



# SIPHON FUNDAMENTALS

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# AGENDA

## Introduction to Siphons

- How a Whipping Siphon Works

## Siphon Techniques

- Creative Uses for Whipping Siphons

## Hand-on Experimentation

- Recipes

## Presentation & Reflection





# WHIPPING SIPHONS: A BRIEF INTRODUCTION

A whipping siphon also known as a **cream whipper**, is a kitchen tool used to create foams, whipped cream, and other aerated foods by using pressurized gas.

By introducing gas into liquids or mixtures, they create a pressurized environment that unlocks a multitude of creative possibilities.



# HOW A WHIPPING SIPHON WORKS

## What's Inside?

A whipping siphon consists of a canister with a lid, a gasket, and a lever. You fill the canister with liquid or even solid food (for infusions), then screw on the lid.

## Pressurization

Next, you charge the siphon by inserting a gas cartridge (either nitrous oxide or carbon dioxide) and tightening it. The gas inflates inside the canister, binding with the cream or other ingredients.

## Texture Magic

When you press the lever, the pressurized gas escapes, creating a fluffy, whipped texture. Traditionally, it's used for whipped cream, but there's so much more you can do!



When the liquid leaves the valve, the pressure decreases. The dissolved gas therefore expands in the liquid and creates bubbles, which lead to the development of foam.

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# SIPHON TECHNIQUES

Sphon Fundamentals



# CREATIVE USES FOR WHIPPING SIPHONS



## Foams

Create light and airy foams from flavored liquids like fruit juices, coffee, or herb-infused broths.



## Gels

Turn liquids into gel-like textures for unique plating and flavor experiences.



## Quick Pickling

Infuse pickling liquids with flavors rapidly—think kimchi or other pickled veggies.



## Infusions

Flavor oils, spirits, or vinegars by infusing them with herbs, spices, or fruits.



## Carbonation

Use carbon dioxide cartridges to carbonate beverages or even fruits.



## Long-Lasting Whipped Cream

Homemade whipped cream stays fresh and fluffy for up to 10 days in a siphon.



# *RECIPES*





# COCONUT AND SQUASH FOAM

## INGREDIENTS

- 13.5 oz Coconut milk
- 2 tbsp annatto seeds
- 4 oz Chicken stocks
- 1 oz Butter
- 2.5 oz Onion, diced
- 2 ea. Garlic cloves, minced
- 1 tsp Ginger, grated
- 4 oz Heavy cream
- 7 oz Butternut Squash, roasted

## TIP

Enhance the dish with finely diced roasted sweet potatoes or carrots to create contrast and add texture

## PREPARATION

1. In a medium saucepan, heat the coconut milk, chicken broth, and annatto seeds for 10 minutes to extract the color. Strain and discard the seeds.
2. In another saucepan, melt the butter and sauté the onions until they are translucent.
3. Add the garlic and ginger and cook for a few minutes, avoiding caramelization.
4. Pour the coconut milk and broth mixture into the saucepan and bring to a simmer.
5. Add the roasted squash and simmer for 15 minutes.
6. Transfer everything to a blender and puree.
7. Return the mixture to a pot, add the heavy cream, and simmer for 8 minutes.
8. Finally, strain the soup directly through a funnel and sieve into a 0.5-liter Siphon Whip. Screw on a charger and shake it 10 times. Serve warm – the soup has a light, pleasant taste thanks to the high whipping volume!





# CORAL TUILE

1 hour • Makes 6 servings

**1** In a bowl mix together water, oil, salt, and flour with a whisk..

**2** Pour tuile batter on (med heat) hot pan.

**3** Put some of the pepitas on top the tuile.

Once the tuile starts to get dry and water is evaporated, gently with help of a spatula gently place it on tissue paper to absorb excess oil.

## TIP

Place the cooled tuiles in an airtight container. You can layer them with parchment paper to prevent sticking.

