SELECTED PAPERS

"The Place of Milk in the Diet"

Milk is a food which is suitable to all the seven ages of man. No other food plays so unique and important a rôle in nutrition. That is apparent when we realize that nature intended milk to be a complete food for some time after birth for the young of the species it is designed to feed. Where substitution is sometimes necessary, as in infant feeding, cow's milk is the one most easily adapted to human use and most easily obtained.

As growth proceeds, milk needs to be supplemented with other foods, especially those containing iron and supplying energy and bulk, but throughout life milk is one of the essentials of a good diet.

It contains a building material, protein, that is the most completely digested and absorbed of all food proteins. It is also an economical building material produced at less expense than meat or eggs, and best utilized by adults when part of a mixed diet.

It combines well with and supplements the protein of cereals, making them more valuable for building; and because of its high mineral content, it is excellent for building bones and teeth, especially when accompanied by sunshine, egg yolk, cod liver oil, or some other source of Vitamin D.

Milk also offsets a mineral and vitamin deficiency in sugars, fats, and white flour products which are found so plentifully in the modern diet, and it leaves an alkaline residue in the body.

A sugar in milk called lactose supplies energy. It is easily assimilated and not as sweet as cane sugar and so does not dull the appetite for other food as cane sugar does.

In addition, milk also contains five of those indispensable food substances — Vitamins — which are to food what the spark is to the automobile engine. It is particularly rich in Vitamin A which is necessary for growth and health and gives us resistance to disease, especially of the respiratory tract. It is also an excellent source of Vitamin B, needed for steady nerves and good digestion. The amount of Vitamin C is somewhat variable, being influenced by the diet of the cow and by heating. Some Vitamin D is also present, but it is best reinforced by sunshine.

It is interesting, however, to know that experimental feeding of cows has shown that the amount of these vitamins can be greatly increased in milk. The amount of Vitamin D, for example, has been increased to such an extent that children were cured of rickets when given milk as the only source of this Vitamin.

But the problem of improvement in feeds goes back to the soil and a study of how to fertilize crops to give the cow the best raw materials for the task of making a better milk. So far as digestibility is concerned, some investigators think it means much to certain infants, fed on milk, whether the milk coagulates in a soft, flocculent form, or not, in digestion; in other words, whether it is a soft or hard curd milk, which can be determined by test. Buttermilk and skim milk are two economical foods that can be used in many ways in the home, but children need whole milk, containing the fat and the protective Vitamin A which is found in it. So don't take the cream off the top of the bottle for the coffee and give the children the skim milk.

Because of its numerous good qualities, nutritionists are agreed that a quart of whole milk a day should be the basis of a child's diet until it is eighteen years of age. There is no substitute for it. During adult life, one pint a day should be taken. It must not necessarily be taken in the liquid form as a beverage, for milk is milk in whatever form it is taken.

To fulfil its intended mission for children in particular, milk must be clean; must come from healthy cows; and be handled in a cleanly manner by people who are not disease carriers. Tuberculin-testing of cows reduces the hazard from tuberculosis, but does not safeguard us from other disease producing germs which may find their way into milk, such as those of scarlet fever, undulant fever, and other organisms.

To make milk safe, unless it is sold as certified milk, it should be pasteurized or boiled, bringing it quickly to the boiling point and boiling it for two minutes. Pasteurization, which is compulsory in the city, consists of heating the milk to 145 degrees for 30 minutes, then cooling quickly. If milk has to be pasteurized at home, a double boiler and a thermometer to test the temperature of the milk, are all that is necessary. The milk should then be cooled quickly and kept cold, lightly covered and in a place free from odours, until it is used.

Milk so handled will be free from objectionable flavours and is health-giving to both young and old.

Don't forget that "A quart a day keeps the children at play."

Foods for Storage

By Mrs. James Patterson, New Hamburg

Canning, curing and storing all come into play with precision in the thrifty homemaker's round of activities. To prevent waste in perishable fruits and vegetables becomes an art with her. Saving energy and fuel must be considered, and to produce these products at their best calls for prompt action in their turn. To have rows of canned fruits and vegetables stored on shelves in a cool, dry, dark place that will keep indefinitely requires forethought and skill; no half-done, slipshod methods work out here.

You may save fuel and energy by covering with earth such vegetables as: carrots, parsnips, beets and cabbage, (the latter may also be made into sauerkraut). Such very perishable vegetables as corn, beans and peas can be saved by a process of canning with heat, and to get best results, these three must be gathered just at the proper time.

