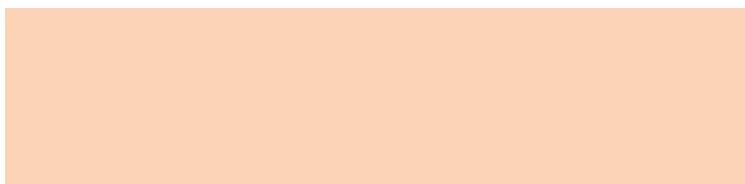


# COCKTAILS



FROM THE FUTURE



# PREFACE

Some historians will tell you that the first cocktail was made in 1586 on board Sir Francis Drake's ship stranded near Havana. The sailors were too sick to sail, so according to legend, Drake mixed together "local medicines such as mint, lime, bark from the chuchuhuasi tree soaked in rum, and cane sugar." The resulting "El Draque" might not have tasted great, but it allegedly cured his sailors. This improvised concoction of ingredients (a likely precursor to the mojito) set the stage for nearly 500 years of spirited ingenuity.

In the next decade, the ingredients we'll have on hand to make cocktails will be drastically different: lab grown egg whites in your gin fizz, climate change fighting perennial wheat in your beer, or entirely new and unexpected recipe combinations designed by artificial intelligence to reduce food waste or maximize flavor. Getting creative with future cocktail recipes can help us think about how best to meet urgent, global challenges that extend well beyond how to sail our stranded ship back home.





# FIVE FAMILIAR COCKTAILS, REINVENTED FOR THE FUTURE

These recipes are inspired by a newly released report from Institute for the Future's Food Futures Lab, ***Food Innovation: Recipes for the Next Decade***.

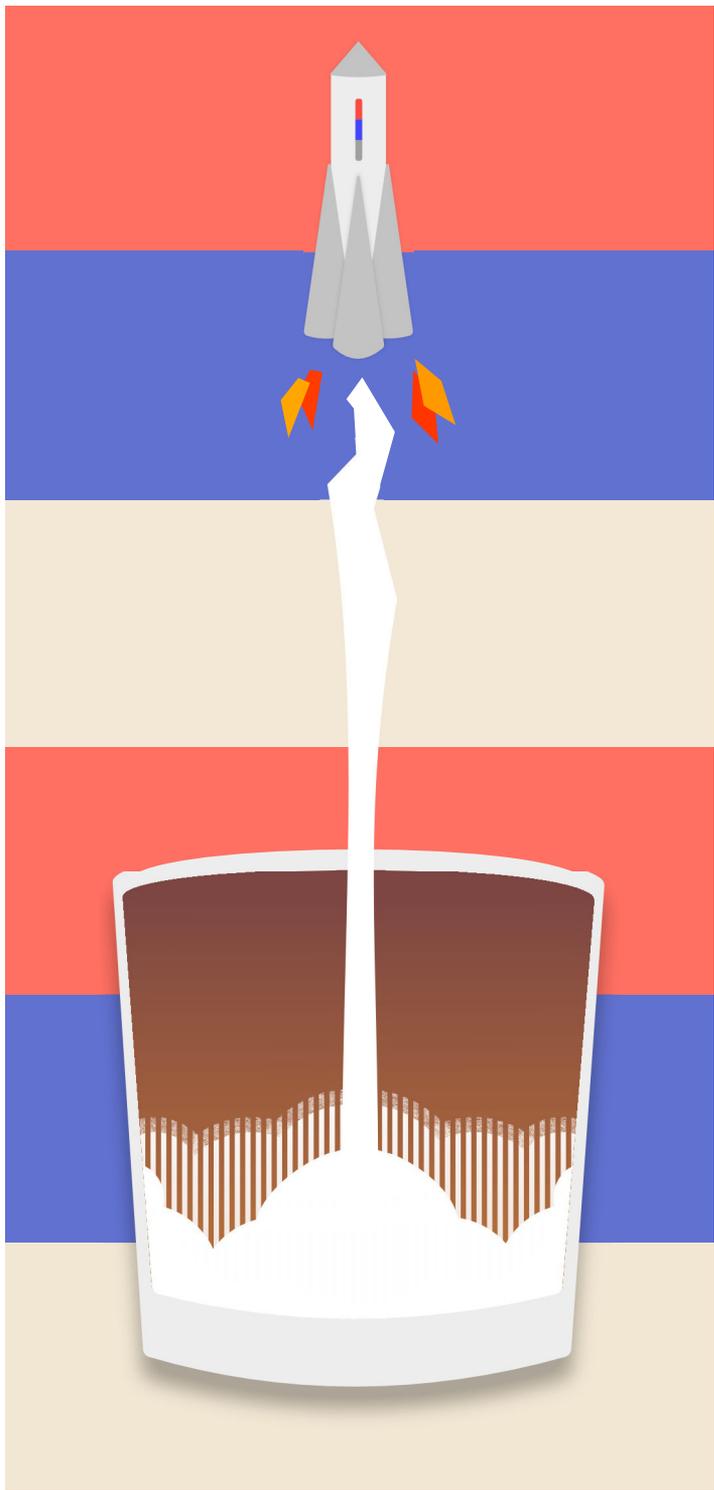
You can download the full report at  
**[www.iff.org/foodinnovation](http://www.iff.org/foodinnovation)**

