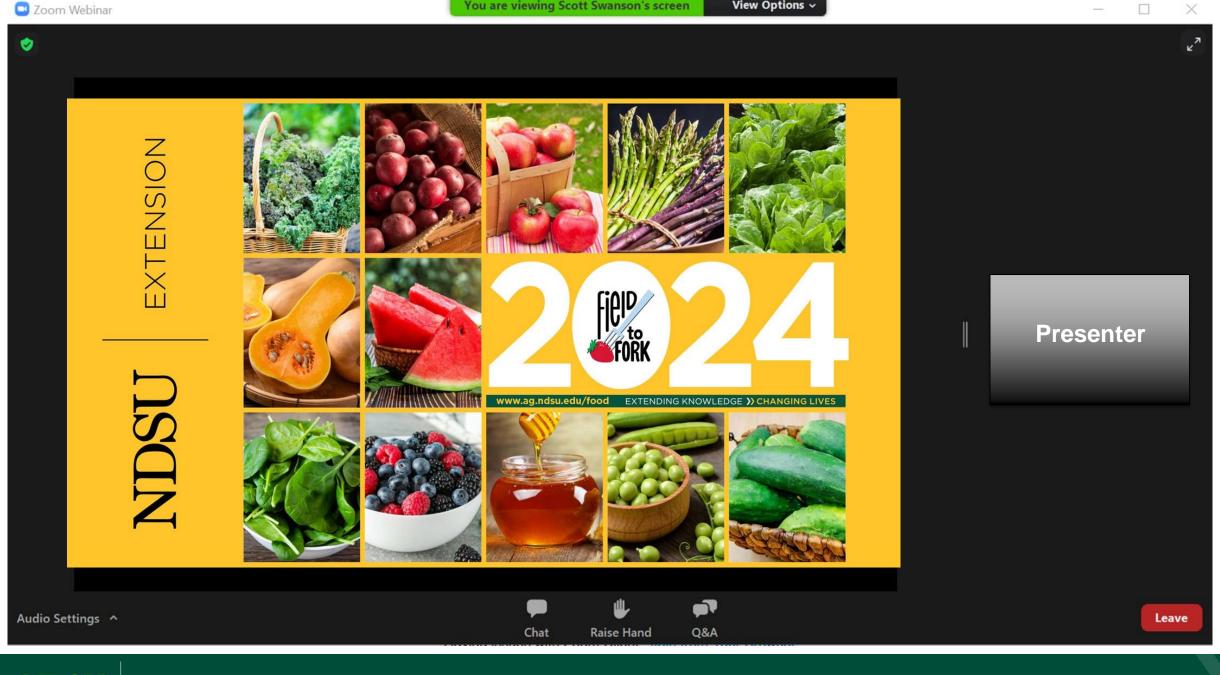
NDSC



Upcoming Webinars

- April 10 Play It Safe! Safe Changes to Tested Canning Recipes
 - Karen Blakeslee, Extension Associate, Kansas State University

- April 17 The Role of Bees in my Fruit and Vegetable Gardens
 - Janet Knodel, Professor and Extension Entomologist, NDSU



- Please complete the short online survey that will be emailed to you after today's webinar. It will take just a couple minutes!
- Be sure to sign up for an opportunity to win a prize in the drawing. After submitting the survey, a form to fill out with your name/address will appear.

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April 3

Being Creative and Safe With Fruit and Vegetable Preparation and Storage

Julie Garden-Robinson, Ph.D., R.D., L.R.D., Professor and Extension Food and Nutrition Specialist, NDSU







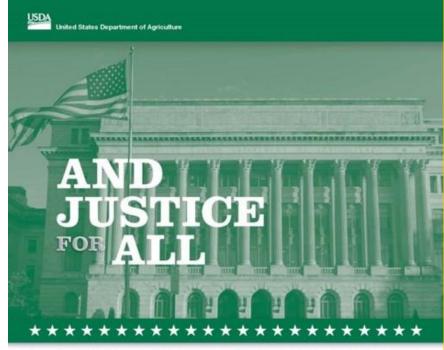




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Esta institución ofrece igualdad de oportunidades

Outline

Fruits and vegetables in the diet: what counts?

Health benefits

Ideas for using fruits and vegetables

What/how much fruits and vegetables did you eat yesterday?

You can include dry edible beans as a vegetable.





