
Cornstarch	4 tablespoonfuls
Sugar	3 to 4 tablespoonfuls
Salt	$\frac{1}{8}$ teaspoonful
Chocolate or powdered cocoa (if desired)	1 ounce
Vanilla	$\frac{1}{4}$ teaspoonful

*How to make.* You have seen your mother make laundry starch, have you not? Perhaps you have done it yourself.

The cornstarch must be mixed with a little of the milk cold and then stirred into the hot milk to cook half an hour. When will you add the sugar and salt, and the chocolate if you use



*Courtesy of Dept. of Foods and Cookery, Teachers College, Columbia University.*

FIG. 106.—A cornstarch mold served with fruit.

it? Remember that if you put the vanilla in at first you will smell it as the pudding cooks. If it passes off as a fragrance, you will not have it as a flavor. When will you add it?

**Creamy rice pudding.**

*What and how much.*

Rice (washed)	$\frac{1}{4}$ cup
Sugar	$\frac{1}{4}$ cup
Salt	$\frac{1}{8}$ teaspoonful
Milk	4 cups
Cinnamon	$\frac{1}{8}$ teaspoonful
Grating of nutmeg	
Seeded raisins	$\frac{1}{3}$ cup

*How to make.* This pudding needs long, slow cooking and is better when made from two or three quarts of milk. It is

easier to make, when you scald the milk and cook the rice in it until it begins to swell. Grease the baking dish; put in the rice with all the other materials. Cover the baking dish, and set it in a slow oven. This pudding cooks well in an Atkinson oven. Stir the pudding gently with a fork two or three times while it is baking. The baking should last for three or four hours or even more. At the very end remove the cover to brown the top, if you wish.

#### Suet pudding.

*What and how much.*

Suet chopped	1 cup
<i>or</i>	
Beef fat	$\frac{1}{2}$ cup
Raisins, currants, and citron sliced	1 cup
Egg	1
Sweet milk	1 cup
Molasses	$\frac{1}{2}$ cup
Soda	1 teaspoonful
Salt	$\frac{1}{4}$ teaspoonful
Flour	1 cup
Bread crumbs	$2\frac{1}{2}$ cups

*How to make.* Skin, wash, and chop the suet, and dredge with flour. Wash, pick over, and seed the dried fruit, slice the citron if it is used, and dredge all with flour. Stir together the milk and molasses, sift the dry materials with the flour, and stir the liquid into the flour slowly. Add the suet, beating the mass thoroughly, and last put in the fruit, sprinkling in both the suet and the fruit as you stir. Fill a greased mold or pail  $\frac{2}{3}$  full, close tightly, and cook in a kettle of boiling water for three hours. Serve with foamy sauce.

#### Baked Indian pudding.

This is one of Grandmother Stark's specialties which she makes for church suppers and sends to her friends sometimes as

a present. Grandmother Stark loves to tell of the days when she used to see it baked in the old brick oven, and she insists that even the Atkinson cooker does not give quite the same flavor. She thinks, too, that the pudding is not perfectly made with less than a milk pan full of milk and with old-fashioned meal; but she is much pleased when other people praise her puddings made of a smaller size. It is hardly worth while to bake it in a pan smaller than the two-quart size. Use an earthen baking dish.

*What and how much.*

Milk	2 quarts
Indian meal	$\frac{1}{2}$ cup (or even $\frac{1}{3}$ )
Molasses (dark colored)	$\frac{1}{2}$ to 1 cup
Salt	1 teaspoonful

*How to make.* Scald half the milk, stir into it the meal mixed with a little cold milk, and cook until the mixture thickens a little. Add the molasses and salt. Pour into the greased baking dish, add the rest of the milk, cover, and put into a very slow oven. To be perfect this pudding should bake from six to eight hours, or overnight in the Atkinson oven. Brown the top at the last. It can be eaten hot or cold. This slow cooking seems to dissolve the Indian meal, whey is formed, and when the pudding cools this makes a jelly.<sup>1</sup>

**What shall we do about pies?** When Miss Travers talked about pies to the Woman's Club at one of their meetings in the Pleasant Valley School, a very lively discussion followed. Mrs. Groves said that her husband

<sup>1</sup> Some people add an egg and butter, but this is not necessary. Others like the flavor of a little ginger. A fairly good pudding is made by using much more meal, cooking the milk and meal longer in a double boiler, and then baking for an hour, but it is very inferior to Grandmother Stark's pudding.

wanted pie three times a day. Another of the ladies said that her husband would like pie perhaps five times a day, between meals as well as at meals, but that the doctor had advised him to go without pie altogether.

