

# Making Culinary Extracts at Home

Andi Hoover, WVU Extension Agent – Greenbrier County

David Roberts, WVU Extension Agent – Lincoln County

---

## Educational Objectives

- Participants will be able to recognize and identify what flavored extracts are and how they are used.
- Participants will learn to identify safe and effective methods for making extracts at home.
- Participants will implement and demonstrate proper labeling and storage techniques.

Flavored extracts are concentrated liquids that capture the aroma and flavor of natural ingredients. They are used in cooking and baking to enhance flavor without altering texture or adding bulk. The most common extract is vanilla, but there are others, such as mint, citrus, almond, coffee, lavender and more. This lesson will explore what flavored extracts are, how they work and how to make them at home safely.



Image by vecstock on Freepik

## What are Flavored Extracts?

A flavored extract is a solution made by soaking a flavoring agent in a solvent, usually alcohol, to pull out the essential oils and flavor compounds. Extracts have a unique flavor and are used in small amounts to add intense flavor to recipes. Cooking with flavored extracts can elevate the flavor of almost any dish. Extracts can be used in baking cakes, cookies or brownies; in beverages, like coffee, cocktails or mocktails; and for savory dishes, such as marinades, sauces and dressings. Bottled extracts make thoughtful DIY presents for friends and family.

## Common Types of Extracts

Vanilla – from vanilla beans

Mint – from peppermint or spearmint leaves

Citrus – from the zest of oranges, lemons or limes

Almond – from almond oil or bitter almond

Coffee – from roasted coffee beans

Lavender – from dried lavender buds

Hot pepper – from different peppers

Garlic – from garlic cloves

– continued –

---

## Making Culinary Extracts

Extraction works because certain flavor compounds are soluble in liquids, like alcohol or glycerin. Ethanol, the type of alcohol found in vodka or rum, is especially effective because it dissolves both water-soluble and fat-soluble compounds. Alcohol preserves the extract, giving it a long shelf life and evaporates during cooking, leaving only the flavor behind. The type of alcohol used makes a difference in the final flavor. Different extracts work differently with different alcohols. Vodka is the most common choice because it doesn't add any flavor and can be used in any extract. Rum has a rich flavor to it, so it works best for vanilla, cinnamon, coconut or banana extracts. Everclear is best used for herbs (i.e., mint or lavender) because it extracts flavor quickly and prevents a "grassy" taste.

If you do not want to use alcohol, there are alternative solvents. Glycerin (vegetable glycerin) is an alcohol-free alternative. Vegetable glycerin is used in food primarily as a humectant, meaning it helps retain moisture. It also acts as a sweetener and solvent. Glycerin does not extract flavor as effectively and tends to be weaker than alcohol-based extracts. Another alternative that can be used for more savory, less sweet extracts is vinegar.

## Safety Methods for Making Extracts at Home

When making extracts, cleanliness is essential. Use clean, sterilized glass jars and utensils. Wash and dry all ingredients thoroughly to rid the product of any debris or contamination. Use food-safe alcohol—at least 80 proof (40% alcohol) vodka or rum. It will take six to eight weeks for the alcohol to draw out the essential oils, flavor and aroma from the food you are using. The longer it sits, the stronger the flavor. Some recipes call for an extract to sit for up to 12 months for the best flavor.

You will want to label the jar with the name, date and ingredients. Then store the extract in a cool, dark place away from sunlight.

## How to Make Flavored Extracts: Step by Step with Recipes

What you will need:

- Solvent of choice (70 to 80 proof alcohol or food grade liquid glycerin)
- Flavoring agent
- Mesh strainer
- Jars with tight fitting lid
- Labels

Basic Flavor Ratios (per 8 ounces vodka)

- Almond: 1 cup raw blanched almonds, roughly chopped
- Berries:  $\frac{3}{4}$  cup crushed fruit
- Cinnamon: 4 to 6 whole sticks
- Citrus: 1 cup zest/peel
- Mint:  $\frac{3}{4}$  cup roughly chopped leaves
- Vanilla: 1 ounce beans

\*Vanilla Beans: There are over 100 types of vanilla beans. The three most popular are Madagascar, Tahitian and Mexican. Each type of vanilla bean has a slightly different taste. Grade B beans are better for extracts due to a lower water content.

Once your extract has reached the flavor desired, it will need to be strained. Pour the extract through a mesh strainer to remove the flavoring agent. The liquid left will be the extract you bottle. Leaving the flavoring agent in the extract will cause it to become stronger, and with some herbs, can change the flavor.

## Basic Vanilla Extract Recipe

Ingredients:

1 ounce whole vanilla beans

1 cup vodka (or another alcohol, such as bourbon or rum)

Instructions:

1. Slice the vanilla beans lengthwise to expose the seeds inside.



2. Place beans in an 8-ounce glass jar with a tight lid.
3. Pour vodka over the beans, completely submerging them.
4. Seal the jar and label it with the date and contents.
5. Keep the jar in a cool, dark place for at least 6 to 8 weeks. Shake occasionally. Strain, return to jar and store or use.

