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Fresh from the Garden

OVERVIEW

In 1999, the *Network for a Healthy California* (previously *California Nutrition Network*) awarded the Common Ground Garden Program at the University of California's Cooperative Extension a grant to provide nutrition education to adult gardeners in Los Angeles County. The lessons were created by Susan Giordano, MS, RD, former Nutrition Program Coordinator at UC Cooperative Extension in Los Angeles County.

The "vegetable education" program, called *Fresh from the Garden*, targets home gardeners and their families with limited resources living in Los Angeles County. Classes, available in English and Spanish, are free and can be presented as a "single" or in a "seasonal" series. The presentations or lessons are designed to increase gardeners' knowledge of healthful eating habits, while emphasizing the health benefits associated with a vegetable-rich diet. Additionally, gardeners are encouraged to grow a greater variety of vegetables, grow more nutrient-dense vegetables, to cultivate vegetable crops throughout the year, and to prepare their harvest healthfully.

Funds supplied through the grant supported the development of five lessons, which are divided into 4 sections: Warm Weather Vegetables—Gardeners' Favorites, Cool Weather Vegetables--Nutritious but Neglected, Cooking Vegetables for Good Health and Good Taste and From Garden to Freezer - Freezing Vegetables. Each lesson contains a presenter's overview of the topic, presentation suggestions, recipes, and an English/Spanish handout.

In addition to the original five lessons, the material contains a variety of supplemental background information from sources such as, the University of California Cooperative Extension, UCCE's Common Garden Program in Los Angeles, other University Extension Programs' Specialists, the USDA, and the National Gardening Association. This material is intended only to provide an introduction to the main topics contained in each presentation--gardening, nutrition, exercise, and food safety--additional education or expertise may be required.

The Fresh from the Garden Program is volunteer-based, as are many of the other programs offered by the University of California Cooperative Extension. Volunteers are trained in each component of the program, and through their energies, it is extended to the community.

Linking Fresh from the Garden with the Food Stamp Nutrition Education Program (FSNEP)

UC Master Gardeners who are helping low-income families grow their own food are encouraged to use Fresh from the Garden lessons to complement their activities in the garden. These lessons can be used to educate food stamp-eligible families about the importance of eating more vegetables and ways to incorporate fresh-from-the-garden vegetables into healthy recipes. All lessons have been updated to reflect the recommendations of the 2005 *Dietary Guidelines for Americans*.

Historically, backyard vegetable gardens have been important tools for helping families and individuals become more self-reliant in meeting their food needs. While growing garden fresh produce is always popular, in times of need it tends to come to the forefront.

Several studies have found that having a vegetable garden, is related to an increase in the consumption of vegetables and fruits by the entire family.

When used to its potential, a 200 square foot garden plot can produce more than \$600 per year of fresh produce. This can add significantly to food security for residents of low-income neighborhoods with limited access to high-quality, affordable fresh produce.

Vegetable gardens have tremendous potential as focal points for ongoing nutrition and food preservation education. Currently, there are few adult educational materials and activities that form a link between gardening and nutrition. The *Fresh from the Garden Program* proposes to enhance existing support activities for gardens by adding a food and nutrition education component.



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HOW TO CONDUCT YOUR OWN "FRESH FROM THE GARDEN" PRESENTATION

Getting supplies:

- The Cooperative Extension County office will have basic supplies for your cooking demonstrations (electric skillet, sauté pan, knives, cutting board, spatula, wooden spoon, mixing bowl, food handlers gloves, disposable plates/cups/etc.). Bins can be checked out of the office with the supplies that you request.
- Contact the office at least one-week in advance with the supplies that you will need included in the bin.
- Cooperative Extension will purchase necessary food supplies for cooking demonstrations. Special food requests also need to be made at least one-week in advance. It is encouraged that you use as much food as possible fresh from the garden.
- All supplies must be returned to the office within 3 days of your cooking demonstration.

Find helpers:

- You many need people to help distribute flyers or to help you prepare for the presentation.
- Help may also be needed for set-up, assistance before and during the presentation (sign-in, pass handouts or samples), and after with clean-up.

Find a location for cooking classes:

- Although presenting in a garden or outdoors is fine, other factors can sometimes be a problem (hot, cold, or rainy weather, traffic noise, uneven ground, wind, insects, animals, etc).
- If you need a location for cooking demonstrations, try calling local churches, schools, and community centers. Someone's home might even work for a small group.
- Figure out the maximum number of people you can have attend, and how many people you will need to help you.
- Novice presenters are advised to limit the number of participants to a manageable group size; no more than 10 to 15 participants is a good idea.

Teaching the class:

- Many of the presentations require that you make some handouts. These are available in the
 office. You can also download them from the UCCE-Los Angeles County website
 (http://celosangeles.ucdavis.edu/).
- Distribute group meeting attendance form and make sure everyone signs-in.
- Open the class with an introduction and a brief summary of what you will present. Then begin with some nutrition information, but don't overdo it. Try to sprinkle important health facts

throughout the presentation. Try to make your presentation fun, interesting, colorful and appetizing.

- Demonstrate the basic steps for each recipe. To keep your presentation moving, prepare time-consuming tasks ahead of time—washing produce, chopping onions, etc.
- Be aware of food safety issues and keep prepared foods either hot or cold as required.
- Have each ingredient of each recipe measured out in a bowl or container.
- Disposable cups or small jars work for seasonings and small amounts. Put the measured ingredients for each recipe on separate serving trays, if possible.
- Put the utensils and equipment you will need for the recipe on the tray--mixing bowls, spoon, knife, spatula, skillet.
- Things to have within easy reach include a towel or paper towels, a waste container, and copies of the recipe.
- For up to 25 people attending, usually a single recipe is enough for a small sample each. For 30-55, double each recipe; for up to 75, triple, etc. Don't forget to include your helpers.
- You may also want to give samples of other recipes that you did not demonstrate.
- Once the group has tasted the recipe, ask the group questions from the taste test tool.
- Distribute "intent to change" questions to adult participants.

When your class is finished:

- Collect group meeting attendance sign-in sheet
- Collect all evaluation paperwork (taste test tool and "intent to change" questions)
- Return borrowed supplies to Cooperative Extension within 3 days
- Be sure to turn in sign-in sheets, taste test tool and intent to change questionnaires to Cooperative Extension.

Who to contact at Cooperative Extension:

- For questions related to adult program delivery:
 - Cynthia Orozco
 Adult Food Stamp Nutrition Education Program (FSNEP) Coordinator
 (323) 260-3346
 corozco@ucdavis.edu
- For questions related to youth program delivery:
 - Ellen Sandor
 Youth Food Stamp Nutrition Education (FSNEP) Coordinator
 (323) 260-3350
 elsandor@ucdavis.edu
- For general inquiries:

Brenda Roche
 Nutrition, Family & Consumer Sciences Advisor
 (323) 260-3299
 bkroche@ucdavis.edu



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NUTRITION—THE BASICS

Nutrition education is the backbone of this project. All the lessons place a strong emphasis on the health-promoting benefits of a diet rich in vegetables.

Familiarize yourself with this section, which contains basic nutrition information from the 2005 Dietary Guidelines for Americans and MyPyramid. This would be a good starting point for beginners.

MyPyramid



What is My Pyramid?

My Pyramid is an outline of what to eat each day based on the 2005 Dietary Guidelines for Americans. It's not a rigid prescription, but a general guide that lets you choose a healthful diet that's right for you.

My Pyramid - Vegetable Group

Why is it important to eat vegetables?

Eating vegetables provides <u>health benefits</u> — people who eat more fruits and vegetables as part of an overall <u>healthy diet</u> are likely to have a reduced risk of some chronic diseases. Vegetables provide <u>nutrients</u> vital for health and maintenance of your body.

Health benefits

• Eating a diet rich in fruits and vegetables as part of an overall healthy diet may reduce risk for stroke and perhaps other cardiovascular diseases.

- Eating a diet rich in fruits and vegetables as part of an overall healthy diet may reduce risk for type 2 diabetes.
- Eating a diet rich in fruits and vegetables as part of an overall healthy diet may protect against certain cancers, such as mouth, stomach, and colon-rectum cancer.
- Diets rich in foods containing fiber, such as fruits and vegetables, may reduce the risk of coronary heart disease.
- Eating fruits and vegetables rich in potassium as part of an overall healthy diet may reduce the risk of developing kidney stones and may help to decrease bone loss.
- Eating foods such as vegetables that are low in calories per cup instead of some other higher-calorie food may be useful in helping to lower calorie intake.

Nutrients

- Most vegetables are naturally low in fat and calories. None have cholesterol. (Sauces or seasonings may add fat, calories, or cholesterol.)
- Vegetables are important sources of many nutrients, including <u>potassium</u>, <u>dietary fiber</u>, folate (folic acid), <u>vitamin A</u>, <u>vitamin E</u>, and <u>vitamin C</u>.
- Diets rich in potassium may help to maintain healthy blood pressure. Vegetable sources of potassium include sweet potatoes, white potatoes, white beans, tomato products (paste, sauce, and juice), beet greens, soybeans, lima beans, winter squash, spinach, lentils, kidney beans, and split peas.
- Dietary fiber from vegetables, as part of an overall healthy diet, helps reduce blood cholesterol levels and may lower risk of heart disease. Fiber is important for proper bowel function. It helps reduce constipation and diverticulosis. Fiber-containing foods such as vegetables help provide a feeling of fullness with fewer calories.
- Folate (folic acid) helps the body form red blood cells. Women of childbearing age who may become pregnant and those in the first trimester of pregnancy should consume adequate folate, including folic acid from fortified foods or supplements. This reduces the risk of neural tube defects, spina bifida, and anencephaly during fetal development.
- Vitamin A keeps eyes and skin healthy and helps to protect against infections.
- Vitamin E helps protect vitamin A and essential fatty acids from cell oxidation.
- Vitamin C helps heal cuts and wounds and keeps teeth and gums healthy. Vitamin C aids in iron absorption.

Phytochemicals

• Phytochemicals (pronounced fight-o-chemicals) are chemicals found naturally in plants, including fruits and vegetables

- Fruits and vegetables that are bright in color usually have the most phytochemicals and nutrients
- There are thousands of known phytochemicals, but only a few have been studied in detail
- Research has shown that some phytochemicals may help reduce the risk of diseases such as heart disease, diabetes, hypertension and cancer
- Some phytochemicals act as antioxidants protecting against certain types of cancers and heart disease
- There are several common types of phytochemicals:
 - o Flavonoids (found in a broad range of fruits, vegetables and grains) and isoflavones (found in soy)
 - o Carotenoids (found in orange, red and yellow fruits and vegetables)
 - o Lycopene (found in tomatoes)
 - o Allyl Sulfides (found in garlic and onions)
- Eating a diet rich in fruits and vegetables is the easiest way to increase phytochemicals in the diet

Vegetables are organized into 5 subgroups, based on their nutrient content. Some commonly eaten vegetables in each subgroup are:

Dark green vegetables bok choy broccoli collard greens dark green leafy lettuce kale mesclun mustard greens romaine lettuce spinach turnip greens watercress	Orange vegetables acorn squash butternut squash carrots hubbard squash pumpkin sweet potatoes	Dry beans and peas black beans black-eyed peas garbanzo beans (chickpeas) kidney beans lentils lima beans (mature) navy beans pinto beans soy beans split peas tofu (bean curd made from soybeans) white beans	Starchy vegetables corn green peas lima beans potatoes	other vegetables artichokes asparagus bean sprouts beets Brussels sprouts cabbage cauliflower celery cucumbers eggplant green beans green or red peppers iceberg (head) lettuce mushrooms okra onions parsnips tomatoes tomato juice vegetable juice turnips wax beans zucchini
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How many vegetables are needed daily?

The amount of vegetables you need to eat depends on your age, sex, and level of physical activity. Recommended total daily amounts are shown in the chart below. Recommended weekly amounts from each vegetable subgroup are shown in the second chart.

Recommendation*			
Children	2-3 years old	1 cup	
	4-8 years old	1 ½ cups	
Girls	9-13 years old	2 cups	
	14-18 years old	2 ½ cups	
Boys	9-13 years old	2 cups	
	14-18 years old	2 ½ cups	
Women	19-30 years old	2 ½ cups	
	31-50 years old	2 ½ cups	
	51+ years old	2 cups	
Men	19-30 years old	3 cups	
	31-50 years old	3 cups	
	51+ years old	2 ½ cups	

^{*}These amounts are appropriate for individuals who get less than 30 minutes per day of moderate physical activity, beyond normal daily activities. Those who are more physically active may be able to consume more while staying within calorie needs.

Vegetable subgroup recommendations are given as amounts to eat WEEKLY. It is not necessary to eat vegetables from each subgroup daily. However, over a week, try to consume the amounts listed from each subgroup as a way to reach your daily intake recommendation.

		Dark	Orange	Dry Beans	Starchy	Other
		Green	Vegetables	and Peas	Vegetables	Vegetables
		Vegetables				
		Amount Per Week				
Children	2-3 yrs old	1 cup	½ cup	½ cup	1 ½ cup	4 cups
	4-8 yrs old	1 ½ cup	1 cup	1 cup	2 ½ cup	4 ½ cups
Girls	9-13 yrs old	2 cups	1 ½ cup	2 ½ cups	2 ½ cups	5 ½ cups
	14-18 yrs old	3 cups	2 cups	3 cups	3 cups	6 ½ cups
Boys	9-13 yrs old	3 cups	2 cups	3 cups	3 cups	6 ½ cups
	14-18 yrs old	3 cups	2 cups	3 cups	6 cups	7 cups
Women	19-30 yrs old	3 cups	2 cups	3 cups	3 cups	6 ½ cups
	31-50 yrs old	3 cups	2 cups	3 cups	3 cups	6 ½ cups
	51+ yrs old	2 cups	1 ½ cups	2 ½ cups	2 ½ cups	5 ½ cups
Men	19-30 yrs old	3 cups	2 cups	3 cups	6 cups	7 cups
	31-50 yrs old	3 cups	2 cups	3 cups	6 cups	7 cups
	51+ yrs old	3 cups	2 cups	3 cups	3 cups	6 ½ cups

What counts as a cup of vegetables?

In general, 1 cup of raw or cooked vegetables or vegetable juice, or 2 cups of raw leafy greens can be considered as 1 cup from the vegetable group.

The chart below lists specific amounts that count as 1 cup of vegetables towards daily recommended intake:

	Amount that counts as 1 cup	Amount that counts as ½	
	of vegetables	cup of vegetables	
Dark-green Vegetables	of vegetables	cup of vegetables	
Broccoli	1 cup chopped or florets 3 spears 5" long raw or cooked		
Greens (collards, mustard greens, turnip greens, kale) Spinach	1 cup cooked 1 cup, cooked 2 cups raw is equivalent to 1 cup of vegetables	1 cup raw is equivalent to ½ cup of vegetables	
Raw leafy greens: Spinach, romaine, watercress, dark green leafy lettuce, endive, escarole	2 cups raw is equivalent to 1 cup of vegetables	1 cup raw is equivalent to ½ cup of vegetables	
Orange Vegetables			
Carrots	1 cup, strips, slices, or chopped, raw or cooked 2 medium carrots 1 cup baby carrots (about 12)	1 medium carrot About 6 baby carrots	
Pumpkin	1 cup mashed, cooked		
Sweet Potato	1 large baked (2 1/4" or more diameter) 1 cup sliced or mashed, cooked		
Winter squash (acorn, butternut, hubbard)	1 cup cubed, cooked	¹ / ₄ acorn squash, baked = ³ / ₄ cup	
Dry Beans and Peas			
Dry beans and peas (such as black, garbanzo, kidney, pinto or soy beans, or black eyed peas or split peas	1 cup whole or mashed, cooked		
Tofu	1 cup ½" cubes (about 8 oz)	1 piece 2 ½" x 2 ¾" x 1" (about 4 oz)	
Starchy Vegetables			
Corn, yellow or white	1 cup 1 large ear (8" to 9" long)	1 small ear (about 6'' long)	
Green peas	1 cup		
White potatoes	1 cup diced, mashed 1 medium boiled or baked potato (2 ½'' to 3'' diameter) French fried: 20 medium to long strips (2 ½'' to 4'' long) (contains discretionary calories)		
Other Vegetables			
Bean sprouts	1 cup cooked		
Cabbage, green	1 cup, chopped or shredded raw or cooked		
Cauliflower	1 cup pieces or florets raw or cooked		
Celery	1 cup, diced or sliced, raw or cooked 2 large stalks (11" to 12" long)	1 large stalk (11'' to 12'' long)	

Cucumbers	1 cup raw, sliced or chopped	
Green or wax beans	1 cup cooked	
Green or red peppers	1 cup chopped, raw or cooked 1 large pepper (3'' diameter, 3 ³ / ₄ '' long)	1 small pepper
Lettuce, iceberg or head	2 cups raw, shredded or chopped = equivalent to 1 cup of vegetables	1 cup raw, shredded or chopped = equivalent to ½ cup of vegetables
Mushrooms	1 cup raw or cooked	
Onions	1 cup chopped, raw or cooked	
Tomatoes	1 large raw whole (3'') 1 cup chopped or sliced, raw, canned, or cooked	1 small raw whole (2 ½'') 1 medium canned
Tomato or mixed vegetable juice	1 cup	½ cup
Summer squash or zucchini	1 cup cooked, sliced or diced	

Source: My Pyramid, United States Department of Agriculture, Washington, DC.U.S. U.S. Department of Agriculture

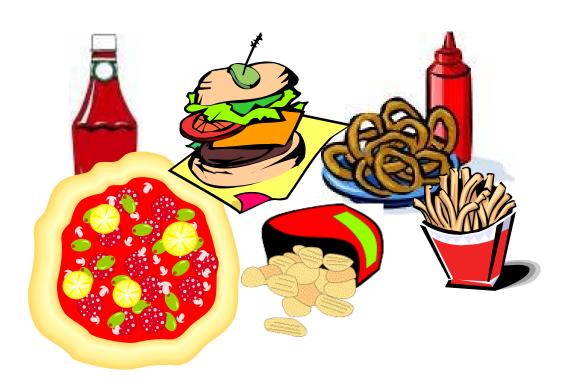
For more information, visit www.mypyramid.gov.

Go easy on the fat you add to vegetables at the table or during cooking. Added spreads or toppings, such as butter, mayonnaise, and salad dressing, count as fat. Use low-fat salad dressing.

THE FOUR MOST POPULAR VEGETABLES IN AMERICA:

- Iceberg lettuce
- Tomatoes
- Potatoes
- Onions

HOW AMERICANS EAT THEM:





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FOOD SAFETY--THE BASICS

Foodborne illness, commonly called food poisoning, is preventable. This section contains Fight BAC's 4 Simple Steps to Food Safety in English and Spanish, as well as 3 publications specific to safely growing and handling fresh vegetables.

Fight BAC!



Four Simple Steps to Food Safety

Right now, there may be an invisible enemy ready to strike. He's called BAC (bacteria) and he can make you and those you care about sick. In fact, even though you can't see BAC - or smell him, or feel him - he and millions more like him may have already invaded the food you eat. But you have the power to Fight $BAC!^{TM}$ and to keep your food safe from harmful bacteria. It's as easy as following these four simple steps:

Clean:

Wash hands and surfaces often

Bacteria can spread throughout the kitchen and get onto cutting boards, utensils, sponges and counter tops. Here's how to *Fight BAC!*TM:

Wash your hands with hot soapy water before handling food and after using the bathroom, changing diapers and handling pets.

Wash your cutting boards, dishes, utensils and counter tops with hot soapy water after preparing each food item and before you go on to the next food.

Use plastic or other non-porous cutting boards. These boards should be run through the dishwasher - or washed in hot soapy water - after use.

Consider using paper towels to clean up kitchen surfaces. If you use cloth towels, wash them often in the hot cycle of your washing machine.

Separate:

Don't Cross-Contaminate

Cross-contamination is the scientific word for how bacteria can be spread from one food product to another. This is especially true when handling raw meat, poultry and seafood, so keep these foods and their juices away from ready-to-eat foods. Here's how to *Fight BAC!*TM:

• Separate raw meat, poultry and seafood from other foods in your grocery shopping cart and in your refrigerator.

- If possible, use a different cutting board for raw meat products.
- Always wash hands, cutting boards, dishes and utensils with hot soapy water after they come in contact with raw meat, poultry and seafood.
- Never place cooked food on a plate which previously held raw meat, poultry and seafood

Cook:

Cook to proper temperatures

Food safety experts agree that foods are properly cooked when they are heated for a long enough time and at a high enough temperature to kill the harmful bacteria that cause foodborne illness. The best way to *Fight BAC!*TM is to:

- Use a clean thermometer, which measures the internal temperature of cooked foods, to make sure meat, poultry, casseroles and other foods are cooked all the way through.
- Cook roasts and steaks to at least 145°F. Whole poultry should be cooked to 165°F for doneness.
- Cook ground beef, where bacteria can spread during processing, to at least 160°F. Information from the Centers for Disease Control and Prevention (CDC) link eating undercooked, pink ground beef with a higher risk of illness. If a thermometer is not available, do not eat ground beef that is still pink inside.
- Cook eggs until the yolk and white are firm. Don't use recipes in which eggs remain raw or only partially cooked.
- Fish should be opaque and flake easily with a fork.
- When cooking in a microwave oven, make sure there are no cold spots in food where bacteria can survive. For best results, cover food, stir and rotate for even cooking. If there is no turntable, rotate the dish by hand once or twice during cooking.
- Bring sauces, soups and gravy to a boil when reheating. Heat other leftovers thoroughly to at least 165°F.

Chill:

Refrigerate Promptly

Refrigerate foods quickly because cold temperatures keep harmful bacteria from growing and multiplying. So, set your refrigerator no higher than 40°F and the freezer unit at 0oF. Check these temperatures occasionally with an appliance thermometer. Then, *Fight BAC!*TM by following these steps:

- Refrigerate or freeze perishables, prepared foods and leftovers within two hours or sooner.
- Never defrost food at room temperature. Thaw food in the refrigerator, under cold running water or in the microwave. Marinate foods in the refrigerator.
- Divide large amounts of leftovers into small, shallow containers for quick cooling in the refrigerator.
- Don't pack the refrigerator. Cool air must circulate to keep food safe.

Source: Four Steps to Fight Bac, FIGHT BAC!®, The Partnership for Food Safety Education, 655 15th Street, N.W., Washington, D.C. 20005. Website: www.fightbac.org.

FDA

TALK PAPER

Food and Drug Administration U.S. Department of Health and Human Services Public Health Service 5600 Fishers Lane Rockville, MD 20857

FOOD SAFETY AND FRESH VEGETABLES

FDA ADVISES CONSUMERS ABOUT FRESH PRODUCE SAFETY May 26, 2000

The Food and Drug Administration is advising consumers to be aware of safe handling and preparation practices for fresh fruits and vegetables. The Centers for Disease Control and Prevention has reported that the occurrence of foodborne disease increases during the summer months for all foods, including fresh produce.

Foodborne illness can cause serious and sometimes fatal infections in young children, frail or elderly people, and others with weakened immune systems. Healthy persons with foodborne illness can experience fever, diarrhea, nausea, vomiting and abdominal pain.

Following are some steps that consumers can take to reduce the risk of foodborne illness from fresh produce:

- At the store, purchase produce that is not bruised or damaged. If buying fresh cut produce, be sure it is refrigerated or surrounded by ice.
- At home, chill and refrigerate foods. After purchase, put produce that needs refrigeration away promptly. (Fresh whole produce such as bananas and potatoes do not need refrigeration.) Fresh produce should be refrigerated within two hours of peeling or cutting. Leftover cut produce should be discarded if left at room temperature for more than two hours.
- Wash hands often. Hands should be washed with hot soapy water before and after handling fresh produce, or raw meat, poultry, or seafood, as well as after using the bathroom, changing diapers, or handling pets.
- Wash all fresh fruits and vegetables with cool tap water immediately before eating. Don't use soap or detergents. Scrub firm produce, such as melons and cucumbers, with a clean produce brush. Cut away any bruised or damaged areas before eating.
- Wash surfaces often. Cutting boards, dishes, utensils, and counter tops should be washed with hot soapy water and sanitized after coming in contact with fresh produce, or raw meat, poultry, or seafood. Sanitize after use with a solution of 1 teaspoon of chlorine bleach in 1 quart of water.
- Don't cross contaminate. Use clean cutting boards and utensils when handling fresh produce. If possible, use one clean cutting board for fresh produce and a separate one for raw meat, poultry, and seafood. During food preparation, wash cutting boards, utensils or dishes that have come into contact with fresh produce, raw meat, poultry, or seafood. Do not consume ice that has come in contact with fresh produce or other raw products.
- Use a cooler with ice or use ice gel packs when transporting or storing perishable food outdoors, including cut fresh fruits and vegetables.

Following these steps will help reduce the risk of foodborne illness from fresh produce.



Food safety--Food safety starts in the garden (9/24/99)

CORVALLIS - Harvest time is here. There's nothing better than fresh, homegrown fruits and vegetables from the garden, right?

But wait - a word of caution is in order, warned Dan Sullivan, a soil scientist, and Carolyn Raab, foods and nutrition specialist, with the Oregon State University Extension Service.

Fruits and vegetables can be carriers of pathogens that cause food-borne illnesses such as Ecoli 0157:H7, Salmonella and Listeria, especially if animal manure has been used in or is near the garden, explained Raab.

"The risk associated with garden produce is small, but it's there," she said. "Most outbreaks involved undercooked meat. Rarer modes of disease transmission included raw fruits and vegetables, unpasteurized apple juice, raw milk and water."

What does this mean for the home gardener?

Use particular care if and when you use animal manure in the garden. To avoid the potential food safety risks, Sullivan and Raab have some recommendations.

Use recommended food preparation techniques with garden produce. Always wash produce in clean water before eating it. Use a vegetable brush to remove visible soil. Peeling also helps reduce risk. People who are more prone to foodborne illness include young children, pregnant women, older adults and those with cancer, AIDS and other immune-compromising diseases.

