## Brain Freeze: Frozen Beverage Education Presented by Effen Vodka and DeKuyper Liqueurs




## Welcome Letter



Welcome to Brain Freeze presented by Effen Vodka and DeKuyper Liqueurs. Who doesn't love a frozen drink?! No matter where you are or what time of year, the first sip of a well-made frozen cocktail is like an instant vacation! In this guide, you'll find delicious recipes from bartenders across the country who take their frozen drinks VERY seriously. We hope you enjoy and experiment with the recipes, tips and tricks presented here.

And remember...frozen drinks are all about FUN!

- Robin Nance

Sr. National Portfolio Ambassador
Beam Suntory


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# History of Frozen Beverages 

## Revolution of Revolutions

The Blender as we know it today, a sealable container featuring blades at its base to be powered through an external motor, was invented and patented by chemist Stephen Poplawski in 1922. This design was then manufactured in the 1930s by Hamilton Beach. One of the original owners of Hamilton Beach, Fred Osius set out to redesign the blender and reached out to musician Fred Waring for financial backing. In 1937 the Waring Miracle Mixer which was shortly renamed the Waring Blendor was released. In the very same year, inventor William Grover Barnard tweaks the design to make it more durable and begins selling his "Vita-Mix". The next 10 years saw a handful of other branded blenders hit the market including John Oster's Osterizer, Turmix Standmixer in Europe, and Walita in Brazil.

## Day of Reckoning

In 1947, Albert Hernandez Sr. of La Plaza Restaurant in La Jolla, California built a version of the Margarita in a blender and the rest is history. One thing that is very important to know is La Plaza was actually a high end establishment and the bartenders "would tend bar in a starched white shirt, bow tie and black jacket,so please do not feel that blended Margs were low-brow concoctions, rather they were the pinnacle of mixology in the 1940s and 50s.


## Rise of the Machines

In the late 1950s, Omar Knedlik stumbled onto a discovery at his Coffeyville, Kansas ice cream store. Lacking a soda fountain, he sold his guests half frozen bottles of soda and a lightbulb went on when he saw how much they loved the slushy consistency. Spending the next several years tinkering with soft serve ice-cream machines, Omar was finally able to develop and produce the first ICEE machine in the mid 60s. ICEEs (and their licencing agreement with 7-11 to rebrand as Slurpees) exploded in popularity and frozen drinks could now be produced quickly and consistently en masse.

In 1971, Mariano Martinez opened a mexican restaurant in Dallas, Texas and found that his bartenders could not keep up with the number of frozen Margaritas that were being ordered. After many bartenders threatened to quit for gratuitous use of blenders, Mariano knew he needed a solution. After a trip to 7-11, the idea hit him. Mariano got his hands on an ice cream machine and started tinkering. Soon after, The World's First Frozen Margarita Machine was born!

# What Kind of Frozen Machine Do You Need? 

## Choosing a Frozen Drink Machine

Adding frozen drinks to your menu can be a great way to feature fun and refreshing drinks that your guests remember. And depending on your specific bar concept may be a way to increase sales while helping your beverage costs. However, if you are not familiar with frozen drink machines, the many options and price points in the thousands can be intimidating. We have put together a short list of the factors that should be considered when purchasing a frozen drink machine to help you make the best decision for your bar program.

## Quantity of Beverages

The amount of frozen drinks you expect your concept to serve will be an important factor to the type of machine you choose. Frozen drink machines require a significant initial outlay of money and can take up valuable real estate behind a bar. The multiple gallons of batch needed to run a machine can also be a constraint if you are not moving the drinks at a volume that prevents wastage. Until you are sure that your concept can sustain a frozen drink program, it may be better to utilize a blender to provide frozen drinks.

## Quality of Machine

Once you have determined if your program is suited for a frozen drink machine, the next question becomes what kind of machine to get. The entry price for a frozen drink machine is around $\$ 1000$ and can range all the way up to over $\$ 10,000$ based on the specifics of the machine. Construction materials, freezing chamber and hopper size, machine voltage, motor power, and cooling systems all contribute to the price of a frozen machine. It should be noted that while the less expensive machines may serve as an easier point of entry, their weaker motors may have trouble fully freezing an alcoholic beverage, and if you are going through a large volume of mix, may not be able to freeze your mix quickly enough to keep up with demand. If you believe that frozen drinks may be an integral part of your beverage mix, investing in a higher quality machine may make more sense so you are able to consistently provide a high quality product to your guests.


## Where to Put It

The final items to be considered are the constraints the physical space of a bar can put on a frozen drink machine. These machines are large, heavy, and effectively immoble once installed. The vast majority of them are air cooled which require extra space for exhaust and the venue to maintain a temperature of less than $80^{\circ} \mathrm{F}$ to function properly. If you are able to have the foresight (and budget), many higher end machines have an option for water-cooling as well. Water-cooling helps the machine (and surrounding space) from overheating, but it requires dedicated plumbing behind the bar. It is also essential to know your building's power supply so you are able to make sure your equipment is compatible with the outlets and circuits to which it will be connected.