Miss Travers said that it is true of pie, as of any other food containing a large amount of fat and sugar, that we should not eat it too often. The fat and sugar give the pie a high food value. If the crust is porous and light, thoroughly baked, and then thoroughly masticated, it has its place in the list of dishes from which the housekeeper makes the plans of her meals. A little baking powder makes the crust more porous. Do not eat pies every day, and remember to have pie at the end of the meal where there is not a large amount of protein and fat in other dishes.

**Some suggestions for making pies more digestible.**

1. With fruit pies use a deep dish and have a top crust over it.
2. When you want a pie without a top, like pumpkin or squash pie, bake the under crust first, brushing on a little white of egg before you bake it. Then fill and bake again.
3. Bake the pie crust in squares or diamonds or rounds by itself, and serve on a plate with cooked fruit.

**What can we use in place of pie crust?** A baking-powder crust makes a very good substitute for a pie crust, and, while your father may not like it so well at first, he probably will find it much better for him in the end. A light baking-powder crust can be used for the



*Courtesy of Dept. of Foods and Cookery, Teachers College, Columbia University.*

FIG. 107. — Squares of pie crust served with jam.



*Courtesy of Dept. of Foods and Cookery, Teachers College, Columbia University.*

FIG. 108. — Squares of pie crust served with fruit.

top of a fruit or meat pie. Bake this kind of crust in a jelly-cake tin, making it rather thin, until it is quite

brown. Split, and put fruit between the crusts. This becomes a shortcake when more butter is used, but the ordinary baking-powder crust is rich enough for everyday use. The crust can be baked and cooled and served cold with the fruit, or it may be reheated and served.

**Making ice cream.** If you have ice on the farm, you will find it is quite easy with a good freezer to make ice cream or sherbet on some hot day. There are a number of freezers for sale that are not expensive, and that will do the freezing in about twenty minutes. Mollie Stark and her brothers make their ice cream without a freezer, using a tin pail with a cover set in a tub. Mollie and her brothers divide the work in this way: the boys bring a piece of ice from the icehouse, put it into a heavy bag, and pound it. Mollie makes a custard by the recipe that follows, and when it is cooled off she puts it into the tin pail, but she does not have the pail more than two thirds full. Can you tell why? The boys mix one part of coarse salt with three parts of ice, and cover the bottom of a wooden box with this. Mollie ties paper tightly over the cover of the pail, sets it in the box, and then packs the ice and salt all around it. The box is four or five inches bigger than the pail. Some of the ice and salt is put on the cover. Paper is laid over the salt and a clean old bed quilt is put over the whole. At the end of about fifteen minutes Mollie opens the pail, stirs the freezing custard with a spoon, and covers it up again as before. This has to be done several times, depending of course upon the

amount of ice cream that is being made. This method does not make the ice cream so smooth as the freezer where you turn the crank all the time, but it makes a very agreeable dessert. Here are two rules that Mollie uses. When the price of eggs is high, Mollie makes a mixture like a cornstarch pudding, using less cornstarch to the quart, and flavors it with chocolate or coffee, or stirs in some cut-up fruit half an hour before the ice cream is finished. Mollie sometimes uses orange juice or the sirup from canned peaches or berries in the sherbet.

**Custard ice cream.**

*What and how much.*

Milk	1 quart
Sugar	$\frac{1}{2}$ or $\frac{3}{4}$ cup
Eggs	2
Vanilla	1 tablespoonful

*How to make.* Scald the milk and sugar together. Beat the eggs and stir a little of the hot milk into them, and then pour the beaten eggs into the hot milk. Stir steadily until the mixture thickens a little on the spoon. If the custard begins to curdle, take it off and beat it rapidly with a Dover egg beater. When it is cool and ready for freezing, stir in the vanilla.<sup>1</sup>

<sup>1</sup> When Mollie wants to make a *soft custard*, she uses this rule, taking a pint of milk, two tablespoonfuls of sugar, one tablespoonful of cornstarch, and two eggs. You have made cornstarch pudding. Which will you cook first in the milk, the cornstarch, or the eggs? Use only half a teaspoonful of the vanilla or other flavoring. This soft custard is very nice poured over cut-up oranges, or bananas, or peaches, or canned fruit.