"If a family member is at risk, serve cooked or canned vegetables and fruits for an extra margin of safety," said Raab. "Heating kills bacteria and parasites."

In the vegetable garden, avoid using manure where the edible portion of the crop touches the soil.

"If you do choose to apply fresh or partially composted manure to the vegetable garden, I'd apply it to a crop with a low pathogen-contamination risk, such as sweet corn," said Sullivan. "I'd plant crops whose edible parts contact the soil such as carrots, potatoes, lettuce and melons, in a section of the garden where manure is not applied."

"Backyard composting can be an effective way to kill pathogens in manure," said Sullivan. "But the composting process must be carefully managed. To be certain of pathogen kill, the pile must reach temperatures greater than 130 degrees F. The pile must be turned often to ensure that the cooler material on the edges of the pile gets into the hotter center of the pile.

"You'll need about five turns during the hot composting phase to assure pathogen kill," he said. "After each turn, temperatures greater than 130 degrees for three days are needed to kill human pathogens."

"We know that the microorganisms in manure that could be harmful to humans are not adapted for long term survival in the soil," he said. "After application to the soil, these pathogens are killed by unfavorable temperatures, pH, desiccation and by predation and competition from native soil organisms."

"My best advice for using manure in the home garden is: 'When in doubt, leave it out,'" concluded Sullivan. "It is best to keep manure out of a cool home compost pile that is not intensively managed."

Washington State University

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Manure: Is It Safe For Your Garden?

Pathogens (microorganisms which cause disease) can be transferred from animal manures to humans. The pathogens salmonella, listeria and *E.coli 0157:H7*, as well as parasites, such as roundworms and tapeworms, have been linked to applications of manure to gardens.

Publicity about illnesses due to *E.coli 0157:H7* has made people more aware of the potential risk of foodborne illness from manure contamination. As a result, many are now asking whether it is safe to use manure on their gardens.

In August 1993, *The Lancet Medical Journal* reported on a small *E.coli 0157:H7* outbreak that appeared to be the result of manure applications to a garden. The gardener ate eggs and milk products, but no meat, and her diet relied heavily on vegetables from her garden. She fertilized the garden all summer with manure from her cow and calf. No *E.coli 0157:H7* bacteria were isolated from fecal samples taken from the cow and calf; however, the animals did have antibody counts for the pathogen, suggesting they had been previously infected. *E.coli 0157:H7* was isolated from the manured garden soil.

So, how risky is the use of manure in gardens and compost piles? If you use **fresh** manure in the garden, there is a **small** risk that pathogens which cause disease may contaminate garden vegetables. The risk is greatest for root crops, like radishes and carrots, and leafy vegetables, such as lettuce, where the edible part touches the soil. Careful washing and/or peeling will remove most of the pathogens responsible for the disease. Thorough cooking is even more effective.

To reduce the risk of disease, we suggest these precautions:

- 1. Apply fresh manure at least 60 days before harvesting of any garden vegetables which will be eaten without cooking. If you apply manure within 60 days of harvest, use only aged or composted manure.
- 2. Never apply fresh manure after the garden is planted.
- 3. Thoroughly wash raw vegetables before eating.
- 4. Do not use cat, dog or pig manure in gardens or compost piles, because some of the parasites which can be found in these manures may survive and remain infectious for people.
- 5. People who are especially susceptible to foodborne illnesses should avoid eating uncooked vegetables from manured gardens. Those who face special risks from foodborne illness include pregnant women, very young children, and persons with chronic diseases, such as cancer, kidney failure, liver disease, diabetes or AIDS.

Source: Washington State University Cooperative Extension Gardening Publication by Van Bobbitt, Master Community Horticulture Coordinator & Dr. Val Hillers, Food Specialist, Washington State University Cooperative Extension. Revised 05/98. Website: http://gardening.wsu.edu/library/vege001/vege001.htm



University of California Cooperative Extension



GARDENING—THE BASICS

While it is not necessary to be a gardening expert in order to present the *Fresh from the Garden* lessons, it is helpful to have some basic knowledge. This section contains gardening information for beginners as well as some interesting facts about vegetable gardening.

For additional information see the Master Gardener Handbook, University publications, and a variety of national extension programs materials online.

GARDENERS' FAVORITE VEGETABLES

These are 10 of the most popular home grown vegetables and the percentage of gardeners cultivating them. How does your garden compare?

Tomatoes	85%	Lettuce	42%
Peppers	58%	Carrots	35%
Onions	50%	Corn	34%
Cucumbers	50%	Radishes	31%
Green Beans	43%	Cabbage	30%

Source: Old Farmer's Almanac Gardener's Companion Stats

HOME VEGETABLE GARDENING

By Nancy Garrison Urban Horticulture Advisor, Santa Clara County University of California Cooperative Extension

*SOME PARTS OF THE ORIGINAL PUBLICATION HAVE BEEN ADAPTED

12 BASIC RULES FOR VEGETABLE GARDENING

Vegetables can be grown in containers, home yards, or community garden lots. To be successful, follow these 12 basic rules:

- 1. Plan your garden before you begin and plant only as large a garden as you can manage.
- 2. It is better to have a small productive garden than a large neglected one.
- 3. Remember that besides harvesting delicious vegetables, you will have to weed, water and control pests.
- 4. Grow crops that produce the most food in the space available.
- 5. Plant vegetables that are rich in nutrients.
- 6. Plant during the correct season for the vegetable you want to grow.
- 7. Don't limit your garden to just summer vegetables. Grow vegetables all year in Los Angeles County.
- 8. Most vegetables require 8 hours of full sun each day, but leafy vegetables can be grown in partial shade.
- 9. Prepare the soil properly.
- 10. Water and fertilize as needed.
- 11. Harvest vegetables when ripe.
- 12. Store vegetables promptly and properly, if they are not to be used immediately.

VEGETABLE CLASSIFICATION

Edible Parts of Vegetables

Vegetables that are roots:

BeetsRadishesCarrotsRutabagasJicamaSweet Potatoes

Leeks Turnips
Onions
Turnips
Yams

Parsnips

Vegetables that are stems:

Asparagus Celery
Bamboo shoots Mushrooms
Bok choy Nopales (Cactus)

Broccoli Rhubarb

Vegetables that are leaves:

Beet Greens Lettuce

Brussels sprouts Mustard Greens

Cabbage Parsley
Chard Spinach
Collard Greens Watercress

Kale

Vegetables that are flowers:

Broccoli Cauliflower

Vegetables that are seeds:

Beans Corn Peas

Vegetables that are fruit:

Artichoke Green Beans
Avocado Peppers
Bell Peppers Pumpkin
Cucumber Squash
Eggplant Tomatoes

^{*}Note: While potatoes and onions are called "root" vegetables, they are actually modified underground stems.

VEGETABLE CLASSIFICATIONS Seasonal

Most seasonal vegetables are classified as "cool-weather" or "warm-weather" crops. In Los Angeles County there are 3 to 4 different growing seasons. Yet, many gardeners grow only summer crops. By planting a spring crop, a summer crop, and a fall crop, a gardener can get 3 harvests from the same space. The idea involves planting your favorite cool-weather vegetables following them with warm-weather vegetables, and then finishing with another planting of cool-weather vegetables.

COOL-WEATHER VEGETABLE CROPS:

Artichokes Kohlrabi Asparagus Lettuce

Beets Mustard Greens

Broccoli Onions
Brussels Sprouts Parsnips
Cabbage Peas

Carrots Potatoes (white and sweet)

Cauliflower Radish
Celery Rutabagas
Chard Spinach
Collard Greens Turnip

Kale

Cool-weather vegetables grow best and produce the best quality crops when average temperatures are 55°F to 75°F. The nutritional value of cool-weather vegetables is usually higher per pound and per square foot than that of warm-weather vegetables. The difference is due to the fact that vegetative parts of the plant, such as roots, stems, leaves, or immature flower parts, are consumed rather than fruits.

WARM-WEATHER VEGETABLE CROPS:

Beans (green and lima)

Corn

Cucumbers

Eggplant

Okra

Peppers

Pumpkins

Radish

Squash (summer and winter)

Tomatoes

Warm-weather vegetables require long, hot days and warm soil to mature. They grow best and produce the best quality crops when average temperatures are 65°F to 95°F. The nutritional value of warm-weather vegetables is usually lower per pound and per square foot than that of coolweather crops because the "fruit" of the plant is eaten. Many warm-weather vegetables are really immature or mature fruits. In other words, vegetables such as tomatoes and squashes are fruits in the botanical sense, just as oranges are fruits.

Plant enough of each vegetable to meet your family's needs for fresh and preserved supplies. When choosing what to plant, consider such factors as disease resistance, maturity date, compactness of plant, and the size, shape, and color of the vegetable desired. Keep in mind past experiences with a given variety.

For more information, refer to the following common ground gardening publications:

- RAISED BEDS AND FURROW IRRIGATION (ENGLISH & SPANISH)
- COMPOST (ENGLISH & SPANISH)
- SOIL, SOIL AMENDMENTS & FERTILIZERS (ENGLISH & SPANISH)
- CHOOSING SEED VARIETIES (ENGLISH & SPANISH)
- TOOLS (ENGLISH & SPANISH)
- PLANNING AND PREPARING THE VEGETABLE GARDEN (ENGLISH & SPANISH)
- MULCH (ENGLISH & SPANISH)

HARVESTING AND STORING FRESH VEGETABLES--THE BASICS

A Consumers Guide to: HOME STORAGE OF VEGETABLES

Prepared by A. A. Kader and R. F. Kasmire (retired)

Department of Vegetable Crops, University of California, Davis

University of California Vegetable Research and Information Center

*SOME PARTS OF THE ORIGINAL PUBLICATION HAVE BEEN ADAPTED

Ideally, fresh vegetables should be consumed soon after harvest or purchase. Since this is not always possible, you may need to store fresh vegetables for a few days before using. Long storage of fresh vegetables at home is generally not practical.

With a few exceptions, fresh vegetables keep best in the refrigerator.

Most home refrigerators maintain a temperature of about 40 ° F in the main storage space, with slightly warmer temperatures in the crisper (drawer) and on the door.

Preparation for storage:

Discard any part that shows evidence of decay. Immediately use any bruised or soft vegetables. Some vegetables, such as beets and turnips, require cleaning before storage; others, such as spinach and chard, should be washed just prior to preparation.

Remove tops of root vegetables, such as carrots. Wash to remove dirt, and then drain excess water thoroughly. Any vegetables stored in the refrigerator outside the crisper should be placed in plastic bags or plastic containers.

Do not mix ripe fruits with vegetables in the crisper. Ripe fruits produce ethylene gas which causes yellowing of green vegetables, rust colored spots on lettuce, toughening of asparagus, sprouting of potatoes, and bitter taste in carrots. Cabbage family vegetables (cabbage, broccoli, etc.) can pass their strong odors onto other refrigerated foods, so don't keep them for more than a few days. Radishes may cause off-flavors in fruits and leafy vegetables--do not store them next to one another. Do not store celery with onions or carrots.

For more information, refer to the following common ground publications:

- COMMON GROUND'S PUBLICATIONS
- HARVESTING (ENGLISH & SPANISH)
- STORING FRESH FRUITS AND VEGETABLES (ENGLISH & SPANISH)



University of California Cooperative Extension



Fresh from the Garden

TOMATOES

This lesson may be presented as part of a general overview of warm season vegetables, or as a stand-alone lesson.

The material is suitable for both beginning gardeners and gardeners with established productive vegetable gardens.

Use the lesson to:

- Teach about the health benefits of tomatoes.
- Demonstrate how to properly harvest, store, handle, preserve, and healthfully prepare tomatoes.
- Introduce new and/or unfamiliar vegetables to gardeners in order to encourage gardeners to include them in their warm weather gardens and their diets.
- Provide more healthful alternatives to traditional cooking techniques or recipes.
- Instruct gardeners how to deal with an overabundant crop.

With minor adaptation, the lesson can be used to introduce the concept of growing vegetables at home to non-gardeners. For example, a container gardening section could be added to demonstrate how to grow tomatoes in a container.

Key presentation points:

- 1. Nutrition and health benefits associated with vegetables
- 2. Importance of eating fruits and vegetables daily.
- 3. Simple cultivation recommendations
- 4. Harvesting techniques
- 5. Washing and storing
- 6. Healthful cooking/preparation techniques
- 7. Freezing techniques
- 8. Recipe demonstration (1 or 2)
- 9. Recipe

Additional (optional) points:

- History or origin
- Cultural information
- Interesting or fun facts

Additional (optional) Activities:

- Compare vegetable name in English with another language appropriate for your audience.
- Taste and compare flavor of different varieties of tomatoes.
- Test audiences' knowledge regarding the difference between a fruit and a vegetable, and into which category selected produce falls.
- Distribute plants or seeds for immediate planting in the garden.

Tomato Facts:

- The tomato is native to South America, probably Peru, and Ecuador, and was first cultivated by the Mayas, Incas, and Aztecs.
- The Aztec name for the tomato, Xitomatl, means "plump thing with a naval."
- Spanish explorers renamed it tomate.
- Returning Spanish explorers brought the tomato to Europe in the 1500's.
- The Italians were the first Europeans to eat tomatoes. They began growing them about 1550.
- The tomato arrived in the United States in 1710.
- Thomas Jefferson was one of the first Americans to cultivate tomatoes in 1781.
- Tomatoes were once thought to be poisonous and were grown as ornamental garden plants.
- Tomatoes were not recognized as a useful vegetable until the 1800's.
- Tomatoes were once used as a remedy for indigestion, diarrhea, liver disease, and as a cholera preventive.
- In 1893, the Supreme Court declared the tomato a vegetable. It is actually a fruit. (A copy of the original ruling can be found at http://www.lawyersweeklyusa.com/nix hedden.cfm).
- The vitamin A content of tomatoes is determined by the color; orange varieties have the most, then yellow and red. White tomatoes have the least.
- Each American eats about 18 pounds of fresh tomatoes annually, plus about 70 pounds of processed tomatoes in products, such as ketchup, bbq sauce, and salsa.

Preparation:

- Review lesson material
- Review presentation guidelines.
- Review demonstration checklist.
- Review resources for additional presentation information or activities.
- Select seasonal vegetables for demonstration.
- Prepare vegetables for demonstrations, as necessary.
- Prepare recipes or parts of recipes for demonstration and sampling, as necessary.

The following is a suggested script with step-by-step demonstration activities:

PRESENTATION PART I: TOMATOES

Introduce yourself and review what you will be presenting with the audience. Discuss the recipe(s) that you will demonstrate.

"Because there is nothing better than a ripe, fresh-fromthe-garden tomato, they are considered the most popular home-grown "vegetable" in the United States, and are cultivated by more than 90% of home gardeners. No other vegetable comes close in popularity. Note: If you plan to demonstrate 2 recipes, select 1 that requires cooking and 1 that is served raw. Start the recipe that requires cooking at the beginning of the presentation to allow adequate cooking time. The 2nd recipe may be prepared at or towards the end of the presentation.

Tomatoes are usually easy to grow, but can be affected by several plant diseases

and pests. They are heat-loving plants that develop the best flavor during the warmest months—usually June through September. When space is limited, tomato plants can be grown in large containers. A few plants can usually provide enough tomatoes for most families."

Display photographs of tomato plants growing in containers

"Over 500 different varieties, both as seeds and transplants, are available to the home gardener. Tomatoes come in a wide range of sizes and shapes, and a rainbow of colors – yellow, orange, pink, red, and even striped."

Display a variety of tomatoes. If unavailable, display photographs

"Tomatoes generally fall into three categories:

<u>Cherry Tomatoes:</u> Small, bite—sized fruits that contain a lot of seeds and juice. They are usually eaten whole, and frequently used in salads. One standard cherry tomato plant is usually sufficient for a family, since they generally produce abundantly.

<u>Round/Slicing Tomatoes</u>: Round varieties can be used in a variety of ways, but are perfect for slicing and eating raw.

<u>Plum/Paste Tomatoes</u>: Pear or egg-shaped fruits with very meaty interiors, thick skins, and few seeds. They are less juicy than standard tomatoes. These tomatoes can be eaten raw, but are also excellent for making sauces and for canning and drying."

Point out the color, shape and size differences of the displayed tomatoes or photographs

"Fresh from the Garden tomatoes not only taste good, but are very nutritious. One medium tomato or 1 cup of chopped tomato contains only 25 calories."

- Display a medium sized tomato
- Measure two ½ cup portions of chopped tomatoes and place on a small plate
- Discuss daily vegetable recommendation (see "Nutrition the basics" handout, in general $2\frac{1}{2}$ to 3 cups per day for adults)
- Discuss serving size recommendation

"Tomatoes are packed with vitamins C and A (beta-carotene). In fact, two medium tomatoes can supply a full day's requirement for Vitamin C. Raw tomatoes contain more vitamin C than cooked or canned tomatoes. Most of the vitamin C in a tomato is concentrated in the clear jelly that surrounds the seeds."

Display a sliced tomato and point out the jelly surrounding the seeds

"Tomatoes also contain the protective plant chemical lycopene, which may prevent heart attacks and some cancers. Cooking tomatoes makes the lycopene more useable by our bodies."

Define phytochemicals and discuss health benefits, if time allows (see "*Nutrition – the basics*" handout for information on phytochemicals)

"So, to get the maximum nutritional benefit from your *Fresh from the Garden* tomatoes, eat some raw and some cooked.

For the best flavor, allow tomatoes to ripen on the vine, and harvest while they are still firm.

If for some reason, the tomatoes cannot be vine ripened, they can be ripened at room temperature—but not in the refrigerator. Refrigeration slows the ripening of tomatoes.

Put green tomatoes in a brown paper bag, with some holes punched in it, and fold the top over. Put the bag in a dark spot – never in the sun – for 1 to 5 days, depending on how green they are. Be sure to check on them every day."

- Display green tomato and a paper bag
- Fold bag 3 times lengthwise
- Snip (with scissors) or tear on folds in several areas
- © Open bag and display holes
- Put green tomato in bag and fold top

"When storing tomatoes, put them in a cool, dry, dark place for about 2 to 3 days. However, note that temperatures above 80°F cause tomatoes to spoil quickly. Therefore, it is necessary to store very ripe tomatoes in the refrigerator.

Always wash tomatoes well with plenty of water before eating, cooking or cutting. To wash the tomato, rinse with running water, rub its surface and dry with a paper towel. Cut away the area where the stem was before slicing or chopping the tomato."

Demonstrate washing technique

It is not necessary to peel fresh tomatoes, but if you must, submerge them in boiling water for about 30 seconds. Transfer to ice water. When cool enough to

handle, just slip the skins off."

Demonstrate peeling technique

"Avoid seeding tomatoes whenever possible, since nutrients are concentrated in the jell surrounding the seeds."

Demonstrate seeding technique

"Tomatoes are delicious raw or cooked. Serve tomatoes raw, sautéed, grilled, stuffed, stewed, or baked. Add them to salads, salsa, soups, and sauces."

COOKING TOMATOES:

Broil: Cut tomatoes in half, sprinkle with a few drops of oil and season. Cook 4 to 5 minutes, until heated through.

<u>Bake</u>: Bake tomato halves (plain, stuffed or with toppings) in a 400° F oven for 8 to 15 minutes, depending on the size.

<u>Stew:</u> Place whole or cut-up tomatoes in a saucepan without water. Season with salt, pepper and a pinch of sugar; add diced onion or green pepper, if desired. Simmer, tightly covered, over low heat until done, 10 to 15 minutes, stirring occasionally.

<u>Microwave</u>: Cook on high (100% power) in a covered dish. One pound, about 3 medium tomatoes, will take three to four minutes. Use in casseroles, stews and soups.

Tomato Equivalents:

- 1 pound = 2 large, 3 medium or 4 small tomatoes
- 1 pound = 20 to 24 small cherry tomatoes
- 1 pound = $1 \frac{1}{2}$ cups chopped
- 2 1/2 pounds = 3 cups chopped
- 3 pounds = 1 28-ounces can
 - Introduce summer veggie pasta sauce recipe
 - Demonstrate recipe
 - When recipe is finished cooking and before portioning samples, measure a ½ cup serving and place on a small plate
 - Point out the portion size
 - Distribute a small portion of the recipe for tasting
 - Ask the audience how they like the recipe

NOTE: IF PRESENTATION IS ENDING HERE, SAY:

"Don't "undo" all the nutritional benefits of eating tomatoes by cooking them with large amounts of fat and salt. Sauces, dressings, and other ingredients will add calories, fat, and cholesterol."

© Conclude presentation

"For good health, it is important to eat a variety of vegetables including tomatoes. Eat vegetables every day – at least 3 servings, but more is better. The more you eat the better chance you have for a healthy life.

Scientists have found that people who eat cabbage and other vegetables, have a lower risk of developing some of the more common cancers."

- Ask for questions
- Thank audience for their participation

NOTE: IF PRESENTATION IS CONTINUING, DO NOT CONCLUDE. PRESENT FREEZING MATERIAL.

PRESENTATION PART 2: FREEZING TOMATOES

"Freezing is a quick and easy way to preserve an abundance of tomatoes, until you have the time to prepare your tomato specialties."

Display bag or container of frozen tomatoes

"Tomatoes may be frozen raw, cooked, or prepared in the recipe of your choice. Thawed raw tomatoes may be used in any <u>cooked</u> recipe. They may not be substituted for fresh, since the freezing process causes their texture to become mushy."

- Display thawed frozen tomato
- Point out liquid and mushy texture

"The freezing process is simple. For whole tomatoes, wash thoroughly and dry them. Place the tomatoes on a tray or cookie sheet and freeze. They do not need to be blanched, peeled, or cored."

- Display cookie sheet
- Demonstrate freezing technique

"When they are frozen, just store them in a tightly sealed <u>freezer</u> bag or container.

You can now remove them from the freezer a few at a time, or if you like, all at once for cooking.

It is best to use the frozen tomatoes within a month or two, since they can develop an off flavor with prolonged storage.

For safety and the best quality, thaw frozen tomatoes in the refrigerator. For quick defrosting, run the tomatoes under warm water. When defrosted the skins just slide off."

- Display a defrosted tomato
- Demonstrate how easily the peel slips off

Don't "undo" all the nutritional benefits of eating tomatoes by cooking them with large amounts of fat and salt. Sauces, dressings, and other ingredients will add calories, fat, and cholesterol."

© Conclude presentation

"For good health, it is important to eat a variety of vegetables including tomatoes. Eat vegetables every day – at least $2\frac{1}{2}$ to 3 cups, but more is better. The more you eat the better chance you have for a healthy life.

Scientists have found that people who eat tomatoes and other vegetables, have a lower risk of developing some of the more common cancers."

- Ask for questions
- Thank the audience for their participation

Recipe

SUMMER VEGGIE PASTA SAUCE

4-6 servings

Make this sauce with whatever fresh vegetables you have in your garden. If it is not moist enough, add some water.

- 3-4 large tomatoes, chopped
- 3 cloves garlic, crushed
- 2 medium zucchini, chopped
- 1 small eggplant, chopped
- 1 medium green pepper, chopped
- 1 medium small onion, chopped
- 1/4—1/2 cup chopped fresh basil
- 2 tablespoons oil

[&]quot;Frozen tomatoes can be added to soups, stews, and sauces without being thawed.

Salt and black pepper to taste

Heat oil in a large pan over medium heat. Add onion, green pepper, and garlic. Cook for 3 to 4 minutes, stirring often.

Add the zucchini and eggplant. Cook for 5 minutes.

Add the tomatoes and basil. Simmer about 20 minutes over low heat, uncovered, until slightly thick. Add salt and pepper to taste.

*This recipe can be doubled or tripled and frozen in individual or family size servings.

GAZPACHO (COLD TOMATO SOUP)

6 - 8 servings

8 ripe tomatoes, chopped (save the juice)

1 medium cucumber

1 small Jalapeno or Serrano chile (seeded)

Handful of cilantro

2 cloves garlic, crushed

2 tablespoons red wine vinegar

1/4 cup olive oil

1 teaspoon salt or salt to taste

1/4 teaspoon black pepper

Put all the ingredients into a blender and puree until the mixture is completely smooth. Check for seasoning. Refrigerate and serve very cold.

TOMATO VEGETABLE SAUCE

4-6 servings

4 large tomatoes, chopped

4 cloves garlic, crushed

1 small zucchini, chopped

1 small eggplant, peeled and chopped

1 small green pepper, chopped

1 small onion, chopped

Handful chopped fresh basil

2 tablespoons oil

Salt and black pepper to taste

Heat the oil in a large pan over medium heat. Add onion, green pepper, and garlic. Cook for 3 to 4 minutes, stirring often. Add the zucchini and eggplant. Cook for another 3 minutes. Add the tomatoes and basil; simmer for about 15 minutes over low heat, uncovered, until slightly thick. Add salt and pepper to taste.

*This recipe can be doubled or tripled and frozen in individual or family size servings.

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University of California Cooperative Extension



Fresh from the Garden

SUMMER SQUASH

This lesson may be presented as a general overview of summer squash, or it may be divided into separate, more in depth, lessons.

The material is suitable for both beginning gardeners and gardeners with established productive vegetable gardens.

Use the lesson to:

- Teach about the health benefits of summer squash.
- Demonstrate how to properly harvest, store, handle, preserve, healthfully prepare, and freeze summer squash.
- Introduce new and/or unfamiliar vegetables to gardeners.
- Provide more healthful alternatives to traditional cooking techniques or recipes.
- Instruct gardeners how to deal with an overabundant crop

With minor adaptation, the lesson can be used to introduce the concept of growing vegetables at home to non-gardeners.

Key presentation points:

- 1. Nutrition and health benefits associated with vegetables
- 2. Importance of eating fruits and vegetables daily.
- 3. Simple cultivation recommendations
- 4. Harvesting techniques
- 5. Washing and storing
- 6. Healthful cooking/preparation techniques
- 7. Freezing techniques
- 8. Recipe demonstration (1 or 2)
- 9. Recipe

Additional (optional) points:

- History or origin
- Cultural information
- Interesting or fun facts

Additional (optional) Activities:

- Compare vegetable name in English with another language appropriate for your audience.
- Taste and compare flavor of different varieties of summer squash.
- Sample raw squash with a healthful dip.
- Test audiences' knowledge regarding the difference between a fruit and a vegetable, and into which category selected produce falls.

