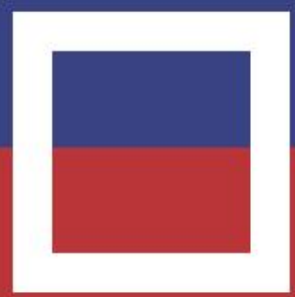




INGREDIENT OF THE MONTH



American Culinary Federation
Education Foundation

ALL ABOUT BITTERS

Dating back to ancient civilizations, the earliest evidence of bitters being added to alcohol comes from a wine vessel found in a tomb in Egypt, dating back to 3150 B.C.E. Egyptians likely infused wine with substances like terebinth or pine tree resin to harness their antioxidant properties. Herbs may have also been added, though the specific ones are challenging to pinpoint due to shared compounds in the vessels.

Around 3000 B.C.E., there's a likelihood that herbs were introduced to wine in Spain and beer in Europe, although the evidence is not as robust as the findings in Egyptian wine. Fast forward to the 5th Century, where a Greek theologian references the use of bitters before or after meals to aid in digestion. In the 17th Century, bitters became associated with patent medicine, a term referring to over-the-counter remedies protected by royal letters patent, granting manufacturers a monopoly over the formula.

Dating back to the early 19th century, bitters gained popularity as herbal remedies, often infused with botanical ingredients, herbs, spices, and fruits. The renowned Angostura bitters, created in Venezuela by Dr. Johann Siegert in the 1820s, marked a significant milestone, becoming a staple in both medicinal and cocktail applications. Over time, bitters diversified in flavors, with aromatic, citrus, and herbal variations emerging to cater to different palates.

The production of bitters involves a meticulous process. Typically infused in high-proof alcohol, the botanical ingredients undergo maceration or percolation, extracting their essences and flavors. This infusion is then aged to allow the flavors to meld and intensify, creating a concentrated and potent elixir. Some recipes are closely guarded secrets, passed down through generations or protected by proprietary formulations, contributing to the mystique surrounding certain iconic brands.

Today, bitters are not only cherished in classic and contemporary cocktails but have also found a place in culinary endeavors, adding depth and complexity to a wide array of dishes. From their medicinal origins to the sophisticated cocktail culture and culinary creativity, the journey of bitters reflects a lasting history of taste and innovation.



HEALTHY INGREDIENT CONTRIBUTION

Bitters assume a critical role in enhancing cocktails to add depth and complexity of flavors. Beyond their complex flavor profiles, certain ingredients used in the production of bitters can carry various potential health benefits. It is important to recognize that the concentration of these healthful components is modest in bitters, and the extent of their benefits can fluctuate based on the formulation used in production. Although studies on the benefits are an evolving area of research, some of the latest findings on the health benefits of bitters include:



- **Digestive Aid:** The bitter taste, commonly from gentian root, is believed to trigger the production of digestive enzymes that aid in breaking down food and improving nutrient absorption.
- **Appetite Stimulation:** Bitters can help stimulate appetite by promoting the secretion of saliva and gastric juices.
- **Anti-inflammatory Properties:** Herbs and botanicals commonly used in bitters such as ginger, chamomile, and thyme can contribute to reducing inflammation in the body.
- **Blood Sugar Regulation:** Ingredients commonly used in bitters such as cinnamon can have a positive, yet nominal, impact on the body's regulation of blood sugar levels.
- **Calming Effects:** Although used in small quantities, ingredients like chamomile and lavender can contribute calming effects on the mind and body, thus leading to an increased sense of relaxation.
- **Antioxidant Properties:** The citrus peels used in bitters contain flavonoids and vitamin C which can help combat oxidative stress and contribute to overall health.
- **Immunity Booster:** Bitters often contain spices such as ginger and turmeric which have been shown to assist in fortifying the body's defenses against sickness.
- **Liver Support:** Some herbs in bitters, including dandelion and milk thistle, show signs of liver-protecting properties that support liver function and the body's detoxification processes.

Nutritional Information/Values from [USDA FoodData Central](https://www.ars.usda.gov/data-center/)

TYPES AND VARIETIES

Bitters, an infusion of herbs, spices, fruits, roots, tree bark, and other botanicals in neutral alcohol, have an extensive array of flavors influenced by their unique styles, ingredients, and craftsmanship. Certain brands exhibit distinct flavor profiles, showcasing their expertise, while others push creative boundaries with innovative combinations. The bitters market is plentiful with an endless variety, each serving diverse purposes, from digestive aids to enhancing the flavors of cocktails, non-alcoholic beverages, sauces, marinades, and dressings.



