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THE HOUSEHOLD CALENDAR

A radio interview by Mrs. Rowena Schmidt Carpenter and Miss Mabel Stienbarger, Bureau of Home Economics, delivered through WRC and 42 other radio stations associated with the National Broadcasting Company, July 9, 1931.

Mrs. Carpenter:

How do you do, Homemakers!

With the gardens and markets full of so many kinds of fruits and vegetables your questions about home canning have been coming to us wholesale. I thought you'd like to have them answered first hand by someone who is working on canning problems in our experimental kitchens at the Bureau, so Miss Mabel Stienbarger has come to the studio with me today.

First this matter of oven canning that you ask us about so frequently. Miss Stienbarger, what is your advice about canning in the oven?

Miss Stienbarger: Fruits and tomatoes, or in other words, acid foods, may be satisfactorily canned in an oven, if the oven is equipped with a good thermometer or heat regulating device. We strongly advise against oven canning of non-acid foods, including meats and most vegetables. Canning in the oven is similar to canning in the hot water bath or live steam bath. In fact, it would be perfectly correct to describe the oven as a hot air bath to stress the similarity.

Mrs. Carpenter: There is a point about oven canning that seems to be very confusing to homemakers who have written us. Will you explain why with the oven temperature at 250 or 270° F. we say that it is impossible to reach a temperature high enough to sterilize non-acid vegetables and meats?

Miss Stienbarger: Because it is not the temperature of the oven but the temperature of the contents of the jars that accomplishes sterilization. Since we only partially seal the jars before placing them in the oven, steam escapes as it is formed and the temperature of the food remains near the boiling point of water. Sealing the jar before placing it in the oven would not be effective because as soon as enough steam accumulated within the jar, it would break the seal. So the temperature of foods canned in the oven is around 212° F. and this temperature is not high enough to kill the bacteria that cause spoilage in non-acid vegetables and meats.

Mrs. Carpenter: And for those foods, what do you recommend?

Miss Stienbarger: A steam pressure cooker, that is a steamer of strong construction and with a close fitting lid that clamps on securely and holds the steam under pressure. In such a cooker or canner temperatures much above 212° F. can be reached. The temperatures generally used are 240° and 250° F. which correspond to 10 and 15 pounds of steam pressure.

Mrs. Carpenter: Fruits and tomatoes, then, may be canned by the use of a boiling water bath, a live steam bath, or an oven, as well as by the open kettle method which we did not mention. But for meats and most vegetables, the Bureau recommends only the use of the steam pressure canner, which brings (over)
another question to my mind. Is the pressure canner satisfactory for fruits also? That is, Miss Stienbarger, if a homemaker buys this piece of equipment, is it possible for her to use it for all of her canning?

Miss Stienbarger: Yes, it is, by leaving the pet cock open and using enough water to allow for evaporation when processing fruits and tomatoes. In this way the pressure cooker becomes just a live steam bath. Steam escapes during the canning, and so the food is really processed just at the temperature of boiling water.

Mrs. Carpenter: Let's leave the question of temperatures and canning equipment now, since the subject is well covered in the revised edition of our canning bulletin.

What will you tell this woman who asks us about the use of salicylic acid in the canning of green beans, lima beans and corn?

Miss Stienbarger: There is only one thing I can tell her: We do not recommend the use of salicylic acid or any other chemical preservative in the home canning of beans, corn or any other food. If the homemaker uses a temperature high enough to sterilize the food, and seals it in air tight containers, she has safeguarded the food from spoilage.

Mrs. Carpenter: One more question and then we must stop. If a homemaker wishes to can foods in tin, what type of can should she use?

Miss Stienbarger: For some foods enamel tin cans are best, and for others plain tin cans should be used. And there are two kinds of enameled tin - one with a bright gold finish and the other, dull gold. The bright enamel is called "Sanitary" and the dull is described as "C" enamel. These types of enamel tins are described in the revised bulletin, which also tells the kinds of tin cans best for different foods.

Mrs. Carpenter: You will need that bulletin, homemakers, if you expect to do much or little canning this season. Ask for Farmers' Bulletin 1471, "Canning Fruits and Vegetables at Home". The name and number of the bulletin have not been changed, but there is new information in the revised edition. Write to your station or to the Department of Agriculture in Washington for a free copy. Goodbye, homemakers, until next Thursday.