- Demonstrate how summer squash may be grown in containers.
- Distribute plants or seeds for immediate planting in the garden.
- Hold a zucchini festival at your garden and prepare unusual recipes.
- For children: Have fun and make use of large, overgrown, or inedible zucchini:
 - Have a contest for the largest zucchini, the best-dressed zucchini, the best zucchini sculpture, etc.
 - o Hold a zucchini relay race, boat race or a "Zucchini 500" at the garden
 - o Hold a "zuke-o-lantern" carving contest

Squash Facts:

- Squash comes in summer and winter varieties.
- Summer and winter squash are both cultivated during the summer months, but winter squash is harvested as a fall crop.
- The word squash comes from the Narragansett and Iroquois words "askootasquash," and "isquoutersquash" meaning "eaten green."
- Squash was the first dish Indians taught the settlers how to cook.
- The name zucchini is Italian, a derivative of the work "sweetest."
- August 8th is national "Sneak Some Zucchini Onto Your Neighbor's Porch Night."
- Squash belongs to the same family of plants that includes pumpkins, cucumbers, melons, and gourds.
- Some people enjoy growing "monster" size squash.

Preparation:

- Review lesson material.
- Review presentation guidelines.
- Review demonstration checklist.
- Review resources for additional presentation information or activities.
- Select seasonal vegetables for demonstration.
- Prepare vegetables for demonstrations, as necessary.
- Prepare recipes or parts of recipes for demonstration and sampling, as necessary.

The following is a suggested script with step-by-step demonstration activities:

PRESENTATION: PART 1: SUMMER SQUASH

Introduce yourself and review what you will be presenting with the audience. Discuss the recipe(s) that you will demonstrate.

"Native to Central America and Mexico, summer squash was here before Columbus. It was one of the first plants cultivated by Native Americans, and the first dish they taught the settlers to cook. Many of the present day varieties have been growing in the Americas for 5,000 years.

Note: If you plan to demonstrate 2 recipes, select 1 that requires cooking and 1 that is served raw. Start the recipe that requires cooking at the beginning of the presentation to allow adequate cooking time. The 2nd recipe may be prepared at or towards the end of the presentation.

If you have selected the Summer Veggie Sauce to be demonstrated, begin preparation at the beginning of the workshop to allow adequate cooking time. Display summer squash and zucchini of various sizes. If unavailable, display photographs

"Summer squash comes in a variety of shapes, colors, and sizes. Most summer squash are similar in flavor and may be interchanged in a recipe. Some summer squash varieties include:

Caserta: Dark yellow-green, about 8 inches long, with whitish flesh.

<u>Chayote:</u> Light green mango-shaped with furrowed skin. If it's young enough, you don't have to peel it. It has a big seed in the middle that's edible.

<u>Cocozelle:</u> Smooth, dark green zucchini look-alikes that have greenish flesh.

Courgette: British term for young zucchini.

<u>Cymling</u>: Also called scallop, white, pattypan, or bush squash. Small, pie-shaped, and scalloped--a little on the green side when they're young, white when older.

<u>Vegetable marrow:</u> British name for mature zucchini.

<u>Yellow squash (includes straight- or crook-necked; also golden):</u> yellow on the outside; white on the inside.

<u>Zucchini</u>: Dark green, shiny, and about 4-10 inches long, depending on variety and harvesting."

Squash is the perfect plant for a beginning gardener. It is easy to grow and prolific. In fact, it is sometimes difficult to keep up with the supply. When space is limited, squash plants can be grown in large containers."

Display photographs of summer squash/zucchini plants growing in containers

"Unlike winter squash, summer squash are harvested at a tender immature stage, before the skin hardens and becomes tough. Zucchini should be no longer than 8". Patty pan and round varieties should be no larger than 4" in diameter. During hot weather, the fruit is usually ready to pick 4 to 8 days after flowering. Check the

Display a variety of summer squash. If unavailable, display photographs

Point out the color, shape and different sizes of the displayed squash or photographs

[&]quot;Squash are in the same plant family as melons, cucumbers, and pumpkins.

plants every 1 to 2 days to avoid tough over mature, giant squash.

Nutritionally speaking summer squash contains vitamins A and C, potassium and fiber. It is rich in the carotenoids lutein and zeaxanthin. These are plant elements (phytochemicals) that have been shown to reduce the risk of an age-related eye problem called macular degeneration (lutein may also reduce the risk of colon cancer).

Define phytochemicals and discuss health benefits, if time allows (see "*Nutrition – the basics*" handout for information on phytochemicals)

"Summer squash is 95% water, and very low in calories—only 20 calories per cup."

- Measure a 1 cup portion of sliced or chopped raw summer squash and place on a small plate
- Discuss daily vegetable recommendation (2 ½ to 3 cups)

"Store summer squash in the refrigerator crisper in a plastic bag. Fresh from the garden squash will keep for about a week or slightly longer.

Wash squash well before preparing them. Scrub gently in cold water with a soft vegetable brush."

Demonstrate washing technique

"Trim the ends then slice, dice, or shred squash. Do not remove skin (many of the nutrients are located here) or seeds of squash, if young and tender. Only tough, oversized squash need to be peeled and seeded before cooking."

- Slice a young, tender squash and an over mature squash in half lengthwise
- © Compare the tender versus the tough skin
- Point out the small seeds versus the large seeds

"Fresh summer squash has a very mild taste, and easily absorbs other flavors. It can be steamed, boiled, sautéed, baked, grilled or stir- fried. Use it in breads, muffins, casseroles, or soups. Serve it raw sliced in salads, with your favorite dip, add shredded squash to recipes for cake, spaghetti sauce, or meatloaf.

Very small squash can be cooked whole. Larger squash can be stuffed. Squash flowers are also edible.

Summer squash can also be made into pickles."

- Introduce bread and butter pickle recipe
- Demonstrate recipe
- Distribute a previously prepared pickle sample
- Display squash flowers. If unavailable, display photograph

"It's very easy to overcook squash, so be careful. Quick cooking techniques, such as sautéing, grilling and roasting, usually produce the best results."

YIELD -

One pound equals about:

- 3 medium squash
- 3 1/2 cups raw slices
- 3 cups raw, grated squash
- 1 1/2 cups cooked squash

COOKING SUMMER SQUASH:

Wash and cut off the ends of the squash. Do not peel. Sauté, bake, microwave, steam, or stir-fry summer squash until tender. Do not overcook.

<u>Sauté or stir-fry:</u> Trim and slice or dice squash. Using a small amount of oil or butter, cook squash stirring frequently, until edges are lightly colored, but squash is still crisp, about 3 to 5 minutes.

<u>Microwave:</u> Trim and cut squash into chunks or leave whole. Cook, adding ¼ cup of water, in a covered dish for 4 to 6 minutes.

Steam: Steam whole, diced, or sliced squash for 2 to 5 minutes.

"Season squash with garlic, onion, peppers, tomatoes, herbs, or whatever you like.

Just don't "undo" all the nutritional benefits of eating summer squash by cooking it with large amounts of fat and salt. Sauces, cheese, dressings, and other ingredients can add calories and cholesterol."

- Introduce selected recipe or recipes
- Demonstrate recipes
- Distribute a small sample of the recipe for tasting
- Ask the audience how they like the recipe

NOTE: IF PRESENTATION IS ENDING HERE, SAY:

"Remember, for good health it is important to eat vegetables everyday, and to eat a variety. Eat at least 2 ½ to 3 cups, but more is better. The more you eat the better

chance you have for a healthy life."

- © Conclude presentation
- Ask for questions
- Thank audience for participation

NOTE: IF PRESENTATION IS CONTINUING, PRESENT FREEZING MATERIAL.

PRESENTATION: PART 2: FREEZING SUMMER SQUASH

"If you find yourself with an overabundance of summer squash, freeze it."

Discuss a bag or container of frozen summer squash

"Squash may be frozen raw, cooked, or prepared in the recipe of your choice. Thawed squash may be used in any <u>cooked</u> recipe. It may not be substituted for fresh, since the freezing process causes the texture to become mushy. Also, when thawed, squash produces quite a bit of liquid."

- Discuss thawed frozen squash
- Point out liquid and mushy texture

"The freezing process is simple:

- Wash and trim squash
- Shred unpeeled squash and drain in a colander
- Pat dry with paper towels, apply pressure, gently squeeze. Remove as much moisture as possible.
- o Portion it into airtight freezer containers or bags (most bread/cake recipes call for 2 to 3 cups) and seal tightly. It will last 3-4 months."
- Demonstrate freezing technique

"When thawed, squash produces quite a bit of liquid. Add the liquid to bread, cake, and muffin recipes, but drain it if sautéing or adding the squash to a casserole."

Display container of thawed squash. Point out the amount of liquid exuded.

"Frozen squash can be added to soups, stews, and sauces.

Don't "undo" all the nutritional benefits squash and other vegetables by cooking

them with large amounts of fat and salt. Sauces, dressings, and other ingredients will add calories, fat, and cholesterol.

Remember, for good health it is important to eat vegetables everyday, and to eat a variety. Eat at least 2 ½ to 3 cups, but more is better. The more you eat the better chance you have for a healthy life.

- © Conclude Presentation
- Ask for questions
- Thank audience for their participation

Recipes

SUMMER VEGGIE PASTA SAUCE

4-6 servings

Make this sauce with whatever fresh vegetables you have in your garden. If it is not moist enough, add some water.

3-4 large tomatoes, chopped

3 cloves garlic, crushed

2 medium zucchini, chopped

1 small eggplant, chopped

1 medium green pepper, chopped

1 medium small onion, chopped

1/4—1/2 cup chopped fresh basil

2 tablespoons oil

Salt and black pepper to taste

Heat oil in a large pan over medium heat. Add onion, green pepper, and garlic. Cook for 3 to 4 minutes, stirring often.

Add the zucchini and eggplant. Cook for 5 minutes.

Add the tomatoes and basil. Simmer about 20 minutes over low heat, uncovered, until slightly thick. Add salt and pepper to taste.

*This recipe can be doubled or tripled and frozen in individual or family size servings.

ZUCCHINI PANCAKES

3-4 servings

4 medium zucchini, grated (discard any liquid that forms)

2 eggs, beaten

½ small onion, minced

1/4 cup all-purpose flour

1 teaspoon baking powder

Small handful fresh chopped parsley

1/4 cup grated Parmesan or other cheese Salt and pepper to taste 2 tablespoons oil

Combine the zucchini, egg, onion, flour, baking powder, cheese, salt and pepper.

Heat the oil in a skillet over medium high heat. Drop zucchini mixture by heaping tablespoonfuls and cook for a few minutes on each side, until golden. Serve with a dollop of light sour cream or a squeeze of fresh lemon juice.

Note: A packaged baking mix, such as Bisquick, may be substituted for the flour and baking powder.

ZUCCHINI BREAD AND BUTTER PICKLES 1 quart

1 clean quart jar with a lid

3-4 medium sized zucchini

2 teaspoon salt

1 teaspoon celery seeds

1 teaspoon mustard seeds

½ teaspoon turmeric (optional)

1 cup white sugar

1 cup white vinegar

Trim and slice zucchini.

Put the salt, celery seeds, mustard seeds, turmeric, and sugar in the jar.

Put the sliced zucchini (pack it tightly—it will shrink) into the jar, and pour in the vinegar.

Screw the lid onto the jar and shake it until the sugar dissolves.

Refrigerate for 5 days for pickles.

ZOODLES (ZUCCHINI NOODLES)

4-6 servings

4 medium squash
3 tablespoons olive oil
3-4 cloves garlic, minced
Salt and pepper to taste
Fresh chopped parsley or basil to taste
Grated Parmesan cheese to taste

Trim the zucchini and cut lengthwise into long thin slices. If the center has large seeds, put it aside and use it in another dish or salad. Stack the slices and cut into thin strips.

Heat the oil and cook the garlic for 1 minute. Add the zucchini ribbons and cook, stirring for 3 to 4 minutes, until crisp tender. Be careful not to overcook. Season with salt and pepper. Stir in

the parsley/basil and cheese. Serve immediately.

OVEN FRIED ZUCCHINI COINS

3-4 servings

3 medium zucchini, sliced 2 eggs, beaten 2 tablespoons grated Parmesan cheese 1/2 cup seasoned bread crumbs salt and pepper to taste

Cut zucchini into 1/4-inch thick slices. Combine bread crumbs, cheese, salt and pepper in a small bowl.

Dip zucchini in the beaten egg then into the bread crumb mixture.

Place zucchini on a baking sheet coated with cooking spray. Bake at 475 degrees for 5 minutes; turn & bake additional 5 minutes. Serve immediately.

ZUCCHINI SLAW

6 cups

6 medium zucchini, grated
4 garlic cloves, minced
1 large carrot, grated
1 medium red bell pepper, diced
1 small onion, diced
1 stalk celery, diced
1/4 cup fresh parsley, minced
1/4 cup vinegar
1/4 cup reduced-fat or regular mayonnaise
1 tablespoon sugar or substitute
1/4 teaspoon dry mustard
Salt and pepper to taste

Mix together mayonnaise, vinegar, sugar, dry mustard, salt and pepper. Add the vegetables and toss to mix well. Cover and refrigerate to blend flavors.

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University of California Cooperative Extension



Fresh from the Garden

ROOT VEGETABLES

(BEETS, TURNIPS, RUTABAGA, PARSNIPS)

This lesson concentrates on the more unfamiliar root vegetables--beets, parsnips, turnips and rutabagas. While carrots, onions, and potatoes are delicious and full of nutrients, they are also common and already well accepted.

This lesson may be presented as part of a general overview of root vegetables, or as stand-alone lessons on individual roots.

If presenting two or more root vegetables as one lesson, some duplicated demonstrations and "tastings" may be eliminated.

The material is suitable for both beginning gardeners and gardeners with established productive vegetable gardens.

Use the lesson to:

- Teach about the health benefits of root vegetables.
- Demonstrate how to properly harvest, store, handle, preserve, and healthfully prepare root vegetables.
- Introduce new and/or unfamiliar root vegetables to gardeners.
- Provide more healthful alternatives to traditional cooking techniques or recipes.
- Instruct gardeners how to deal with an overabundant crop.

With minor adaptation, the lesson may be used to introduce the concept of growing root vegetables at home to non-gardeners.

Key presentation points:

- 1. Nutrition and health benefits associated with roots and other vegetables
- 2. Importance of eating fruits and vegetables daily.
- 3. Simple cultivation recommendations
- 4. Harvesting techniques
- 5. Washing and storing
- 6. Healthful cooking/preparation techniques
- 7. Freezing techniques, if applicable
- 8. Recipe demonstration (1 or 2)
- 9. Recipe

Additional (optional) points:

- History or origin
- Cultural information
- Interesting or fun facts

Additional (optional) Activities:

- Compare vegetable name in English with another language appropriate for your audience.
- Taste and compare flavor of different varieties of root vegetables.
- Sample raw root vegetables with a healthful dip.
- Test audiences' knowledge regarding the difference between a fruit and a vegetable, and into which category root vegetables falls.
- Distribute plants or seeds for immediate planting in the garden.

Preparation:

- Review lesson material.
- Review presentation guidelines.
- Review demonstration checklist.
- Review resources for additional presentation information or activities.
- Select seasonal vegetables for demonstration.
- Prepare vegetables for demonstrations, as necessary.
- Prepare recipes or parts of recipes for demonstration and sampling, as necessary.

The following is a suggested script with step-by-step demonstration activities.

PRESENTATION: ROOT VEGETABLES

Introduce yourself and review what you will be presenting with the audience. Discuss the recipe(s) that you will demonstrate.

"It's not difficult to figure out why this group of cool weather vegetables is called root vegetables--the edible part of the plant grows underground and is the plant's root. Most can be grown during warmer months, but they thrive when temperatures drop. An advantage to having roots in your garden is that they can be left in the ground and harvested as needed."

Display root vegetables with tops and roots intact, if possible

"Beets, carrots, potatoes, and onions are probably the most familiar root vegetables. Of these, potatoes and carrots are probably the most popular."

Display a variety of root vegetables

Note: If you plan to demonstrate 2 recipes, select 1 that requires cooking and 1 that is served raw. Start the that recipe requires cooking at the beginning of the presentation to allow adequate cooking The 2^{nd} recipe time. may be prepared at or towards the end of the presentation.

It may be necessary to prepare some recipes in advance and reheat them during the presentation, if possible.

"Turnips, parsnips, and rutabagas are the lesser-known roots. Parsnips look like white carrots."

- Display parsnips and compare with carrots
- © Compare the flavor of parsnips to carrots

- "Turnips resemble giant radishes with a cabbage-like flavor."
 - Display a turnip and point out the purple color at the top
- "Rutabagas are larger than turnips with yellow skin and flesh."
 - Display a rutabaga and point out the yellow skin and flesh
 - Compare the flavor differences between the turnip and a rutabaga
- "All root vegetables are low in calories and good sources of fiber."
 - Distribute samples of raw, thinly sliced turnips, parsnips, and rutabagas
 - Encourage the audience to taste raw vegetables
- "Beets are an excellent source of folate, and vitamins A and C. Eat the leafy tops—beet greens—for calcium, iron, and more vitamins. While beets have high sugar content, they are still very low in calories."
 - Display a beet with leafy greens intact
- "Parsnips are high in potassium, a good source of folate, and contain vitamins A and C, as well as some calcium and iron.
- Rutabagas and turnips are good sources of vitamins A and C. Leafy green turnip tops are an added nutrient-rich bonus (vitamins A & C), but rutabaga greens are not generally eaten."
 - Display turnip greens, if available
- "In addition to being root vegetables, turnips and rutabagas are also members of the cabbage or cruciferous vegetable family."
 - Compare the flavor of turnips and rutabagas to the cabbage family vegetables
- "These vegetables contain important plant substances called phytochemicals, such as sulforaphane, that may protect us against cancer."
 - Define phytochemicals and discuss health benefits, if appropriate for the group and time allows. (see "*Nutrition the basics*" handout for information on phytochemicals)
- "All roots should be firm and dense--never soft or flabby.

Harvest roots when they are young and tender – about 2 to 4 inches in diameter for beets and turnips. After harvesting, store beets, parsnips, turnips and rutabagas in the refrigerator in the vegetable crisper, or in a plastic bag. Remove the green tops before storing roots.

Always scrub root vegetables with a brush and rinse with plenty of water, even if you plan to peel them."

Demonstrate scrubbing technique

"Root vegetables are very versatile and may be roasted, boiled, braised, or steamed. They may be served hot or cold, raw or cooked, pickled or plain. Try young, tender beets, turnips, and parsnips grated in salads. Use turnips and rutabagas as you would potatoes, or serve them thinly sliced as a low calorie dip chip.

A simple way to prepare all root vegetables is to boil or steam them and mash.

To reduce the cooking time for root vegetables, except beets, thinly slice them or cut into small pieces before cooking. This is easier to do, when the vegetable has a flat side and sits firmly on the cutting board. So, cut it in half before slicing."

Demonstrate cutting technique

Note: Information about individual roots and recipes many be introduced at this point. Include some additional information about each root and demonstrate at least one recipe for each. For additional information, see Beet and Turnip lessons.

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University of California Cooperative Extension



Fresh from the Garden

ROOT VEGETABLES BEETS

This lesson may be presented as part of an overview of root vegetables, or as a stand-alone beet lesson.

If presenting two or more root vegetables as one lesson, some duplicated demonstrations and "tastings" may be eliminated.

It may be necessary to prepare some recipes in advance and reheat them during the presentation, if possible.

The material is suitable for both beginning gardeners and gardeners with established productive vegetable gardens.

Use the lesson to:

- Teach about the health benefits of beets
- Demonstrate how to properly harvest, store, handle, preserve, and healthfully prepare beets.
- Introduce new and/or unfamiliar vegetables to gardeners in order to encourage gardeners to include more nutrient dense cool weather vegetables in their gardens and their diets.
- Provide more healthful alternatives to traditional cooking techniques or recipes.
- Instruct gardeners how to deal with an overabundant crop.

With minor adaptation, the lesson can be used to introduce the concept of growing vegetables at home to non-gardeners. For example, a container gardening section could be added to demonstrate how to grow beets in a pot or container.

Key presentation points:

- 1. Nutrition and health benefits associated with vegetables
- 2. Importance of consuming fruits and vegetables daily.
- 3. Simple cultivation recommendations
- 4. Harvesting techniques
- 5. Washing and storing
- 6. Healthful cooking/preparation techniques
- 7. Recipe demonstration (1 or 2)
- 8. Recipe

Additional (optional) points:

- History or origin
- Cultural information
- Interesting or fun facts

Additional (optional) Activities:

- Compare vegetable name in English with another language appropriate for your audience.
- Taste and compare flavor of different root vegetables
- Sample thinly sliced raw beets with a healthful dip.
- Test audiences' knowledge regarding the difference between a fruit and a vegetable, and into which category selected produce falls.
- Demonstrate how beets may be grown in containers
- Distribute plants or seeds for immediate planting in the garden.

Beet Facts:

- Beets and beet juice have been used throughout history as a dye for clothing, cosmetics, and foods.
- In colonial America, beets were used to color cake frosting and pancakes.
- In Europe, beets are called beetroot, and sometimes called blood turnip.
- Beets are native to Europe, Africa, and the Near East
- Borscht is a Russian soup made with beets.
- Beets come in a variety of colors—white, yellow, and even striped

Preparation:

- Review lesson material
- Review presentation guidelines.
- Review demonstration checklist.
- Review resources for additional presentation information or activities.
- Select seasonal vegetables for demonstration.
- Prepare vegetables for demonstrations, as necessary.
- Prepare recipes or parts of recipes for demonstration and sampling, as necessary.

The following is a suggested script with step-by-step demonstration activities:

PRESENTATION: BEETS

Introduce yourself and review what you will be presenting with the audience. Discuss the recipe(s) that you will demonstrate.

"For good health, it is important to eat a variety of vegetables, including beets and other root vegetables.

Eat vegetables every day--at least 2 ½ cups, but more are better. The more you eat the better chance you have for a healthy life. Scientists have found that people who eat beets and other vegetables, have a lower risk of developing some of the more common cancers.

It's not difficult to figure out why beets are called a

Note: Due to the amount of time required to cook beets (about 35-45 mins.), it may be necessary to cook beets for tasting and use in demonstrated recipes a day ahead of the presentation.

If you plan to demonstrate 2 recipes, select 1 that requires cooking and 1 that is served raw. Start the recipe that requires cooking at the beginning of the presentation to allow adequate cooking time. The 2nd recipe may be prepared at or towards the end of the presentation.

It may be necessary to prepare some recipes in advance and reheat them during the presentation, if possible. root vegetable. The edible part of the plant grows underground and is the plant's root."

Display fresh beets with leafy tops and tap root intact, if possible. If not, display a photograph.

"Beets are the most colorful of the root vegetables. Before the round, red roots were developed they were grown strictly for their leafy tops.

Stories of how they came by their name are as colorful as the beets themselves. One claim is that the beet was so name because it resembles the second letter of the alphabet --"b." A less appetizing story is that beets reminded early cooks of a bleeding animal when they cut them open, so they named them bête, meaning "beast," which later became beat then beet.

Beets are considered low-maintenance and easy to grow. While they prefer cool weather and moist conditions, beets can also be grown in warmer weather. An advantage to having beets in your garden is that they can be left in the ground and harvested as needed.

Fresh from the garden beets have a distinctive sweet, earthy flavor, and a rich, deep red color that is nothing like slippery, pale, commercially canned beets. However, if you prefer to eat canned beets or frozen (which are rarely seen), go ahead. Frozen and canned vegetables have about the same amount of vitamins as fresh vegetables."

- Display a can of beets
- Display a plate of cooked sliced fresh beets
- © Compare the flavor, color and texture of fresh vs. canned beets

"Beets come in two basic shapes: globe-shaped, and cylindrical. The mild, tender beet greens or leaves are considered a green leafy vegetable."

- Display globe shaped and cylindrical beets. If unavailable, display photographs
- Display the beet greens and compare to other leafy greens, such as spinach
- Distribute a few beet leaves for tasting raw

"Beets are an excellent source of folate, an essential vitamin that may prevent certain types of birth defects and cancers, and may protect against heart attacks. One average size beet contains ¼ of the daily folate requirement. The deep red color of beets tells us that they also contain the antioxidant vitamin A, which is good for our skin and may prevent cancer. It also is an important vitamin for our eyes and plays a roll in preventing a common form of blindness in the elderly

called macular degeneration. Dark green and orange vegetables are also good sources of Vitamin A. Eat the leafy tops—beet greens—for calcium, iron, and more vitamins.

Beets have a high sugar content but are still very low in calories. One half cup of boiled, diced beets is only about 30 calories and has as much potassium as a banana.

Harvest beets when the root is from 2 to 4 inches in diameter. Beets may be left in the ground and pulled up as you need them, but very large beets may get woody (tough and fibrous)."

- Display and compare a small, medium and large sized beet
- If available, display a very large woody beet

"If beets are clean, store them unwashed with the greens removed, in the refrigerator crisper or in a plastic bag. They will last 2-3 weeks.

Wash beets well before eating raw or cooking. Scrub with a brush and rinse with plenty of water. Be careful not to puncture or tear the skin or some of the color will be lost during cooking."

Demonstrate washing technique

COOKING BEETS:

Cut off all but 2 inches of the tops, and leave the root end attached. Do not peel. Bake, boil, or microwave until tender.

<u>Boil:</u> Cover beets with water and heat to boiling. Cover, reduce heat to a full simmer, and cook for 35 to 45 minutes or until tender. Cooking time depends on the age, size, and amount of beets.

<u>Bake:</u> Wrap 1- 3 beets in a double layer of foil. Place on oven rack; bake at 425°F until tender— about 1 to 1 1/4 hours for medium sized turnips. Peel, if desired.

