

CiCN

CULINARY
INSTITUTE OF
CHILD NUTRITION

CULINARY QUICK BITES

BASIC COOKING TECHNIQUES:
HOW TO MAKE VEGETABLE STOCK



CULINARY QUICK BITES

BASIC COOKING TECHNIQUES: HOW TO MAKE VEGETABLE STOCK

EXECUTIVE DIRECTOR
Aleshia Hall-Campbell, PhD, MPH

Institute of Child Nutrition
The University of Mississippi, School of Applied Sciences
www.theicn.org

Key Area: 2 – Operations

USDA Professional Standards Code
Food Production – 2100

2024

DISCLAIMER

This project has been funded at least in part with Federal funds from the U.S. Department of Agriculture, Food and Nutrition Service through an agreement with the Institute of Child Nutrition at the University of Mississippi. The content of this publication does not necessarily reflect the view or policies of the U.S. Department of Agriculture, nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. Government.

In accordance with federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, this institution is prohibited from discriminating on the basis of race, color, national origin, sex (including gender identity and sexual orientation), disability, age, or reprisal or retaliation for prior civil rights activity.

Program information may be made available in languages other than English. Persons with disabilities who require alternative means of communication to obtain program information (e.g., Braille, large print, audiotape, American Sign Language), should contact the responsible state or local agency that administers the program or USDA's TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339.

To file a program discrimination complaint, a Complainant should complete a Form AD-3027, USDA Program Discrimination Complaint Form which can be obtained online at: <https://www.usda.gov/sites/default/files/documents/ad-3027.pdf>, from any USDA office, by calling (866) 632-9992, or by writing a letter addressed to USDA. The letter must contain the complainant's name, address, telephone number, and a written description of the alleged discriminatory action in sufficient detail to inform the Assistant Secretary for Civil Rights (ASCR) about the nature and date of an alleged civil rights violation. The completed AD-3027 form or letter must be submitted to USDA by:

- (1) Mail: U.S. Department of Agriculture
Office of the Assistant Secretary for Civil Rights
1400 Independence Avenue, SW
Washington, D.C. 20250-9410;
- (2) Fax: (833) 256-1665 or (202) 690-7442; or
- (3) Email: program.intake@usda.gov

The USDA is an equal opportunity provider.

The University of Mississippi is an EEO/AA/Title VI/Title IX/Section 504/ADA/ADEA Employer.

Except as provided below, you may freely use the text and information contained in this document for non-profit or educational use with no cost to the participant for the training providing the following credit is included. These materials may not be incorporated into other websites or textbooks and may not be sold.

Suggested Reference Citation:

Institute of Child Nutrition. (2024). *Culinary quick bites basic cooking techniques: How to make vegetable stock*. University, MS: Author.

The photographs and images in this document may be owned by third parties and used by the University of Mississippi under a licensing agreement. The university cannot, therefore, grant permission to use these images. Please contact helpdesk@theicn.org for more information.

©2024, Institute of Child Nutrition, The University of Mississippi, School of Applied Sciences

TABLE OF CONTENTS

3 DISCLAIMER

4 TABLE OF CONTENTS

5 TRAINING OVERVIEW

5 KEY AREA

5 PROFESSIONAL STANDARDS

6 FACILITATOR'S NOTES

7 MATERIALS NEEDED

8 LESSON OVERVIEW

10 INFOGRAPHIC: HOW TO MAKE VEGETABLE STOCK

11 TRAINING VIDEO

11 QR CODE

12 ACTIVITY

14 POST ACTIVITY



TRAINING OVERVIEW

The Culinary Quick Bites training series is a tool to help child nutrition professionals develop and refine their culinary skills. Each lesson is designed to last approximately fifteen minutes. Each lesson should be facilitated (led) by the person responsible for overseeing food production at a meal site, service area, or at the district level.

Training facilitators should review the training, in its entirety, prior to conducting the training.