Digestive Bitters

- Traditionally consumed for their potential digestive benefits
- Often consumed neat or with a small amount of water
- Served before or after meals to stimulate digestion
- Common Digestive Bitter Brands: Amaro, Aperol, Campari

Cocktail Bitters

- Traditionally used in the preparation of cocktails
- Used in small quantities to enhance the flavor profile of a drink
- Serves as a tool to create a balance of flavors
- Common Cocktail Bitter Brands: Angostura, Peychaud's, Bittermens

Popular Brands/Varieties of Bitters

- **Angostura:** One of the most widely used bitters with notes of clove, cinnamon, and spice.
- **Regan's Orange:** Citrusy and slightly sweet, adding brightness and complexity.
- **Peychaud's:** Classically used in the Sazerac cocktail giving a light, sweet flavor with hints of anise.
- **Aromatic:** Besides the popular brand of aromatic bitters, Angostura, many other aromatic bitters are available, each with a distinct flavor profile.
- **Celery:** Used since the 19th century to add vegetal and earthy overtones.
- **Citrus:** One or more fruits are used to add a vibrant aroma of citrus.
- **Chocolate:** Bitters made with cocoa and cacao nibs infuse cocktails with rich tones of vanilla and coffee.
- **Fruit:** Ideally used to add a hint of sweetness, freshness, and seasonality to cocktails.

SELECTING AND STORING

Selecting Bitters:

- **Brand Quality:** Popular brands of bitters like Angostura and Peychaud's have been around for a long time for a reason. Research the reputation of different brands and read reviews to help find reliable options.
- **Natural Ingredients:** Look for bitters made with natural ingredients rather than artificial flavors. Quality bitters often use a combination of botanicals, herbs, spices, and other natural elements to create their unique flavors.
- **Flavor Profile:** Consider the flavor profiles of cocktails you already enjoy. Whether you prefer citrusy, spicy, herbal, or floral, odds are, there is a variety of bitters that can take your cocktail to the next level with just a dash.
- **Versatility:** Choose bitters that are versatile and can complement a variety of spirits and cocktails.
- **Experimentation:** Don't be afraid to try something new. Experiment with different flavors such as orange, chocolate, aromatic, and herbal bitters.



Storing Bitters:

- **Light Contamination:** Bitters should be stored in dark-colored bottles to protect them from light which is known to degrade their quality.
- **Temperature:** Storing bitters in areas that are cool and dark is ideal for maintaining quality.
- **Refrigeration:** Keeping bitters stored in the refrigerator is not required but the cooler temperature can extend shelf life.
- **Proper Seal:** Maintaining a proper seal on bitters after each use helps prevent evaporation and maintain freshness.
- **Contamination:** Be sure to use clean bottles, droppers, and utensils when working with bitters to avoid cross-contamination which can compromise the integrity of the flavors.
- **Labeling:** If using multiple types of bitters, keeping their labels up to date is imperative to easily identify and access the correct bitter for usage.
- **Shelf Life:** Although bitters generally have a long shelf life, be sure to keep a check on expiration dates to ensure a quality product. House made bitters typically are best used within one year.

CULINARY USES

Bitters are concentrated elixirs crafted from a diverse medley of botanicals—a fusion of herbs, spices, and fruits in a neutral spirit. Beyond their use in mixology, these powerful concoctions unveil a versatility that goes beyond the confines of the bar. In the kitchen, bitters are taste transformers, used to balance sweetness, cut through richness, and elevate dishes to new heights. Introducing bitters early in the cooking process allows their potency to mellow and harmonize with other ingredients, while a later addition preserves their vibrant intensity, imparting a forward bitterness that adds a distinct final touch to any culinary creation.



- **Marinades & Brines:** Bitters, especially herbal or citrus-infused varieties, can add complex flavors, depth, and a distinctive touch to protein marinades and brines for pickling vegetables and fruits. Orange bitters perfectly compliments a citrus glaze for meats and vegetables.
- **Soups & Stews:** When using bitters in soups and stews, it is best to add them early. Avoid tasting or adding more bitters for at least 15 minutes to allow the flavor to fully develop.
- **Syrups & Infusions:** Use bitters to infuse oils and vinegars for salad dressing and dipping sauces or infuse syrups to use in drinks, desserts, or even drizzle over waffles.
- **Jams & Jellies:** In addition to balancing sweetness, bitters can extract deeper fruit flavors (especially from berries) when making various types of jams and jellies.
- **Desserts:** Adding a dash of bitters to chocolate and fruit desserts can tone down sweetness and cut richness.
- **Ice Cream:** Due to the properties of milk fat that allow it to absorb flavors, ice cream base is beautifully imparted with flavor from bitters.

