1927

Taking the Guess Work Out of Meat Cookery

Elsie V. McElhinney
Iowa State College

Linda Spence Brown
Iowa State College

Follow this and additional works at: http://lib.dr.iastate.edu/homemaker

Part of the Home Economics Commons

Recommended Citation
Available at: http://lib.dr.iastate.edu/homemaker/vol7/iss2/6

This Article is brought to you for free and open access by the Student Publications at Iowa State University Digital Repository. It has been accepted for inclusion in The Iowa Homemaker by an authorized editor of Iowa State University Digital Repository. For more information, please contact digirep@iastate.edu.
Taking the Guess Work Out of Meat Cookery

By ELSIE V. McELHINNEY and LINDA SPENCE BROWN

The modern homemaker cannot take time to learn in the "school of experience" as did her mother and grandmother. With her activities, both social and economic, outside the home, she cannot learn the many processes of housekeeping by doing them innumerable times. She, therefore, demands that science determine within the laboratory the best methods of performing the different operations of homemaking and give her the results.

The mother of former generations tested her baby's bath water by putting her elbow into it. In the course of bathing five or six babies over a period of years, she had determined the proper temperature by the elbow test. The young mother of today has fewer babies to practice on—and so has less opportunity to develop the elbow method. She therefore uses a bath thermometer.

Likewise in her cooking processes—food is too costly and time too limited to permit her to learn "by experience" and cooking "by guess and by gosh" is rapidly disappearing. Along with the bath thermometer have come the oven thermometer, the sugar and the deep fat thermometers. The modern cook, if she be wise, uses all of these to insure a satisfactory product in her cooking. Cooking meat by thermometers is not generally practiced in the home, but our laboratory tests have demonstrated the efficiency of such procedure.

Meat is one of the most important and most expensive articles of the diet. To cook meat well is a fine art, and one of the most difficult to master without the aid of scientific practice. We always wonder how long it will take to cook a roast of certain size to a desired doneness. And we are often at a loss to know how much meat shall be purchased to serve a given number of people.

To answer these questions, some experimental work has been done this year in the large quantity cookery laboratory at Iowa State. Prime ribs of beef and smoked ham were the meats chosen for the experiments. A Taylor oven thermometer was used to regulate the oven temperatures and a right angle meat thermometer was inserted in the roast to determine the interior temperatures. The accompanying picture shows the manner of inserting the thermometer.

The following is a brief resume of the results:

Prime Ribs of Beef
1. Rare meat—interior temperature, 55° C. to 60° C. Large rare—60° to 70° C. Well done—above 70° C.
2. Searing—500° F. for 20 minutes.
3. Oven temperature for finishing the cooking process, 250° C.

Method of Inserting the Thermometer

4. Average of 11.4 minutes per pound (cooking period).
5. Average percentage loss during cooking—22.6.
6. Average percent of sliceable meat calculated to meat as purchased—111.1.
7. On an average of 6.2 ounces of sliceable meat can be obtained from each pound of prime ribs of beef as purchased, approximately three two-ounce servings to the pound.

Hams
1. Searing—300° F. for 30 minutes.
2. Oven temperature for finishing cooking—257° F.
3. Average of 14.8 minutes per pound (cooking period).
4. Remove ham from the oven when the interior temperature reaches 70° C.
5. Average percentage loss during cooking—21.5.
6. Percent (average) of sliceable meat calculated to the meat as purchased—466.2.
7. On an average of 66.4 ounces of sliceable meat can be obtained from each pound of ham purchased, approximately four 16.6 ounce servings to the pound.

To sum up briefly these results:

Beef:
1. One pound of prime rib roast as bought (with bone in) will yield 6.2 ounces and will serve three people, giving a two-ounce serving.
2. Sear the roast at 500° F. for 20 minutes; then reduce the temperature to 250° F.
3. Allow 11 to 12 minutes for a pound for cooking roast medium done.
4. If meat thermometer is used, the following temperatures are given: Rare—interior temperature 55°-60° C. Medium—interior temperature 60°-70° C. Well done—interior temperature 70°-78° C.

Baked Ham:
1. One pound of ham as bought with bone will yield 6.4 ounces of sliceable meat. This will serve approximatively four people, giving 11.8 ounces per serving.
2. Sear ham at 300° F. for 30 minutes and then reduce the temperature to 250° F.
3. Allow 14-15 minutes per pound for cooking. This will give you a well-done ham, which will slice nicely without crumbling.

If a housewife has much roasting of meat to do, she will find a meat thermometer of great assistance. Every cook should have an oven thermometer, however, as they can be purchased for about two dollars and are invaluable in all oven cookery. With an oven thermometer and a kitchen clock, the homemaker can get most satisfactory results if she will follow directions outlined above. She will be able to figure accurately how much meat she should buy to serve a given number. Nothing so baffles the ordinarily even disposition of a husband as having his favorite prime rib of roast over or under done. The wise wife will, therefore, take the guess out of the meat cooking by using a thermometer and watching her clock—thus saving herself time, money and effort and her husband his good disposition.

Games for Everyone

Here is a game that will prove a desirable change for those who have not yet enjoyed it:

One of the players should own a flashlight, or if he can make a spark with flint and steel, this will do. The darker the night the better the game. The player with the light is given three minutes to hide himself somewhere within suitable bounds. He then flashes his light for a second, and the others immediately endeavor to catch him. Naturally the boy with the light drops to the ground and crawls away from the danger zone as rapidly as possible. When he feels safe, he again flashes his light.

The one who catches "bright eyes" takes the light, while "bright eyes" becomes one of the hunters.

This game gives every one plenty of healthful exercise and pleasure as well.

YOU ACTED RIGHT

No doubt you feel

There's something in this life that's real
And that is right!
'Tis one great fact
That all were made in life to act and to act right.
I love the right
The good, the real, the infinite
Created right!
When you did good—
Doing the best you could
You acted right.

—Author unknown.