This training has been developed to address a variety of learning styles. The training includes an overview of the topic presented by the facilitator, an infographic to reinforce the training topic visually, a video to demonstrate the topic, and an activity to reinforce learning.

Please contact the Institute of Child Nutrition Help Desk at 1-800-321-3054 or helpdesk@theicn.org if you have any questions about how best to facilitate this training.

KEY AREA

Key Area: 2 – Operations

PROFESSIONAL STANDARDS

FOOD PRODUCTION – 2100

Employee will be able to effectively utilize food preparation principles, production records, kitchen equipment, and food crediting to prepare foods from standardized recipes, including those for special diets.

2130 – Develop culinary skills necessary for school meal preparation.

FACILITATOR'S NOTES

This training counts for 15 minutes of training credit under USDA Professional Standards learning objective 2130 – Develop culinary skills necessary for school meal preparation.

This activity helps reinforce knowledge and skills learned during this lesson. The vegetable stock prepared during this lesson may be included in the next day's menu production.

Before the training, prepare for the lesson activity and set up the kitchen workstation as described on page 12.

Deliver the lesson/training to participants:

- Read the lesson overview to the participants.
- Discuss the infographic and how it relates to the training topic.
- View the instruction video with participants.
- Answer any questions participants may have on the lesson, infographic, and video.

Complete the activity as instructed on page 12.

MATERIALS NEEDED



- Anti-slip mat – 1 per person
- Cutting board – 1 per person
- Chef knife – 1 per person
- Waste pan – as needed
- Food pan – as needed
- Stock pot – as needed
- Washed vegetables (amount based on your service needs)
- Water (amount based on your service needs)
- Equipment: stove or steam jacketed kettle
- Infographic: How to Make Vegetable Stock – 1 per person
- Access to a screen to show the training video. Possible options include:
 - Site computer monitors with sound
 - Projector with sound
 - Tablets and smartphones
 - A QR code has been provided for quick access to the video on handheld devices.

LESSON OVERVIEW

OBJECTIVE:

At the end of this lesson, participants will be able to demonstrate how to make vegetable stock.

GENERAL INFORMATION ABOUT VEGETABLE STOCK

- Vegetable stock is a flavorful liquid prepared by simmering vegetables in water until the flavor is extracted.
- Vegetable broth and vegetable stock are often used interchangeably in the culinary world, despite the traditional definition of stock involving the use of animal bones or crustacean shells. Although vegetables don't have bones, the term "stock" is commonly used to refer to a flavorful liquid made from simmering vegetables.
- Vegetable stock is the base for many dishes. It can be used to flavor grains such as rice and is the base of many soups and stews.
- A good stock is clear, like a commercial stock base mixed with water to make a broth.
 - Skimming frequently during cooking removes impurities (film) that rise to the top, so the stock remains clear.
- By making your vegetable stock, you can control the amount of sodium, the overall flavor, and cost; making your vegetable stock is inexpensive.
- Cooking vegetables like onion, carrot, and celery at the start of stock preparation is essentially sautéing the vegetables to develop layers of flavor.
 - Cooking the aromatic vegetables at the beginning of the process will help them to break down and release their natural sugars to help add a depth of flavor to the dish.
- Recommended vegetables:
 - Onions, carrots, celery, garlic, mushrooms, parsnips, scallions, leeks, shallots, and summer squash
- Other recommended aromatics:
 - Parsley, bay leaf, thyme, black peppercorns
- Vegetables not recommended:
 - Asparagus, beets, bell peppers, broccoli, cabbage (all varieties), corn, greens, okra, potatoes, and squash (hard or winter)

STEPS TO MAKE VEGETABLE STOCK

- Wash/clean, peel (if necessary), and cut vegetables. Note that peels/stems/ends/etc. that would usually be waste can actually be used in stock preparation (these parts also have flavor like other parts of vegetables and can be used since the liquid will be strained anyway).
- Lightly sauté the vegetables over medium heat with a small amount of oil, or you can sauté dry, if desired.
- Add water to cover the vegetables and bring to a boil.