Particulars as to methods will be found in Bulletin 252.

With a furnace in the basement, it is difficult to keep root vegetables and cabbage firm, so a box in a cool, dark corner, with layers of vegetables and earth and the top well covered with earth, helps. We prefer the outdoor pit for carrots, beets, parsnips and cabbage. Dig a shallow flat trench, about eight inches deep, where the earth is slightly sloped for drainage, and place the vegetables in this trench. Cabbage should have the roots left on and turned upward to prevent earth getting into the heads. Pile all the vegetables, forming a mound to a raised peak; then put a layer of straw or leaves over all and pack earth four to six inches deep over all, leaving a space on the top open and just cover with a board, (this to let moisture escape, caused by heating within). When winter sets in, remove the board and cover with earth. Supplies may be taken out of here by opening the side of the pit on mild days and carefully closing again. Vegetables have been kept successfully in this way till the middle of May.

September and October are the months for old hens to be disposed of. At present prices of live fowl we think it pays to can them for the family use. The birds should be dressed, thoroughly washed, singed and drawn and left to cool at least six hours; or left over night is better. Cut up as for stew, leaving the bone in wings, legs, etc., pare with a sharp knife all meat off breast and pack all into sealers with a teaspoon of salt to the quart, (no water must go inside the sealer); seal tight to retain flavor, place sealers in cold water in a boiler and proceed as for corn or beans, boiling three hours, (if very old hens, boil one hour longer). Remove from the boiling bath and be sure the tops are tight. Beef and pork are done in the same way, cutting all meat off the bone in suitable size for serving. Pack in quart sealers, with one teaspoon salt, (no water inside sealers), and after the three hours boiling, remove from the hot bath making sure they are sealed tight. We have repeatedly stated, **to seal tight.** This is very important as the tops occasionally loosen during the process of boiling.

Someone might be interest in our proved Sugar Curing for hams and bacon. For one hundred pounds of pork, mix four (4) pounds strong salt, one-half (½) pound black pepper, one half (½) pound brown sugar, two (2) ounces of Saltpetre. This must be mixed thoroughly and rubbed on hams and bacon and let hams and bacon lie on a board or table for from ten to twelve days. If hams each weigh twenty-five pounds or over, this mixture should be rubbed on twice, seven days apart. Now it is ready to hang up to dry and smoke; or liquid smoke may be applied. Dust powdered borax over the meat before hanging away for summer use, as this prevents flies from working on the meat and meat need not be placed in bags where mould easily develops.

The making of sauerkraut is pretty well understood. I just want to add that the kraut will go on its process of curing after it is really sauerkraut unless it is kept in a very cold place after it is ready for use. If in a wooden tub, it may be put to freeze and the salt will prevent solid freezing. We like to take the sauerkraut and place it in sealers with small pieces of fat pork (fresh), with sauerkraut juice included, seal tight and cook for two hours. We do this in cold weather when fires are required, and so save fuel in summer, as it only requires rewarming.

I close with still another thought. Tomato time is here, and I would like to urge that tomato soup in goodly quantity be on the shelves. Our recipe—one heaping (eleven quart) basket of well ripened tomatoes, two bunches of celery, two large onions, (put celery and onions through food chopper). Scald tomatoes, cold dip and peel; then with thumb and finger remove all seeds as you break up the tomato; this is easily done as the seeds with a liquid substance are in pockets. Now, the solid tomato flesh will need but one-half hour boiling with celery and onions added, after which press the cooked product through a colander, place again over heat to boil a very few minutes, adding one-half cup butter, small half cup salt, one cup brown sugar, and three-quarter cup flour smoothed in water. Pour into sealers and seal very hot. When serving, add rich milk in equal quantity, with a quarter teaspoon baking soda, heat together and serve.

There is much that we can do,
Help to see each other through,
Give fresh courage to a heart,
Always try to do our part.

There is wealth enough for all
Why be money-mad or small?
That is not the way to live,
Learn to labor, love and give.

Now get busy, do your best,
Doing, gives pleasure, zest,
This and more you sure can do,
Now my friends, it's up to you.

Fruits and Vegetables in the Modern Menu

By Gertrude A. Gray, Nutrition Specialist

Modern investigation has shown the wisdom of giving increased attention to minerals, vitamins, and roughage, in the modern menu. It is interesting to note that fruits and vegetables meet these important requirements as well as certain others and so should be used liberally in the diet — fresh, cooked, or canned.