## Amic Ward Chicago, IL Second Summer

$8 \times 750 \mathrm{ml}$ Effen Rosé 2qt Real Raspberry Puree 2qt Perfect Puree Lychee 160 g True Lime Limeade Powder 1.5qt 1:1 Simple Syrup 8.5qt Water



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Use frozen fruits and purees to satisfy your drink component and garnish needs! These products have been harvested in their prime, meet a multitude of demands, are cost efficient, and prevent waste.

True Citrus products are another incredible whole fruit alternative that helps to cut down your waste and still get that acidity you need! Play around with their flavors and see what magic you can create!

Fuzzy Slippers
$5 \times 750 \mathrm{ml}$ DeKuyper Buttershots
$1 \times 750 \mathrm{ml}$ Cruzan Black Strap Rum
$2 \times 32$ oz Boxes Oregon Chai Original Concentrate
$5 \times 13.50 z$ Cans Full Fat Coconut Milk
1qt Purfect Puree Caramelized Pineapple 6oz 5\% Lactic Acid Solution
10qt Water
1:1 Demerara Syrup to Taste/Brix
Top with Coconut Whipped Cream + Sea Salt



## Amanda Carto Austin, TX Electric Avenue

4 L Effen Vodka<br>2.5 L DeKuyper Blue Curacao<br>2.5 L Green Tea Syrup<br>1.5 L Lemon Juice<br>1.5 L Citrus Stock<br>3.5 L Orange Tea



## Saturday In The Park

192 oz Effen Vodka


160 oz Fresh Lemon Juice
128 oz Local Honey
64 oz Green Tea
64 oz Water


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# Balancing Cocktails For Frozen Machines 

## Base Frozen Drink Recipe

While every frozen drink recipe will need tweaking to hit the sweet spot, the following recipe will give you a good starting point.


3 L 80 Proof Alcohol
1.5 L Citrus

2 L 1:1 Syrup
4.5 L Water

11\% ABV
14\% Brix
$8-10 \mathrm{oz}$ Serving Size

## What is Brix?

Brix is the concentration of sucrose by weight in a solution. It is calculated by dividing the mass of sucrose by the overall mass of the solution. So for a $1: 1$ simple syrup consisting of 500 g Sugar and 500 g Water, the brix would be calculated as 500 g Sugar/ 1000 g total syrup $=.50$ or 50 Brix. Similarly a $2: 1$ simple syrup which is made up of 500 g sugar and 250 g water would be 500 g Sugar/750g Total $=.667$ or 67 Brix. The sugar concentration of your frozen drink batch is important. Density of $1: 1$ Simple is $1.21 \mathrm{~g} / \mathrm{ml}$ and $2: 1$ Simple is $1.31 \mathrm{~g} /$ ml

## Why is sugar so important in frozen drinks?

Sugar provides two main functions in a frozen drink. The first is to lower the freezing point of the mixture below $32^{\circ}$. Without a healthy dose of sugar to stop the water in your mix from freezing, the mix in a frozen drink machine would turn into an ice block and would no longer pour. The second is to act as a flavor enhancer. Extremely cold drinks numb your taste buds and require stronger flavors to register. Sugar naturally acts as a flavor enhancer and has the added benefit of giving the drink viscosity so it will physically cling to the palate for a longer period of time.

## Tips For Caring For Your Frozen Machine



## Machine Care and Maintenance

Clean Your Machines Daily, For your machine to be in tip-top shape, we recommend to empty and flush with water at the end of every night.

To keep your machine in pristine condition and operating smoothly, the machine should be disassembled, sanitized and lubed weekly. Lube is your friend! The main drive shaft for the turning mechanism that rotates your frozen beverage needs to be properly lubricated with "food grade" lube as well as any and all rubber " O " rings! These gaskets are essential for suppressing leaks and if they're not properly lubricated they can degrade quickly. We use this video as reference to disassemble the barrel chamber, which parts to check on, and where to apply lube to the mechanism.

Make sure the back and side ventilation areas are clear and clean at all times. These machines use a lot of power and because of that they need massive amounts of cool air or water so as not to overheat and potentially shut down.

Ambient temperature can influence your cocktail greatly. Make sure your machine is in an area that's temperature controlled. This has a huge impact on the time it takes to properly freeze your drink and if it properly freezes at all! Many people keep their frozen drink machines outdoors for their convenience and guest presentation but you're running the risk of a Mother Nature triggered machine malfunction down the road. Especially if your area is over $80^{\circ} \mathrm{F}$ !


# Glendom Hartley Washington, DC 

 Life's A PeachFresh citrus is muted when it becomes cold so I always reinforce my sour ratio with more citrus than sugar.

One of the easiest ways to get your base flavor to shine through is to try to use it more than once in the same drink. For instance, an ingredient being used for a spirit infusion can also be used to make a syrup or tea. As fresh flavors can sometimes end up subdued it's always good to have more of what you're trying to portray.