LESSON OVERVIEW

- Bring the vegetables and water to a boil and reduce the heat so the liquid is at a simmer (do not boil). Cook until the liquid is reduced by one-third. This will take 1-2 hours. Skim the stock to remove impurities (film) as needed during cooking time.
- After the stock is ready, remove it from the heat. The stock should be strained to separate all the solids from the liquid. Using a ladle, carefully ladle the stock from the pot and strain it through a very fine strainer. The strainer should be fine enough that no solids are strained through, and the liquid is clear.
- After the stock has been strained, cool it quickly in shallow pans in the refrigerator or place in an ice water bath. Stir the stock periodically during the cooling process. When the stock is completely chilled (41 °F or less), remove any fat (cooking fat from sauté) that is on the top.

HOW TO MAKE VEGETABLE STOCK

- Utilizing the infographic, review the process for making vegetable stock.
- Review the embedded training video.

After we review the infographic and video, there will be an activity to reinforce skills learned.

Culinary Quick Bites

BASIC FOOD PREPARATION SKILLS

HOW TO MAKE VEGETABLE STOCK

1



Gather the vegetables for the stock.

2



Chop vegetables and add them to the pot, over medium heat.

3



Lightly sauté over medium heat.

4



Add water to cover the vegetables and bring to a boil.

5



Reduce to a simmer and allow to simmer for 1-2 hours.

6



Skim the surface as needed.

7



Strain the stock, remove, cool, and store properly for future use.

8





CULINARY QUICK BITES

How to Make Vegetable Stock

[WATCH THE VIDEO](#)

<https://vimeo.com/879569540/a071e472b5?share=copy>

QR CODE

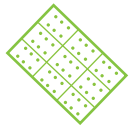
Utilize the QR code embedded to the right to share the video with staff utilizing handheld devices such as smartphones and tablets. Use the photo app on the smart device to scan the code to be directed to the video.



ACTIVITY

SETUP

MATERIALS:



Anti-slip mat
– 1 per person



Food pan
– as needed



Equipment: stove or
steam jacketed kettle



Cutting board
– 1 per person



Stock pot
– as needed



Infographic: How to
Make Vegetable Stock
– 1 per person



Chef knife
– 1 per person



Washed vegetables
(amount based on
your service needs)



Waste pan
– as needed



Water
(amount based on
your service needs)

NOTE: Participants will be working together to make the recipe. Determine the quantity of the recipe to prepare based on the number of servings needed for your service. Scale recipe accordingly.

SETUP INSTRUCTIONS FOR FACILITATOR

- 1** Prior to the training, gather all of the materials needed for the activity. Set up a workstation for each participant with the utensils and ingredients needed to prepare the recipe.
- 2** During the activity, remember to monitor and observe staff as they practice their culinary skills.

ACTIVITY

ACTIVITY INSTRUCTIONS FOR PARTICIPANTS

- 1** Refer the participants to the infographic and the recipe. Then read the instructions for the activity. Ask the participants if there are any questions before beginning the activity.
- 2** Instruct all participants to wash their hands and put on single-use gloves before starting.
- 3** As a group, the participants will prepare vegetable stock to incorporate into their weekly menu. Complete the cooking process and encourage the participants to taste the final product.
 - Instruct participants to take their time and practice their culinary skills.
 - Discard waste.

POST ACTIVITY

- After completing the hands-on activity, recap the lesson with the participants. Offer an opportunity for participants to share their learning experience during the training and highlight any tips or takeaways they want to share with the group.
- If time allows, facilitate a discussion with the participants. Suggested discussion topics include:
 - Ask participants to discuss recipes that would benefit from using vegetable stock to flavor the recipe.
 - Ask participants to describe how using vegetable stock can assist in improving meal quality.
- Ask if the participants feel more comfortable with making vegetable stock or want more time to develop the skill further if time allows.
- Plan the next training session based on the needs of your staff.



The University of Mississippi

School of Applied Sciences

800-321-3054

www.theicn.org