<u>Roast:</u> Trim and peel beets. Cut large beets in half or in quarters. Toss beets with just enough oil to coat them lightly, and place in a heatproof pan. Roast at 400°F until tender—about 45 minutes to 1 hour. Beets may be roasted unpeeled, and the skins removed after cooking.

<u>Microwave</u>: Cook 5 medium beets in a covered dish with 1/4 cup water for about 10 to 11 minutes. Let stand covered for at least 5 minutes.

"Beets may be boiled, steamed, baked, roasted, microwaved, pickled, or made into a hot or cold soup. They may also be eaten raw. Try grated raw beets in a green

salad, or mixed with a variety of vegetables, fruits and dressings.

It isn't necessary to peel small young beets with tender skin, but older beets are best when peeled. Trim and peel beets as you would a potato.

In the past, beets and their juice were used as dyes, so be careful when handling them. They can leave red stains on dishtowels, cutting boards, clothing, and skin. Use a little salt to clean stained fingers."

- Demonstrate peeling and grating raw beets
- Point out how color bleeds and stains
- Distribute a small portion of raw grated beets for tasting
- Optional Recipe: Introduce a recipe that uses raw beets
- Demonstrate Recipe
- Distribute a small portion for tasting
- Ask Audience how they like the recipe

"Roasting is an unusual but easy way to prepare fresh beets. The hot oven concentrates their natural sugar and produces a deliciously different version to serve as a side dish or to use in salads. Beets may be roasted peeled or unpeeled."

- Demonstrate how to prepare beets for roasting
- Discuss the difference between roasting and baking instructions
- Discuss roasting time and temperature
- Option #1: Distribute a small portion of roasted beets for tasting, or
- Option #2: Introduce roasted beet salad recipe and demonstrate
- Distribute a small portion for tasting
- Ask audience how they like the recipe
- Option #3: Move to the next section without a demonstration or tasting

"When boiling beets, they bleed less if left whole and unpeeled. Leave the taproot on and about 2 to 3 inches of the stems attached."

- Point out tap root
- Demonstrate how to trim beet tops leaving stems attached

"Do not discard the very nutritious leafy green tops. They also contain folate, vitamins A and C. Prolonged cooking will destroy vitamin C, so cook them quickly in a small amount of butter, oil, or broth and serve, or mix the cooked greens with the cooked roots.

Beet greens are prepared like spinach or any other leafy green. They may be added raw to salads, stir-fried and mixed with cooked beets, or served alone as a separate side dish."

- Display greens previously removed from whole beets
- Optional recipe: sauté trimmed beet tops following the basic recipe at the end of the lesson. If beet greens are the main recipe, other flavoring ingredients may be added to the basic recipe.
- Distribute a small sample for tasting
- Display raw beet prepared for cooking
- Unless you are cooking beets for a recipe demonstration, simulate the cooking process. Use previously cooked beets for the recipe demonstration.

"To cook beets, cover with water, heat to boiling. Reduce the heat to a full simmer, and cook for 35 to 45 minutes or until tender. The cooking time will vary according to size. Larger beets may require an hour or more to become tender.

When cool enough to handle, trim the root and stems and slip off the skin under cold running water."

- Display cooked beet
- Demonstrate how to peel cooked beets
- Display stained fingers

"To serve, slice, dice or quarter large beets. Small beets may be left whole."

- Demonstrate various ways to cut beets
- Slice some beets for recipe demonstration
- Display stained cutting board
- Introduce lemony beets or other recipe
- Demonstrate recipe
- Continue presentation while recipe heats through
- When recipe is finished and before portioning samples, measure a ½ cup serving of beets and place on a small plate
- Point out the portion size
- Discuss daily vegetable recommendation (see "Nutrition the basics" handout, in general $2\frac{1}{2}$ to 3 cups per day for adults)
- Distribute a small portion of the recipe for tasting
- Ask the audience how they like the recipe

"Don't "undo" all the nutritional benefits of eating beets and other roots by serving

them with large amounts of fat and salt. Sauces, dressings, and other ingredients will add calories, fat, and cholesterol.

Leftover beets may be pickled."

- Option #1 pickled beets recipe. Introduce and demonstrate pickled beets recipe
- Distribute a small sample for tasting
- Option #2: do not demonstrate pickled beets recipe, but distribute a small portion of previously pickled beets for tasting
- Ask audience how they like the recipe
- Option #3: move to the next section without a demonstration or tasting.

"If mixing beets with other ingredients, do it just before serving so the color doesn't bleed over the other foods.

Although you rarely see frozen beets in the supermarket, young, cooked beets may be frozen.

Beets may be home canned using either a dial or weighted gauge pressure canner. Home canned pickled beets may be processed in a boiling water bath."

© Conclude presentation

"Remember, for good health, it is important to eat a variety of vegetables, including beets and other root vegetables. Be sure to eat the tops as well, since they are even more nutritious than the root.

Eat vegetables every day--at least 2 ½ cups, but more are better. The more you eat the better chance you have for a healthy life. Scientists have found that people who eat beets and other vegetables, have a lower risk of developing some of the more common cancers.

Ask for questions

Thank audience for their participation

Recipes

LEMONY BEETS

2-3 servings.

- 4 medium beets, cooked and quartered
- 1 fresh lemon
- 2 tablespoons butter or margarine (or substitute vegetable spray)
- 1 tablespoon sugar (or less to taste)

Salt and pepper to taste

Cook, peel, and quarter beets. Grate lemon rind and reserve. Squeeze juice. Melt butter or margarine in a saucepan and add the sugar and lemon juice. Cook over moderate heat about 5 minutes or until slightly syrupy. Add the cooked beets and heat through, stirring constantly.

BASIC SAUTÉED BEET GREENS

3-4 servings

1 –2 large bunches beet greens, stems removed
1 teaspoon olive oil
Salt and pepper to taste

Wash, trim, and chop beet greens. Heat olive oil in pan. Add beet greens and sauté until greens are wilted. Season to taste.

- *Flavor with additional ingredients as desired. For example, onion, garlic, chile, citrus, ginger, tomato, herbs, etc.
- *If using optional ingredients, add them to the pan after the oil is heated. Cook for a minute or two then add the beet greens and continue with the recipe as printed.

ROASTED BEETS

Trim and peel beets. Cut beets in quarters or smaller. Toss beets with just enough oil to coat them lightly, season as desired. Stirring occasionally, roast at 400°F until tender—about 45 minutes to one hour.

Beets may be roasted with other vegetables such as onions, carrots, turnips, etc.

If desired, toss roasted beets with fresh chopped herbs after removing from the oven.

PICKLED BEETS

4 servings

2 cups cooked beets, sliced 1 small onion, chopped (ontion

1 small onion, chopped (optional)

1/2 cup water

1/2 cup vinegar

2 tablespoons sugar (or equivalent amount sugar substitute)

Salt and pepper to taste

Mix beet slices with chopped onion. In a small pan, heat vinegar, water and sugar together until the sugar is dissolved. Pour vinegar mixture over beets and cool. Add salt and pepper to taste. Refrigerate. Allow the beets to marinate for 4 to 6 hours before serving.

ROASTED BEET SALAD WITH WALNUTS & CHEESE 4 servings

4 - 6 medium size beets, roasted, cooled and sliced
1 tablespoon oil for roasting (or substitute vegetable spray)
1 small red onion, thinly sliced
1 clove garlic, finely minced

1/2 cup walnut pieces, roasted
1/4 cup crumbled feta or blue cheese
3 tablespoons olive (or other) oil
3 tablespoons vinegar
1/4 teaspoon black pepper, or more to taste salad greens, if desired

To Roast Beets and Walnuts:

Beets: Trim and peel beets. Cut beets in quarters. Toss beets with just enough oil to coat them lightly, and place in a heatproof pan. Roast at 400°F until tender—about 45 minutes to 1 hour.

Walnuts: 10 to 15 minutes before beets are finished roasting, add walnut pieces to pan.

In a bowl, whisk together oil, vinegar, garlic, and black pepper. Add the onion and roasted beets and toss to cover with the dressing. Add the walnuts and cheese and toss. Serve immediately, or cover and chill until serving time.

*May be served as is or with salad greens.

QUICK GRATED BEETS

4 servings

3-4 medium sized beets, grated
1 tablespoon olive oil
2 tablespoons fresh orange, lime or lemon juice
3 - 6 tablespoons of water or vegetable stock
Salt and pepper to taste
Fresh dill, parsley, cilantro, thyme or tarragon, chopped

Wash, peel, and coarsely grate beets. Heat olive oil over medium low heat. Add beets, and stir to coat well. Sprinkle with juice, cover, and cook for about 10 minutes. Stir occasionally and add water or stock as needed to prevent scorching. Cook until just tender. Season with salt and pepper and sprinkle with fresh herbs.

^{*}May be made with steamed or boiled beets.

BEETS WITH MINT AND YOGURT

6-8 servings

2-3 medium sized beets, peeled raw, boiled or roasted 2 cups plain reduced fat yogurt 3 cloves garlic cloves, chopped 1/4 teaspoon cayenne pepper (optional) small handful fresh mint, finely chopped salt and black pepper to taste

Coarsely grate beets. Combine the yogurt, salt, garlic, black pepper, and cayenne pepper and stir until smooth and creamy. Stir in the mint and beets.

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University of California Cooperative Extension



FRESH FROM THE GARDEN

ROOT VEGETABLES TURNIPS

This lesson may be presented as part of an overview of root vegetables, or as a stand-alone turnip lesson.

If presenting two or more root vegetables as one lesson, some duplicated demonstrations and food "tastings" may be eliminated.

It may be necessary to prepare some recipes in advance and reheat them during the presentation, if possible.

The material is suitable for both beginning gardeners and gardeners with established productive vegetable gardens.

Use the lesson to:

- Teach about the health benefits of turnips
- Demonstrate how to properly harvest, store, handle, preserve, and healthfully prepare turnips.
- Introduce new and/or unfamiliar vegetables to gardeners in order to encourage gardeners to include more nutrient dense cool weather vegetables in their gardens and their diets.
- Provide more healthful alternatives to traditional cooking techniques or recipes.
- Instruct gardeners how to deal with an overabundant crop.

With minor adaptation, the lesson can be used to introduce the concept of growing vegetables at home to non-gardeners. For example, a container gardening section could be added to demonstrate how to grow turnips in a pot or container.

Key presentation points:

- 1. Nutrition and health benefits associated with vegetables
- 2. Importance of consuming fruits and vegetables daily.
- 3. Simple cultivation recommendations
- 4. Harvesting techniques
- 5. Washing and storing
- 6. Healthful cooking/preparation techniques
- 7. Recipe demonstration (1 or 2)
- 8. Recipe

Additional (optional) points:

- History or origin
- Cultural information
- Interesting or fun facts

Additional (optional) Activities:

- Carve (or paint) a turnip jack-o-lantern.
- Compare vegetable name in English with another language appropriate for your audience.
- Taste and compare flavor of different root vegetables
- Sample thinly sliced raw turnips with a healthful dip
- Test audiences' knowledge regarding the difference between a fruit and a vegetable, and into which category selected produce falls
- Demonstrate how turnips may be grown in containers
- Distribute plants or seeds for immediate planting in the garden

Turnip Facts:

- Turnips are one of the oldest crops in existence.
- The longer you cook a turnip the more bitter it gets.
- About 2000 years ago, the Romans used turnips to remove wrinkles.
- The Pennsylvania Dutch make a coleslaw with turnips, as well as one with cabbage.
- Turnips were first planted in America (in Virginia) in 1609.
- Turnips were probably served at the first Thanksgiving.
- Large turnips (and rutabaga) were the first Halloween Jack-o-lanterns. Pumpkins came later.

Preparation:

- Review lesson material
- Review presentation guidelines
- Review demonstration checklist
- Review resources for additional presentation information or activities
- Select seasonal vegetables for demonstration
- Prepare vegetables for demonstrations, as necessary
- Prepare recipes or parts of recipes for demonstration and sampling, as necessary

Following is a suggested script with step-by-step demonstration activities:

PRESENTATION: TURNIPS

Introduce yourself and review what you will be presenting with the audience. Discuss the recipe(s) that you will demonstrate.

"Turnips, originally called "neeps" (derived from the Latin word for turnips--napus), are one of the oldest know vegetables and were an important crop in the Middle Ages. In addition to being appreciated for their food value, they have been used as a wrinkle remover by the Romans, and as a treatment for frostbite, gout, measles, and arthritis.

Turnips are a member of the cabbage family, and their

Note: If you plan to demonstrate 2 recipes, select 1 that requires cooking and 1 that is served raw. Start the recipe that requires cooking at the beginning of the presentation to allow adequate cooking time. The 2nd recipe may be prepared at or towards the end of the presentation.

It may be necessary to prepare some recipes in advance and reheat them during the presentation, if possible. tops, turnip greens, are classified as a green leafy vegetable. In fact, some varieties of turnips are grown just for their tops and the roots are never allowed to develop."

Display fresh turnips with green leafy tops, if possible. If not, display a photograph.

"Turnips are fast growers and don't require much care. Although they can grow very large (in 1850 a California grower reported he had produced one weighing over 100 pounds), turnips should be harvested when small, firm and crisp. Unlike other root vegetables, turnips should not be left in the ground once they are ready to be harvested. They will become strong-flavored, bitter, tough, and woody."

- Display turnips of different sizes
- Point out best size to harvest turnips

"Turnips are a good source of potassium, vitamin C, and folate. The greens are rich in vitamins A and C. Turnips also contain some important plant elements called phytochemicals that may protect us against cancer."

- Discuss daily vegetable recommendation (see "Nutrition the basics" handout, in general $2\frac{1}{2}$ to 3 cups per day for adults)
- Define phytochemicals and discuss health benefits, if time allows (see "*Nutrition the basics*" handout for information on phytochemicals)

"Store turnips in the refrigerator vegetable crisper or in a plastic bag. Remove the green tops before storing. Turnips contain more water than other roots, so they deteriorate more quickly. They will last about 2 weeks.

Always scrub turnips with a brush and rinse with plenty of water, even if you plan to peel them."

Demonstrate washing technique

"Turnips, like cabbage, can be preserved through the process of fermentation. Fermented or pickled turnips are called "saueruben."

Young, tender turnips can be served raw. Try them grated in a salad, or thinly sliced as a low calorie chip for dip."

- Distribute a small sample of thinly sliced or grated raw turnip, or
- Introduce turnip and apple salad
- Demonstrate recipe
- When recipe is finished and before portioning samples, measure a 1-cup serving of raw salad and place on a small plate
- Discuss portion size

- Distribute a small sample of the salad for tasting
- Ask audience how they like the recipe

"Young tender turnips don't need to be peeled, but peel older turnips and trim off the tops and the taproot."

Demonstrate how to prepare turnips for cooking

"Cook turnips the same way you would a potato. A simple and traditional method is to boil and mash them. When boiling, use just enough water to prevent the turnips from scorching.

Slow roasting concentrates their natural sugar and tones down the "cabbagy" flavor."

- Demonstrate how to prepare turnips for roasting
- Discuss the difference between roasting and baking instructions
- Discuss roasting time and temperature
- Option: distribute a small portion of roasted turnips for tasting

"Turnips are also delicious steamed, braised, baked, microwaved, or added to soups and stews."

COOKING TURNIPS:

Trim the tops and the root. Leave small turnips whole. Peel and slice or cube larger ones. Bake, boil, microwave, or stir-fry until tender.

<u>Boil:</u> Cover turnips with water and heat to boiling. Cook whole turnips for 15 to 20 minutes; 1/2" pieces take 5 to 8 minutes.

Steam: Put 1/2" pieces into a steamer basket over 1" of boiling water. Steam for about 15 minutes, or until tender.

<u>Microwave</u>: Cook 2 cups of cubed turnips in a dish with two tablespoons of water. Microwave on high for 4 to 6 minutes. Small turnips may be left whole.

- Introduce mashed turnip (or other) recipe
- Demonstrate recipe
- Distribute a small portion for tasting
- Ask audience how they like the recipe

"Don't "undo" all the nutritional benefits of eating turnips by cooking them with large amounts of fat and salt. Sauces, dressings, and other ingredients will add

calories, fat, and cholesterol."

© Conclude presentation.

"Remember, for good health, it is important to eat a variety of vegetables, including turnips and other root vegetables. Be sure to eat the turnip tops as well, since they are even more nutritious than the root.

Eat vegetables every day--at least 2 ½ cups, but more are better. The more you eat, the better chance you have for a healthy life. Scientists have found that people who eat turnips and other vegetables, have a lower risk of developing some of the more common cancers."

Ask for questions

Thank audience for their participation

Recipes

MASHED TURNIPS

4 servings

4 large turnips, peeled and cut into 2" cubes 1 tablespoon butter or margarine About 1/4 - 1/2 can (5 oz) evaporated skim milk Salt and pepper to taste

Steam turnips or boil until very tender in enough water to prevent them from scorching them. If water boils away before turnips are soft, add more. Alternatively, turnips may be microwaved.

Drain turnips well and mash with the margarine until smooth.

Beat in about ½ of the can of milk and add salt and pepper to taste. Add additional milk, if necessary.

Note: If turnips are bitter, stir in a small pinch of sugar.

GRATED TURNIP & APPLE SALAD

4 servings

2 turnips, peeled & grated
2 crisp green apples, seeded & grated and tossed with lemon or lime juice
Juice of 1 large lemon or 2 limes
6 scallions, sliced
2 tablespoon oil
1 clove garlic, minced & mashed

1 chile, seeded & minced

Sugar to taste—approx. 1 tablespoon 1 handful chopped cilantro

OPTIONAL: grated carrot

Combine apple with other ingredients and mix well.

Note: This salad is similar to a Thai Green Papaya Salad

GLAZED TURNIPS

4 servings

6 medium turnips, peeled and sliced
2 cups reduced sodium chicken broth
1 small onion, chopped
2 cloves garlic, minced
3 tablespoons margarine or butter
1 teaspoon sugar
1 tablespoon lemon juice
Small handful minced parsley
Salt and pepper to taste

Melt the margarine in a non-stick pan. Add the onion and garlic and cook until soft. Add the turnips and sugar and cook, stirring occasionally, until lightly browned. Add the broth and bring to a boil. Reduce the heat and simmer until the liquid evaporates and turnips are very tender (about 30 to 40 minutes). Stir in the lemon juice and parsley and season with salt and pepper to taste.

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Fresh from the Garden

CABBAGE

This lesson may be presented as part of a general overview of the cruciferous vegetable family (cole crops, brassica family), or as a stand-alone lesson.

The material is suitable for both beginning gardeners and gardeners with established productive vegetable gardens.

Use the lesson to:

- Teach about the health benefits of cabbage.
- Demonstrate how to properly harvest, store, handle, preserve, and healthfully prepare cabbage.
- Introduce new and/or unfamiliar cabbage family vegetables to gardeners.
- Provide more healthful alternatives to traditional cooking techniques or recipes.
- Instruct gardeners how to deal with an overabundant crop.

With minor adaptation, the lesson may be used to introduce the concept of growing vegetables at home to non-gardeners.

Key presentation points:

- 1. Nutrition and health benefits associated with cabbage and other vegetables
- 2. Importance of eating fruits and vegetables daily.
- 3. Simple cultivation recommendations
- 4. Harvesting techniques
- 5. Washing and storing
- 6. Healthful cooking/preparation techniques
- 7. Freezing techniques, if applicable
- 8. Recipe demonstration (1 or 2)
- 9. Recipe

Additional (optional) points:

- History or origin
- Cultural information
- Interesting or fun facts

Additional (optional) Activities:

- Compare vegetable name in English with another language appropriate for your audience.
- Taste and compare flavor of different varieties of raw cabbage.
- Sample raw cabbage with a healthful dip.
- Test audiences' knowledge regarding the difference between a fruit and a vegetable, and into which category cabbage falls.
- Distribute plants or seeds for immediate planting in the garden.

- Make sauerkraut.
- Explore color changes in red cabbage.
- For children: After harvesting and before preparing the cabbage harvest, have a "Mr. Cabbage Head" contest. Similar to Mr. Potato Head, build faces and body parts on cabbages with pieces of fruits and vegetables, as well as non-toxic flowers and plants.

Cabbage Facts:

- Cabbage has been used as a food crop for more than 3,000 years.
- In the early time of its cultivation, cabbage was used more for medicine than for food.
- Ancient Greek and Roman civilizations used cabbage to treat a wide variety of health conditions, including gout, deafness, and headache.
- The Romans believed that cabbage cured a hangover.
- The name coleslaw (a salad dish made with shredded cabbage) may have come from the Dutch, whose word for cabbage is "kool" and salad is "sla".
- Fermented cabbage, in the form of sauerkraut, was an essential in the medieval diet.
- On long voyages, Dutch sailors ate fermented cabbage to prevent scurvy.
- The Germans learned to make sauerkraut from the Tartars who learned the fermentation process in China.
- In 1541, Jacques Cartier planted cabbage in Canada on his third voyage to the new world.
- The largest cabbage ever grown was 124 lb.
- When eaten on New Year's Day, cabbage is supposed to bring good luck for the coming year.
- February 17th is World Cabbage Day.
- The word cabbage is derived from the French word caboche or head.

Preparation:

- Review lesson material.
- Review presentation guidelines.
- Review demonstration checklist.
- Review resources for additional presentation information or activities.
- Select seasonal vegetables for demonstration.
- Prepare vegetables for demonstrations, as necessary.
- Prepare recipes or parts of recipes for demonstration and sampling, as necessary.

The following is a suggested script with step-by-step demonstration activities:

PRESENTATION: CABBAGE

Introduce yourself and review what you will be presenting with the audience. Discuss the recipe(s) that you will demonstrate.

"Cabbage is a cool season vegetable and a member of the cruciferous vegetable family (Flowers on the plants cluster in groups of four, a pattern suggestive of a crucifix). Also included in the cabbage family are broccoli, Brussels sprouts, cauliflower, and kohlrabi. These vegetables are often called "cole" crops (from the Note: If you plan to demonstrate 2 recipes, select 1 that requires cooking and 1 that is served raw. Start the recipe that requires cooking at the beginning of the presentation to allow adequate cooking time. The 2nd recipe may be prepared at or towards the end of the presentation.

Dutch word for cabbage -- kool).

Also included in the cabbage family are beet greens, chard, collards, kale, mustard and turnips greens from the leafy green vegetable category; and radishes, turnips and rutabagas from the root vegetable category.

There are at least a hundred different types of cabbage grown throughout the world. The most common types in the United States are the Green, Red, and Savoy varieties. Chinese cabbages are also available. The two most common types of Chinese cabbage are Bok Choy and Napa cabbage."

Display a variety of washed cabbage. If some varieties are unavailable, display photographs of the various cabbage family vegetables.

"Green cabbage is round and compact. Red cabbage differs only in color. Savoy cabbage has crinkled leaves that form a looser head. Chinese or Napa cabbage is an elongated, oval head that is very firm and very pale green to white in color. Bok Choy resembles celery, with thick white stems and round green leaves."

- Point out the color and shape differences of the displayed cabbage or photographs
- Distribute a few leaves from each of the different cabbages
- Encourage the audience to taste the raw cabbage

"Cabbage thrives in cool weather and is easy to grow. It doesn't require much attention, but it does require space. It is best grown in a garden plot, rather than a container.

Harvest cabbage anytime after solid heads form. Cut the head from the stem with a sharp knife.

You may remove the outer leaves, especially if they are damaged; but do not wash cabbage before storing. It will keep for up to 2 weeks loosely covered with a plastic bag in the refrigerator crisper.

Cabbage is very low in calories containing only about 20 calories in both a 1/2 cup cooked and 1-cup raw shredded cabbage.

Cabbage is rich in vitamin C (an antioxidant) and fiber. It contains plant chemicals (phytochemicals: isothiocyanates and idoles), which have been shown to reduce the risk of certain cancers. Try to eat vegetables from the cabbage family at least three times a week."

Discuss daily vegetable recommendation (see "Nutrition – the basics" handout, in general $2\frac{1}{2}$ to 3 cups per day for adults)

- Discuss MyPyramid, if time allows
- Define phytochemicals and discuss health benefits, if time allows. (See "*Nutrition the basics*" handout for information on phytochemicals)

"Research also shows that cabbage juice is effective in treating stomach (peptic) ulcers.

Don't wash cabbage until you are ready to use it. The interior of a tight head is almost always clean; but if you want to rinse it, do so after cutting or chopping the vegetable.

Don't chop or shred cabbage in advance, because vitamin C is lost. However, if you must, seal the cut cabbage tightly in a plastic bag and refrigerate.

To cut cabbage, remove damaged or wilted outer leaves then quarter and core it. Place a quarter on the cutting board, resting on its side, then slice the wedge vertically in either chunky pieces, wide ribbons or fine shreds.

Demonstrate slicing/chopping technique

"Do not use a carbon steel knife to cut cabbage. Green cabbage will turn black and red cabbage blue. Cabbage may also be shredded on the largest holes of a grater."

- Introduce cabbage recipe #1 or the cabbage and onion recipe
- Begin preparation:
 - Use cabbage cut during the slicing/cutting demonstration
 - Chop garlic and onions
 - Sauté garlic and onions briefly. Add chopped cabbage.
 - While cabbage is cooking, chop parsley
- Continue with presentation while you prepare the recipe

"Season your cabbage with garlic, onion, peppers, herbs, or whatever you like.

Just don't "undo" all the nutritional benefits of eating cabbage family vegetables by cooking them with large amounts of fat and salt. Sauces, dressings, and other ingredients can add calories and cholesterol.

Raw red cabbage bleeds into recipes to which it has been added. For example, if used in a cole slaw, it will turn the mayonnaise pink. If this is a problem, use green cabbage or add red cabbage just before serving.

When cooked, the pigment in red cabbage leaches out turning it an unappealing bluish-gray color. To preserve the red color in cabbage, cook or dress it with something acidic like lemon juice or vinegar (add 1 teaspoon lemon juice or

vinegar to 1 quart of the cooking liquid). (Red cabbage gets its color from a pigment called anthocyanin as do all red, blue, and purple plants.)."