2 qt DeKuyper Peachtree
3 qt Roku Gin
5 qt Peach Water
3 qt Green Tea Syrup
4 qt Lime Juice
5 qt water



## Shaun Traxler Fayetteville, AR

 2 Chiclets At The Same TimeKeep It Simple! I'm happy to let professionals who have made a living developing perfect flavors for us do the heavy lifting. I'm often asked what my favorite way to make a Miami Vice is and anyone who's asked has gotten the same answer: Go buy some Cruzan Rum. Go buy some Strawberry Daiquiri and Piña Colada mixes. Buy frozen strawberries and pineapples. Read the back of your syrup bottles and use their specs while subbing frozen fruit for ice. They make millions developing these recipes for us. They know what they're doing.

32 oz DeKuyper Peppermint Schnapps
32 oz Midori
32 oz Roku Gin
96 oz Passionfruit Juice
64 oz Lime Juice
32 oz Pineapple Juice
16 oz Orgeat
80 oz Water



# Parker Luthman Providence, RI One Day At ATME Tine 

.75 oz Roku Gin

. 5 oz Apricot Vanilla Tea
Syrup
. 5 oz Ginger Syrup
.75 oz Lemon
1 Barspoon Rice Vinegar
1 Cup Crushed Ice


When trying to create a frozen version of a typically stirred cocktail, like a Negroni or Old Pal, adding a mixer to lower the proof will allow the mix to freeze at a higher temperature.

If trying to create a recipe for a blended cocktail with a higher alcohol content, dissolve superfine sugar into your base spirit for use in the recipe instead of additional sugar syrup, which contains water, to avoid ruining your ethanol:sugar:water ratio prior to blending with your ice.

## Carley Gaskin Chicago, IL Scottish Nacional

## 1.5 oz Auchentoshan 12

. 5 oz DeKuyper Triple Sec
.75 oz Lime Juice
1/4 Cup Frozen Apricot
1/2 Cup Frozen Pineapple Chunks
1 Cup Crushed Ice


Start with a low speed on your blender and gradually turn up. This will allow you to keep a closer eye on how smooth your blended cocktail is without over blending it.

Serve in a chilled glass if you can! This will keep your cocktail frozen for longer.

AVOID METAL STRAWS! When slurping a frozen drink through a metal straw, it can cause your straw to become frozen itself, resulting in it freezing to your lip... yes, exactly like on "A Christmas Story".


Basic build of Large batch frozens for slushy machines is about 20\% booze, $60 \%$ juice/flavors, and the rest filtered water (or tea, or coffee, or whatever exciting type of water you dream up) and always about 2 tsp of salt.

Take fresh fruits like banana, avocado, berries, ect puree them and add directly to your batch. This will ensure a more vibrant/rich flavor. When you balance a batch for a machine, it should taste a little too sweet than you would normally like. This will balance after freezing.

# Aisling Gammill Boise, ID Beachy Dreamin' 

3.75 L Effen Cucumber

4 qt Honeydew Puree 4 qt Raspberry Honey Syrup

2 qt Lemon Juice
2 oz (jiggered) Taijin
6 qt Water


## Frozen Cucumber-Melon Spritz



Keeping costs down is essential for every program. Using a blender can be wasteful if you are not careful. As best as possible, create proper specs for the glassware you are using so that it is consistent; including for the ice. Use separate blenders for allergy purposes and cleanliness. Save any left over product and freeze because you can use that by adding the right amount of ice and batch to get to your desired amount without waste.

Too little ice will cause your drink to separate. Too much will water it down too much.

2 oz Effen Cucumber Vodka
1 oz Midori
2 oz Yuzu-Brown Sugar Simple
1 oz Passionfruit Nectar
1 oz Cava


## About Effen About DeKuyper

EFFEN® is Dutch for "smooth, even, and balanced," and was created for those who are deliberate about every detail they choose. From their clothes and clubs, to their cocktails and company they keep. EFFEN® Vodka wasn't just distilled for them-it was designed for them.

Made from premium French wheat, EFFEN® Vodka uses a continuous distillation process, along with all-natural ingredients to create a smooth taste on the palate. The range of flavors include Black Cherry, Raspberry, Cucumber, Blood Orange and Green Apple, in addition to newcomers Rosé and Yuzu Citrus.

At DeKuyper, we're the \#1 selling range cordial brand in the U.S., and we pride ourselves in making the highest quality spirits for over 300 years. By mixing or redistilling distilled spirits with or over fruits, plants, pure juices or other natural flavoring materials-we concoct some of the world's greatest flavors using all-natural ingredients for one of the world's oldest spirits. With our wide variety of top-selling flavors including Triple Sec, Peachtree, Buttershots, Blue Curacao and Watermelon, we're the brand bartender's trust. They know it's our labor of love and they'll never find corn syrup or artificial flavors. So you can raise your glass with a cocktail worthy of celebrating.

DeKuyper® - the Brand Bartenders Trust
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