

Bile, formed in the hepatic cells, assists in the emulsification of fats and promotes their absorption and stimulates the secretions of the intestinal glands. It also serves to prevent putrefactive changes in the food. The digested food or chyme is absorbed by the blood as the food passes through the intestines, the undigested portion entering the large intestines.

THE CHEMISTRY OF COOKING.

The changes induced by cooking are manifold, some increasing, others decreasing the digestibility of the food, while others only serve to render the same more tasteful by the production of certain substances which pleasantly excite the palate.

Meats are more readily digested when "underdone" than well cooked, though undoubtedly very tough meat by its disintegration is rendered more tender and easy of mastication by the process. Certain empyreumatic substances are developed by roasting and boiling meats which give agreeable taste and savoury odours. These act rather as stimulants than nutrients, and render the food more palatable than in the uncooked condition. Roast beef, beef tea and soups owe their piquancy to these compounds. Eggs and milk are rendered less digestible by cooking, for the reason that coagulated albumen is not readily acted upon by the digestive fluids.

On the other hand, most vegetable foods require cooking to increase their digestibility. The cells containing the starch in the raw material have walls of cellulose, difficult of digestion. By cooking, this cellulose is softened and the starch grains are burst. The contents then are more completely exposed to the digestive fluids.

In summing up I would offer the following remarks and deductions. Their importance, I think, merits your consideration.

1. That in the choice of viands care should be taken that the diet consists of both vegetable and animal foods. The proportion of nutrients may roughly be stated at three times the weight of carbohydrates to equal weights of fats and albuminoids. Excess of any one nutrient is likely to be injurious to health.

It would seem that nature teaches what science confirms—a proper combination of materials. The Irishman with his potatoes (carbo-hydrates) and buttermilk (albuminoids), the Englishman with