Hand Book on Ice Cream

Recipes, Trade Secrets and Valuable Information for the Manufacturer of Ice Cream

PRICE . . . $5.00

THIS little booklet tells you how to manufacture a prime Ice Cream at *ten cents per gallon*, equal to a full cream and perfectly healthful; formulas for Fancy Creams, Fruit Ices, Fruit Frosts, Sherberts, Whipped Cream, etc.

This Booklet is worth $100 to You

KRAMER

ON

ICE CREAM

A Monograph on the Manufacture of
Ice Cream

By

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Analytical Chemist

RECEIPTS, TRADE SECRETS AND VALUABLE INFORMATION ON
ICE CREAM

PUBLISHED FOR THE TRADE

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Ice Cream

ICE CREAM at ten cents per gallon sounds good to you, doesn't it? Of course it does. It is not the purpose of the writer to give a history of Ice Creams. That, we shall leave for other writers, but will aim to give information in this little booklet which will bring in the dollars to every manufacturer. Ice Cream has been made and used in this country for over 110 years and it has increased in popularity every day since and will continue to do so. The Italians claim the honor of first presenting ice in solid form, and for that reason it is presumable that the name "Neapolitan" as applied to ice cream will never become obsolete. The name "Neapolitan" is applied to custard cream in general. It is also used to designate a fancy cream.

Now the writer is not going to string out a whole lot of advice and tell you what temperature is best for freezing, proper speed and the relation of speed to temperature, the moulding of brick cream, size and style of packages, but shall leave that for you.

The day for using a straight cream, testing from 25 per cent to 30 per cent of butter fat has gone by, and should go by, though some manufacturers claim they are using 20 per cent butter fat test and producing all cream and that their trade is constantly increasing. However that may be, a full cream is too rich for the ordinary person's stomach. Manufacturers should aim to produce an ice cream that any

person with a weak stomach should be able to eat all he wants without fear of being made sick, and such a cream is just as pleasing to the taste and just as healthful and far more satisfactory than a straight cream, not taking into consideration the extra profit for the manufacturer.

Condensed milk and gelatine is used and known by the majority of manufacturers of ice cream over the country, but you must remember that condensed milk is about as expensive as an all cream product, though it really will produce a better article for the ordinary person, as it is more easy on the stomach. Your curiosity would naturally be aroused and you would want to know what would be the principal thing for reducing the cost and at the same time improving the quality. The author has analyzed a large number of the different preparations on the market which is used to improve and lessen the cost of ice cream, and when you have read this little booklet through you will be able to use your own preparations without paying some one else 1000 per cent profit, like some of them on the market. Dextrine! Dextrine! Dextrine flour is one of the principal ingredients that does the trick. Now this article is perfectly healthful and will give good satisfaction; it doubles the quantity, saves one-half of the labor, saves one-half of the ice, saves one-half of the salt, it keeps them twice as long, it will not separate and will not ice. By its use whipped cream can be made of 25 per cent cream in half of the time and stand twice as long as 50 per cent without it. It will make good ice cream from pure milk. Those of us who use a cream, take

a 20 per cent all-cream and base your calculations as follows: For a 10 per cent cream, use two ounces of Dextrine to the gallon; for 15 per cent cream, use 1½ ounces to the gallon; for 20 per cent cream, use one ounce to the gallon; for 25 per cent cream, use three-fourths ounce to the gallon.

Directions—For ice cream, one ounce to each gallon of cream; mix thoroughly with sugar. Stir into the cream. Flavor and freeze. For sherbert, double the quantity of powder for each gallon. Mix well with sugar before adding the water. For Whipped Cream, one ounce for each gallon of cream, mix with sugar, whip all at once. For one quart of cream, use one rounding teaspoonful of powder. In experimenting, if you find the ice cream to be too slick and of too much body, use less Dextrine; if it is found to be too coarse and not sufficiently smooth, use more Dextrine. Dextrine furnishes the body and gives a smooth velvety condition to ice cream.

Ice Cream Receipts with Dextrine — For ice cream, 5 ozs. Dextrine, 3½ pounds granutated sugar, 2½ gallons fresh milk or cream. DIRECTIONS: Add five ounces of Dextrine to the sugar (while dry mix thoroughly), then add sufficient cream or milk to moisten, beat to a smooth thin paste, then add the balance of your 2½ gallons of cream or milk, flavor to taste and it is ready for the freezer. This amount when used with fresh cream will beat up to five gallons of pure ice cream, and with fresh milk four gallons ice cream as smooth as silk. *For Fruit Creams*, use the same amount of Dextrine and cream or milk, add one to two

quarts of fruit, run through a coarse sieve, and add one pound of granulated sugar for each quart of fruit. Never place the fruit with your cream until about half frozen, then add, and turn the freezer slowly until finished.