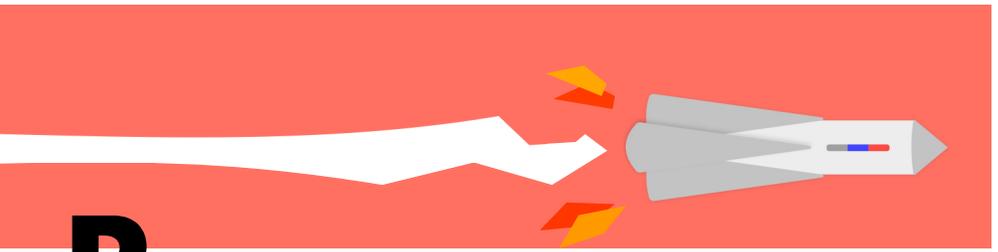
The recipes highlight ingredients that are today's signals of change—small or local innovations that have the potential to scale and transform the global food system. These signals are emphasized in bold in each recipe. However, these recipes are *artifacts from the future*. While all of the ingredients are real companies and products today, some are still in development or are not yet commercially available. So, hang on to this book so you're ready to mix a drink in the future!

## CHEERS!



# WHITE RUSSIAN INTELLIGENCE





**R**ussians and automated bots aren't such a tasty combination (just ask Hillary). But by 2027, a combination of automated kitchen robotics and artificial intelligence will reinvent the White Russian to taste great, look out for the environment, and not influence any national elections.

This drink's signature heavy cream comes from **The Not Company**, who created an artificial intelligence food scientist to formulate its plant-based dairy substitutes. Their AI sorts through massive amounts of data on human nutrition, taste preferences, and environmental impact to create novel food formulations.

Forget using that old burnt carafe of coffee—bartenders of the next decade can incorporate robotics that automate the production of perfect quality foods. Use **Blossom Coffee**, a wireless coffee maker developed at MIT. It downloads brewing settings from a database populated by roasters who want to ensure peak flavors of their coffee in homes. These appliances create new precision methods for cooking and open platforms for peer-to-peer sharing. However, when everything is digitally connected, we need to be on the lookout for ransomware, even in our kitchen appliances. Now your online enemies can sabotage your identity and—even worse—burn your coffee.



# ingredients

1 1/2 oz.

1 oz.

3/4 oz.

3/4 oz.

1/4 cup

a dusting

vodka

**Blossom Coffee**

coffee liqueur

vanilla liqueur

**The Not Company**

**heavy cream**

cocoa powder



prep

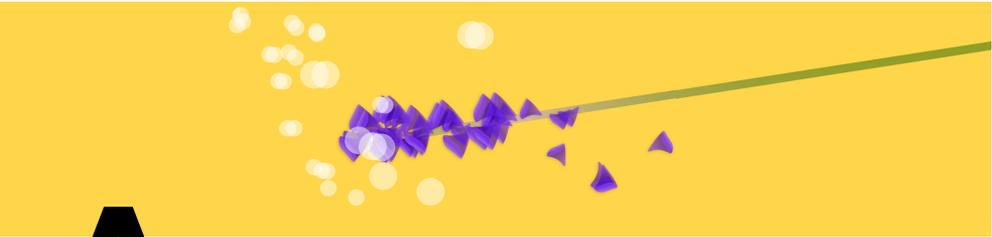


Combine vodka, coffee, and vanilla and coffee liqueurs in an ice-filled shaker. Shake. strain into a chilled cocktail glass filled with ice cubes. Top with Not Co. heavy cream and dust with cocoa powder.