Optional:

- Display a portion of raw red cabbage, red cabbage cooked/dressed without acid, and red cabbage cooked/dressed with acid
- Point out the differences in color among the three types of cabbage

"Cabbage may be steamed, boiled, braised, sautéed, stir-fried, roasted, stuffed, and pickled. It may be eaten raw or cooked."

COOKING CABBAGE:

<u>Boiling:</u> Use a lot of water and cook quickly in an uncovered pot. Drop chopped, quartered, or sliced cabbage into boiling water and cook for about 4 to 8 minutes. Shredded cabbage will cook in 2 to 3 minutes.

<u>Braising:</u> Braise in water, stock, juice, or wine. Add onions, garlic, and herbs for flavor. For quartered cabbage, put about 1" of water in a pan. Bring it to a boil, cover the pan, turn down the heat, and simmer until tender for about 6 to 8 minutes. For chopped or shredded cabbage, use about ½" of water and cook for about 3 minutes.

<u>Microwaving:</u> Put cabbage wedges in a microwaveable dish with 2 tablespoons of liquid. Cook for 5 to 7 minutes, stirring halfway through. For shredded cabbage, add ¹/₄-cup liquid to 2 cups cabbage. Cook for 5 minutes, stirring halfway through.

<u>Steaming:</u> This is the best way to preserve the nutrients, color, and crisp texture of cabbage. Place quartered, sliced, or shredded cabbage in a vegetable steamer over boiling water or in a pot with about an inch of boiling water. Steam quarters or wedges for 10 to 15 minutes. Steam shredded cabbage for 5 to 10 minutes.

<u>Stir-frying:</u> Shred or slice any variety of cabbage. Heat a small amount of vegetable oil in a large skillet. When hot, toss cabbage in and stir frequently until softened, about 2 to 4 minutes. Other vegetables may be cooked with the cabbage for a more interesting dish. For a crisper cabbage for cole slaws, shred the cabbage and soak it in salted ice water for 15 minutes and then drain.

"Cooking cabbage usually reduces its volume by about ½. One-pound cabbage will yield 4 cups raw shredded or 2 cups cooked cabbage."

- Point out the reduced volume of the cooking cabbage
- Tilt pan to allow audience to see

"Many older recipes called for long cooking because old-fashioned varieties of cabbage were tougher. However, today's more tender cabbage should be cooked quickly and uncovered. Shorter cooking retains more of the vitamins, and prevents strong odors (caused by hydrogen sulfide-sulfur compounds) and flavors from forming. If your cabbage smells, you've cooked it too long."

- When recipe is finished cooking and before portioning samples, measure a ½ cup serving and place on a small plate
- Point out the portion size
- Distribute a small portion of the recipe for tasting
- Ask the audience how they like the recipe
- Conclude presentation here (see closing remarks at bottom of page), or continue with recipe #2
- Introduce cabbage recipe #2 or cabbage salad recipe
- Demonstrate recipe
- When recipe is finished and before portioning samples, measure a 1-cup serving of raw cabbage and place on a small plate
- Point out portion size
- Distribute a small portion of the recipe for tasting
- Ask the audience how they like the recipe
- Conclude presentation

"For good health, it is important to eat a variety of vegetables including cabbage. Eat vegetables every day – at least $2\frac{1}{2}$ cups, but more is better. The more you eat the better chance you have for a healthy life.

Remember, scientists have found that people who eat cabbage and other vegetables, have a lower risk of developing some of the more common cancers. They recommend that we eat vegetables from the cabbage family at least 3 times a week."

- Ask for questions
- Thank audience for their participation

Recipes

SIMPLY SAUTEED CABBAGE AND ONIONS

6-8 servings

Oil - about 2 tablespoon 1 cabbage, cored, cut into 2 inch pieces, layers separated 1 large onion, cut into 1 inch pieces, layers separated 2-3 cloves garlic, minced

A handful of fresh herbs, chopped (parsley, thyme, cilantro, basil, tarragon, etc.)

Salt and pepper to taste

Heat oil in a nonstick pan over moderately high heat.

Add onions and garlic and cook one to two minutes.

Add cabbage and cook until tender or until it begins to wilt slightly.

Stir in chopped herbs and season with salt and pepper to taste.

ROASTED CABBAGE 6 servings

1 large head red cabbage, cored and sliced

2 tablespoons oil

Salt and pepper to taste

Preheat oven to 450 degrees.

On a baking sheet, toss sliced cabbage with oil, salt, and pepper.

Cover sheet tightly with foil.

Bake until cabbage is crisp-tender, about 20 minutes.

Remove foil and continue cooking and stirring occasionally for 20 to 25 minutes more.

Cabbage should be tender and browned in spots.

CABBAGE AND POTATOES (COLCANNON) 6-8 servings

6 medium potatoes, peeled and quartered (red potatoes need not be peeled, just quartered) (leftover mashed can be used).

1 large cabbage, cored, cut into 2 inch pieces, layers separated

2 Tbs butter or margarine

½ to ¾ cup milk (use 1%, 2%, fat free, or evaporated skim milk)

6 scallions, trimmed and sliced

A handful of fresh, chopped parsley

Boil potatoes until tender.

Put cabbage into pot with the potatoes, cook until tender, and drain.

Mash potatoes and cabbage with the butter/margarine and the milk. Start with a small amount of milk and add as much as needed to make a smooth, thick puree.

Season with salt and pepper.

Stir in the scallions and parsley.

ORIENTAL NAPA CABBAGE SALAD 4-6 servings

1 head Napa cabbage, thinly sliced (or green cabbage, cored and thinly sliced)

1 bunch scallions, trimmed and chopped

1 bunch cilantro, chopped

1 Jalapeno chile, seeded and minced

1 cup chopped peanuts

1/3 - 1/2 cup lime juice or vinegar

2 T oil

1 tablespoon grated ginger (optional)

½ teaspoon sugar Salt and pepper to taste

Place cabbage in a large bowl. Mix in the scallions, cilantro, chile and ginger. Toss with the oil, lime juice and sugar. Season with salt and pepper. Stir in peanuts.

PINEAPPLE SLAW (An Official Network for Healthy CA Recipe) 4 servings

1/2 tsp. grated orange peel

2 Tbsp. fresh orange juice

2 1/2 cups shredded cabbage

1/2 cup shredded carrot

1 cup coarsely chopped fresh pineapple or one 8 oz can pineapple tidbits

1/4 cup raisins

Combine orange peel and orange juice and mix well.

Add shredded cabbage, carrot, pineapple, and raisins and toss.

Serve immediately or cover and chill until serving time.

CABBAGE AND NOODLES 8-10 servings

Oil - about 2 tablespoon

1 cabbage, cored, cut into 2 inch pieces, layers separated

1 large onion, cut into 1 inch pieces, layers separated

3-4 cloves garlic, minced

8 ounces noodles (use shells, bowties, rigatoni, corkscrews, etc.)

A handful of chopped parsley or a combination of parsley and basil.

Salt and pepper to taste

Parmesan cheese

Boil noodles.

Heat oil in a nonstick pan over moderately high heat.

Add onions and garlic and cook a minute or two.

Add cabbage and cook until tender or until it begins to wilt slightly.

Drain noodles and add to cabbage and onions and mix well.

Season with salt and pepper to taste.

Stir in the herbs and Parmesan cheese.

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University of California Cooperative Extension



Fresh from the Garden

LEAFY GREENS

This lesson may be presented as a general overview of greens, or it may be divided into separate, more in depth, lessons.

The material is suitable for both beginning gardeners and gardeners with established productive vegetable gardens.

Use the lesson to:

- Teach about the health benefits of leafy greens.
- Demonstrate how to properly harvest, store, handle, preserve, and healthfully prepare leafy greens.
- Introduce new and/or unfamiliar vegetables to gardeners in order to encourage them to include more nutrient dense cool weather vegetables in their gardens and their diets.
- Provide more healthful alternatives to traditional cooking techniques or recipes.
- Instruct gardeners how to deal with an overabundant crop.

With minor adaptation, the lesson can be used to introduce the concept of growing vegetables at home to non-gardeners. For example, a container gardening section could be added to demonstrate how to grow leafy greens in a pot or container.

Key presentation points:

- 1. Nutrition and health benefits associated with leafy greens and other vegetables
- 2. Importance of eating fruits and vegetables daily
- 3. Simple cultivation recommendations
- 4. Harvesting techniques
- 5. Washing and storing
- 6. Healthful cooking/preparation techniques
- 7. Freezing techniques
- 8. Recipe demonstration (1 or 2)
- 9. Recipe

Additional (optional) points:

- History or origin
- Cultural information
- Interesting or fun facts

Additional (optional) Activities:

- Compare vegetable name in English with another language appropriate for your audience.
- Taste and compare flavor of different raw greens.
- Sample raw greens with a healthful dip.
- Test audiences' knowledge regarding the difference between a fruit and a vegetable, and into which category selected produce falls.
- Demonstrate how leafy greens may be grown in containers.

• Distribute plants or seeds for immediate planting in the garden.

Leafy Greens Facts:

- The ancient Greeks and Romans were fond of chard.
- Spinach most likely originated in Persia and was introduced into Europe by the Moors around 1000 A.D.
- Swiss chard and beets are relatives

Preparation:

- Review lesson material.
- Review presentation guidelines.
- Review demonstration checklist.
- Review resources for additional presentation information or activities.
- Select seasonal vegetables for demonstration.
- Prepare vegetables for demonstrations, as necessary.
- Prepare recipes or parts of recipes for demonstration and sampling, as necessary.

The following is a suggested script with step-by-step demonstration activities:

PRESENTATION: LEAFY GREENS

Introduce yourself and review what you will be presenting with the audience. Discuss the recipe(s) that you will demonstrate.

"In many parts of California, we are lucky to be able to grow fresh from the garden vegetables even when the weather turns cool (average temperatures between 55°F to 75°F).

The vegetables grown during the cool seasons are some of the most nutritious. In fact, these vegetables contain

more vitamins and minerals per pound in their roots, stems and leaves than do the fruits produced by the warm season plants.

As you plan your cool weather garden, consider planting a variety of leafy greens. They are easy to grow and worth the effort. The plants can be left in the ground and the outer leaves harvested throughout the growing season without injuring the plant.

Leafy greens may also be grown in small spaces, containers, or pots.

Cool weather green leafy vegetables include beet greens, collards, kale, mustard greens, spinach, Swiss chard, and turnip greens."

Display a variety of washed raw greens. If unavailable, display photographs.

Note: If you plan to demonstrate 2 recipes, select 1 that requires cooking and 1 that is served raw. Start the recipe that requires cooking at the beginning of the presentation to allow adequate cooking time. The 2nd recipe may be prepared at or towards the end of the presentation.

Display the individual leaves and point out the color, shape and size differences

"Kale and collard greens both belong to the cabbage family. They taste alike, but their leaves are different. Kale has frilly leaves that usually have a blue or gray tint. Collard greens have larger flat, cabbage-like leaves that are a darker shade of green.

Swiss chard and beets are related and there is a similarity in their leaves. Chard has long celery-like stalks, and large dark green leaves that may or may not be crinkled. The stalks and veins in the leaves can be white, red, or even yellow. Beet leaves or greens are much smaller, not crinkled, but like Ruby Chard have red veins and a red stalk.

Spinach leaves are smaller than the others, dark green and more oval shaped.

Mustard greens are a much lighter shade of green and are medium sized with slightly frilled edges.

Greens are excellent sources of vitamins A (beta-carotene) and C, and most contain vitamin K, calcium, and iron. They also contain an abundance of cancer fighting substances called phytochemicals."

Define phytochemicals and discuss health benefits, if time (see "Nutrition – the basics" handout for information on phytochemicals)

"They are low in calories and sodium and are naturally fat and cholesterol free. A 1/2 cup serving of most cooked greens contains only about 20 calories and over 100 different phytochemicals."

- Discuss daily vegetable recommendation (see "*Nutrition the basics*" handout, in general 2 ½ to 3 cups per day for adults)
- Discuss MyPyramid, if time allows

"Dark-colored, strongly flavored greens have more nutritional value than pale, mild salad greens like head lettuce. Therefore, a spinach salad is a better choice than a salad made with iceberg lettuce.

Scientists have found that people who eat dark green leafy vegetables have a lower risk of developing some of the more common cancers. Be sure to eat a dark green leafy vegetable at least 2 to 3 times a week."

Display and compare the color difference between a lettuce leaf and a spinach leaf

"Kale, collards and mustard greens have a slightly bitter flavor. Larger leaves are usually more bitter. For a milder flavor, harvest when the leaves are small to medium sized."

- Distribute a few leaves from each of the different plants
- Encourage the audience to taste raw greens
- Discuss and compare the taste of the mild greens versus the bitter greens
- Have audience vote on whether they like or dislike the bitter greens

"Harvest greens with crisp, tender, and bright green leaves. Discard leaves that are soft or slimy, yellow or dried-out."

Display and compare a green and a yellow leaf

"Greens are best stored unwashed in the refrigerator crisper wrapped in a damp paper towel or in a plastic bag.

Wash leafy greens before cooking by swishing them around in plenty of water. If greens are particularly dirty, change the water and wash a second or even a third time. Lift them out of the water each time so dirt sinks to bottom."

Demonstrate washing technique

"Remove thick, tough or woody stems. Do not discard chard stalks--they may be eaten."

Demonstrate how to separate leaves from stems

"Strip the leaves from the tough stem by either cutting with a sharp knife or tearing. Cut or tear large leaves into pieces. Small leaves may be left whole.

Usually only very young greens are eaten raw. Mature leaves require cooking.

Greens may be steamed, braised, sautéed, or stir-fried. They mix well with pasta, rice and potatoes, and are a good addition to soup. Large leaves may be stuffed like cabbage leaves. Chard ribs or stalks require a little more cooking time that the leaves.

Mild-flavored greens like chard and spinach may be eaten raw--try them in a salad."

Introduce tropical spinach salad recipe
Note: For some, eating raw spinach is uncommon. The Tropical Spinach Salad recipe is
one of the most popular in this vegetable classification, and it is almost always included

as one of the demonstrated recipes. It has been a real favorite with children, and they frequently ask for seconds.

Demonstrate recipe

"Spinach contains something called oxalic acid that reduces the absorption of iron by our bodies. Eating a food containing vitamin C along with spinach improves the iron's absorption. So today, I'm adding some diced oranges to the spinach salad, and orange juice to the dressing."

- When recipe is finished and before portioning samples, measure a 1-cup serving and place on a small plate
- Point out the portion size
- Distribute a small portion of the recipe for tasting
- Ask the audience how they like the recipe
- Encourage participants to replace part or all of the lettuce in their salads with spinach or swiss chard

"Stronger flavored greens like collards, mustard or turnip greens benefit from longer cooking. Cooking in a seasoned broth helps to mellow the flavor of stronger tasting greens."

- Introduce the collard greens, swiss chard, or pasta and greens recipe
- Demonstrate recipe
- If demonstrating the collard greens or pasta with greens recipes, continue presentation while the greens cook or broth is reduced
- Stress that homemade or purchased reduced sodium broth is used to cook the greens. Regular broth is too salty when reduced.
- Tt may be necessary to use precooked pasta based on demonstration site

"Cooking reduces the volume of leafy greens considerably. They will cook down to about 1/4 of the original volume. One pound of fresh greens will produce about 1 1/2 to 2 cups of cooked."

Point out how much the volume of greens has been reduced since they were put in the pan. Tilt the pan to allow the audience to see.

COOKING LEAFY GREENS: (Approximate cooking times)		
Beet Greens	5-15 minutes	
Chard	10-20 minutes	
Collard Greens	10-20 minutes	
Kale	10-15 minutes	
Spinach	3-10 minutes	
Turnip Greens	10-30 minutes	

"Season your greens with garlic, onion, diced tomato, lemon or lime juice, vinegar, chilies or hot pepper flakes, and nuts or seeds.

Don't "undo" all the nutritional benefits of eating leafy green vegetables by cooking them with large amounts of fat and salt. Sauces, dressings, and other ingredients will add calories, fat and cholesterol."

- When recipe is finished cooking and before portioning samples, measure a ½ cup serving and place on a small plate
- Point out the portion size
- Distribute a small portion of the recipe for tasting
- Ask audience how they like the recipe
- © Conclude presentation

"For good health, it is important to eat a variety of vegetables including leafy greens. Eat vegetables every day--at least 2 ½ to 3 cups, but more is better. The more you eat the better chance you have for a healthy life.

Remember, scientists have found that people who eat dark green leafy vegetables, have a lower risk of developing some of the more common cancers. They recommend that we eat a dark green leafy vegetable at least 2 to 3 times a week.

- Ask for questions
- Thank the audience for their participation

Recipes

GOOD HEALTH COLLARD GREENS

4 servings

- 1 large bunch collard greens, stems removed, in bite-size pieces
- 1 tablespoon oil
- 2-3 garlic cloves, minced
- 1 small onion, chopped
- 1/8 teaspoon black pepper
- 1/4 teaspoon red pepper flakes (optional)
- 1/2-3/4 cup low-sodium, fat-free chicken broth (homemade is preferred)
- 2 tablespoons vinegar (or more to taste)

Heat the oil, add the onions and garlic and cook until soft. Be careful not to burn the garlic—it will become bitter.

Add about 1/4 of the greens and toss with onions and garlic. When the greens are wilted, add the remaining greens in batches until all are added and wilted. Mix in the black pepper and the red pepper flakes.

Add the broth and bring to a boil. Reduce the heat and simmer the greens for about 15 to 20 minutes, or until tender. The broth should be almost completely reduced.

Sprinkle with vinegar before serving.

TROPICAL SPINACH SALAD

4 servings

8 servings

Grated rind from 1 or 2 oranges (optional)

1 or 2 oranges, peeled and cut in chunks

1/2 medium red onion, sliced

1 large bunch spinach, large stems removed, in bite-size pieces

1 cup reduced fat mayonnaise

1/2 cup orange juice

1 clove garlic, minced

1/2 teaspoon cinnamon

1/2 teaspoon ground ginger or 1 teaspoon fresh grated ginger

Salt and pepper to taste

Put spinach, oranges, and onion slices in a bowl. For dressing, mix together mayonnaise orange juice, orange rind, garlic clove, cinnamon, ginger, salt, and pepper. Toss salad with the dressing.

SWISS CHARD WITH LIME AND CHILES

2 large bunches Swiss chard, chopped, stalks trimmed and sliced

2-3 cloves garlic, minced

1-2 jalapeno or Serrano chiles, minced

2 tablespoons olive oil

1 or 2 teaspoons sugar

1/2 cup limejuice

Salt and pepper to taste

In a large pan, heat the oil. Add the sliced stalks, chiles, and garlic and cook until tender, stirring constantly. Add about 1/4 of the chopped chard and toss with chiles, stalks, and garlic. When the leaves are wilted, add the remaining chard in batches until all are added and wilted. Add the sugar, lime juice, salt, and pepper and cook for an additional minute.

PASTA WITH GREENS AND FETA CHEESE 6 servings

1 pound pasta, cooked

10 cups mixed greens (packed), rinsed and chopped

3 cups onion, chopped

3 large cloves garlic, minced

3 tablespoons olive oil

2 tablespoons Parmesan cheese

1/4 pound reduced fat feta cheese, crumbled

Salt and pepper to taste.

Cook your favorite pasta (penne, bowties, shells, or other small pasta) in boiling water until tender.

While the pasta is cooking, heat the oil in a deep pan. Add the onion and garlic and cook until tender. Add about 1/4 of the greens and toss with onions and garlic. When the greens are wilted, add the remaining greens in batches until all are added and wilted. Cover the pan and cook over medium-low heat for about 10 minutes. When the pasta is ready, drain and add the greens. Add the crumbled cheese and mix the dish thoroughly. Season to taste with salt and pepper and cook for a minute or two over low heat. Add Parmesan, if desired. Serve immediately.

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University of California Cooperative Extension



Fresh from the Garden

WINTER SQUASH

This lesson may be presented as a general overview of winter squash and/or winter squash, or it may be divided into separate, more in depth lessons.

The material is suitable for both beginning gardeners and gardeners with established productive vegetable gardens.

It may be necessary to prepare some recipes in advance and reheat them during the presentation, if possible.

Use the lesson to:

- Teach about the health benefits of winter squash
- Demonstrate how to properly harvest, store, handle, preserve, and healthfully prepare winter squash.
- Introduce new and/or unfamiliar vegetables to gardeners in order to encourage gardeners to include more nutrient dense cool weather vegetables in their gardens and their diets.
- Provide more healthful alternatives to traditional cooking techniques or recipes.
- Instruct gardeners how to deal with an overabundant crop.

With minor adaptation, the lesson can be used to introduce the concept of growing vegetables at home to non-gardeners.

Key presentation points:

- 1. Nutrition and health benefits associated with vegetables
- 2. Importance of eating fruits and vegetables daily
- 3. Simple cultivation recommendations
- 4. Harvesting techniques
- 5. Washing and storing
- 6. Healthful cooking/preparation techniques
- 7. Recipe demonstration (1 or 2)
- 8. Recipe

Additional (optional) points:

- History or origin
- Cultural information
- Interesting or fun facts

Additional (optional) Activities:

- Taste and compare flavor of winter squash and winter squash.
- Demonstrate techniques to extend the life of harvested winter squash and squash.
- Demonstrate how to dry and roast squash seeds.
- Compare vegetable name in English with another language appropriate for your audience.

- Test audiences' knowledge regarding the difference between a fruit and a vegetable, and into which category selected produce falls.
- Demonstrate how winter squash may be grown in a large container.
- Distribute plants or seeds for immediate planting in the garden.

Winter Squash and Winter squash Facts:

- Winter squash originated in the new world.
- The name "squash" is an abbreviation of the Narragansett Indian word "askutasquash", which means "something that is eaten raw."
- The Iroquois called it "isquoutersquash, the Algonquins' word was "askoot."
- The term "three sisters" refers to the three foods that appear together consistently in Native American cuisine: squash, corn, and beans.
- Archaeological evidence shows that Native Americans were cultivating squash at least 8,000 years ago.
- Native Americans boiled, baked, fried and dried squash.
- Winter squash was such an important part of the diet of the Native Americans that they buried it with their dead.
- Squashes were originally domesticated for their seeds rather than their flesh.
- Early explorers mistakenly identified squash as melon.
- Christopher Columbus brought squash back to Europe from the New World.
- Squash seeds were once used as a cure for freckles.
- Squash seeds can be roasted like winter squash seeds.
- Squash flowers are edible, and are considered a delicacy by many.

Preparation:

- Review lesson material
- Review presentation guidelines.
- Review demonstration checklist.
- Review resources for additional presentation information or activities.
- Select seasonal vegetables for demonstration.
- Prepare vegetables for demonstrations, as necessary.
- Prepare recipes or parts of recipes for demonstration and sampling, as necessary.

The following is a suggested script with step-by-step demonstration activities:

PRESENTATION: WINTER SQUASH

Introduce yourself and review what you will be presenting with the audience. Discuss the recipe(s) that you will demonstrate.

"Winter squash grow on vigorous, sprawling vines and ripen in late autumn. They come in all shapes, colors, and sizes.

Like summer squash and zucchini, winter squash is grown in the summer, but it ripens in the autumn.

Note: it may be necessary to prepare winter squash for recipes and demonstration in advance. It may be necessary to prepare some entire recipes in advance and reheat them during the presentation, if possible.

Winter squash have a firm rind, a hollow middle, and orange flesh with a mild, slightly sweet flavor.

There are many varieties of winter squash, such as acorn, banana, butternut, Hubbard, turban and pumpkin."

- Display a variety of winter squash or a photograph
- Point out the color, shape and size differences

"The bright orange color of winter squash indicates that it is rich in Vitamin A (beta-carotene). It also contains considerable quantities of B and C vitamins, along with phosphorus, potassium, calcium, and iron, as well as plant chemicals (phytochemicals), which have been shown to reduce the risk of certain cancers. One cup of mashed winter squash contains approximately 50 calories."

- Display a halved winter squash and point out the color of the flesh
- Discuss daily vegetable recommendation (see "Nutrition the basics" handout, in general $2\frac{1}{2}$ to 3 cups per day for adults)
- Discuss serving size recommendation
- Define phytochemicals and discuss health benefits, if time allows (see "*Nutrition the basics*" handout for information on phytochemicals)

"Winter squash are ready to harvest once the color of the fruit has deepened into somewhere between deep yellow and fiery red, depending on the variety. Use a sharp cutting tool or knife to cut the winter squash from the vine, leaving several inches of stem on the winter squash."

- Display winter squash with several inches of stem intact
- Point out the stem

"Winter squash stores well for months in a cool, dry, dark spot, but must be cured to dry and harden their shells completely before being put into storage. To cure winter squash, hold at warm dry temperatures for a few days.

For extended storage, sit winter squash on a piece of cardboard to allow air circulation and check stored winter squash frequently. If you find mold, wipe with vegetable oil to remove the mold and seal the spot.

Before cutting, scrub the outer surface of the winter squash with a brush and rinse with plenty of water to remove any surface dirt that could be transferred to the inside of the winter squash during cutting."

Demonstrate washing technique

"To cook winter squash, remove the stem, and cut it in half with a very sharp knife. Scoop out the seeds and scrape away all of the stringy mass. This is a messy job.

Another method for cutting a large or thick-skinned squash is to use a rubber or wooden mallet to tap a sharp knife into and through the squash."

- Demonstrate how to cut, seed, and scrape a winter squash
- Display the winter squash seeds

"Winter squash seeds can be roasted and eaten as snacks.

Drying seeds and roasting seeds are two different processes.

To dry: Scoop out the seeds and scrape away all of the stringy mass. Carefully wash winter squash seeds to remove any remaining clinging fibrous winter squash tissue. Spread the seeds on a baking sheet and dry in a warm oven for 3 to 4 hours. Alternatively, winter squash seeds can be dried in a dehydrator at 115⁰ to 120⁰ for 1 to 2 hours."

- Demonstrate how to separate and wash winter squash seeds
- Demonstrate how to prepare seeds (dry) for roasting

"To roast: take dried winter squash seeds and toss with just enough oil to coat the seeds lightly and a little salt. Roast in a preheated oven at 250° for 10 to 15 minutes.