**Milk sherbet.***What and how much.*

Milk	4 cups
Sugar	1½ cups
Lemons	juice of 3

*How to make.* Mix juice and sugar, stirring constantly as you slowly add the milk. If the mixture should curdle, the curdle will disappear when frozen.

## EXERCISES AND PROBLEMS

1. Look in the dictionary for the meaning of the word "dessert."
2. Study a cook book and see what recipes there are for using milk in a pudding.
3. In what puddings can you use skimmed milk just as well as whole milk?
4. Explain why we should be careful not to eat pie too often.
5. Explain why the can of the ice cream freezer must not be filled up to the top before freezing.
6. Can you explain why a mixture of ice and salt will freeze the cream when ice by itself would only cool it? (See some book on physics.)
7. We have cooked several kinds of food in a number of different ways. Make a list of cooking processes that we have used. After you have done this, look on page 294.

## LESSON 26

## COOKING APPARATUS

How can we save heat at dinner time, and other times?

It is at noon of a hot summer day that preparing dinner seems such a burden, and oh! how hot that stove makes the kitchen. The class talked one day

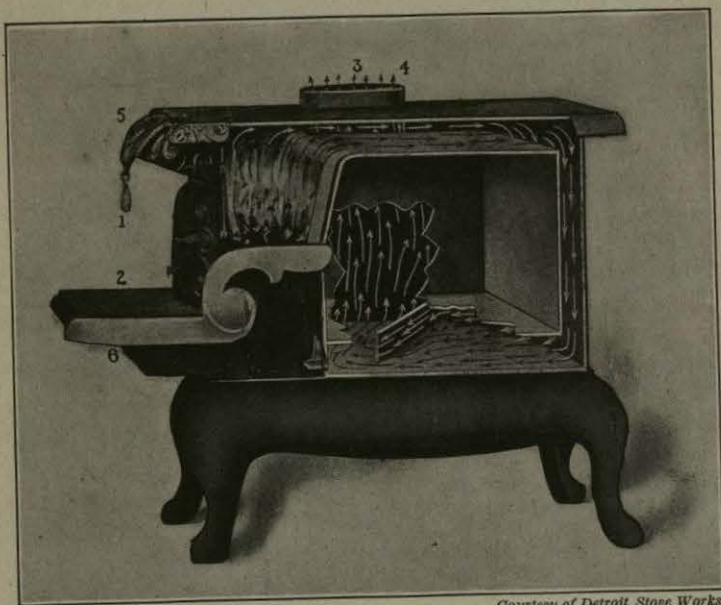
about apparatus that would cook the food without heating the cook.

**Different ways of having heat for cooking.** How interesting it would be if, at the moment you are reading this page, you could see all the ways in which people are cooking. Some one, somewhere, has a camp fire with a kettle boiling over it; and, far away in some old-fashioned house, dinner is being cooked by the fire in the open fireplace. Somebody is turning a button, and presto! a current of electricity runs along a wire fastened to a cooking utensil, and there is all the heat needed and no more, and no ashes, and no hard work. And between these two, the newest and the oldest fashions, there are coal stoves and wood stoves, natural and manufactured gas, kerosene and gasoline stoves, and steam cookers; and we hear about fireless cookers and Atkinson cookers.

**What are you using?** Coal or wood in the winter for warmth as well as for cooking? It needs a well-made stove for either, for no one can be expected to do good work with a poor stove. With the coal stove you must bring in coal and take out ashes, and space must be given to the coal bin and ash pit. Large ranges, resting upon the floor, have a "dump" which empties the ashes directly into the ash box in the cellar. A range the size of the one in the picture (see over) would serve for a family of five or six. It requires from 2 to 3 hods of coal per day. A hood should be placed above a large range, whether coal or wood, with a pipe into the chimney.

Here is a picture (Fig. 109) showing a section of a coal stove that can be used for wood with a different grate.

**The coal range.** The coal box at (1) has a lining that keeps the iron from burning out. The air enters at (2)



*Courtesy of Detroit Stove Works.*

FIG. 109.—A modern coal range, showing the parts and the air circulation.

and passes out at (3), when the fire is first made. When you want to heat the oven, a damper is closed at (4), and the heated air then passes around the oven in the direction of the arrows. The coal is put in at (5), and the ashes shaken down at (6).