Don't have access to Not Co. heavy cream, but still want a less caloric or vegan-friendly version? Try this classic cocktail with soy or any nut-based milk! No matter what you use, this cocktail always abides.

# GINETIC FIZZICIST





**A**s climate change increases mean temperatures around the world, a gin fizz is the perfect craft cocktail to cool you down in that summer (and winter) heat!

For those worried about the raw egg in this cocktail, have no fear; **Clara Foods** creates an animal-free egg white alternative that is salmonella-free and formulated with precisely the proteins you need for the perfect froth. How do they do it? Clara is at the forefront of a new approach to farming, called cellular agriculture, using advances in synthetic biology to engineer yeast that create the proteins found in egg whites.

You'll need some cultured flavoring from **Ginkgo Bioworks**, a biology company that produces food flavoring through designer yeast strain fermentation. Because the final flavor doesn't include the engineered yeast, it can be labeled as natural, which has already started causing some confusion and controversy among eaters. This process of engineering yeast has actually been used both in food and medical applications for decades, however as it becomes more common we can expect to see more consumer protests and calls for transparency.



# ingredients

2 oz.	gin
1/2 oz.	lemon juice
1	<b>Clara Foods animal-free egg white</b>
1 oz.	lavender simple syrup (see below)
a splash	club soda
to garnish	lavender flowers and sliced lemon

## *lavender simple syrup:*

1 cup	water
1 cup	sugar
2 tbsp.	<b>Ginkgo Bioworks lavender flavoring</b>



## prep



Fill both a tumbler and a shaker with ice. Add gin, lemon juice, lavender simple syrup, and Clara egg white to the shaker and shake for 30-45 seconds. Strain into tumbler and top off with club soda. For a fancy garnish, add lavender flowers and a thin slice of lemon.

To make the lavender simple syrup, combine water and sugar in saucepan over medium heat until the sugar has dissolved. Let the syrup cool for one minute, then add 2 tablespoons of Gingko Bioworks' signature lavender flavoring. Chill in the fridge until you make your cocktails!



NOW WHO GETS  
THE LAST WORD?





# W

hen this drink was introduced at the Detroit Athletic Club in 1915, equal parts gin (floral), green chartreuse (herbaceous), maraschino (sweet), and lime (citrus) duked it out on your taste buds for which flavor got The Last Word. One hundred years later, the question of who gets the last word is still up for grabs, but now our understanding of taste perception makes it even more contested.

Charles Spence's **Crossmodal Research Lab** at Oxford University studies the complex relationship between our senses. They have found that people enjoy the taste of red wine significantly more under red lighting than green lighting and that playing high pitched sounds makes chocolate taste sweeter and low pitched sounds makes it more bitter. By manipulating the light and sound of your surroundings, you too can play with this synesthesia to make the drink as sweet or as bitter as you'd like. Trying to cut back on sugar? Use less maraschino and pump up those sweet melodic tunes.



# ingredients

3/4 oz.	gin
3/4 oz.	green Chartreuse
3/4 oz.	maraschino liqueur, like Luxardo
3/4 oz.	fresh lime juice
to garnish	twist of lime

**Programmable Philips Hue light bulbs [select “cocktail party” preset mode]**

**MP3 sound files to enhance bitter or sweet flavors [listen to the “Sonic Seasoning” episode of the 20k Hertz podcast]**



prep



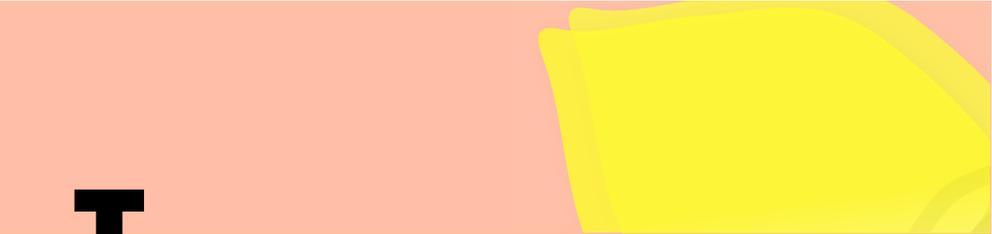
Vigorously shake all ingredients together with ice. Strain into a martini glass and garnish with lime twist.