Use winter squash in soup, stew, casseroles, pies, cakes, cookies, and beverages."

- Demonstrate how to roast winter squash seeds
- Display a bowl of roasted winter squash seeds

COOKING WINTER SOUASH:

Cut winter squash in half; scrape away strings and seeds, cut into smaller pieces, peel. Roast, steam, boil, microwave, or stir-fry until tender.

Boiling/Steaming: Place pieces in a large pot with a cup of water. Cover pot and boil 20 to 30 minutes or until tender, or steam 10 to 12 minutes. Check for doneness by poking with a fork.

<u>Roasting:</u> Slice the winter squash crosswise into 1/2" slices. Toss with one to two tablespoon of oil, salt, and pepper. Place pieces on a cookie sheet. Roast at 400^{0} for about 30 to 40 minutes or until fork tender.

<u>Microwave:</u> Cut winter squash in half, place cut side down on a microwave safe plate or tray. Microwave on high for 15 minutes, check for doneness. If necessary, continue cooking at 1-2 minute intervals until fork tender.

"For a winter squash puree, cut a winter squash in half, scraping away stringy mass and seeds.

Place winter squash, cut side down, on a large cookie sheet. Bake at 350° for one hour or until fork tender."

Demonstrate baking technique

"When the winter squash is cool enough to handle, remove the peel using a small sharp knife and your fingers. Put the peeled winter squash in a bowl and mash to form a puree."

- Demonstrate how to prepare winter squash puree using pre-baked winter squash
- Distribute a small sample of plain or seasoned winter squash puree for tasting

"If the winter squash puree is watery, place in strainer for several hours or overnight.

Winter squash puree freezes well.

To freeze, measure cooled puree into one-cup portions, place in freezer containers, leaving 1/2-inch headspace, or pack into freezer bags. Label, date, and freeze at 0^0 F for up to one year."

Demonstrate freezing technique

"Winter squash may also be sautéed."

- Introduce winter squash salad recipe. Use winter squash that was cut, peeled, and seeded earlier in the presentation
- Demonstrate the recipe
- When recipe is finished cooking and before portioning samples, measure a ½ cup serving and place on a small plate
- Point out the portion size
- Distribute a small portion of the recipe for tasting
- Ask the audience how they like the recipe

"Don't "undo" all the nutritional benefits of eating winter squash by cooking it with large amounts of sugar, fat, and salt. Sauces, dressings, and other ingredients will add calories, fat, and cholesterol."

© Conclude presentation

"For good health, it is important to eat a variety of vegetables including winter squash and orange and deep yellow vegetables. Eat vegetables every day $-2\frac{1}{2}$ to 3 cups, but more is better. The more you eat the better chance you have for a healthy life.

Remember, scientists have found that people who eat winter squash and other orange and deep yellow vegetables, have a lower risk of developing some of the more common cancers. They recommend that we eat these vegetables several times a week."

Ask for questions

Thank audience for their participation

Recipes

SQUASH AND ONION SALAD WITH MINT

6 servings

1 small winter squash, cut in half, peeled, seeded and sliced into 1/2" slices.

1 large onion, cut into thick slices

2 tablespoons olive oil

2 tablespoons brown sugar

2 teaspoons cinnamon

Salt and pepper to taste

½-cup olive oil

½ cup red wine vinegar (or ¼ cup vinegar and ¼ cup fresh lime juice)

2 cloves garlic, minced

1 tablespoon dried oregano

1/2 teaspoon crushed red pepper

Small handful fresh mint, minced

Toss the winter squash and onion with oil, salt, pepper, brown sugar, and cinnamon.

Heat 1 tablespoon of oil in a pan. Add squash and onion and cook until tender and browned (about 10 minutes). Remove from pan and put onto a plate.

Combine olive oil, vinegar, oregano, garlic and crushed red pepper. Season with salt and pepper to taste.

Pour the dressing over the warm winter squash, sprinkle with the mint leaves, and serve.

WINTER SQUASH CORNBREAD

1 loaf

1 cup cooked and pureed winter squash

1 egg or equivalent amount of egg substitute

2 teaspoons baking powder

1 teaspoon salt 1 cup vegetable oil 3/4 cup yellow corn meal

Beat the egg lightly and mix into the winter squash. Add the other ingredients and mix lightly. Place the batter into a cast iron skillet or 9 inch square pan that has been coated with butter, margarine or no-stick spray. Bake at 350° F for 40 minutes.

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University of California Cooperative Extension



Fresh from the Garden

"FROM GARDEN TO FREEZER" FREEZING VEGETABLES

This lesson demonstrates, step-by-step, how to correctly freeze fresh vegetables, in order to preserve the flavor, texture and nutritional value.

Green beans work well for this presentation, but any seasonal substitution may be made.

The material is suitable for both beginning gardeners and gardeners with established productive vegetable gardens, as well as for non-gardeners.

Use the lesson to:

- Teach about the health benefits of vegetables--frozen or fresh
- Demonstrate how to properly freeze fresh vegetables
- Instruct gardeners how to deal with an overabundant crop

Key presentation points:

- 1. Nutrition and health benefits associated with vegetables.
- 2. Freezing is a quick and easy way to preserve freshly harvested or purchased vegetables.
- 3. Proper freezing techniques preserve the natural colors, fresh flavors, and nutrients in vegetables.
- 4. Frozen, ready-to-serve vegetables will make it easier to serve and eat vegetables.
- 5. Safe thawing practices.

Additional (optional) points:

- History of frozen foods
- Interesting or fun facts
- Comparison of freezing to other food preservation methods

Freezing Facts:

- In 1924, Clarence Birdseye invented the system for rapidly freezing foods at extremely low temperatures.
- Freezing is a natural way to preserve vegetables and other foods. It does not usually require the use of chemical preservatives.

Preparation:

- Review lesson material
- Review presentation guidelines
- Review demonstration checklist
- Review resources for additional presentation information or activities.

- Select one or more seasonal vegetables for demonstration.
- Prepare vegetables for demonstrations, as necessary.
- Have a variety of samples available for the presentation. A small sample of previously, correctly and incorrectly, frozen vegetables and a sample of a freezer burned item. There are often questions about what freezer burn looks like.
- Collect a variety of containers and plastic bags to display. Show containers that are approved for freezing and containers that are not.

The following is a suggested script with step-by-step demonstration activities:

PRESENTATION: FREEZING VEGETABLES

Before beginning, put a pot of water on the butane burner. While the water comes to a boil, begin the presentation. Introduce yourself and review what you will be presenting with the audience.

"For good health, it is important to eat a variety of vegetables. The more you eat the better chance you have for a healthy life. Eating vegetables, either fresh or frozen, is one of the easiest and most delicious ways to protect your health. They are high in fiber, low in fat and calories, and contain vitamins, minerals, and important plant chemicals (phytochemicals) that may reduce the risk of some cancers and heart disease. For good health, eat vegetables every day – the more the better. For a wide variety of nutrients, choose a rainbow of colors."

Define phytochemicals and discuss health benefits, if time allows (See "*Nutrition – the basics*" handout for information on phytochemicals)

"Fresh vegetables don't have to be just a summertime treat. Freezing is a quick and easy way to preserve your fresh-from-the-garden harvest (or vegetables purchased at the farmers' market) to enjoy all year long. Taking some time to freeze your vegetables is a good way to ensure that you will have vegetables readily available for family meals.

Freezing preserves the natural colors, fresh flavors, and nutrients in vegetables."

- Display a serving of canned green beans and a serving of frozen green beans
- © Compare the color difference
- Point out that canned vegetables contain sodium

"Freezing does not kill bacteria, but it does stop it from growing. Always handle vegetables and other foods safely before freezing and when thawing.

You may freeze large or small amounts of vegetables based on what you have onhand and your family's needs. Even freezing small amounts of vegetables will allow you to take advantage of low prices.

The time and effort you put into gardening and harvesting, washing, and packing fresh vegetables will be wasted, if you do not take the time to follow a few simple rules before putting the vegetables in the freezer. Today's class will demonstrate, step-by-step, how to freeze vegetables the right way!

You may freeze almost any vegetable you like. However, there are a few that don't freeze well and get soggy or mushy, like cucumbers, celery, lettuce, and a few others."

Display frozen and thawed limp celery and/or cucumber

"Celery does better if it is cooked and combined in a casserole or mixed dish.

The reason these vegetables don't freeze well is because they contain a lot of water. Water in the cells of vegetables like celery expand when they freeze. The individual cells break and, when the vegetable is thawed, the water leaks out and the vegetable turns mushy."

Demonstrate how the cells burst and lose liquid by squeezing a previously frozen and thawed vegetable sample over a bowl

"Cabbage is another vegetable that is usually not frozen raw. Freezing a traditional cabbage salad—coleslaw—made with mayonnaise would be double trouble. The cabbage would exude water and become mushy and the mayonnaise would separate and curdle.

When preserving, always start with high quality, young, flavorful vegetables."

Display green beans for freezing

"Most vegetables will retain their quality (i.e. color, texture, taste, and nutrients) during freezer storage if they are blanched or scalded before freezing. Blanching is not an optional step. There are only a few vegetables that don't require blanching. Neither onions nor peppers need to be blanched. Just chop or dice and freeze.

Blanching just means to put the vegetables in boiling water (or over steam) for a short period of time.

There are natural chemicals in vegetables called enzymes that cause changes in flavor, texture, and color. Blanching stops the action of these enzymes.

If you have been disappointed with your home-frozen vegetables, it is probably because you have not blanched them. After about 4 weeks, frozen vegetables that haven't been blanched, usually do not look or taste very good (they lose flavor and color), and many of their vitamins and minerals have been destroyed. They will be safe to eat, just not very appealing."

Display unblanched freezer burned green beans

"To begin blanching, you need a large pot of boiling water."

Point to pot on burner

"You need about 1 gallon of water for every pound of vegetables you plan to blanch. Leafy greens like collards or spinach require 2 gallons of water for each pound.

Wash the vegetables well. Trim off the ends and cut the beans in pieces. You can leave them whole if you like, but I think the pieces are easier to handle."

Demonstrate how to trim and cut green beans

"Put the vegetables into a colander or fry basket or even some cheesecloth. This makes it very easy to lower them into the water and to remove them."

- Display cheesecloth, colander and fryer basket
- Put cut green beans into cheesecloth and secure with string or a rubber band

"A string works well because you can leave the ends long and hang them over the side of the pot for easy removal. The pot cover holds the string in place.

When the water is at a rolling boil--that means that it is really moving--put the vegetables into the water and cover the pot."

Lower the cheesecloth bag of green beans into water and cover pot

"Start counting the blanching time right away."

- Set timer for 3 minutes
- Point out the amount of time to blanch green beans is 3 minutes
- During blanching time, prepare bowl of water with ice (if possible) and continue with presentation

"If you don't have a timer, a clock or a watch with a second hand will help keep track of the time.

When the time is up, remove the vegetables from the boiling water. Don't leave them in the boiling water for longer than the recommended time, or they will cook. If they are removed too soon (under-blanched), the enzymes will continue to be active and the vegetables will become tough and develop an "off-flavor" in the freezer.

When blanching more than one batch of vegetables, save the water and use it several times."

- Remove the green beans from the pot
- Do not remove from cheesecloth bag
- Put the vegetables into the water immediately

"If you don't have a large bowl, fill the kitchen sink with cold water and add some ice.

Cool the vegetables completely. Usually they are cooled in the cold water for the same amount of time they were blanched. So, for green beans, that means 3 minutes in the boiling water and 3 minutes in the cold water."

- Remove the green beans from the ice water
- Untie the cheesecloth
- Put the green beans into the colander

"When the vegetables are blanched, you will see a very definite color change. This is really easy to see with green vegetables like green beans and broccoli."

Display the blanched and raw green beans and compare the color difference

"Drain the vegetables well and allow them to dry thoroughly. It helps to spread them onto a kitchen towel or paper towels. Blot dry, if necessary."

Spread a towel and lay green beans on it

"When the vegetable pieces are completely dry, package them in small or family size portions."

Place the green beans into a freezer container

"For individually frozen pieces, place the dry pieces, without touching, on a cookie sheet or tray. Place the tray in the freezer. When the pieces are frozen, remove from the tray and package."

- Display cookie sheet
- Spread blanched, dry green beans into cookie sheet

"With this method, you can remove the exact amount needed for a meal from the package."

- Display container of individually frozen vegetable pieces
- Share the container to demonstrate the individual pieces

"Frozen foods that are kept too long or not packaged properly will develop "freezer burn" from moisture loss. Freezer burn appears as spongy looking, grayish white spots on the food's surface, and causes off-flavors and toughness. Freezer burned food is safe, but doesn't taste very good."

Display a sample of freezer burned vegetables

"To protect the quality of frozen vegetables, it is important to use containers that are suitable for freezing. The best containers are those that keep out the air and moisture that circulates in the freezer."

Display appropriate freezer containers

"Containers should be rigid with tight fitting lids. They are usually labeled 'for the freezer'."

Display container packaging and point out the word "freezer"

"Cottage cheese, sour cream and similar containers don't really do the best job for freezing. They don't keep the moisture and air out, because they are designed for storing food in the refrigerator. When used in the freezer, they can become brittle and crack. Remember that it's the moisture and air that will affect the quality of your frozen vegetables."

Display cottage cheese and sour cream container (or yogurt and/or salsa containers)

"However, if these are all you have, use them only for foods that will be frozen for a short time.

Don't overfill them, and hold the lids in place with freezer tape.

If you find that you have a lot of space between the vegetables and the lid, crumple up a piece of wax paper, plastic wrap, or foil and put it on top of the vegetables. The paper fills the empty space where air can collect, and will help preserve the quality of the frozen vegetables."

- Put some of the blanched green beans into the container
- Crumple a piece of wax paper and put it on top of the beans
- Put the cover on the container
- "If you prefer plastic bags, use heavy bags labeled 'freezer bags'."
 - Display plastic freezer bag

"Plastic produce bags from the supermarket are not acceptable. These bags are too thin to protect your vegetables from the air and moisture in the freezer. Also, they frequently have very small holes in them that let even more air and moisture into the package."

Display plastic produce bag

"When storing vegetables in a plastic bag, remove as much air as possible before sealing."

- Put some of the blanched green beans into the bag
- Demonstrate how to push or squeeze air from the bag

"There is a little trick you can use to remove the air and it works very well. Seal the freezer bag almost completely, but leave just enough space to put a straw into the bag. Now suck out any air that remains. As the air is removed, the plastic forms a tight protective seal around the vegetables."

Demonstrate the removal of air with a straw

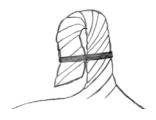
"Be very careful not to draw any vegetable particles up through the straw and into your lungs. Also, be careful not to add any saliva to the freezer bag.

Now seal the bag tightly using a twist tie.

The gooseneck seal is an effective way to prevent air from getting into the freezer bag."

Demonstrate the gooseneck-twist tie seal

"Twist the top tightly. Fold the twisted section in half. Secure the tie just above where the top and bottom sections meet.



Heavy-duty aluminum foil will also work (it's better than regular foil), if you are careful to close it tightly. Be aware that foods that contain acid, like tomatoes will react with the aluminum and cause pitting. To avoid this, first wrap these foods in plastic wrap, then over wrap with foil. Foil is probably the most costly way to package your frozen vegetables."

- Display box of heavy-duty aluminum foil
- Display piece of pitted aluminum foil

"Always label freezer packages with a description of the contents and the date. Do this even if you think you will be able to recognize the food later. When frozen, many foods look the same.

You can write directly on plastic bags and some containers with an indelible marker. Some packages might need a label or some tape. Be sure that you purchase materials that are designed for the freezer--"freezer tape and labels". Regular Scotch tape or mailing labels won't stay stuck. They will eventually come off."

Display freezer tape, market, and labels

"Now you are ready to put the vegetables in the freezer to be enjoyed later.

For the best quality, store frozen vegetables at 0°. This will be hard to do, if you have a freezer that is part of a refrigerator (on the top or side-by-side), so eat the vegetables within a month or two, or at the longest 4 months. If you have a free standing freezer, they can be stored a little longer (6 months). If possible, use a freezer thermometer."

Display a freezer thermometer

"Freeze packaged vegetables quickly, in a single layer, in the coldest part of the freezer. The faster the vegetables freeze, the firmer they will be when thawed.

The longer it takes for the food to freeze, the more large ice crystals, which puncture the veggie's cell walls, are formed. After the vegetables are frozen, stack them.

Cook most frozen vegetables straight from the freezer without thawing. If you must thaw the vegetables, be sure to do it in the refrigerator, the microwave or in <u>cold</u> water. When foods are thawed at room temperature, it is possible for the bacteria that cause food poisoning to grow.

Vegetables that have been partially thawed can be refrozen, if they still contain ice crystals. Refreezing will result in the loss of some texture and quality."

- Display a partially thawed package of vegetables
- Point out the feel and look of existing ice crystals

"Cooking vegetables in a small amount of water rather than a large amount will prevent the vitamins from being lost to the water.

Generally, for each quart of vegetables, use 1/2 to 1 cup of water. Salt is optional. Some vegetables, like corn-on-the-cob, may require more water."

Demonstrate the most nutritious cooking method by placing vegetables in the glass saucepan and adding water just to cover

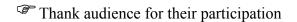
"Avoid overcooking by adding the vegetables to the water only after it has come to a boil.

Cook them only until tender--about half as long as you would, if the same vegetable were fresh.

Vegetables can also be frozen in a casserole or mixed-dish. If you have a favorite vegetable dish, prepare it as usual but cook for only ½ the recommended time. Then cool, label and freeze.

Remember, for good health, it is important to eat a variety of vegetables--fresh or frozen. Eat vegetables every day—the more the better. The more vegetables you eat the better chance you have for a healthy life. Having vegetables handy in the freezer will make serving and eating vegetables easier.

Don't "undo" all the nutritional benefits of eating vegetables by serving them with large amounts of fat and salt. Sauces, dressings, and other ingredients will add calories, fat and cholesterol."



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University of California Cooperative Extension



Fresh from the Garden

COOKING VEGETABLES FOR GOOD TASTE AND GOOD HEALTH

This lesson demonstrates how to prepare fresh vegetables. It may be presented as a general overview of vegetable preparation, or one or more cooking techniques may be included (see steaming, stir-frying and roasting vegetables).

Use the lesson to:

- Teach about the health benefits associated with vegetables.
- Introduce more healthful alternatives to traditional cooking techniques
- Demonstrate how to properly wash, store, peel, cut and cook fresh vegetables

Key presentation points:

- 1. Nutrition and health benefits associated with vegetables
- 2. Healthful cooking/preparation techniques
- 3. Vegetable preparation
- 4. Basic knife skills
- 5. Cooking demonstrations
- 6. Sampling

Additional (optional) points:

- History or origin
- Cultural information
- Interesting or fun facts

Additional (optional) activities:

• Prepare a large fresh, lightly steamed, or roasted vegetable salad containing a variety of vegetables. Depending on the season, the vegetables might include beets, turnips, spinach, and chard, or tomatoes, zucchini, eggplant and peppers.

Preparation:

- Review lesson material.
- Review presentation guidelines.
- Review demonstration checklist.
- Review resources for additional presentation information or activities.
- Select seasonal vegetables for demonstration.
- Prepare vegetables for demonstrations, as necessary.
- Prepare recipes or parts of recipes for demonstration and sampling, as necessary.

The following is a suggested script with step-by-step demonstration activities:

PRESENTATION: VEGETABLE PREPARATION

Introduce yourself and review what you will be presenting with the audience. Discuss the recipe(s), if any, that you will demonstrate. Note: If you plan to demonstrate recipes some preparation before the presentation may be required,

"For good health it is important to eat a variety of seasonal vegetables. Fresh from the garden vegetables are the best tasting and may be the most nutritious. They are low in calories and packed full of vitamins, minerals, fiber, and antioxidants (fruits are too). A $\frac{1}{2}$ cup serving of most vegetables is 25 to 50 calories. Starchy vegetables, such as potatoes, corn and peas have 50 to 100 calories per $\frac{1}{2}$ cup. Be sure to eat vegetables every day $-2\frac{1}{2}$ to 3 cups or more are recommended. Research continues to show that eating vegetables may decrease the risk of heart disease, some cancers, and other health problems."

- Measure out a 1 cup portion and place on a small plate
- Point out the portion size
- Display and compare portion size to familiar non-food objects

"Vegetables are available in many varieties with a rainbow of colors and an array of textures. There are many healthful ways to prepare and serve vegetables – fresh and raw, crisply steamed, stir-fried, grilled, roasted, pureed, mashed, sliced, diced or whole. It is possible to lose some of the vitamins and minerals when washing, peeling, chopping, and cooking fresh vegetables, so be sure to prepare and cook them properly. Today's presentation will demonstrate a few simple techniques for nutritious and delicious vegetables."

Display an assortment of fresh, colorful vegetables

Storage:

"Most vegetables should be stored in the vegetable crisper section of your refrigerator. Unripe tomatoes (technically a fruit) should be stored at room temperature until they have ripened, and may then be refrigerated. Tomatoes lose some of their texture and flavor when refrigerated. Store potatoes, sweet potatoes, onions, and winter squash in cool, dry, well ventilated places."

Display refrigerator/crisper graphics and vegetable basket

Washing:

- "Always wash your hands with warm water and soap for at least 15 to 20 seconds before preparing food."
 - Demonstrate hand washing technique
 - Demonstrate 15 to 20 seconds recommendation by singing "the happy birthday song" twice during the hand washing procedure
- "Wash all fresh vegetables thoroughly before eating them. Scrub them under running water using a brush. Washing removes dirt, as well as some bacteria and pesticide residue. Never use soap. It can leave a residue that is difficult to remove."
 - Demonstrate vegetable washing techniques
- "Never soak vegetables in water for long periods of time or store them in water because Vitamin C, the B vitamins and some minerals can be dissolved in the water, and washed down the drain."
 - Display a container with cut-up vegetables stored in water
- "For leafy vegetables, separate the leaves remove the tough stems and place them into a bowl of water. Swish the leaves around to remove the dirt. Then lift the leaves out of the dirty water and drain."
 - Demonstrate technique for washing leafy greens

Peeling:

"Whether you peel or not depends on the vegetable and your taste. Keep in mind that both fiber and nutrients are found in the edible skin of vegetables, so when you remove peel or skin you remove nutrition. Whenever possible, leave the skin on, but be sure to scrub vegetables well with a brush before eating or cooking.

To peel most vegetables, use a sharp paring knife or a "peeler" to remove a thin layer."

Demonstrate vegetable peeling technique

Chopping:

"Use a sharp knife to cut vegetables. Contrary to common belief, a sharp knife is safer than a dull one. A sharp blade cuts more easily, while a dull one can slide off the vegetable's surface causing an accident."

- Demonstrate sharp knife vs. a dull one
- Demonstrate how a dull knife can slide and cause an injury

"Use a cutting board on a flat surface. If it slides around while you're working, secure it by placing it on a damp kitchen towel or other non-slip surface, like a rubber mat. For example, an inexpensive placemat with a foam bottom or a computer mouse pad will do a good job."

Demonstrate how to prevent a cutting board from slipping with a towel and a rubber placemat or a computer mouse pad

"Some vitamins and minerals can be lost when vegetables are cut or bruised. On the other hand, keeping peeled and/or cut-up vegetables handy in the refrigerator may mean that more will be eaten as snacks, added to salads, or quickly prepared for meals. Lost nutrients can be compensated for by eating more vegetables.

Cut-up vegetables cook more rapidly than whole ones. Quick cooking methods, like stir-frying, usually call for coarsely chopped or thinly sliced vegetables."

- Demonstrate vegetable cutting techniques:
 - o Coarsely chopped: cut a bell pepper (or other vegetable) into 6 to 8 bite-size pieces
 - o Diced: cut coarsely chopped pieces into small cubes about 1/4" in size
 - o Finely chopped: cut diced pieces into very small pieces

"Store cut-up vegetables in an airtight container in the refrigerator."

COOKING

"Eat vegetables raw and cooked. While heat can destroy some nutrients, cooking makes others more available for absorption by the body. A good example of this is tomatoes. Eat them raw for the most vitamin C. To benefit from the cancer fighting lycopene they contain, they should be cooked."

Define phytochemicals and discuss health benefits, if time allows (see "*Nutrition – the basics*" handout for information on phytochemicals)

"Vegetables are best when they are tender but still crisp. They should never be mushy. Overcooking destroys their fresh, natural color and crisp texture, as well as and some of the vitamins and minerals."

- Display a plate of overcooked broccoli (or other vegetable) and a plate of correctly cooked broccoli
- Compare the difference in color and texture

"Vegetables should be cooked quickly in the smallest amount of water possible and served immediately. Reheating will destroy some additional vitamins."

Display vegetable pieces in a glass pot. Add just enough water to cover the vegetables

"Steaming or microwaving vegetables saves more nutrients than cooking in large amounts of water."

Display graphic of different vegetable steamers

"Cooking vegetables in a covered pot prevents nutrients from escaping with the steam and also shortens the cooking time."

Place lid on pot

"Save liquid left over from cooking vegetables. Freeze it in small containers and add to soups or stews.

Never add baking soda (bicarbonate of soda) to cooking vegetables. While it does preserve the bright green color of some vegetables, it can destroy vitamin C and the B group vitamins."

Tisplay baking soda graphics with red sign on box

"Cook vegetables until just tender. Most vegetables should be somewhat crunchy rather than soft and mushy. Green vegetables should be bright green rather than olive green. Overcooked vegetables will have poor color, texture, and flavor, and will not be very nutritious."

- Display plate of overcooked broccoli and plate of correctly cooked broccoli again
- © Compare the difference in color and texture

"Prepare vegetables just before serving. If they won't be eaten right away, cool and refrigerate them. Reheat just before serving time.

Boiling, steaming, stir-frying, roasting, microwaving, grilling, and dry sautéing are methods of cooking vegetables that are considered to be more healthful. Each one has advantages and disadvantages. The most important advice for all cooking methods is *DO NOT OVERCOOK VEGETABLES*."