Bisque Ice Cream—One gallon fresh cream; two pounds granulated sugar; one-half pound stale Macaroons, crushed fine; one-half pound finely chopped Almonds (blanched); one-half ounce Extract of Pistache or Orange; 1½ ounces Dextrine. DIRECTIONS: Mix Dextrine, sugar, Macaroons and Almonds well together, add gradually the cream, lastly the extracts; freeze as directed for ice cream.

Chocolate Ice Cream—Take 1½ ounces Dextrine, two pounds granulated sugar, four ounces Soluble Powdered Cocoa; one gallon fresh milk or cream. DIRECTIONS: Add the Dextrine and the Cocoa to the sugar (mix thoroughly dry); then add sufficient cream to moisten; beat to a thin smooth paste; then add balance of your cream, with one-fourth ounce vanilla extract and it is ready for the freezer.

Strawberry Receipt—To the juice of six lemons add one-half gallon of clear water, add after steaming and washing, one quart strawberries, or take one three-pound can strawberries, allow mixture to stand half an hour, then strain through a coarse sieve. To two pounds of granulated sugar add one ounce Dextrine, mix thoroughly (while dry), add sufficient of the water containing Strawberry and Lemon juice to moisten, stir to smooth paste and add balance and it is ready for the freezer; when partly frozen add the whites of three eggs beaten to a stiff froth; turn slowly until

finished. All fruit ices are made this way, using the lemon water as body for all fruits, one or two quarts of ripe fruit to each gallon of lemon water.

Lemon Ice Receipt——To the juice of one dozen lemons add one gallon clear water, then strain. To 3½ pounds granulated sugar add two ounces Dextrine flour, mix thoroughly with sugar (while dry), then add sufficient lemon water to moisten, stir to a smooth paste, add balance of lemon water. When partly frozen add the whites of four eggs beaten to a stiff froth; paddle or turn freezer slowly until finished. The above quantity will whip up to three gallons.

Pine Apple Frost—One can of grated Pine-Apple and the juice of six lemons, add to one-half gallon water, mix and strain. To two pounds of granulated sugar (while dry) mix thoroughly one ounce Dextrine, add sufficient of the water containing the Pine-Apple and the Lemon Juice to moisten, stir to thin smooth paste, then add balance of water containing the Pine-Apple and Lemon Juice, place in freezer; when about half frozen add the whites of three eggs beaten to a stiff froth, mix well and stir slow until frozen. This amount will beat up to nearly two gallons. When served at the fountain with soda water it far surpasses ice cream, and it will hold a cream bead that will not drop down. To soda fountain people, give this a trial. Serve this and Cherry Frost and make money; the cost is next to nothing; all profit,

Peach Frost—Peel and stone sufficient ripe peaches (clings are the best) to make one quart,

then add one pound of granulated sugar, place in earthen bowl or granite pan, beat them well, then add one-half gallon clear water and the juice of six lemons, strain through coarse sieve, mix thoroughly (while dry) one ounce Dextrine to one pound of granulated sugar, then add peaches and lemon juice and it is ready for the freezer; when about half frozen add the whites of three eggs beaten to a stiff froth, mix well and turn freezer until finished. The amount will whip up to about two gallons.

Cherry Frost—Stem and stone sufficient ripe cherries to make one quart, add the juice of six lemons and half a gallon of clear water, strain through coarse sieve. Mix (while dry) one ounce of Dextrine to two pounds of granulated sugar, then add sufficient of cherry and lemon water to moisten, stir to thin paste, add balance of water containing cherry and lemon juice and it is ready for the freezer. When about half frozen add the whites of three eggs beaten stiff, mix well and turn freezer until finished, This amount will whip up to two gallons.

Creme DeMenthe Frost—To the juice of six lemons add one-half gallon clear water, then strain. To two pounds granulated sugar add one ounce Dextrine (mix dry), then add sufficient lemon water to moisten, stir to a thin paste, add balance of lemon water and one-fourth ounce pure Extract Peppermint and a few drops of Leaf Green Color; when partly frozen add the whites of three eggs beaten to a stiff froth. The above amount will make about two gallons. Serve over soda water

counter in hot weather in sherbert glass. Nothing more delicious or refreshing.

Ice Cream at Ten Cents Per Gallon — It is possible to produce a good ice cream for 10 cents, figuring milk at 14c per gallon. Here is the formula:

Powdered Gelatine.....7 lbs.
Dextrine Flour .....3 lbs.