If used uncooked, there is naturally no loss of vitamins or mineral matter but some must be cooked to be palatable. When this is the case do not prolong the cooking beyond the point where the product is just done. Heat and oxidation reduce the vitamin content of the food and usually affect the colour unfavourably, while long cooking in water dissolves out a larger proportion of the mineral matter.

In vegetable cooking especially, aim to retain as much of the original color and texture as possible. It may seem a bit odd to talk of the aesthetic value of cabbage or carrots, but appearance is important, as recent food studies have shown that colour, flavour and food value go hand in hand in the food world, and well prepared vegetables occupy a high place in food society. The green vegetables particularly are highly esteemed today; the greener the leaf the higher the iron content and the amount of the protective food substance, Vitamin A, which helps to give us resistance to disease. Yellow vegetables are also valuable for this vitamin — tomatoes too — here the yellow is masked by the red. In addition we get Vitamin B and some C from vegetables, except the dried ones, peas, beans, and lentils.

A good rule is to use two vegetables a day in addition to potatoes. This is easy with the modern popularity of salads, which have the added advantage of using many vegetables and fruits uncooked. In justice to our old friend the potato it should be said that one a day, preferably baked, should even form part of a reduction diet because it is not as high in energy value as white bread or sweet things of which the "would be" reducer is usually fond, and it is a good source of iron and Vitamins B and C.

When cooking vegetables in water, the observance of a few simple rules and, above all, avoiding over cooking, are necessary. In the green vegetables and those of the strong juiced class—turnips, cabbage, cauliflower, and onions, the best way of cooking them is in a large amount of boiling, salted, water, in an uncovered dish. The mild juiced vegetables, as carrots, peas, celery, etc., may be cooked in a small amount of boiling, salted, water and covered. Where fuel is a consideration several vegetables may be cooked in the same kettle of water by tying each separately in a piece of the new waterproof paper. This also conserves the food value as any liquid from the vegetable is retained, and may be used in soup or sauce.

Baking and steaming are also good for many vegetables. The firm skinned vegetables may be baked on the rack of the oven while others may be cut up and put in a covered container with half a cup of water, for baking. When scalloped or used in chowders, they are particularly good for supper or luncheon.

All our vegetables, except sweet corn, and all fruits except plums, prunes, and cranberries, leave an alkaline residue in the body and so help to maintain a normal condition of the blood. Many people think because a fruit has an acid taste that it leaves an acid residue in the body and so refrain from taking the very things that should form part of a normal diet and are essential to keep one well.

Variety adds interest to foods so try new combinations of fruit juices to satisfy the family's thirst—more broiled and baked vegetables and fruits, more salads. And don't forget the importance of attractive colour combinations when preparing a vegetable plate—a salad—or a fruit cup.

Clothing Economies

By Miss E. M. Collins, Clothing Specialist

There is real need for definite study of our clothing problem as statistics seem to indicate that even with reduced incomes people are buying what they can with what they have; but they are buying more cautiously, anxious to get the most value for their money. At the same time many stores are carrying cheaper types of merchandise than ever before. This applies to ready-made garments, yard goods, hosiery, shoes, and other articles. Few homemakers seem to be aware that much cheapening and skimping are being practised in every line. They fail to note the closely clipped seams, the poor edge finishes on garments, the overweighting or the excess stretching of yarns.

Stockings are the most frequent purchase for the wardrobe therefore with the present price war on hosiery it is important to be able to judge the quality of the yarn and the difference between 45 gauge and 54 gauge and know what service can be reasonably expected from the 45 gauge with its cheaper value.

In thinking of clothing selection one should not lose sight of clothing maintenance: which includes its general care by laundering, cleaning and pressing, thus giving each garment a longer period of service as well as always making an attractive appearance. Frequent brushing, and prompt attention to spot removal; making little repairs as soon as possible, and storing with prudence, are factors of value. The life of clothing is lengthened and the amount of repair is lessened. Such renovation as will continue the life of a good garment or make a useful article for another should be a part of the economy of every household.

By selecting clothing so that a harmony of colour combinations can be maintained will reduce the cost of the wardrobe and yet on each and every occasion a pleasing result will naturally be the outcome of careful selection.

The average woman cannot indulge in the doubtful joy of a costume made for a few special occasions, but must bring her ingenuity to bear on a series of costumes sufficiently elastic in scope to provide for all her

No outsider can decide another's expenditures on social needs.