MILK
MILK FOODS and DAIRY PRODUCTS
HELPFUL LESSON MATERIAL FOR STUDENTS
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MILK

Milk the original diet of the race. The oldest records, written in Sanskrit and preserved in India, reveal that milk was an important food 6,000 years ago; that domestication of cattle began somewhere between 6,000 and 10,000 years ago. In 2,000 B. C. cows were worshipped in Babylonia, and Hathor, the goddess who watched over the fertility of land in Egypt, was shown as a cow. The “Promised Land” of the Old Testament is described as “a land flowing with milk and honey.” There are over 50 references to milk and cows in the Old Testament alone! Wall panels and mural paintings from excavated ruins tell stories of milk and dairy products.

The importance of milk. Let us learn about the importance of this economical beverage-food which has been called “Nature’s most nearly perfect food”—most nearly perfect because it contains so many of the nutrients which our bodies need, and supplies them in such easily available form. For example, it contains proteins, carbohydrates, and fats which furnish food energy for supporting the energy demands of the body for work and play.

Calcium and phosphorous are important in our diet, because they supply the materials for strong bones and sound teeth, and in addition contribute to the proper functioning of other parts of the body as well. It has been found that the requirements of calcium in the body are fulfilled when a quart of milk is included in the daily diet.

Then, there are the all-important vitamins, of which milk is the source of three:

Vitamin A, which is found so abundantly in milk, is an aid in maintaining the resistance of the body to infection in general. If it is withdrawn from an animal’s diet, the animal ceases to grow, and infections of the mucous membranes of eyes, ears, and other parts of the body develop more easily.

Vitamin G, the other vitamin found so plentifully in milk, is essential to good nutrition. In other words, without this vitamin, you might eat plenty of other nutrients which your body needs, but still not be well nourished.

Vitamin B, for which milk is a good source, is also important to good nutrition.

Is it any wonder that children need a quart of milk a day and that adults should consume at least a pint!
MILK FOODS AND DAIRY PRODUCTS

Milk foods and desserts. Did you ever think of all the different foods which are milk products, or which we ourselves prepare with milk? Milk and milk foods appear in our menu from breakfast to dessert. In selecting recipes, choose often those requiring the use of milk. There are meats prepared in milk, cream soups, creamed vegetables, milk drinks, and many desserts made with milk, such as rennet-custards, boiled or baked custards, cornstarch puddings and ice cream.

RENNET-CUSTARDS

Rennet-custards have all the nutritive qualities of milk . . . and more. The rennet enzyme contained in both "JUNKET" Rennet Tablets and flavored and sweetened "JUNKET" Rennet Powder coagulates milk, thus transforming it into easily digestible rennet-custards, which are both delicious and appealing to the eye.

Use lukewarm milk. In preparing rennet-custards, it is very important that the milk be just LUKEWARM—not hot. The milk should be tested on the wrist, just as you would the milk in a baby's bottle—it should feel neither hot nor cold to the wrist.

Use only raw or pasteurized fresh milk which should never be scalded or boiled. When lukewarm, the milk should be immediately removed from the stove. If the milk accidentally gets too hot, cool to LUKEWARM before adding the rennet tablets or rennet powder. Do not use condensed or evaporated milk since it has been preheated and will not make a firm dessert.

Both rennet tablets and flavored and sweetened rennet powder have the power to coagulate milk.

Rennet powder contains the rennet enzyme with sugar and pure flavor already added, and is used for making an endless variety of rennet-custard desserts. To make rennet-custards with rennet powder, it is simply added to LUKEWARM milk, stirred for not more than a minute, then poured into individual dessert glasses, and allowed to stand undisturbed until the rennet-custard is firm—about ten minutes, and then placed in the refrigerator to chill. Rennet-custards are always served in the same individual dessert glasses.

Rennet tablets are not sweetened or flavored. They merely contain the highly concentrated rennet enzyme with a filler consisting chiefly of pure table salt. In making rennet-custards with rennet tablets, the milk should be sweetened and flavored to taste and milk warmed to LUKEWARM, and the dissolved rennet tablet then added and stirred for a few seconds. After the mixture is poured into individual dessert glasses, it is allowed to stand UNDISTURBED until the rennet-custard is firm—about ten minutes, and then placed in the refrigerator to chill. It is served in the same glasses.

Rennet tablets are widely used for making milk foods for invalids and children, protein milk, cottage cheese and ice cream.
MILK DRINKS

Milk drinks are always nourishing. Chocolate and cocoa are always popular as milk drinks, hot or cold. Cultured buttermilk, buttermilk from the churn, Bulgarian milk, and Acidophilus milk are beneficial, refreshing types of soured milk.

Milk shakes of various flavors are especially delicious. The various flavors of prepared rennet powder make it easy to stir up a tempting variety of delicious, digestible cold milk shakes. When prepared hot, and taken before retiring, the warmth of the milk in the stomach encourages relaxation which induces restful sleep.

MILK COOKERY

Cream soups, cereal soups made with rice, sago, oatmeal or “Cream of Wheat” or “Farina,” corn soups or milk chowders give a pleasing variety of ways to include milk in the diet.

Eggs and potatoes and other vegetables may be creamed with a thick white sauce made from milk.

Milk toast is another much used method of including milk, and sometimes butter, in the diet.