Mix thoroughly. You may take ounces instead of pounds to make small quantity. In buying this in large quantities the cost of the mixture will be about 15c per pound. A powdered gelatine good enough for this may be bought for 20c per pound at the factory, and Dextrine flour for 3c per pound. Dextrine may be bought from any glucose refinery. Take for instance:

Five gallons milk at 14c.....70c
One pound of above mixture 15c

This in a good power freezer will make nearly, if not quite 10 gallons of ice cream at cost less than $1.00 for the full amount, the yield being fully equal to that obtained from pure cream, at a cost less than 10 cents per gallon. In a hand freezer the expansion will be less because of the slower speed, and the body and product will be heavier. The quantity of the above mixture, sugar and flavoring should be gaged according to the expansion. Three ounces of the powder to a gallon of milk will make in a hand freezer about six quarts of cream. DIRECTIONS: This powder must be thoroughly mixed with all the sugar while dry. After mixing, pour on part or all of the cold milk. Allow the powder and sugar to soak in the cold milk for from 20 to 60 minutes. After

soaking, apply sufficient heat to dissolve preparation and sugar. After removing from the fire, strain the mixture and allow to stand until perfectly cold. To hasten the cooling you may let it stand in the ice box. Be careful and do not let the milk reach the scalding point. Unless a double boiler is used, the milk should be well stirred. You may strain through a thickness of cheese cloth. Where one has the facilities for carrying the milk without souring, it is well to prepare it at night and allow the mixture to stand until the following morning, when it should be quite thick. If allowed to thicken before freezing, the ice cream will be a little richer. If any cream should be used, it should not be added until the last thing before freezing, at which time the flavoring should be put in. In a power freezer the expansion will be about double. When used with pure milk this will produce as fine an article as can be made from twenty-pound cream; when used with part milk and part cream, the result equals the best all-cream article; and when used with all twenty-pound cream, a better article results than can be made from forty-pound cream. Another thing, this is perfectly healthful and your child can eat all he wants and grow fat on it. I could write pages of the good qualities of this formula, but give it a good trial and you will know how to work it properly.

Another Preparation was analyzed and as it has a large sale all over the country, we will give it to you. The manufacturers claim it solves the problem of a good profit in a five-cent ice cream soda. It will convert sweet milk into pure cream with no increase to cost.

This valuable preparation was originated after a detailed and thorough study of the composition of milk and the various changes it underwent by the action of the light, heat, acids, etc., and the conclusion was finally arrived at that milk could be converted into pure cream as it existed in nature, by continuing the process begun in the udder of the cow. This was found conclusively to be due to the action of an agent which has been isolated so cheaply that its use has been placed within every maker of ice cream, and has already begun to revolutionize the manufacture of this delicacy to such an extent that custard ice cream is being relegated to the rear. Milk is the most perfect type of an emulsion, as it is merely the suspension of tiny globules of fat in an aqueous liquid. No delay in heating; does not require anything else, though you may use gelatine. One powder will convert one gallon of milk into pure cream. Increase the body of frozen cream 33 per cent; takes less ice, as by its acid cream is frozen in one-half of the time.

Directions—The analysis proved to be a powder of 10 grains Rennin. Dissolve the powder in the proportion of 10 grains Rennin to one gallon of sweet milk in a small quantity of water; that is, dissolve the Rennin in the water first. Add to the milk the proper amount of sweeting and flavoring agents, warm slightly and then add the solution of Rennin and water. Mix thoroughly and allow the mixture to stand for a few moments until the milk has thickened and conversion has taken place, then pour contents into a freezer. After operating it a few minutes the result will be a cream of incomparable richness and delicacy of flavor.

Special attention is called to the fact that the process of freezing should begin as soon as the milk begins to thicken, which can be seen by pouring a small quantity into another container, when large globules of fat will be noticed. As only a few moments are required to produce this change, it is advisable to pack the freezer first. If allowed to stand too long, the cream will become grainy instead of a smooth consistency and therefore not give satisfaction. Note these points and you will never be disappointed in the results.

Little Giant

ICE CRUSHERS

Little Giant Ice Crushers are being used by the majority of ice cream manufacturers and other users of crushed ice over the entire country.

These machines have a very large capacity, require very little power and are built to give years of service.

A Little Giant Crusher will produce less real fine ice than any crusher made. The crushed ice is in flat pieces and always turn the flat side to the can. No denting or wearing of cans. This form of crushed ice will last longer and freeze quicker than ice crushed by hand or by the use of any other machine.

We will send a Little Giant Crusher anywhere on approval. If it does not prove to be what we claim, it can be returned. Write for catalogue of prices on our entire line.

Davenport Ice Chipping Machine Co.
Davenport, Iowa