Do you know that this kind of stove lets most of the heat go up the chimney, although less than in the

old-time fireplace? We have to box in the heat to keep it.

**Cooking by kerosene.** On page 12 is a picture (Fig. 4) of a kerosene stove with wicks where the kerosene is made to burn with a blue flame.<sup>1</sup>

A blue flame always gives more heat than a yellow one. A yellow flame gives light, and it smokes more easily than the blue. The flame on this stove is very hot, the oil burns out slowly, and one gallon will last about 15 hours. If one is careless and raises the wick too high, then the flame grows yellow and smoky, and it spoils the wick and makes much trouble. Notice the picture (Fig. 4) of the oven which is placed on top of the stove for baking.

This was one of the first summer comforts that the Stark family tried, and they were surprised to see how seldom a fire in the wood stove was needed.

A friend who was interested in the school lunch gave a stove of this pattern to the Pleasant Valley School. The members of the Lunch Club took turns in keeping it clean, and they found that it saved time in the end to attend to it daily.

**Catching heat and keeping it in a box.** The picture (Fig. 110) that follows, shows one way of doing this. This plan was invented by Mr. Edward Atkinson of Boston, who wanted to teach us to save fuel and to improve some of our foods by cooking them slowly. The

<sup>1</sup> In many parts of the country the use of gasoline is forbidden. Stoves are made especially for it.



heat comes from a round-wicked kerosene lamp. If you try to hold your hand over the chimney of a large lamp, you realize how much heat is given off; really enough to cook with. Around the iron oven which holds the food there is a box or cover, large enough to leave a space between the inner oven and the outer box; and the outer box is made of something that does not let the heat through; so the heat is in a trap, and does the work of cooking.

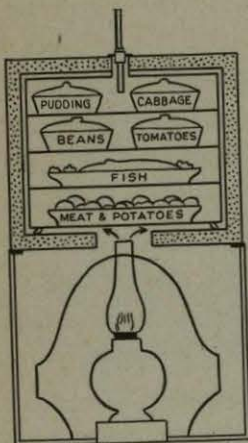


FIG. 110. — The Atkinson cooker, a plan for catching heat and keeping it in a box.

Food cooked in this way has a fine taste, because the flavor has not gone off in the air.

**A homemade Atkinson cooker.** The Stark family made a cooker at home. They could not have the same kind of oven, because in the Atkinson ovens that one buys the outer box is made of a kind of fiber or pulp; but they talked the matter over at home, and Mollie and John asked this question at school, "What can be used to keep heat in or out?" Why do you have a wooden handle on a poker for the fire? Why do you use a cloth holder for a flatiron or any hot metal? Why do you want a blanket over you on a cool night? Some substances become hot, carry heat, and lose heat quickly; and these are called "*conductors*" of heat: others heat slowly and cool slowly; and those are "*nonconductors*."

For our oven cover, then, we want a nonconductor. The Starks took such an oven as we use on a kerosene stove; they found a wooden box larger than the oven, and lined it with the kind of tin that is used for roofing. They made a hole in the bottom of the wooden box, where it would come just over the lamp, and on the bottom they put the tin both inside and outside the box, that the wood might not catch fire. As you know, wood is a poor conductor; but more covering is needed for an oven than the wooden box only.

The boys covered the box with many layers of paper, put on a neat outside cover of white oilcloth, and made a stand to hold the box, with a shelf below for the lamp. Whenever you want to keep a surface from giving off heat, paint it white or use a white cover. A shiny black surface will radiate heat. This has been proved by experiment.

At first Mrs. Stark was disappointed because the food came from the oven a pale rather than a rich brown.<sup>1</sup> She found that, like all other conveniences, the cooker did not do all the work. But Mr. Stark declared that he should never know the old fowl cooked this way from a spring chicken, for it was so tender; and that the brown bread, beans, and Indian pudding tasted more like the old-fashioned kind than any he had eaten for years. Slow cooking is the secret, or charm, in many dishes,

<sup>1</sup> The ready-made oven has a hole in the top with a cover, and the cover can be taken out when you want to brown something over. A hole can be put in the homemade cooker.