Display the "do not overcook" graphic

"Determine how well-done you prefer your vegetables. Some vegetables, such as winter squashes, are not cooked sufficiently until they are very tender. Others, such as green beans or broccoli, should remain a bit firm. The cooking method will affect the texture. Stir-frying and steaming produces vegetables that are crisp. Baking and braising makes them very tender.

The visual appearance of vegetables will give you a clue as to their doneness. Less cooked vegetables have a brighter color than overcooked vegetables."

- Point to the display plates of overcooked broccoli and correctly cooked broccoli
- Ask class which vegetable they would rather eat

NOTE: IF PRESENTATION IS ENDING HERE, SAY:

"Don't "undo" all the nutritional benefits of healthfully prepared vegetables by adding large amounts of salt and fat. Sauces, dressings, and other ingredients can add calories, fat, and cholesterol.

For good health, it is important to eat a variety of vegetables. Eat vegetables every day – at least $2\frac{1}{2}$ to 3 cups. The more you eat the better chance you have for a healthy life.

Scientists have found that people, who eat vegetables, may have a lower risk of developing some of the more common cancers."

- Ask for questions
- Thank audience for their participation
- © Conclude presentation

NOTE: IF PRESENTATION IS CONTINUING, DO NOT CONCLUDE. PRESENT ROASTING, STIR FRYING, AND STEAMING MATERIAL –ONE, TWO, OR ALL THREE.

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University of California Cooperative Extension



Fresh from the Garden **Tomatoes**

Tomatoes are a rich source of vitamins C and A and potassium.

Tomatoes contain lycopene, which may play a role in the fight against cancer.

One cup of chopped tomatoes contains only 25 calories.

Tomatoes are the most popular home-grown "vegetable" in the United States. Tomatoes are really a fruit and not a vegetable.

Tomatoes are usually easy to grow. They are heat-loving plants that develop the best flavor during the warmest months—usually June through September. Tomato plants can be grown in large containers.

Freezing tomatoes is easy:

- Wash and thoroughly dry
- Place whole, raw tomatoes on a cookie sheet and freeze
- When fully frozen, put into a freezer bag, remove all air in bag, label and seal.

GAZPACHO (COLD TOMATO SOUP)

6 - 8 servings

8 ripe tomatoes, chopped (save the juice)

1 medium cucumber

1 small Jalapeno or Serrano chile (seeded)

Handful of cilantro 2 cloves garlic, crushed 2 tablespoons red wine vinegar

1/4 cup olive oil

1 teaspoon salt or salt to taste

1/4 teaspoon black pepper

Put all the ingredients into a blender and puree until the mixture is completely smooth. Check for seasoning. Refrigerate and serve very cold.

TOMATO VEGETABLE SAUCE

4-6 servings

4 large tomatoes, chopped

4 cloves garlic, crushed

1 small zucchini, chopped

1 small eggplant, peeled and chopped

1 small green pepper, chopped

1 small onion, chopped

Handful chopped fresh basil

2 tablespoons oil

salt and black pepper to taste

Heat the oil in a large pan over medium heat. Add onion, green pepper, and garlic. Cook for 3 to 4 minutes, stirring often. Add the zucchini and eggplant. Cook for another 3 minutes. Add the tomatoes and basil; simmer for about 15 minutes over low heat, uncovered, until slightly thick. Add salt and pepper to taste.

*This recipe can be doubled or tripled and frozen in individual or family size servings.



Extensión Cooperativa de la Universidad de California



Frescas del Jardín Tomates

Los tomates son una fuente rica de vitaminas C y A y potasio.

Los tomates contienen lycopenos, que posiblemente ayudan en la lucha contra el cáncer.

Una taza de tomates picados contiene solamente 25 calorías.

El tomate es el "vegetal" mas popular cultivado domésticamente en los Estados Unidos. Los tomates son frutas y no vegetales.

Los tomates son generalmente fáciles de cultivar. Les gusta el calor y desarrollan mejor sabor durante los meses más calurosos — en general Junio a Septiembre. Las plantas de tomate pueden crecer en macetas grandes.

Es fácil congelar tomates:

- Lávelos y séquelos bien
- Ponga tomates crudos y enteros en una parrilla para hornear y congélelos
- Cuando estén completamente congelados, póngalos en una bolsa de plástico para congelar, saque todo el aire, etiquételo, y séllelos

GAZPACHO (SOPA FRIA DE TOMATES)

6 - 8 porciones

8 tomates maduros picados (guarde el jugo)

1 pepino mediano

1 chile jalapeño o Serrano sin semillas

Un puño de cilantro

2 dientes de ajo triturados

2 cucharadas de vinagre de

vino tinto

1/4 taza de aceite de oliva

1 cucharadita de sal al gusto

1/4 cucharadita de pimienta negra

Coloque todos los ingredientes en una licuadora y licue hasta que la mezcla este bien suave. Verifique los condimentos. Coloque en el refrigerador y sirva frió

SALSA DE TOMATE CON VERDURAS

4 - 6 porciones

4 tomates grandes picados

4 dientes de ajo machacados

1 calabacita pequeña picada

1 berenjena pequeña pelada y picada

1 chile morón pequeño picado

1 cebolla pequeña picada

Un puño pequeño de albahaca

2 cucharadas de aceite

Sal y pimienta al gusto

Caliente el aceite en un sartén grande con el fuego mediano. Agregue la cebolla, chile morón y ajo. Cocine por 3 a 4 minutos, mezclando. Agregue las calabacitas y berenjena. Cocine por 3 minutos mas. Agregue el tomate y albahaca cocine a fuego lento por 15 minutos, sin tapar, hasta que se espese. Agregue sal y pimienta al gusto.



University of California Cooperative Extension



Fresh from the Garden Summer Squash

Types of Summer Squash

Crookneck

Scallop—Pattypan

Straightneck

Italian

Summer squash is very prolific; a few plants can provide more squash than the average family can use.

For the best quality, harvest when small and tender. If garden space is limited, grow it in a large container.

TOO much squash? Freeze it!

Wash, grate and portion into air tight freezer containers or bags. When thawed, it will produce quite a bit of liquid. Add the liquid to bread, cake, and muffin recipes, but drain if sautéing or adding the squash to a casserole.

Good Squash for Good Health

- o Contains vitamin A & C, and other elements shown to reduce the risk of age-related eye problems
- o 1 cup of squash contains only about 20 calories it's 95% water
- Squash can be steamed, boiled, baked, sautéed, grilled, fried, stuffed, or grated and used in breads, muffins, casseroles or soups

ZUCCHINI PANCAKES

Serves 4

4 medium zucchini, grated (approximately 4 cups)

2 eggs, beaten

1/2 small onion, minced

1/4 cup all-purpose flour

1 teaspoon baking powder

Small handful fresh herbs, minced (parsley, cilantro, thyme)

Small handful grated parmesan cheese

Salt & pepper to taste

2 tablespoons oil

Optional: chopped jalapeno pepper or grated lemon peel

Combine zucchini, eggs, onion, fresh herb, flour, baking powder, salt and pepper. Heat oil in a skillet over medium high heat. Drop zucchini mixture by heaping tablespoonfuls and cook for a few minutes on each side, until lightly browned. Serve with a dollop of light (reduced fat) sour cream or a squeeze of fresh lemon.

OVEN FRIED ZUCCHINI COINS 4 – 6 servings

3 medium zucchini, sliced

1/2 cup seasoned bread crumbs

2 eggs, beaten

salt and pepper to taste

2 tablespoons grated Parmesan cheese

Cut into 1/4-inch thick slices. Combine bread crumbs, cheese, salt and pepper in a small bowl. Dip zucchini in the beaten egg then into the bread crumb mixture.

Place on a baking sheet coated with cooking spray. Bake at 475 degrees for 5 minutes; turn and bake an additional 5 minutes. Serve immediately.



Extensión Cooperativa de la Universidad de California



Frescas del Jardín Calabacitas de Verano

TIPO DE CALABACITAS

Cuello Torcido Cuello Derecho Italianas Scallop-Pattypan La calabacita es muy prolífica; unas pocas plantas pueden proveer más calabacitas que lo que la familia promedio puede comer.

Para obtener mejor calidad, cosecha las calabacitas cuando estén pequeñas y tiernas. Si el espacio del jardín es limitado, cultívelos en una maceta grande.

¿Demasiadas Calabacitas? ¡Congélelas!

Lávelas, rállelas, y guarde porciones en recipientes o bolsas herméticas. Cuando valla a descongelar las calabacitas, producirán una buena cantidad de líquido. Agregue el líquido a panes o pasteles, pero remueva el líquido si decide agregar la calabacita a una cacerola o freír las.

LA CALABASITAS SON BUENA PARA UNA BUENA SALUD

- Contiene vitamina C y A, también otros elementos que han demostrado ayudar a reducir los problemas de visión relacionados con la edad
- O Una taza de calabacita contiene solamente 20 calorías. Esta compuesta de un 95% de agua
- La calabacita de verano puede ser cocinada al vapor, hervida, a la parilla, frita, rellena o rallada y utilizada en panes, sopas y en cacerolas

TORTITAS DE CALABACITAS 4 porciones

4 calabacitas medianas ralladas (Aprox. 4 tazas)

2 huevos batidos

½ cebolla pequeña picada

½ taza de harina común

1 cucharadita de levadura

1 manojo pequeño de hierbas frescas (perejil, cilantro, u otra)

1 manojo de queso parmesano rallado

Sal y pimienta al gusto

2 cucharadas de aceite

Opcional: chile jalapeño picado; cascaron de limón rallado.

Combine la calabacita, huevo, cebolla, hierbas, harina, levadura, queso, sal, y pimienta. Caliente el aceite en un sartén sobre fuego mediano a alto. Sumerja cucharadas colmadas de la mezcla de calabacitas y cocínelos por unos minutos de cada lado, hasta que se doren. Sirva con una cucharadita de crema acida bajo en grasa o exprima limón fresco.

MONEDAS DE CALABACITAS FRITAS AL HORNO 4-6 porciones

3 Calabacitas medianas, en rodajas

2 huevos batidos

2 cucharaditas de Parmesano

rallado

½ taza de pan rallado sazonado

Sal y pimienta al gusto

Corte la calabacita en rebanadas de ¼ de pulgada. Combine con el pan rallado, queso parmesano, sal y pimienta en un recipiente pequeño. Sumerja la calabacita en el huevo batido y cubra con la mezcla de pan rallado. Ponga la calabacita en una charola para horno aceitada con aerosol. Hornee a 475 grados; de vuelta a las rodajas y hornee 5 minutos mas. Sirva inmediatamente.



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Fresh from the Garden Root Vegetables

ROOT VEGETABLES

Beets Parsnips Carrots Potatoes Onions Rutabagas

Turnips

Root vegetables grow best in cool weather. They are easy to grow and good for you. Most roots may be left in the ground and harvested as needed.

GOOD ROOTS FOR GOOD HEALTH

- Always scrub root vegetables with a brush and rinse with plenty of water
- To prevent root vegetables from shriveling, remove the green tops before storing
- A simple way to prepare roots is to boil and mash them like potatoes.

Root vegetables are low in calories and good sources of vitamins, minerals and fiber.

Expecting a baby? Eat beets for folate, a vitamin that prevents birth defects.

Turnips and rutabagas contain cancer fighting plant compounds called phytochemicals.

A ½ cup of carrots supplies 3 times the Vitamin A recommended for one day.

What we typically call a yam is really a sweet potato. Those with orange flesh have more Vitamin A, and are generally sweeter and moister than light-colored sweet potatoes.

LEMONY BEETS 2 - 3 servings

- 4 medium beets, cooked and quartered
- 1 fresh lemon
- 2 tablespoons butter or margarine (or substitute vegetable spray)
- 1 tablespoon sugar

Cook, peel and quarter beets. Grate lemon rind and reserve. Squeeze juice. Melt butter or margarine in a saucepan and add the sugar and lemon juice. Cook over moderate heat about 5 minutes or until slightly syrupy. Add the cooked beets and heat through, stirring constantly.

MASHED TURNIPS 4 servings

- 1 pound turnips, peeled and cut into 2" cubes
- 1 tablespoon butter or margarine
- ¹/₄ cup reduced fat milk, buttermilk, or evaporated skim milk

Salt and pepper to taste

Cook in boiling water or in the microwave until tender. Drain and mash with the margarine until smooth. Beat in the milk and add salt and pepper to taste. Add additional milk, if necessary.



La Extensión Cooperativa de la Universidad de California



Frescas del Jardín Verduras de Raíz

VERDURAS de RAÍZ

Betabel Pastinaca Cebolla Papas Nabo Zanahoria

Nabo de Suecia

Verduras de raíz crecen mejor en clima frío. Son fáciles de cultivar y son buenas para uno. La mayoría de las verduras de raíz se puede dejar en el suelo y solo cosechar lo que va a consumir.

Las verduras de raíz son bajas en calorías y buena fuente de vitaminas, minerales y fibra.

¿Esta embarazada? Coma betabel para obtener folacín, una vitamina que ayuda a prevenir defectos de nacimiento en los bebés.

El nabo contiene una sustancia llamada phytochemical que combate el cáncer.

BUENAS RAÍCES PARA UNA BUENA SALUD

- Siempre cepille las verduras de raíces con un cepillo y enjuague con suficiente agua.
- Para prevenir que las verduras se marchiten, corte las hojas verdes antes de guardarlas.
- Una manera simple de preparar las verduras de raíz es de cocinarlas en agua y machacarlas como las papas.

1/2 taza de zanahorias nos da 3 veces la cantidad de Vitamina A recomendada por un día.

Lo que llamamos camote en el mercado es batata. Los de color anaranjado contienen mas Vitamina A, y generalmente son mas dulces que la batata de color mas claro.

BETABEL EN LIMÓN 2 - 3 porcíones

- 4 betabeles medianos, cocidos cortados en cuatro pedazos
- 1 limón fresco
- 2 cucharadas de mantequilla o margarina (o substituya spray de vegetal)
- 1 cucharada de azúcar

Cocine, pele, y corte el betabel en cuatro partes. Ralle la cáscara del limón y resérvelo. Exprima el jugo del limón. Derrita la mantequilla o margarina en un sartén y mezcle el azúcar y el jugo de limón. Cocine a fuego moderado aproximadamente 5 minutos o hasta que este un poco amielado. Agregue el betabel cocido y continúe cocinando, mezclándolos constantemente.

PURE DE NABO 4 porcíones

- 1 libra de nabo, pelado y cortado en cubitos de 2" pulgadas
- 1 cucharada de mantequilla o margarina
- ¼ taza de leche reducida en grasa, leche agria, o leche evaporada
- Sal y pimienta al gusto

Cocine en agua hirviendo o en el microondas hasta que esten tiernos. Escúrralos y macháquelos con la margarina hasta que este suave. Batiendo agregue la leche sal y pimienta al gusto. Agregue más leche si lo necesita.



University of California Cooperative Extension



Fresh from the Garden Beets

Beets come in a variety of different colors:

- Red
- White
- Yellow
- Striped

Beets are the most colorful of the root vegetables. *Fresh from the Garden* they have a distinctive sweet, earthy flavor, and a rich, deep red color.

If beets are clean, store them unwashed with the greens removed, in the refrigerator crisper or in a plastic bag. They will last 2-3 weeks.

BEETS FOR GOOD HEALTH

- One half cup of boiled, diced beets is only about 30 calories and contains as much potassium as a banana.
- Beets are an excellent source of folic acid, an essential vitamin that may prevent certain types of birth defects, cancers, and heart attacks
- Their deep red color tells us that they also contain vitamins A and C
- For calcium, iron and more vitamins, eat the leafy tops (beet greens).

Be sure to wash beets well. Scrub with a brush and rinse with plenty of water. Be careful not to puncture or tear the skin or some of the color will be lost during cooking.

Small young beets with tender skin don't need to be peeled, but older beets do. Trim and peel beets as you would a potato.

Beets may be boiled, steamed, baked, roasted, microwaved, pickled, or made into soup. They may also be eaten raw. Try grated raw beets in a green salad, or mixed with a variety of vegetables, fruits and dressings.

Quick Grated Beets 4 servings

3-4 medium sized beets 3-6 tablespoons water or vegetable stock

1 tablespoon olive oil Salt and pepper to taste

2 tablespoons fresh orange, lime or lemon juice Fresh dill, parsley, or tarragon chopped

Wash, peel and coarsely grate beets. Heat olive oil over medium-low heat. Add beets, and stir to coat well. Sprinkle with juice, cover, and cook for about 10 minutes. Stir occasionally and add water or stock as needed to prevent scorching. Cook until just tender. Season with salt and pepper. Sprinkle with dill, parsley, or tarragon.

BEETS WITH MINT AND YOGURT

6-8 servings

2-3 medium sized beets, raw, boiled or roasted 3 tablespoons fresh mint, finely chopped

2 cups plain reduced fat yogurt 3 cloves garlic cloves, chopped

Salt and black pepper to taste **1 tablespoon olive or vegetable oil** 1/4 teaspoon cayenne pepper (optional)

Peel the beets and grate coarsely. Combine the yogurt, salt, black pepper and cayenne pepper and stir until smooth and creamy. Stir in the mint and beets.

Heat the oil, add the garlic, and cook over medium-high heat until it turns a medium brown. Stir the flavored oil and garlic into the beets. Serve at room temperature or chilled.



La Extensión Cooperativa de la Universidad de California



Frescas del Jardín Betabeles

El betabel viene en una variedad de colores:

- Rojos
- Blancos
- Amarillos
- Pintos

El betabel es el más colorido de las verduras de raíz. Frescas, cosechadas en el jardín, tienen un sabor particularmente dulce, robusto, y rojo.

Si están limpias, guárdelas sin lavar sin las hojas, en un cajón de la refrigeradora o en una bolsa de plástico. Duran de 2 a 3 semanas.

Lávelos bien, frótelos con un cepillo y enjuáguelos con agua. Tenga cuidado de no romper o picar la cáscara o perderá color al cocinar.

Los betabeles pequeños y tiernos no necesitan pelarse, a diferencia de los más grandes y maduros. Pele y corte el betabel como lo hace con las papas.

Los betabeles pueden ser hervidos, cocinados al vapor, horneados, asados, cocidos en microondas, curtidos o en sopa. También pueden comerse crudos. Pruebe betabeles rallados con una ensalada verde o mezclada con vegetales, frutas, y aderezos.

BETABEL PARA BUENA SALUD

- Media taza de betabeles hervidos y cortados tiene solo 30 calorías y más potasio que una banana
- Son una excelente fuente de folacín, una vitamina especial que podría prevenir defectos de nacimiento, cáncer y ataques al corazón
- El color rojo oscuro también sugiere que contiene las vitaminas A y C
- Coma las hojas del betabel para obtener calcio, hierro y más vitaminas

BetABELES Rallados

4 porcíones

3-4 betabeles medianas

1 cuchara aceite de olivo

2 cucharas jugo de naranja, limón, o lima

3-6 cucharas de agua o caldo de vegetales

Sal y pimienta al gusto

Eneldo, perejil, o estragón fresco picado

Lave, pele, y ralle los betabeles. Caliente el aceite de olivo sobre fuego mediano-bajo. Agregue los betabeles, y revuelva bien. Rocíe con jugo, cubra, y cocine por 10 minutos. Revuelva de vez en cuando y agregue agua o caldo para prevenir quemar el betabel. Cocine hasta que estén tiernos. Sazone con sal y pimienta. Rocíe con eneldo, perejil, o estragón.

BETABELES CON MENTA Y YOGURT 6 a 8 porciones

2 – 3 betabeles medianos, crudos, hervidos o asados

2 tazas de yogurt natural parcialmente desgrasado

Sal y pimienta negra al gusto

¹/₄ de cucharadita de pimienta de cayena (opcional)

3 cucharadas de menta fresca, picada fina

3 dientes de ajo, picados

1 cucharada de aceite de oliva o vegetal

Pele los betabeles y ralle con el rallador grueso. Mezcle el yogurt y la sal. Revuelva hasta que se haga suave y cremoso. Mezcle la menta y betabeles.

Caliente el aceite, agregue el ajo, y cocine sobre fuego mediano-fuerte. Agregue el aceite aromatizado con el ajo y revuelva.





Fresh from the Garden **Turnip**

Turnips are a root vegetable and a member of the cabbage family. The leaves are rich in minerals and vitamins and are very low in calories (40 calories per 1/2 cup). Turnips also contain elements that can protect us from certain types of cancer.

Add turnip to soups or broths, or serve as a main dish. Ripe turnips can be served raw. Try them in salads, grated or thinly sliced, with low-fat dressing.

COOKING TURNIPS: Peel the turnip and rinse well, slice and cut into large cubes. If the turnip is small, you can leave it whole.

To boil: Boil whole turnips for 15 to 20 minutes; if they are cut in half, boil for 5 to 8 minutes.

Steam: Cut turnips in half and put into a steamer basket over 1" of boiling water. Steam approximately 15 minutes, or until tender.

Microwave: Cook 2 cups of cubed turnips in a dish with 2 tablespoons of water. Microwave on high for 4 to 6 minutes. Smaller pieces will take less time to cook.

Roast: Trim, peel, and cut turnips in half or quarters. Toss with just enough oil to coat lightly and place in a heatproof pan. Roast at 400°F until tender—about 45 minutes.

Mashed Turnips 4 servings

4 cups of peeled turnips, cut in small cubes 1/4 - 1/2 cup of low fat milk 1 Tablespoon of butter or margarine Salt and pepper to taste

Cook in boiling water until tender. The turnips can be cooked in a microwave or they can be steamed. Drain the turnips and mash with the margarine until smooth. Beat in the milk and add salt and pepper to taste. Add additional milk, if needed.

Sweet Turnips 4 servings

6 medium, peeled turnips cut in small cubes 3 teaspoons of butter or margarine 2 cups of chicken broth (low in sodium) 1 Tablespoon of sugar

1 chopped onion 1 Tablespoon of lemon juice

2 chopped garlic cloves Add salt and pepper to taste

Melt the margarine in a frying pan. Add the onion and garlic to cook, and then add the turnips and sugar. Stir constantly until they turn brown. Add the broth, allow it to condense and cook the turnips until they are soft (for 30 to 40 minutes); add the lemon, salt and pepper to taste.





Frescas del Jardín Nabos

El nabo es una verdura de raíz que pertenece a la familia de la col. Las hojas son ricas en vitaminas y minerales y muy bajas en calorías (40 calorías por 1/2 taza). Los nabos también contienen elementos que nos protegen de ciertos tipos de canceres.

Agregue nabos a las sopas o caldos, o sirva como plato de entrada.

Los nabos tiernos pueden ser servidos crudos. Pruébelos en ensaladas, rallados o en rebanadas delgadas, con un aderezo bajo en grasa.

COCINANDO NABOS: Pele y lávelos bien. Corte en rebanadas o en cuadros grandes. Si es el nabo es pequeño déjelo entero.

<u>Hervir:</u> Si están enteros hiérvalos de 15 a 20 minutos; si están cortados a la mitad hierva de 5 a 8 minutos.

<u>Al vapor:</u> Corte los nabos a la mitad y póngalos en un colador sobre una olla al vapor aproximadamente 15 minutos, o hasta que estén blandos

<u>Microwave:</u> Cocine 2 tazas de nabos partidos en cuadritos en un plato con 2 cucharadas de agua. Póngalos en el microwave a temperatura alta por 4 a 6 minutos. Los pedazos pequeños se cocinaran en menos tiempo

<u>Asados:</u> Limpie, pele, y corte a la mitad o en pedazos. Mezcle con aceite ligeramente, póngalo en el sartén. Rosticelo a 400 grados por 45 minutos o hasta que esten blandos

Puré de Nabos 4 porciones

4 tazas de nabos pelados y cortados en cuadritos 1/4 –1/2 1 cucharada de mantequilla o margarina Sal y p

1/4 –1/2 taza de leche reducida en grasa Sal y pimienta al gusto

Cocine en agua hirviendo hasta que estén suaves. Los nabos pueden cocinarse en el microwave o pueden cocinarse al vapor. Escurra los nabos y macháquelos con la margarina. Batiendo agregue la leche, sal, y pimienta al gusto. Agregue mas leche si lo necesita.

Nabo azucarado 4 porciones

6 nabos medianos, pelados, y cortados 2 tazas de caldo de pollo reducido en sal 1 cebolla picada 3 cucharaditas de margarina o mantequilla

1 cucharada de azúcar

2 dientes de ajo picados

1 cucharada de jugo de limón Sal y pimienta al gusto

Derrita la mantequilla en un sartén de teflón. Concine la cebolla y el ajo, ponga los nabos con el azúcar y mueva constantemente hasta que estén café claro. Agregue el caldo espere que se reduzca y a que los nabos esten suaves (por 30 a 40 minutos); agregue limón, sal, y pimienta al gusto





Fresh from the Garden Cabbage

CABBAGE VARIETIES

Green

Red

Savoy

Chinese

Cabbage thrives in cool weather and is easy to grow. It is best grown in a garden plot, rather than a container.

Harvest cabbage anytime after solid heads form. Cut the head from the stem with a sharp knife.

Cabbage is an excellent source of vitamin C and fiber.

Low in calories, cabbage contains only about 20 calories in a cup of raw or 1/2 cup cooked cabbage.

Vegetables from the cabbage family contain substances that appear to block cancer cells before they turn deadly.

CABBAGE FOR GOOD HEALTH

Flavor cabbage with onions, garlic and fresh herbs.

Cook cabbage quickly and uncovered.

Shorter cooking saves more of the vitamins, and prevents strong odors and flavors from forming.

CABBAGE AND ONIONS 6 servings

1 tablespoon olive oil

1 medium cabbage, cored, cut into 2-inch pieces, and layers separated

1 large onion, cut into 1-inch pieces and layers separated

2 cloves garlic, minced

¹/₄ cup fresh parsley, chopped (substitute any fresh herb: cilantro, thyme, basil, etc.)

Salt and pepper to taste

Heat oil in a nonstick skillet over moderately high heat. Add onions and garlic and cook about 1 minute. Add cabbage and cook until tender. Stir in herbs and season with salt and pepper to taste.

