

Liquid Nitrogen Ice Cream

We've been making ice cream for many years now, using liquid nitrogen (LN2) as the refrigerant for a very fast freeze; the result is the smoothest ice cream you'll ever experience, perhaps because there is not time for crystals to form (or whatever...).

It's important, of course, to begin with a good recipe; the ones below have been tested numerous times, and consistently produce great results. All of them begin with a French-style custard, which you cook slowly, with lots of stirring, until they thicken. The finished mix should be thoroughly refrigerated, preferably at least a half day ahead of time, so you don't have to use too much nitrogen to finish the job.

The freezing process is quite a spectacle, and we usually do it at the dining table; guests will pull out their cameras to record the event, complete with great spewing clouds.

Here's what you do: Use a "stand mixer" (e.g., a KitchenAid mixer), with a "flat beater" blade (this looks like a sturdy diamond-shaped outline, with a few cross-braces). Pour some mix into the bowl, run the machine at low to medium speed, and slowly pour in the nitrogen. If you hear crunching sounds, slow down on the LN2. After a few minutes the mix should become quite thick; you may have to scrape a frozen crust off the sides of the bowl (use a wooden spoon). Keep at it until you like the consistency, which will basically be "soft ice cream." Remove the bowl, and serve with a wooden spoon.

A Warning: Liquid nitrogen is potentially hazardous, because it can produce rapid frostbite. Don't attempt to make this stuff unless you are experienced in the handling of cryogenes.

Another caution: Don't let the LN2 splash onto glassware, glass or ceramic tabletops, etc. We busted a host's bowl this way, once; haven't been invited back since...

Figure on using about as much LN2 as chilled mix. We use a 4-liter dewar, which will barely make a gallon of soft ice cream. If in doubt, bring some extra LN2 home; you can amuse the kids by using the leftover to freeze rubber bands, roll little steaming balls across the floor, and so on...

The Recipes

Espresso Ice Cream

2 c espresso*
3 c heavy cream
3 eggs
1 1/4 c sugar

* we use decaf Kenya AA, from Distant Lands Coffee Roaster (Tyler, Texas), prepared in a traditional Pavoni espresso machine.

cook slowly until the mixture thickens; then cool, and add

1 3/4 tsp vanilla extract

chill thoroughly.

Intense Chocolate Ice Cream

2 1/2 c whole milk
4 eggs
1 c sugar

cook slowly to a custard, then beat in

1 1/8 c Valrhona cocoa

cool, add

2 c whipping or heavy cream
2 tsp vanilla extract

chill thoroughly.

(continued)

Sour Cherry Ice Cream

1 c milk
2 eggs
1/2 c sugar

cook slowly to a custard, cool, then add

1 1/2 c light cream
1 c milk
2/3 c sour cherry syrup (you get it at middle eastern shops)
1 1/2 c pitted sour cherries (ditto)
1 tsp vanilla extract
3/8 tsp almond extract

chill thoroughly.

Peach Ice Cream

2 c milk
2 eggs
1 c sugar

cook slowly to a custard, cool, then add

1 c whipping cream
1 tsp vanilla extract
1/2 tsp almond extract
2 c chopped peaches*
1 c pureed peaches*

* use very ripe peaches if in season, otherwise try canned "lite" Del Monte peaches, drained.

chill thoroughly.

Addictive Vanilla Ice Cream

2 c milk
5 eggs (we use Country Hen, large)
1 c sugar
2/3 tsp Eucalipto honey (we use the superb Mario Bianco)
1 vanilla bean

cook slowly to a custard, cool, squeeze out bean, then add

2 c heavy cream
2 2/3 tsp vanilla

chill thoroughly.