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Homemakers' chat

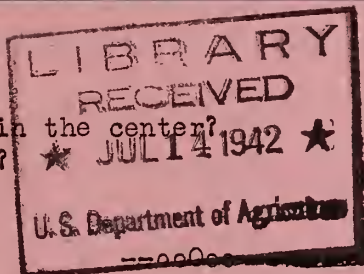
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U. S. DEPARTMENT
OF AGRICULTURE

Tuesday, July 14, 1942

1.7
In 34 h
QUESTION BOX

Why does bread become slimy in the center?
What makes canned peas tough?
Why mold on stored fat?



INFORMATION FROM

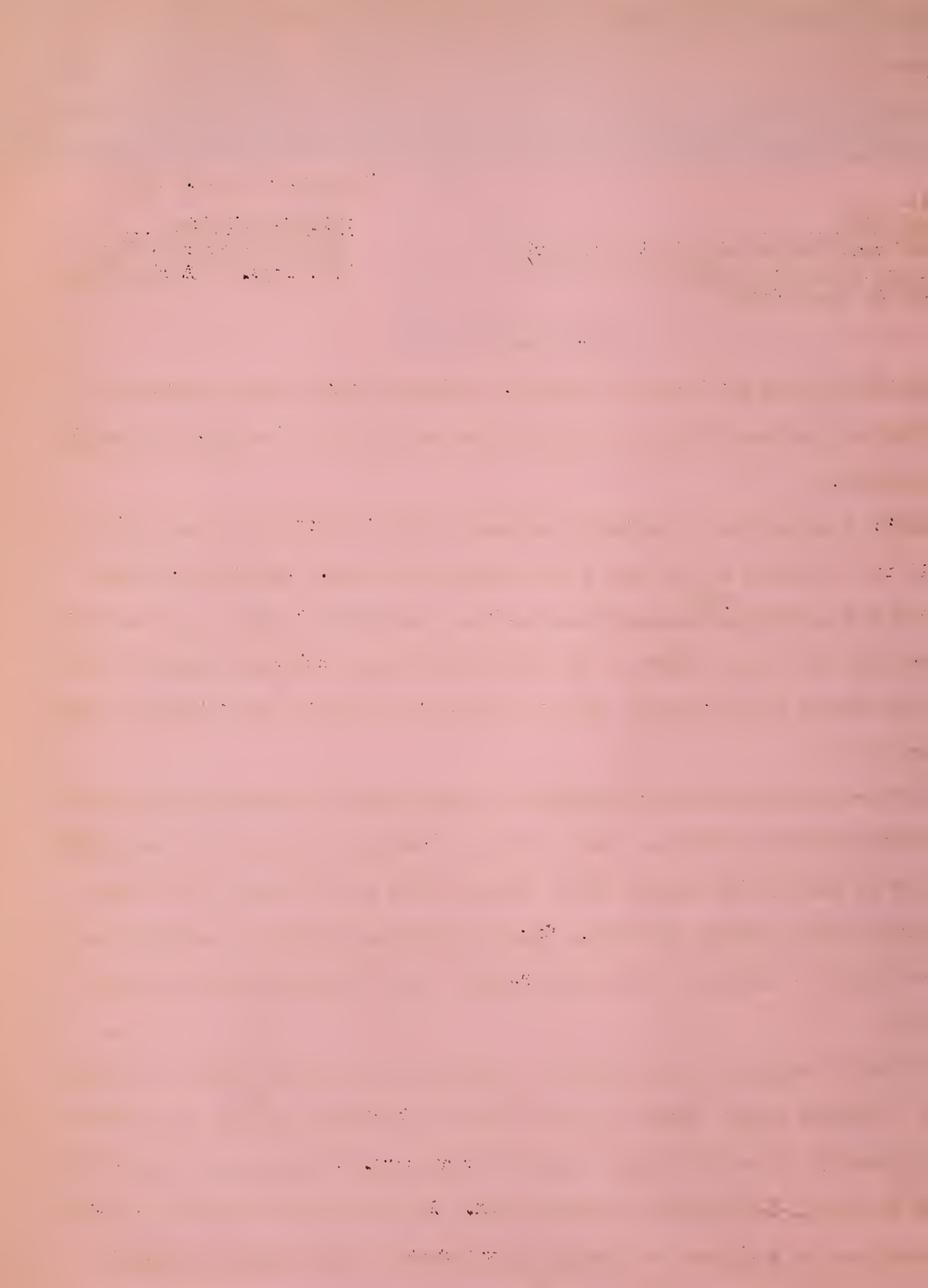
Food scientists of the
U.S. Dept. of Agriculture

Questions about food keep on coming in. Today an extra large collection of food questions are here waiting for answer from scientists of the U.S. Department of Agriculture.

