

Food, in order to replace the waste of the body, needs contain such elements, in combination, as are found in the body substance; these complex substances are found in the material world around us. There are various ways in which changes in the natural condition of these material substances may be brought about so as to make them better adapted to satisfy hunger and replace waste. The principal of these is by cooking. In cooking we apply heat and often moisture to food products in such manner that they are made more digestible (soluble and diffusible) either directly, as when starch is changed to dextrine, or tough and fibrous substances are softened and thus rendered easily divisible; or, indirectly, through the development of new and pleasing odors and flavors that excite the flow of the digestive fluids. Cooking also sterilizes food.

THE KITCHEN RANGE

Fire is one of the first essentials in cooking food. Fire for this purpose is usually confined in a cooking stove or range. Outside the modern accessories of warming oven, water tank, front or coil, the common cooking range consists of a rectangular iron box divided into three compartments, viz., fire-box, ash-box and oven. The fire-box is lined with fire-brick and is separated from the receptacle below, which holds a pan for waste products, by a grate. The oven occupies the rest of the box, and with the lids or covers on the top is the principal feature of the range. Means are provided to convey hot air entirely around the oven before it enters the flue or chimney. The fire is regulated and controlled by dampers; these admit air to the burning fuel, check the strength of the draft (of air) and control the circulation of heat about the oven.

HOW TO BUILD A FIRE

The ash-pan is empty; the flue about the oven clean—the ash-pan needs be emptied each day and the flue cleaned each month—the draft below the fire-box is open, the damper that opens or closes the flue is drawn, affording free draft