## INGREDIENTS

- 10 gr AP flour
- 55 g Water
- 60 g Vegetable oil
- Pinch of Salt
- 2 tbsp Pumpkin seeds (pepitas)



# LUNCH

1 hour • Makes 6 servings

- 1** Roasted Baby carrots.  
Drizzle them with olive oil, sprinkle with salt and pepper, then roast at 425°F for 20 minutes until fork-tender.



- 2** Roasted Fingerling potato's.  
Toss halved fingerling potatoes with, olive oil, minced garlic, salt, and pepper, then roast at 425°F for 15-20 minutes until golden brown and crispy on the outside, yet tender on the inside.



- 3** Grill Tenderloin medallion  
Season it generously with salt and pepper, drizzle with olive oil, and cook over the grill for 10 minutes, turning every 5 minutes until done.



## TIP

Enhance the flavor by using Mediterranean-infused oil.

## INGREDIENTS

Fingerling potatoes

Baby carrots

Beef tenderloin medallions

Olive oil

Salt and pepper

Mediterranean-infused oil.



# MEDITERRANEAN OIL

30 minutes

**1** Put all ingredients together in a 0.5 L siphon Whip.

**2** Assemble the Rapid Infusion Set and screw on an Charger. Swirl the bottle briefly and allow to rest for at least 30 minutes

**3** Vent the bottle by pressing the lever, unscrew the head and remove the oil.



## TIP

The longer you let the flavors of the oil infuse, the more intense the flavor will be

## INGREDIENTS

- 400 ml Canola oil
- 2 pc. Rosemary
- 10 g Lemon peel
- 2 pcs. Mint
- 2 springs of thyme



# 40-SECOND CHOCOLATE CAKE

10 minutes • Makes 4 servings

## INGREDIENTS

- 90 g Dark couverture (Chocolate)
- 80 ml Milk
- 110 g Confectioner's Sugar
- 3 ea. Eggs
- 1 pinch Salt
- 65 g AP Flour
- 80 g Butter

### TIP

Preparation stays fresh for several days in the whipper.

## PREPARATION

1. Melt the dark chocolate coating over a water bath or in a microwave and let it cool slightly.
2. Stir the eggs with the icing sugar and salt.
3. Stir the flour and the melted coating.
4. Mix everything until a smooth mass is obtained.
5. Pass the mixture through the funnel & sieve directly into a 0.5 l siphon whipper.
6. Screw on 1 Charger and shake vigorously..
7. Grease several cups or bowls with butter and fill up to a third with the mixture.
8. Heat each individual beaker for 40 seconds in the microwave at 850 watts.
9. Remove from the mold or serve directly to the bowl.



# NUTELLA MOUSSE

*20 minutes • Makes 4 servings*

## INGREDIENTS

- 200 ml, Heavy Cream min. 32% fat
- 150 g Nutella
- 150 ml, Milk

## PREPARATION

1. Blend all ingredients together in a blender.
2. Pour the entire mixture through the iSi Funnel & Sieve into a 0.5 L iSi Whip.
3. Screw on an iSi Professional Charger and shake vigorously 14-18 times.
4. Place in the refrigerator for 3 hours and shake vigorously again before use..

### TIP

Preparation stays fresh for several days in the whipper.





# MAIZE ESPUMA

30 minutes •

## INGREDIENTS

- 8 ea., corn on the cob
- 125 g, heavy sour cream
- 2 ea. , egg white
- 200 ml, Chicken stock
- ¼ tsp xanthan gum

### TIP

The sauce can be kept warm at 69°C in a water bath.

## PREPARATION

1. Remove the maize kernels from the cob and smoke them. Cut the corncob up small and also smoke separately.
2. Bring the stock to the boil with the sour cream, add the smoked corncob and gently simmer for about 20 minutes on a low heat while covered. Then strain.
3. Add the maize kernels and puree until fine, season to taste and leave to cool. When the mixture has cooled, mix in the xanthan gum and carefully add the egg white.
4. Pour through an iSi Funnel & Sieve into a 0.5 L iSi Whip, screw on an iSi Professional Charger and shake 8 to 10 times.



# THANK YOU

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