## Mint Extract

Ingredients:

$\frac{3}{4}$  to 1 cup fresh mint leaves

1 cup vodka

Instructions:

1. Roughly tear the leaves before adding to the jar
2. Pour alcohol over the leaves, completely submerging them.
3. Seal the jar and label it with the date and contents.
4. Keep the jar in a cool, dark place for at least 6 to 8 weeks. Shake occasionally. Strain, return to jar and store or use.

## Lemon Extract

Ingredients:

Zest from 3 to 4 lemons (avoid the white pith)

1 cup vodka or Everclear

Instructions:

1. Peel thin strips of zest using a vegetable peeler
2. Pour alcohol over the leaves, completely submerging them.
3. Seal the jar and label it with the date and contents.
4. Keep the jar in a cool, dark place for at least 6 to 8 weeks. Shake occasionally. Strain, return to jar and store or use.

## Almond Extract

Ingredients:

1 cup of crushed raw almonds

1 cup vodka or rum

Instructions:

1. Toast nuts lightly for a richer flavor before extraction.
2. Pour alcohol over the almonds, completely submerging them.
3. Seal the jar and label it with the date and contents.
4. Keep the jar in a cool, dark place for at least 6 to 8 weeks. Shake occasionally. Strain, return to jar and store or use.

## Coffee Extract

Ingredients:

$\frac{1}{2}$  cup roasted coffee beans (lightly crushed)

1 cup vodka

Instructions:

1. Pour alcohol over the beans, completely submerging them.
2. Seal the jar and label it with the date and contents.
3. Keep the jar in a cool, dark place for at least 6 to 8 weeks. Shake occasionally. Strain, return to jar and store or use.

## Lavender Extract

Ingredients:

$\frac{1}{4}$  cup dried lavender buds

1 cup vodka or glycerin

Instructions:

1. Use culinary-grade lavender only.
2. Pour alcohol over the leaves, completely submerging them.
3. Seal the jar and label it with the date and contents.



4. Keep the jar in a cool, dark place for at least 6 to 8 weeks. Shake occasionally. Strain, return to jar and store or use.

## Making Alcohol-Free Extracts

Not everyone can use alcohol, especially in extracts for children or for certain dietary/religious reasons.

An alternative mentioned above is to use vegetable glycerin mixed with water in a 3:1 ratio. Glycerin extracts take a little longer to mature (six to eight weeks) and tend to be slightly sweeter. However, you will follow the same method (except maturing longer) as with alcohol-based extracts.

## Labeling and Storage Tips

Include the type of extract, the date started and the alcohol used. You also can add information on ways to use the extract.

Store in dark glass bottles or keep jars in a dark cupboard. Extracts using alcohol have a shelf-life up to five years. For Glycerin-based extracts, those have a shelf life of one year. Always check for changes in smell, color or texture before use.

Making flavored extracts is a simple yet powerful way to learn about chemistry, cooking and creative expression. Whether you are making a traditional vanilla extract or experimenting with new combinations, like ginger-lime or cinnamon-cardamom, this DIY process is both educational and rewarding.

## Activities:

### DIY Extract Challenge

Have each member create their own flavored extract and present it to the club after four to six weeks.

Compare homemade extracts to store-bought versions in a blind taste test.

### Steps:

1. Choose a flavor (e.g., citrus, mint, spice, etc.).
2. Prepare the extract using proper hygiene and technique.
3. Design a label and bottle.
4. Present findings on the process, challenges and final product.

## Resources

Filippi, C. (2021, September 28). Making flavored culinary extracts. Fruition. Cornell University. <https://blogs.cornell.edu/fruition/2021/09/28/making-flavored-culinary-extracts/>

Huffstetler, E. (2019, June 21). How to make non-alcoholic extracts. The Spruce Eats. <https://www.thespruceeats.com/how-to-make-non-alcoholic-extracts-1388885>

Farnsworth, R. (n.d.). How to make homemade extracts (any flavor!) The Stay At Home Chef. <https://thestayathomechef.com/how-to-make-homemade-extracts/>

Fulton, P., & Fulton, J. (2023). The art of extract making: A kitchen guide to making vanilla and other extracts at home. Agate Publishing. <https://www.agatepublishing.com/9781572843301/the-art-of-extract-making/>

---

West Virginia University is an Equal Opportunity Employer.

In accordance with Federal law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, WVU is prohibited from discriminating on the basis of race, color, national origin, sex, age, disability, and reprisal or retaliation for prior civil rights activity. (Not all prohibited bases apply to all programs).

Reasonable accommodations will be made to provide this content in alternate formats upon request. Contact the WVU Division for Land-Grant Engagement Communications at 304-293-4222. For all other ADA requests, contact WVU Division of Campus Engagement and Compliance at [ADA@mail.wvu.edu](mailto:ADA@mail.wvu.edu) or 304-293-4750.

