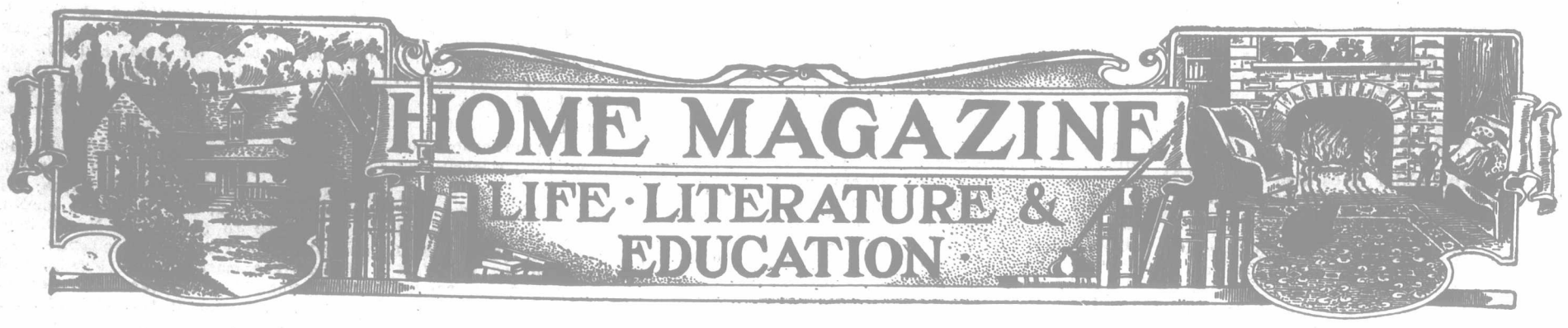

Bread and Bread-Making

By J. A. T.

From the character of bread offered for premiums at the Exhibitions of Agricultural Societies, the conclusion is reached that very many families have hardly yet learned what good bread is, and that there is a wide margin for improvements in the methods of bread-making. No subject is certainly more important, as it has a direct bearing upon the health and consequent happiness of households, and it should receive the attention which it deserves.

Besides the manipulating processes, the manufacture of good bread involves some other considerations of no secondary importance. It is useless to attempt its production with imperfect or bad materials. The flour or meal must be sweet, and from fully-matured grain. During every year the market is crowded with flour of a damaged character. Severe rains and long-continued moist weather, which prevail in some localities, are unfavorable for securing the grain crops, and much of it germinates in the fields and barns, and is thereby rendered unfit for bread-making. In the germinating process, diastase is formed; reaction upon the starch of the flour in the baking transforms it into dextrine and sugar, and prevents the formation of light, spongy bread. Flour from such grain will afford only sticky, glutinous, heavy bread, no matter how much care and skill is bestowed in the making. Fungous growths also appear in wheat injured by moisture, and the flour becomes "musty." In bread from such materials, besides its repulsive appearance and unpleasant taste, a chemical change has occurred which renders it positively injurious as an article of diet. The nutritive properties, the gluten, especially, has undergone decomposition, and new bodies have been formed which are not of an alimentary nature. Impaired digestion, derangements of the bowels, follow the use of bread from such flour. The poor, who are unable to pay large prices for choice, selected brands, suffer greatly from this source, and much of the bread they are compelled to eat is well calculated to weaken rather than sustain the vital functions.

During the most favorable seasons, thousands of bushels of wheat are made into flour, which, owing to local causes, delay in harvesting, or storage in large bodies, is rendered entirely unfit to be used as food. A portion of this is employed in the arts; but the great bulk goes into families, and feeble children, as well as adults, are forced to consume it, much to their injury.

There are several methods of testing wheat flour, which are available to purchasers, although none of them afford positive indications. Good flour is not sensibly sweet to the taste, but bad flour often is. This is owing to the presence of glucose, resulting from chemical changes in the grain, by partial malting. Extreme whiteness is a good indication, as changed grain is discolored in the process of change. Good flour is tenacious and unctuous to the touch; when thrown against a wall it should adhere, and not fall readily. It does not feel crispy, and when formed into a ball in the hand, adheres together like a ball of snow. To the sense of smell it is sweet and pleasant, and when taken into the mouth forms a glutinous mass, free from all disagreeable taste.