FUN FACTS



- The use of Angostura bitters pre-dates its spot at the bar being first used as a medicinal tonic for upset stomachs.
- Used to skirt the rules of Prohibition, a Wisconsin bar has served full shots of Angostura bitters for “upset stomachs” since 1920, thus giving the state the unique distinction of selling more Angostura per capita than any other state.
- Bitters are generally bottled at an ABV of 35-45% but are often marketed as non-alcoholic because a dash or two of bitters adds only a minuscule amount of alcohol.
- Bartenders, or mixologists as they are sometimes called, use bitters in a cocktail like a kitchen chef uses salt & pepper as the backbone of a dish.
- A shot of Underberg, a digestive bitter brand from Germany, is said to cure most hangovers.
- The popularity of bitters, used in both the bar and the kitchen, shot up in 2022 with estimated sales reaching \$350+ million and expected to rise to sales levels of \$600+ million by 2027.
- Following the trend of spiritless cocktails, glycerin-based and alcohol-free bitters like those made by Dram Apothecary, have surged in popularity.

RECIPE

1920's Pegu Club Cocktail

Yield: 1 Cocktail

Ingredients (Orange Bitters):

4 Large Oranges
2 C. Neutral Grain Alcohol (100+ Proof)
12 Coriander Seeds
6 Allspice Berries
12 Fennel Seeds
3 Cardamom Pods, Gently Crushed
½ t. Gentian Root, Dried

Ingredients (Cocktail):

2 Oz. Dry Gin
1 Oz. Orange Liqueur
½ Oz. Lime Juice, Fresh
1 Dash Angostura Bitters
1 Dash Orange Bitters
Lime Wheel, For Garnish



Directions (Orange Bitters):

1. Preheat the oven to 200° F.
2. Remove the zest of the oranges in wide strips using a vegetable peeler. Spread evenly on a baking sheet.
3. Dry the orange peel in the oven for approximately 60 minutes, stirring occasionally during drying. The orange peels do not have to be bone-dry but should have lost most of their moisture and have a strong scent of orange.
4. Combine the dried orange peel, grain alcohol and spices into a clean, glass jar with a tight-fitting lid. Cover and shake vigorously.
5. Let the jar stand in a cool, dark place for at least 2 weeks, shaking it once daily.
6. Strain the mixture through a coffee filter and your homemade orange bitters are ready for use.

Directions (Cocktail):

1. Combine the gin, orange liqueur, lime juice, and bitters into a cocktail shaker.
2. Add two handfuls of ice and shake vigorously until well chilled.
3. Strain the drink, without ice, into a cocktail glass of your choice.
4. Garnish with lime wheel.

QUIZ



After you read through this month's Ingredient of the Month, take this quiz to test your knowledge. In order to earn continuing education hours (CEHs) from the American Culinary Federation (ACF), the test must be completed through the ACF's Online Learning Center. Seventy-five percent accuracy is required to earn one hour of continuing education credits toward professional certification.

QUIZ

Question #1

In the 17th century, what term is associated with bitters, referring to over-the-counter remedies?

- A. Royal Elixir
- B. Medicinal Monopoly
- C. Patent Medicine
- D. Regal Remedy



QUIZ

Question #2

The infusion of botanical ingredients in bitters is commonly done in low-proof alcohol.

- A. True
- B. False



QUIZ

Question #3

Which spice found in some bitters is known for its potential to assist in fortifying the body's defenses against sickness?

- A. Cinnamon
- B. Turmeric
- C. Chamomile
- D. Thyme



QUIZ

Question #4

The chamomile and lavender in some bitters can contribute to calming effects on the mind and body.

- A. True
- B. False



QUIZ

Question #5

What purpose does cocktail bitters serve in the preparation of cocktails?

- A. Adding sweetness
- B. Enhancing the flavor profile
- C. Providing carbonation
- D. Substituting for alcohol



QUIZ

Question #6

Which type of bitters adds vegetal and earthy overtones to mixology and culinary recipes?

- A. Aromatic
- B. Celery
- C. Citrus
- D. Chocolate



QUIZ

Question #7

Why is researching the reputation of different brands recommended when selecting bitters?

- A. To identify the cheapest option
- B. To discover new and experimental brands
- C. To find reliable options with a history of quality
- D. To support local producers



QUIZ

Question #8

Why is maintaining a proper seal on bitters important after each use?

- A. To speed up the maceration process
- B. To reduce the rate of evaporation
- C. To protect them from light contamination
- D. To add extra flavor to the bitters



QUIZ

Question #9

When used in the kitchen, which is NOT a function of bitters as a taste transformer?

- A. By adding bitterness
- B. By cutting through richness
- C. By reducing the intensity of flavors
- D. By increasing sweetness



QUIZ

Question #10

What is the average alcohol by volume (ABV) range for bitters?

- A. 20-30%
- B. 35-45%
- C. 50-60%
- D. 70-80%



JOIN US NEXT MONTH!

Stay tuned for the next ACF Ingredient of the Month! Be sure to visit the Online Learning Center (OLC) to download a copy of each month's ingredient presentation. Don't forget to take the official IOTM quiz through the OLC to earn one hour of continuing education credits toward professional certification.

For more information:

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