

## **TRAINING TIP – Frozen Custard Article.**

This month I was asked by the editor of the National Dipper to do up an article on Frozen Custard. If you don't mind, I will reproduce it here for your reading pleasure:

When I left the police force to open up a “Frozen Custard” store in Brisbane Australia, my fellow colleagues were inquisitive as to what exactly frozen custard was. “Is it pudding?” “Is it a Frozen Pie Filling?”

For newcomers to the term, it can be a little confusing. I was recently in Atlanta GA where I overheard a store employee explain frozen Custard to a customer as “full of fat, and full of eggs” Doesn't that just make your mouth water. On the other hand, some foodies have commented that Frozen Custard is “Where God gets his ice cream” or that it is “Sexy” Ice Cream.

Let's dispel a few myths and hopefully have you a little more educated as to what the Frozen Custard actually is.

Frozen Custard originates as far back at the early 1900's and typically Coney Island is claimed as the birth place of frozen custard. So this premium ice cream has been around for quite some time – why the confusion?

After a strong start on the east coast, the growth of Frozen Custard really took off after the Worlds Fair in Chicago IL in 1930. A short migration north found multiple operators opening stands in the Milwaukee WI area, which to this day has the highest concentration of custard stores per capita than anywhere in the world. Both St Louis MO and Kansas City MO also have a high concentration of custard stands. In fact during the Frozen Dessert Institute Courses in St Louis, we load up a van of students for a “Custard Crawl” and hit 7 custard stores in one evening. It's quite the experience!

So what makes frozen custard different to soft serve or regular hard scoop ice cream? And let's face it: It is an Ice Cream. I have a lot of people say to me “So how is the Ice Cream business....oops, I mean *Frozen Custard* business”. Frozen custard *is* an ice cream under the standard of identity that the FDA has mandated. It must contain at least 10% butterfat. So Frozen Custard is a type, or flavor of the Ice Cream Family.

There are 3 simple points to explain the difference.

1. *Frozen Custard is a fresh made product.* We preach in our classes, Fresh Fresh Fresh! Just like the “Now Baking” sign in the front of a Krispy Kreme store, a custard stand operator must have the discipline to make the product fresh: every 2 hours or so. If you make it fresh, they will come. Now making custard fresh every 2 or 3 hours limits the amount of flavors you can make, so most operators will run a Vanilla, Chocolate and a rotating flavor of the day.

What happens if it is not run fresh? Well it's not going to self destruct, however, when frozen custard is extruded out of a modified continuous freezer (See point 2), it comes out as a silky smooth ribbon of ice cream. This is in part due to the size of the ice crystal contained in the product. The minute size of ice crystal adds to the smoothness of the end product. When an ice crystal that small is left in a dipping cabinet for 4, 5 or 6 hours or more, the ice crystal grows and makes the product coarser. Fresh is always best!!

2. *Frozen Custard has low overrun.* Most hard scoop ice creams and soft serve product have an overrun level that ranges between 40% up to 100%. Traditional frozen custard has always been low in overrun: about 20%. The low overrun percentages gives frozen custard a very dense and creamy characteristic, which is probably one of its most recognizable attribute. This low overrun is attributed to the machine that traditional frozen custard is made in: a modified continuous freezer. These machines are nearly always gravity fed and once your hopper is full, the mix is frozen through the barrel and drops down a slide into a pre-chilled dipping cabinet. Being a "continuous" freezer, as long as the hopper is topped up, the machine will make frozen custard all day long.

Some equipment manufacturers will tell prospective customers that a soft serve machine or a batch freezer is a "Frozen Custard" machine, as a frozen custard mix can be run through each of these units: and technically that may be the case. However neither a soft serve machine or batch freezer will have the ability to provide a consistently low overrun like a "frozen custard" machine will. If you are looking for frozen custard equipment, be sure that the machine can give you a consistently low overrun product. Also some consideration should be given to how the barrel is formulated to freeze the product down quickly. A jacketed barrel assembly which allows the barrel to be flooded will also aid in providing smaller ice crystals, which in turn generate a smoother product. A quick freeze is always a better freeze.

In relation to the dipping cabinet, not all cabinets are made the same. Generally a dipping cabinet designed for hard scoop ice cream has different characteristics than that of a dedicated frozen custard dipping cabinet. A custard dipping cabinet is designed to limit air flow over the exposed ice cream. This prolongs the life and freshness of the custard and limits oxidizing. These cabinets tend to be a little more expensive than the regular ice cream cabinets, but their functionality is generally worth the extra dollars.

Customer support and education is also important, particularly if you are considering running the product in an area where frozen custard is not commonly found.

3. *Frozen Custard contains a small amount of egg yolk.* The FDA's standard of identity states that frozen custard mix must contain at least 1.4% egg yolk by weight. This is where the "Custard" term comes into play. Now, believe me when I say that 1.4% is not enough egg yolk to color or flavor the mix. I often had people in our stores comment "Hmmm yes, I can taste the egg" or "Hey look, you can see the egg color in the ice cream". This is tantamount to saying "I can taste the Kentucky Bourbon in the Madagascar Bourbon Vanilla. (If you often say this, please consult your local vanilla technician before making a goose of yourself at the next ice cream function you attend).

Technically, both New York Vanilla and French Vanilla flavors of ice cream can also be classified as a type of custard as they both usually contain an amount of egg yolk.

In the Midwest where custard is readily accepted and loved, customers will drive past 3 hard scoop stores to get their silky smooth treat. But in areas of the country where frozen custard is relatively new, some store owners have the task ahead of them educating their customers about frozen custard. In fact a store owner on the west coast had a tagline of "Frozen What?" as this was the most common response to his product.

These issues are easily overcome with good staff training and an aggressive sampling program that usually woos hesitant first timers to life long companions down the ice cream highway.

If you are interested in learning a little more about frozen custard and what it can do for your bottom line (or your waist line), we conduct monthly frozen custard training courses at our Frozen Dessert Institute, based in St Louis MO. You will have a lot of fun, learn a lot about the ice cream industry and consume as much frozen custard over a three day period that is humanly possible. Visit [www.frozendessertinstitute.com](http://www.frozendessertinstitute.com) for more details.