Use smartphone to activate light and sound flavor manipulation settings.



# CRICKET'S KNEES





**T**he Bee's Knees was a cocktail designed to mask the awful taste of prohibition-era homemade gin with honey. Now, bigger problems than bad gin confront our food system—about one third of all food produced for human consumption is wasted every year, bee colony collapse threatens the pollinators responsible for 75% of our crops—just to name a few.

Now, engaged eaters are using ingredients that have both culinary and functional purposes to address urgent future challenges. Beekeepers from Bangalore to Boston are tending **rooftop hives** and entomophagists are growing crickets on their countertops. Others are working to create new markets for foods once deemed undesirable: **Imperfect Produce** sources produce that doesn't fit cosmetic standards to be sold on grocery store shelves and instead sells them directly to consumers. **Chili lime crickets** ease people into familiarity with a protein source that produces 100x less greenhouse gas emissions than beef.

Eaters are no longer just “demand” at the end of a supply chain; they are collaborators and investors and if history has taught us anything, they definitely won't let constraints stand in the way of a good drink.

# ingredients

2 oz.

Gin

(we suggest Anty Gin)

1 oz.

**Imperfect lemon** juice

1/2 oz.

rooftop honey

1

**Imperfect lemon** twist

for garnish

**chili lime crickets**





Combine equal amounts honey and hot water, mix thoroughly. In a shaker, combine gin, lemon juice, honey syrup and ice. Shake vigorously and strain into a chilled glass. Garnish with ugly lemon twist and candied crickets.

# PERENNIAL PRAIRIE PEACH





In 2017, almost all of America's 46 million acres of wheat are monocultures of annual grains. Every year we have to till and replant, and in the process tear up topsoil and release much of the carbon that had once been fixed into the ground.

**The Land Institute** in Kansas is researching and developing a new kind of wheat, a perennial grain that doesn't need to be planted every year. Now that you're saving time by not tilling your wheat fields every year, you can kick back with friends and enjoy a pitcher of this refreshing beer cocktail.

Use **Long Root Ale**, a beer from Patagonia Provisions and Hopworks Urban Brewery, which is made from **Kernza**, a perennial grain. Kernza sinks roots 10 feet deep into the ground so it requires less water and prevents erosion, and produces edible grains for five years. The Grapefruit hop-forward Pale Ale mixes perfectly with a tangy peach shrub, which helps boost biodiversity at a different scale: inside your gut. The apple cider vinegar in the shrub contains a "**mother**" (a **colony of beneficial bacteria**) that your gut microbiome will love.



# ingredients

5 oz.

white rum

5 oz.

peach shrub

1 1/4 oz.

orgeat

20 oz.

**Patagonia Provisions  
and Hopworks  
Brewery Long  
Root Ale**

*For peach shrub:*

4

medium fresh peaches,  
cut into 1-inch cubes

1 cup

granulated sugar

1 cup

grated fresh ginger

1 3/4 cup

apple cider vinegar (with  
“**the mother,**” such  
as Braggs)

1/2 cup

white balsamic vinegar





## prep

For the Cocktail: In a pitcher, mix together white rum, peach shrub, and orgeat. Refrigerate at least 1 hour before serving, or mix and refrigerate up to 24 hours in advance. When ready to serve, add beer to the pitcher and stir gently. Serve cocktails in ice-filled highball glasses.

For the peach shrub: Place the peach cubes and ginger in a wide-mouth container. Cover with sugar and lightly crush the peaches using a muddler. Cover and refrigerate overnight. Press peach mixture through a fine-mesh sieve into a clean medium-sized bowl. Discard peach solids. Add both vinegars to peach juices. Whisk to combine. Pour through funnel into clean bottle. Seal bottle and shake vigorously. Store in refrigerator for 3 to 5 days, shaking periodically to help dissolve sugar. Strained shrub keeps up to 6 months in the refrigerator.





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IFTF's Food Futures Lab identifies and catalyzes the world-changing innovations that have the potential to reinvent our global food systems. We align the minds, innovations, and resources shaping the future of food with a long-term perspective. The Food Futures Lab challenges assumptions and reveals new opportunities to make a resilient, equitable, and delicious future of food.