Here's a letter from a housewife complaining that her homemade bread begins to spoil in the center of the loaf a few hours after baking. She writes: "Ever since the hot weather ^{began} /my homemade bread has been spoiling so badly that I have had to throw most of it out. Within a few hours after baking each loaf begins to get slimy and stringy in the center. Can you tell me the cause of this trouble and how to prevent it?"

Food scientists say this "ropiness" is a common kind of bacterial spoilage in bread that occurs most often in summer weather. Spoilage bacteria that are highly resistant to heat are the cause. These bacteria seem to be present in the flour or potatoes used in making the bread. Once the spoilage starts, it carries over from one baking to another in the liquid yeast, or on the bread board, or other utensils.

To prevent ropiness, first clean all traces of the bacteria from the utensils you use in making bread. Cracks and seams hold the bacteria and make them difficult to destroy. Clean the bread board with great care. Acid helps destroy this type of bacteria. Boiling also will kill them. So boil all the utensils you use in making bread in a mixture of vinegar and water—one part vinegar to 3 parts water. If you are using potatoes in making bread, leave them out in the next



baking. If you save liquid yeast from one baking to the next, throw out the yeast and start again with new yeast. If these precautions don't entirely clear up the spoilage, add vinegar to the bread dough itself. Add about 2 teaspoons of 90-grain white vinegar to the liquid ingredients for about 3 and a half pounds of dough. The vinegar in the dough itself should stop the action of bacteria in the bread.

By the way, be sure to keep your bread box in good condition in warm weather. Otherwise, mildew, ropiness, and other spoilage may survive in the box. Bread needs to be stored in a clean, well-aired, covered and ventilated box kept in a cool dry place. Wash the bread box at frequent intervals with hot soapsuds, rinse with boiling water, and dry thoroughly in the sun or in a warm oven. Throw away bread as soon as it shows signs of spoilage, and then wash, scald and sun the bread box.

Let's go on now to the second question up for answer today. This is a question about tough canned peas. The letter says: "Can you tell me why all the peas I put up this spring became tough in canning? They were young, tender and in perfect condition when I put them up. I followed the canning directions exactly as to time and temperature. But the result is a lot of green peas with tough--really tough--skins.""

Canning experts suggest that hard water may be the trouble. Very hard water containing calcium salts will toughen vegetable tissues and also make fruit sirups cloudy. You can soften hard water somewhat by boiling it, and then straining through several thicknesses of muslin. Or you can simply boil the water and let it stand until the mineral "hardness" settles to the bottom. Then pour off the clear water and use it for canning. In parts of the country where water is especially hard housewives sometimes save rain water for canning.

By the way, this hardness in water--these calcium salts--have advantages as well as disadvantages in canning. Their toughening action helps soft foods like tomatoes and some varieties of peaches hold their shape instead of going to pieces in the can.

Commercial canners now use some of these salts in putting up tomatoes in order to keep the tomatoes whole. Certain varieties of peaches that fall to pieces when heated hold their shape better if heated with a little calcium salts.

Now for a question about mold on stored fat. You know--every patriotic housewife knows--that fat is one of the foods to save carefully these days. Your country needs fat. Fat is precious. Keep all bits and leftovers of fat. Cook the fat down over slow heat, preferably over hot water, then strain and clarify it, and store it in a cold place like the refrigerator to keep it from getting rancid. Fat that becomes rancid cannot be made sweet and fresh again. And it won't do either for cooking or for making glycerin, in fact rancid fat won't do for anything but soap.

But let's get back to this letter. A housewife says: "The directions for saving fat all say to cover the fat and keep it in a cold place like the refrigerator. Every time I cover fat, it molds on top. It gets moldy right in the refrigerator. Can you tell me how to prevent this?"

If fat becomes moldy, it contains moisture, or the container that holds it is moist. When you cook fat down for storing, you should cook it until all moisture is out. And you should store it in a dry container. Since the air in an automatic refrigerator is dry, it may be wise to leave the fat uncovered unless you are sure both fat and container are completely dry. In an ice refrigerator, the air may not be dry so leaving the fat uncovered won't dry the surface. Just be sure that fat is dry before it goes in the refrigerator.

That's all the food questions today. Listen for more on Thursday.

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