The nutritive quality of flour depends upon the proportion of gluten which it contains. In the best specimens, ten or twelve per cent. is found. A barrel of flour contains about twenty pounds of gluten, and one hundred and fifty of common starch. The starch can easily be washed out of a small quantity of flour by placing it in a bag of cotton cloth and kneading it under a stream of water. The gluten remains upon the cloth, and is a gray, viscid, tenacious mass, insoluble in water. It is the strength-giving principle of the flour, and in a three-pound loaf of bread there should be at least three ounces of this substance.

Bad bread is by no means always chargeable to imperfect materials. Hundreds of families who procure and use the most perfect flour, subsist upon bread of a very inferior quality. Some housekeepers assert that they can have no "luck" in bread-making; their loaves are always heavy, or sour, or doughy, or burnt, and they give up experimenting and become discouraged. As with good materials everyone can prepare good bread, there should be no want of success.

Success depends in a great measure upon good judgment, faithfulness, and patience in working, and in using the right materials. It is quite preposterous to present a filed recipe and set it up as an infallible guide in this department of household labor. The method adopted in my family, which affords perfect white bread, is as follows:

Sift five pounds of good flour and put it in an earthen pan suitable for mixing and kneading. Have ready a ferment, or yeast, prepared as follows:

Take two potatoes the size of the fist, boil them, mash, and mix with half a pint of boiling water. A fresh yeast cake, of the size common in the market, is dissolved in water, and the two solutions mixed together and put in a warm place to ferment. As soon as it commences to rise, or ferment, which requires a longer or shorter time, as the weather is warm or cold, pour it into the flour, and with the addition of a pint each of milk and water, form a dough, and knead for a full half hour. Form the dough at night, and allow it to stand until morning in a moderately-warm place, then mould and put in pans and let it remain until it has become well raised, then place in a hot oven and bake.

The points needing attention in this process are several. First, the flour must be of the best quality; second, the potatoes should be sound and mealy; third, the yeast cake is to be freshly prepared; fourth, the ferment must be in just the right condition; fifth, the kneading should be thorough and effective; sixth, the raising of the dough must be watched, that it does not proceed too far and set up the acetic fermentation and cause the bread to sour, seventh, after the dough is placed in pans, it should be allowed to rise, or puff up, before placing in the oven; eighth, the temperature of the oven, and the time consumed in baking, have much to do with the perfection of the process.

If this method is followed, with the exercise of good judgment and ordinary skill, white bread of the highest perfection will be uniformly produced.

Unfermented, or "Cream-of-tartar" bread, is never placed upon the table in my family. There are special dietary or sanitary reasons for its exclusion. All "quick-made" bread is usually prepared in haste, and the adjustment of acid and alkali is apt to be imperfect. Not one pound in a hundred of cream of tartar sold in the market is free from adulteration. If tartaric acid, or cream of tartar, is used with the soda, there remains in the bread after baking, a neutral salt, the tartrate of soda, which is diffused through the loaf and is consumed with it. This salt has aperient properties—in fact, is a medicine; and thus, at the daily meal, those who use bread made with "powders," or with cream of tartar, are taking food and medicine together.

It is a noticeable fact that seldom specimens of whole meal, wheaten, or corn bread, are offered for exhibition. It is presumed that the premiums of agricultural societies are intended to include these forms of the "staff of life," and it is a matter of regret that none are presented. There is manifestly a perversion of sentiment, or fashion, as regards bread made from the unbolted meal of wheat, which ought to be corrected. Why, upon the tables of farmers, the white-flour loaf should usurp the place of the darker, but sweeter and more healthful one from the the whole meal, is a question of no little interest and importance.

If there is any form of bread more delicious than another, or more conducive to the sustenance of the physical and intellectual powers, it is that from unsifted wheat meal; and every owner of land should include this grain among his crops, that he may have the bread fresh and in its highest perfection. A generous dressing of finely-ground bone will put almost any field in condition to grow a profitable crop; and in these days, when flour of the better sorts commands such enormous prices, there seems to be no good reason why farmers should not resume the cultivation of wheat in all wheat-growing States.