Boiled or baked custards made with milk and eggs, and cornstarch puddings are good ways to use milk, but rennet-custards made with rennet tablets or flavored and sweetened rennet powder give the housewife the easiest and most delightful means of giving each member of the family his daily quota of milk in a delicious form without eggs or cooking.

ICE CREAM

Today ice cream is an everyday food, enjoyed by everybody, regardless of season. In the manufacture of commercial ice cream, continuous brine or direct expansion freezers are used. Extremely fast freezing has recently been developed, resulting in minute ice crystals, giving a much smoother texture.

Good ice cream usually contains at least 12% of butterfat, but various brands contain 8% to 16%. In commercial ice cream condensed or dry milk is added to the cream, together with a stabilizer such as gelatin or gum, sugar and flavor.

The whipping of the mix during freezing incorporates considerable air, so that the volume of the mix is increased from 70% to 100%.

In homemade ice cream, made in hand freezers without the use of other ingredients than sugar or flavor, it is necessary to use cream containing 18% to 24% butterfat. By the use of rennet tablets, smooth ice cream can be made in hand freezers with much less cream—one part of cream to three parts of milk.
With the increase in the use of electric and other automatic refrigerators, housewives began preparing more ice cream at home in refrigerator trays. At first, in order to get a smooth ice cream, it was necessary to use whipping cream only, supplemented by the addition of cornstarch or gelatin, to avoid large ice crystals, which was both expensive and objectionable.

More recently “JUNKET” MIX, in powder form, for making ice cream containing the necessary added milk solids, stabilizer, and most important, the rennet enzyme, was developed, resulting in a smooth, easily digestible ice cream made in the automatic refrigerator tray with equal parts of heavy cream and milk, without stirring while freezing.

Moreover, a rennet mix in powder form for making ice cream, results in delicious, smooth ice cream easily made in hand freezers with much less cream.

To incorporate air in the ice cream mix to be frozen in the automatic refrigerator, the heavy cream is either whipped separately, and the milk is whipped with the powder subsequently mixing both together, or when light cream only is used, it is whipped with the rennet mix. In doing this it is important to have all the ingredients very cold to get the best results.

In freezing ice cream in the automatic refrigerator tray, it is important to set the cold control at the coldest point for fast freezing, and when the ice cream is frozen to the right consistency— not too hard—to set the cold control back to its accustomed place.

Ice cream is easily prepared at home, and should be included often in our diet, since this is another food which helps us to fulfill our daily milk requirement.

BUTTER

One of the greatest commercial uses of milk is for butter. The great value of butter as a nutrient lies in the fact that it is such a splendid source of vitamin A, which is so necessary in our diets. Butter is very readily digested, and yields 3300 calories per pound. The diet of every growing child and every normal adult should include butter. There are several kinds and grades of butter. Good butter has a firm, waxy (not crumbly) body, and while it may have a little moisture on the surface, it should not have large water droplets. It should be uniformly colored, and not too highly salted. A quick test of the flavor of any butter is to spread it on hot toast. The hot toast melts the butter and brings out the flavor.

Almost without exception, the cream made into butter today is first pasteurized, to guarantee a pure, wholesome product. After the cream has been cooled down, the large, creamery power-driven churns are filled 1/3 to 1/2 full of cream, then revolved for about 45 minutes, when granules of butter begin to separate out or “come.” The buttermilk is then drained off, and the butter salted. It is then thoroughly worked, to distribute the salt and congeal the granules into one mass of butter.
CHEESE

Another commercially important product of milk is cheese. For American or Cheddar Cheese, milk is "set" or curdled with the rennet enzyme and the cheesemaker then cuts it into fine cubes with specially designed curd knives. This allows the whey (light amber liquid) to be expelled quickly. To this cut curd, heat and mechanical manipulation are applied, and it is then finally put in a hoop and pressed, to expel the last of the whey. In this solid curd, is the butterfat, casein, vitamin A, and much of the calcium and phosphorus. The American Cheese is then ripened on shelves several months before being ready to serve.

The American people have never learned to appreciate the value and economy of cheese as a food. Some other countries consume five to six times as much cheese per person as we do, and we might well follow their example—for cheese is very rich in proteins, fats and calcium and is easily digested.

"JUNKET'S" Rennet Preparations

"JUNKET" Rennet Powder. For making an endless variety of delicious rennet-custard desserts. Use only lukewarm milk as it contains no cornstarch, eggs, or gelatin. 6 tempting flavors in natural colors:

Vanilla  Chocolate  Lemon
Orange  Raspberry  Maple

"JUNKET" Rennet Tablets. Not sweetened or flavored—add sugar and flavor to taste. For making easily digested rennet-custards and milk foods for infants, invalids, and convalescents. Makes smoother ice cream with less cream in hand freezers.

"JUNKET" Mix for Ice Cream. For use in electric or other automatic refrigerators or hand freezers. Just mix with milk and cream. No heating necessary for it contains no cornstarch, gelatin, or eggs. No stirring while freezing. Three delicious flavors:

Vanilla  Chocolate  Maple

"JUNKET” and “Little Miss Muffet” are registered trade-marks of Chr. Hansen’s Laboratory, Inc., for its rennet and other food preparations.

HEALTH EDUCATION DEPARTMENT
"THE ‘JUNKET’ FOLKS"
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