

Beef-juice contains albumen and other proteids, mineral salts and extractives. The albumen contained in meat is similar to the white of egg. The effect of heat on it is that it hardens it and renders it more difficult of digestion. Raw beef is more easy of digestion than cooked beef. In cooking meat our object is to keep in as much juice as possible, and in order to do this it requires to be subjected to a very high temperature at first in order to coagulate or harden the outside albumen, and make a coating which will keep in the juices. When this is formed over the entire surface of the piece of meat, the temperature may be lowered and the cooking process continued more slowly to prevent the hardening of the albumen throughout the entire piece of meat. If the application of a high temperature is continued throughout the whole process of cooking, the meat will be dry and hard instead of tender and juicy. While we know that the digestibility of the outside albumen is destroyed to a certain extent by the intense heat, yet, for the sake of the larger portion contained in the inner juices, it is necessary to harden that on the outside.

In cooking meat by methods such as broiling, roasting, boiling and frying, the object is to keep in the juices. In stewing, the juices are partly extracted and partly retained, this may be done by putting the meat in cold water and bringing quickly to boiling point, then simmering gently for a long time at a low temperature, or by cooking in a fireless cooker. In soup-making the object is to extract the juices, so the meat is cut up into small pieces and allowed to stand in cold water for some time to draw out the juices. When put on to cook it should not be allowed to reach a higher temperature than simmering (180 degrees F.).

Every housewife is aware of the fact that some meat is tough and some tender, but not everyone can tell the reason why such is the case. The more a muscle is used the tougher the connective tissue and fibres in it become; it absorbs more food material and makes rich, juicy meat. The muscles which are used very little yield tender meat. Hence we find that from along the back of the animal and the upper part of the leg the tender cuts are obtained which are used for steaks and roasts. From the neck, shank, shin and other parts much used, the pieces suitable for boiling, stewing and soups are obtained.

#### BROILED STEAK

Time:—1 In. thick, allow 5 to 6 minutes

1½ " " " 8 to 10 "