PINEAPPLE SLAW

4 servings

1/2 tsp. grated orange peel

2 Tbsp. fresh orange juice

2 1/2 cups shredded cabbage

1/2 cup shredded carrot

1 cup coarsely chopped fresh pineapple or one 8 oz can pineapple tidbits

1/4 cup raisins

Combine orange peel and orange juice and mix well. Add shredded cabbage, carrot, pineapple, and raisins and toss. Serve immediately or cover and chill until serving time.





Una Variedad de Col

Verde

Rojo

Saboya (hojas rizadas)

Chino

Frescas del Jardín Repollo

El repollo crece mejor durante un clima fresco. La planta del repollo crece mejor en una parcela que en un recipiente.

El repollo se cosecha cuando se forma una cabeza sólida. Corta la cabeza desde el tronco con una navaja filosa.

El repollo contiene una buena fuente de vitamina C y fibra.

Bajo en calorías, una taza de repollo crudo o ½ taza de repollo cocinado contiene 20 calorías.

Los vegetales que son parte de la familia del repollo contienen una sustancia que aparentemente bloquea las células cancerosas antes de que se hagan mortales.

EL REPOLLO PARA UNA BUENA SALUD

Agrégale sabor al repollo con cebolla, ajo y perejil.

Cocina el repollo rápido y destapado

Cocinando el repollo menos tiempo, se conservan las vitaminas y previene que se

REPOLLO Y CEBOLLAS 6 porciones

1 cucharada de aceite de olivo

1 cabeza mediana de repollo sin el tronco, cortado en pedazos de 2 pulgadas y separe las capas

1 cebolla grande, cortada en pedazos de 1 pulgada y separe las capas

2 dientes de ajo picado

¹/₄ de taza de perejil fresco, picado (puede sustituir el perejil con; cilantro, albahaca, tomillo) Agrégale sal y pimienta al gusto

Cocina el aceite a fuego alto en un sartén que no se valla a pegar. Agrega la cebolla y el ajo, cocina por 1 minuto. Luego agregas el repollo, mezcla hasta que se ablande. Agrega el perejil, sal, y pimienta al gusto.

ENSALADA DE PIÑA 4 porciones

½ cucharada de cáscara de naranja rayada (no rayar lo blanco de la cáscara)

2 cucharadas de jugo de naranja fresco

2½ tazas de repollo rallado

½ taza de zanahoria rallada

1 taza de piña fresca cortada en cubitos o una lata de 8oz de cubitos de piña

¼ taza de pasas

Combine la cáscara y el jugo de naranja-batirlo bien. Mezclar el repollo rallado, zanahorias, piña, y pasas. Sirve inmediatamente ó enfriar hasta que sea tiempo de servir.





Fresh from the Garden Leafy Greens

LEAFY GREEN VEGETABLES

Chard Collard Greens Kale Mustard greens

Spinach

Plant a patch of greens in your cool season garden. They are easy to grow and good for you. Harvest the leaves throughout the season without injuring the plant.

Greens are an excellent source of vitamins A and C. Most contain vitamin K, folate, calcium, iron and fiber.

Greens are very low in calories and sodium. All greens are fat and cholesterol free. Dark green means more vitamins.

GOOD GREENS FOR GOOD HEALTH

- Eat dark green, leafy vegetables to reduce the risk of cancer and heart disease.
- Add flavor with garlic, onion, vinegar and hot pepper flakes, not salt and fat.
- In salads, replace iceberg lettuce with raw spinach.

Always wash greens thoroughly and remove tough stems.

Mild-flavored greens like spinach, kale or chard can be steamed until tender. Stronger-flavored greens like collards, mustard or turnip greens need longer cooking. Cooking in a seasoned broth will mellow the flavor of stronger tasting greens.

TROPICAL SPINACH SALAD

4 servings

1 large bunch spinach, stems removed, in bite-size pieces

1 or 2 oranges, peeled and cut in chunks

1/2 medium red onion, sliced

1 cup reduced fat mayonnaise

1/2 cup orange juice

Grated rind from 1 or 2 oranges

1 clove garlic, minced

1/2 teaspoon cinnamon

1/2 teaspoon ground ginger

salt and pepper to taste

Put spinach, oranges and onion slices in a bowl. For dressing, mix together mayonnaise, orange juice, orange rind, garlic clove, cinnamon, ginger, salt and pepper. Toss salad with the dressing.

GOOD HEALTH COLLARD GREENS 4 servings

1/2 tablespoon oil

1/8 teaspoon black pepper

1/2 onion, chopped

1/4 teaspoon red pepper flakes (optional)

2-3 garlic cloves, minced

1—1 1/2 cups low-sodium, fat-free

1 large bunch collard greens, stems removed, in bite-size pieces

chicken broth

2 tablespoons vinegar (or more to taste)

Heat the oil, add the onions and garlic and cook until soft. Be careful not to burn the garlic—it will become bitter. Add about 1/4 of the greens and toss with onions and garlic. When the greens are wilted, add the remaining greens in batches until all are added and wilted. Mix in the black pepper and the red pepper flakes.

Add the broth and bring to a boil. Reduce the heat and simmer the greens for about 15 to 20 minutes, or until they are tender. The broth should be almost completely reduced.

Sprinkle with vinegar before serving.





Frescas del Jardín Hojas Verdes

VERDURAS DE HOJAS VERDES

Acelgas

Col Rizada

Hojas de Mostaza

Espinacas

Cuando planee su jardín de temporada fresca considere sembrar vegetales de hojas verdes. Son fáciles de cultivar y vale la pena. Se pueden cosechar durante la temporada sin dañar la planta.

Las verduras de hojas verdes son una excelente fuente de vitamina A y C. La mayoría contienen vitamina K, folacina, calcio, hierro, y fibra.

HOJAS VERDES PARA UNA BUENA SALUD

- Coma vegetales de hoja verde oscuro para reducir el riesgo de cáncer, y enfermedades del corazon
- Agregue sabor con ajo, cebolla, vinagre, y chile rojo, no sal o grasa
- En ensaladas, reemplace la lechuga por espinaca cruda

Las hojas verdes son bajas en calorías y sodio. Las hojas verdes no tienen grasa o colesterol. Las hojas de color oscuro verde y de sabor fuerte contienen más nutrientes.

Siempre lave las hojas bien y quítele los tallos gruesos.

Las espinacas, acelgas, y la col rizada se pueden poner al vapor y cocinar hasta que estén blandas. Las hojas de mostaza y betabel toman más tiempo en cocinarse y se cocinan mejor en caldos. Cocinar en agua sazonada disminuye el sabor de las hojas verdes que tienen el sabor fuerte

Ensalada Tropical de Espinacas Rinde 4 porciones

1 manojo de espinacas sin el tallo en pedazos pequeños

1 o 2 naranjas, peladas, y cortadas en cuadros

1/2 cebolla morada rebanada

1 taza de mayonesa reducida en grasa

1/2 taza de jugo de naranja

Cáscara de naranja rallada (1 o 2 naranjas)

1 diente de ajo picado

1/2 cucharadita de canela

1/2 cucharadita de jengibre

Sal y pimienta al gusto

Ponga las espinacas, naranjas, y rebanadas de cebolla en un tazón. Para hacer el aderezo mezcle la mayonesa jugo de naranja, ajo, canela, jengibre, sal, y pimienta. Revuelva la ensalada de espinacas con el aderezo

Hojas Verdes Para Una Buena Salud Rinde 4 porciones

1/2 cucharada de aceite

½ cebolla picada

2-3 dientes de ajo picado

1 manojo de hojas verdes, sin el tallo, en pedazos pequeños

1/8 cucharadita de pimienta negra

¹/₄ de cucharita de chile rojo seco

1-1 ½ taza de caldo de pollo, bajo en sodio

2 cucharadas de vinagre (o al gusto)

Caliente el aceite, agregue la cebolla, ajo, y guíselo hasta que este suave. Tenga cuidado de no quemar el ajoporque amarga la comida. Agregue ¼ de las hojas verdes y mézclelas con la cebolla y el ajo. Cuando las hojas se marchiten agregue más en partes hasta que todas las hojas estén marchitadas. Agregue la pimienta negra y el chile rojo.

Agregue el caldo y déjelo hervir. Reduzca la lumbre a fuego-lento y hierva las hojas verdes por 15 a 20 minutos, o hasta que estén tiernas. El caldo casi se debe consumir.

Rocíe vinagre antes de servir.





Fresh from the Garden Winter Squash

Varieties

Acorn Golden Nugget

Banana Hubbard
Buttercup Kabocha

Butternut Spaghetti

Carnival Sweet Dumpling

Delicata Turban

Pumpkins

For Good Health:

Squash and pumpkin are excellent sources of vitamins A and C and potassium.

Eating winter squash and other orange vegetables and fruits will lower the risk of certain types of cancers.

One half cup of cooked winter squash (about the size of a half baseball) contains about 50 calories.

In the Kitchen:

Do not refrigerate hard skinned squash. Store in a cool, dry, dark place for longer storage, or at room temperature for 1 to 3 weeks. The smaller the squash, the shorter the shelf life.

One pound of peeled, raw squash equals approx.1 cup cooked, mashed squash.

Winter squash is easier to cut if partially cooked. Microwave on high for 5 minutes, or put in the oven for 20 minutes at 350 degrees.

Roasting Squash

Cut in half, seed and peel. Cut into 1 inch slices. Toss squash with a little oil and season to taste. Roast in a preheated 400 degree oven for about 30 minutes, or until squash is tender and lightly browned.

Roasted squash freezes well

Squash and Onion Salad with Mint 6 Servings

1 med. winter squash, cut in half, peeled and seeded

1 large onions, cut into thick slices

2 tablespoons olive oil

2 teaspoons cinnamon

2 tablespoons brown sugar

Salt and pepper to taste

½ cup olive oil

1/4 cup vinegar (red wine)
1/4 cup fresh lime juice

2 cloves garlic

1 tablespoon dried oregano

1/2 teaspoon crushed red pepper

½ cup fresh mint, minced

Slice squash crosswise into 1/2" slices. Toss squash and onion with 1 tablespoon oil, salt, pepper, sugar and cinnamon. Heat 1 tablespoon of oil in a pan. Add squash and onion and cook, turning once, until tender and browned (about 10 minutes). Remove from pan and put onto a plate.

Combine olive oil, vinegar, lime juice, oregano, garlic and crushed red pepper. Season with salt and pepper.

Pour the dressing over the warm squash and sprinkle with the mint leaves.





Frescas del Jardín Calabaza de invierno

Variedades

Bellota Pepita de oro Plátano Hubbard

Ranúnculo Kabocha Espagueti Butternut

Carnaval Sweet Dumpling

Delicata Turban

Calabazas

Para una buena salud:

Las calabacitas y la calabaza son una buena fuente de vitamina A, C y potasio.

Comer calabazas de invierno y otras verduras y frutas anaranjadas previene ciertos riesgos de cáncer

Media taza de calabaza de invierno cocinada (el tamaño de una pelota de béisbol mediana) contiene cerca de 50 calorías.

En la Cocina:

Mantenga las calabazas con cáscara dura fuera del refrigerador en un lugar fresco, seco y oscuro para que duren mas tiempo o a temperatura ambienté por 1 a 3 semanas. La calabaza chica. dura menos tiempo almacenada.

Una libra de calabaza pelada, cruda iguala aprox.1 taza de calabaza cocinada.

La calabaza de invierno es más fácil de cortar si está parcialmente cocinada. Meta la calabaza al microonda por 5 minutos, o en el horno por 20 minutos en 350 grados.

Calabaza Horneada:

Corte la calabaza a la mitad. Pele y remueva la semilla. Corte en rebanadas de 1 pulgada. Agrege un poco de aceite y sazone al gusto. Asar las calabazas en un horno pre-calentado a 400 grados por 30 minutos o hasta que estén tiernas y un poco doradas.

La Calabaza horneada se congela bien

Ensalada de calabaza con cebolla y hierbabuena 6 porciones

1 calabaza mediana pelada cortada por mitad sin

1 cebolla grande cortada en rodajas gruesas

1/4 taza de aceité de oliva

2 cucharadas de canela molida

2 cucharadas de azúcar café

Sal v pimienta al gusto

1 cucharada de aceite de oliva

½ taza de vinagre o vino rojo

¹/₄ taza de jugo de limón fresco

2 dientes de ajo

1 cucharada de orégano seco

1/2 cucharadita de chile de árbol molido

½ taza de hierbabuena picada

Corte la calabaza en rebanadas de 1/2" pulgada de gruesa. Revuelva la calabaza y la cebolla con aceite, sal, pimienta, azúcar y canela. Caliente 1 cuchara de aceite en una cacerola. Agregue la calabaza y cebolla y cocine, dándole una vuelta, hasta que esten blanditas y doradas (10 minutos). Saque las calabazas del sartén y ponga en un plato.

Combine la ¼ taza de aceite de oliva, vinagre, jugo de limón, orégano, ajo y chile de árbol molido. Sazoné con sal y pimienta al gusto.

Agregué el aderezo sobre la calabaza caliente y por última vez agregué la hierbabuena por encima.





Fresh from the Garden Freezing Vegetables

Freezing is a quick and easy way to preserve the natural colors, fresh flavors, and nutrients in vegetables. It's also a good way to ensure that vegetables are readily available for family meals. Freezing does not kill bacteria, but it does stop it from growing. Foods are safe indefinitely while frozen. As soon as they begin to defrost, any bacteria that may have been present before freezing can multiply.

15 STEPS TO FREEZE VEGETABLES:

- Select young, high quality vegetables for freezing
- 2. Wash them well and cut, if desired
- 3. Blanch in boiling water or steam—1 gallon per pound
- 4. Cover pot and start counting the blanching time immediately
- 5. Remove the vegetables from the hot water
- 6. Place into iced water for the same amount of time used for blanching
- 7. Drain thoroughly and dry vegetables well
- 8. Package into freezer containers or freezer plastic bags
- 9. Remove as much air as possible
- 10. Seal, label, date
- 11. Freeze quickly
- 12. If possible, use within a month or two
- 13. Cook most frozen vegetables without thawing
- 14. For each quart of vegetables, use 1/2 to 1 cup of water
- 15. Cook frozen vegetables about half as long as fresh.

BLANCHING CHART:

Vegetable	Size	Blanching Time
Asparagus	Small spears	2 minutes
	Medium	3 minutes
	Large	3 minutes
Green Beans	Cut or whole	3 minutes
Broccoli and	Medium pieces	3 minutes
Cauliflower	Large pieces	4 minutes
Carrots	Cut	3 minutes
	Whole	5 minutes
Chayote		Cook, drain well,
		mash cool
Corn on the	Small	6 minutes
cob	Medium	8 minutes 10 minutes 5 minutes
	Large	
	Kernels	
Onions		May be frozen
		without blanching
Peppers, green		May be frozen
		without blanching
Peppers, hot		May be frozen
		without blanching





Frescas del Jardín Congelar Vegetales

Congelar vegetales es una manera rápida y fácil de preservar los colores naturales, el sabor fresco, y los nutrientes. Es también una buena manera de asegurarse de que los vegetales serán fácilmente disponibles para la comidas de la familia. El congelar no mata la bacteria, pero pone alto al crecimiento. Los alimentos son seguros indefinidamente mientras que son congelados. Tan pronto como comiencen a descongelar, cualquier bacteria que pudo haber estado presente antes de congelar puede multiplicarse.

15 PASOS PARA CONGELAR VEGETALES:

- 1. Elija vegetales tiernos, de mejor calidad para congelar.
- 2. Lávelos bien y si desea corte en pedazos
- 3. Escalde verduras en agua hirviendo o al vapor un galón por cada libra de verduras
- 4. Tape la olla e inmediatamente comience a tomar tiempo para escaldar los vegetales
- 5. Remueva los vegetales del agua caliente
- 6. Ponga los vegetales en agua helada, por el mismo tiempo que los puso en agua hirviendo
- 7. Remueva las verduras del agua y seque bien
- 8. Empaque las verduras en una bolsa de plástico para congelar o en un recipiente para congelar
- 9. Saque todo el aire posible de la bolsa de congelar
- 10. Selle, ponga nombre, y fecha
- 11. Congele rápidamente los vegetales
- 12. Si es posible cocínelos dentro de 1 a 2 meses
- 13. La mayoría de verduras congeladas se cocinan sin tener que descongelar
- 14. Por cada ¼ taza de vegetales usa, ½ taza de agua
- 15. Cocina las verduras congeladas menos tiempo que las frescas

TIEMPO DE ESCALDAR VEGETALES:

TIEMPO DE ESCALDAR VEGETALES:			
Vegetal	Tamaño	Tiempo de	
		Escaldar	
Espárragos	Pequeño	2 minutos	
	Mediano	3 minutos	
	Grandes	3 minutos	
Ejotes	Enteros	3 minutos	
Brócoli y	Mediano	3 minutos	
Coliflor	Grande	4 minutos	
Zanahorias	Cortadas	3 minutos	
	Enteras	5 minutos	
Chayote	:	Cocinar, estilar	
		bien, y moler	
Elotes	Pequeños	6 minutos	
	Mediano	8 minutos	
	Grande	10 minutos	
	En grano	5 minutos	
Cebolla		Se congela sin	
		tener que escaldar	
Chile Campana	:	Se congela sin	
		tener que escaldar	
Chile, ardiente		Se congela sin	
		tener que escaldar	





Fresh from the Garden

ROASTING VEGETABLES

Roasting is an easy way to cook vegetables in the oven. The high temperature brings out the vegetables' sweetness by caramelizing the natural sugars. Vitamins and minerals are preserved because the vegetables' juices are sealed in. Roasting also intensifies the flavors. Since only a small amount of oil is used, it is a low-fat, healthful cooking method.

Vegetables may be left whole, cut in half or chunks, or into bite-size pieces. They may be peeled or not.

Toss the prepared vegetables with a little oil so they won't dry out or stick to the roasting pan. Season as you choose. Try a sprinkle of herbs (dried or fresh).

Spread the vegetables in an uncovered baking dish or pan and roast in the lower 1/3 of the oven at 400 degrees for about 20 to 30 minutes. The cooking time will depend on the type of vegetable being roasted and the size of the pieces.

Some recipes may call for higher temperatures.

Roasted vegetables should be cooked until they're browned and fork tender. They won't win any beauty contests, but they will taste great.





FRESCAS DEL JARDÍN

ASANDO VERDURAS AL HORNO

Verduras asadas al horno es una manera facíl de cocinar. La temperatura alta del horno saca el sabor dulce y natural de las verduras. Las vitaminas y minerales se preservan porque los jugos se sellan. Asar al horno es un método nutritivo y bajo en grasa porque se usa muy poco aceite.

Las verduras se pueden dejar enteras, cortar en mitad o en trozos y si desea las puede pelar. Agregué un poquito de aceite para que no se peguen en el sartén. Tambien puede sazonar las verduras con especies secas, frescas, o simplemente con sal y pimienta.

En un sartén especial para hornear coloque las verduras; sin taparlas póngalas en la parte baja del horno a 400 grados por 20 a 30 minutos. El tiempo que se tarde en asar al horno depende de la clase de verduras y tamaño.

Algunas recetas requieren temperaturas más altas.

Las verduras asadas al horno se devén cocinar hasta que esten doradas y blandas. No ganan un concurso de belleza pero tienen un buen sabor.





Fresh from the Garden STIR-FRYING VEGETABLES

Stir-frying is a classic Chinese cooking method where vegetables are cooked at a high temperature for a short period of time. It is considered a very healthful way to cook, because vegetables retain more of their nutrients, as well as their texture and color. A small amount of oil is generally used--about 1 to 2 tablespoons. Broth or a non-stick spray may be substituted for the oil in any recipe.

No special equipment is needed for stir-frying. You can use a skillet or frying pan, or the traditional wok, if you have one.

Cut vegetables into bite-size or very thin diagonal slices for fast cooking. Have all the recipe ingredients ready before you begin.

Heat a small amount of oil in a large skillet or wok. Add the vegetables and toss to coat with the oil. Stir constantly over high heat until the vegetables are tender--about 5 to 7 minutes. The vegetables must be crisp, not soggy.

Use the back of a spatula or wooden spoon to stir the vegetables.

Just about any vegetable is good stir-fried. When combining vegetables, start with hard vegetables such as onion, broccoli, carrots, and root vegetables to allow them to cook a little longer before adding softer vegetables like peppers or tomatoes. Add minced garlic and fresh ginger to the pan after the harder vegetables have browned and before the other vegetables.

If you like your vegetables with a touch of "heat", add one or more dried hot chilis to the pan along with the garlic and ginger.

Sauce ingredients should be added last. Sauces are optional and can be as simple as a few tablespoons of low sodium soy sauce, or a purchased flavoring sauce. The sauce may be thickened or not.

If using a sauce, prepare it before you begin to cook the vegetables.

For a simple yet flavorful sauce, combine 1/4 cup orange (or lemon) juice, 1/2 teaspoon sugar, 2 tablespoons reduced sodium soy sauce, 2 tablespoons chicken broth, 2 teaspoons cornstarch, and mix well.





FRESCAS DEL JARDÍN FRITURA RAPIDA

Fritura rápida es un método Chino clásico donde las verduras se cocinan a una temperatura alta por un corto tiempo. Se considera una manera saludable de cocinar. Es una de las maneras más rápidas de cocinar verduras y conservar los nutrientes, sabor, color, y textura. Generalmente se usa 1 a 2 cucharadas de aceite o se puede sustituir caldo por aceite.

No se ocupa equipo especial para la fritura -rápida. Use un sartén para freír o lo tradicional un wok si lo tiene.

Corte las verduras en pedazos chicos o rebánelas finitas en diagonal para que se cocinen mas rápido. Tenga todos los ingredientes de la receta listos antes de comenzar. Caliente poquito aceite en un sartén grande o wok agregue las verduras y mezcle bien en aceite. Mezcle constantemente hasta que las verduras estén tiernitas aproximadamente de 5 a 7 minutos. Las verduras deben estar crujientes no blandas

Utilice una espátula o una cuchara de madera para mezclar las verduras.

Cualquier verdura es buena con el método de fritura rápida. Cuando combine las verduras empiece con las verduras como el brócoli, zanahoria y verduras de raíz para que se cocinen un poco más antes de agregar las verduras blanditas como los tomates y chiles. Siempre empiece con la cebolla. Agregue ajo picado y jengibre fresco al sartén despues de dorar la cebolla y antes de agregar las verduras.

Si le gustan las verduras con un sabor picante agregue uno o dos chiles picantes al sartén con ajo y jengibre.

Los ingredientes de la salsa se agregan al último. La salsa es opcional y puede ser tan simple como mezclar dos cucharaditas de salsa de soya o puede comprar una mezcla ya hecha. La salsa se puede espesar si lo desea.

Si va a usar una salsa prepárela antes de empezar a cocinar.

Para una salsa combine 1/4 de taza de jugo de naranja (o limón), 1/2 cucharadita de azúcar, 2 cucharadas de salsa de soya, 2 cucharadas de caldo de pollo, 2 cucharaditas de maicena y mezcle bien. Prepare la salsa antes de empezar a cocinar las verduras.

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Fresh from the Garden STEAMING VEGETABLES

Steaming preserves nutrients and retains much of the color and texture of fresh vegetables.

A collapsible metal steamer basket is nice, but not necessary. However, steamer baskets are usually easy to find and inexpensive. You can improvise a steamer with a metal colander by putting it in a deep pan and covering tightly to trap the steam.

Put about an inch of water in a pot, and bring it to a boil over high heat. Put in the basket, and place a single layer of vegetables inside. The liquid shouldn't touch the food. Put a tight-fitting lid on the pot and steam the vegetables until just tender.

Leafy greens like spinach cook very quickly. Steam or about three minutes or so, and check the color. They will change to a fresh, bright green, which indicates they're done.

Steam green beans for about 5 minutes then test them. If you prefer them more tender, try another 3 to 5 minutes.

For roots and tubers like potatoes, beets, or yams, figure on 30 minutes. You can also try the fork test: a fork inserted into the root should slide in easily. You may have to add a little boiling water if all of the original water boils away.

It's a good idea to keep a record of the amount of steaming time required to cook the vegetables to your taste.

You can also steam vegetables in the microwave. Put them into a dish with a little water. Cover with a lid or plate and cook on full power for the time stated in the recipe. Allow the vegetables to stand for a few minutes to complete the cooking before you serve them.

Caution: Steam can cause severe burns. Always open a steaming pot away from you and let the steam escape before you reach inside or look at the food.





FRESCAS DEL JARDÍN VERDURAS AL VAPOR

Las verduras al vapor preservan nutrientes y retienen mejor su color y textura.

Tener una olla de vapor es bueno, pero no es necesario. Generalmente las canastas de vapor son mas baratas y faciles de encontrar. También puede improvisar con un colador de metal poniéndolo en una olla honda bien cerrada para atrapar el vapor.

Hierva una pulgada de agua en una olla a fuego alto. Coloque la canasta dentro de la olla y ponga una capa de verduras. El agua no debe de tocar la comida. Use una tapadera que quede bien cerrada, y cocínelas a vapor hasta que esten tiernitas.

Para verduras de hojas verdes, espere aproximadamente tres minutos. Observe como cambian de color a un verde brillante lo cual indica que ya estan. Las verduras, como las espinacas se cosen pronto.

Los ejotes cocínelos a vapor por 5 minutos y pruébelos si los quiere más blandos déjelos de 3 a 5 minutos más.

Las papas, betabel y camote toman 30 minutos para cocerse. Puede encajar un tenedor para probar si ya estan. Tambien puede agregar agua hirviendo a la olla ya que el agua original puede evaporarse por completo.

Es una buena idea anotar el tiempo que le tomo para cocer las verduras a su gusto

Las verduras se pueden cocer en el microondas. En un plato con poca agua agregue las verduras tápelas y cocínelas a temperatura alta por el tiempo que indique la receta. Déjelas por unos minutos para que se sigan cocinando.

Aviso: El vapor puede causar quemaduras graves, siempre destape las ollas de vapor con cuidado y déjelo escapar antes de meter la mano o antes de ver la comida.