Corn bread is also excellent, and most nutritious. It contains a large amount of oil not found in other grains, which adds greatly to its value. There is far too little of this used in our families. The old-fashioned dish of corn "pudding and milk" is now nearly as obsolete as that of "bean porridge"; and may we not, with much reason, attribute the physical degeneracy of the present race to the radical changes in the forms of food? Regarding the matter from a chemical and medical point of view, it certainly would be difficult to select better or more healthful forms of human nutriment—forms so well calculated to build up and sustain a "sound mind in a sound body," as the two named above, once so popular, but now banished from our tables. They were easy of digestion and assimilation, and contained all the chemical substances, or organic and inorganic constituents needed to nourish the body and mind. Certainly, white-flour bread, cake, and condiments, are poor substitutes for the sensible but plain dishes of our fathers and mothers a half-century ago.

The Dietetic Value of Fruit.

[A paper given by Mrs. Alex. Cuppage, at a meeting of the Orillia Branch of the Women's Institute.]

Fruits in some form should constitute an essential part of our everyday diet, for the following reasons: (1) Because they are appetizing, and we like them. I place this reason first because it is the least reason that can be given.

Everyone in a normal condition enjoys fruit, and the natural appetite is a true guide to the needs of the body. Hunger and thirst are sensations wisely given, and when not abused, direct us in the path of health, that is to say, happy living, for good health is not only wealth, but happiness also. If one has a good constitution, and is temperate in his or her habits, and leads a clean, pure, and wholesome life, his or her appetite is a good guide that may be implicitly trusted. Under such conditions we all like fruit, and should eat it in the serene confidence that the thing one likes in the way of food is the thing one needs most. In satisfying our natural appetite for fruit, if we use such fruits as are well matured, juicy, and fine flavored, we receive a real pleasure with the least possible digestive effort.

(2) Because they help to keep our bodies in a good condition. Our ordinary fruits contain the following substances or compounds in greater or less proportions: Water, sugar, acids, oils and esters, proteid, pectose, cellulose, or vegetable fibre, and ash, or mineral salts. These substances are all essential constituents of a perfect and well-rounded diet. While the actual nutrient value of fruit is not so high, its dietetic value is very great.

The two qualities which most serve to render fruit wholesome are their acids, juciness, and flavor. The juice is largely water, but it contains the sugar and acids of the fruit; and if these are present in large quantities and in the right proportions, the fruit is agreeable and refreshing. Flavor also adds to the quality of the fruit.

The flavor of the fruit is due, in part, to the acids and sugar they contain, but more largely to the volatile acids and esters. Fruit acids and esters, when taken into the body, have a tendency to lower the temperature of the blood, and thus correct or allay any slight feverishness that may exist. They also tend to keep the organs of secretion, like the liver and kidneys, normally active. The pectose and cellulose of fruit correct a tendency to constipation, and signally aid in keeping the whole digestive tract in an open, and healthy condition.

Again, if children were given free access to fruits I think there would be less indigestion or bowel troubles. After a child is two and a half years old, stewed fruits should be freely used, especially apples, prunes, figs, and peaches. For many children, all ripe fruits are a laxative, and for this reason alone, if for no other, they are valuable aids in regulating a diet that is frequently much too concentrated or too starchy, keeping a child dull, sluggish, and unhappy.

The sub-acids of fruit are highly antiseptic to our bodies, and tend to prevent disease germs from finding a lodgment, and developing in our systems. As to what kinds or how much fruit we should eat, there is only this answer: Eat the kind of fruits you like, and can best afford, and eat just as much as your conscience and good judgment will allow you. When to eat fruit is a less personal question, and the following general advice may be of service: (1) Fruit should be eaten when you eat other food. Although fruit is easily digested, it is not wise to be constantly and frequently putting into our stomach foods of any sort. By this practice, the strongest stomach may be ruined, and refuse to take the best of food. (2) When fruit is eaten before breakfast, say, an orange or apple, its cooling and laxative effect is likely to be at its maximum. (3) Fruit is an excellent thing to be taken with the midday lunch. One or two slices of bread, taken with an apple, is better than three without an apple. (4) Fruit of any sort eaten after dinner adds largely to the pleasure of the palate, while adding little to the tax upon the digestive organs, which are more likely to be overtaxed when there is no fruit in view. (5) If it is ever desirable to partake of a late supper, it is well to remember that an apple, a pear, a peach, an orange, some plums, or a bunch of grapes, will be less likely to haunt our late slumbers, than oysters, meat salads, ice cream, potato salads, rich cake, pies, and other sweetmeats.