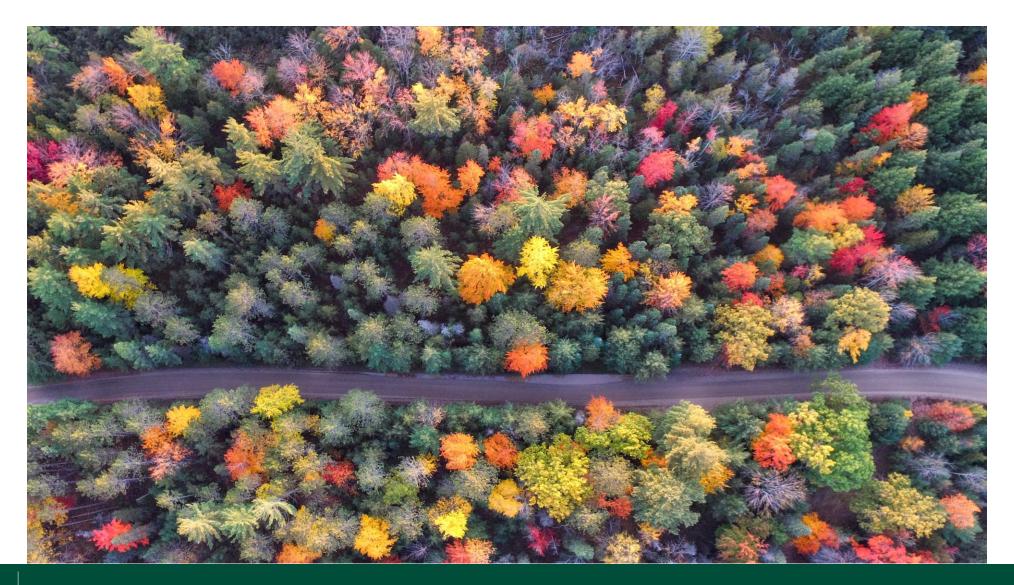




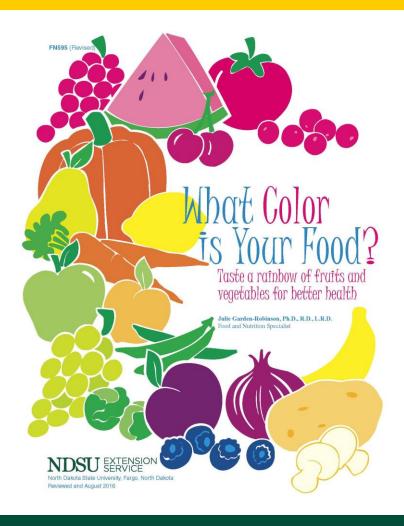


In general, 1 cup of raw or cooked vegetables or vegetable juice, or 2 cups of raw leafy greens can be considered as 1 cup from the vegetable group.

Nutrition: Take a Cue from Nature!



Learn More



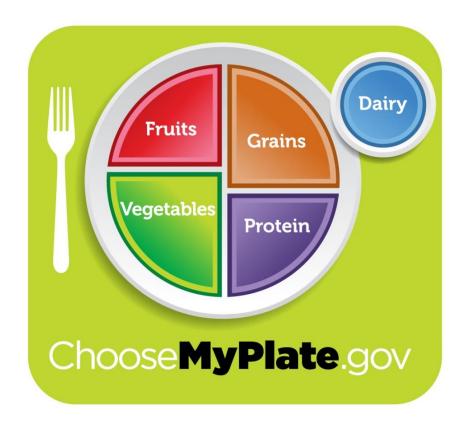
MyPlate

Represent the different food groups needed.

- Orange = Grains
- Green = Vegetables
- Red = Fruits
- Blue = Dairy
- Purple = Protein foods



Recommendations are in cups instead of servings.



Daily Vegetable Recommendations

Women	19-30 years old	2 ½ cups
	31-50 years old	2 ½ cups
	51 + years old	2 cups
N / 0 10	10.20 years old	2 01100
Men	19-30 years old	3 cups
	31-50 years old	3 cups
	51 + years old	2 ½ cups

Daily Fruit Recommendations

Women	19-30 years old	2 cups
	31-50 years old	1 ½ cups
	51 + years old	1 ½ cups
Men	19-30 years old	2 cups
	31-50 years old	2 cups
	51 + years old	2 cups

Poll Time

1) On average, what percentage of adults meet the fruit and vegetable recommendations?

a. 5% b. 10% c. 20% d. 30% e. 40%

Poll 2 Time

2) On average, what percentage of children meet the fruit and vegetable recommendations?

a. 5% b. 10% c. 20% d. 30% 3. 40%

Categories of Vegetables

- Dark green: all fresh, frozen, and canned dark green leafy vegetables and broccoli, cooked or raw (broccoli, spinach, romaine, collard, turnip, and mustard greens)
- Red and orange: all fresh, frozen, and canned red and orange vegetables, cooked or raw (tomatoes, red peppers, carrots, sweet potatoes, winter squash, pumpkin)

Categories of vegetables

- Beans and peas: all cooked and canned beans and peas (kidney beans, lentils, chickpeas, and pinto beans). Does not include green beans or green peas.
- Starchy vegetables: all fresh, frozen, and canned starchy vegetables (white potatoes, corn, green peas)
- Other vegetables: all fresh, frozen, and canned other vegetables (iceberg lettuce, green beans, onions)
- All fresh, frozen, canned, and dried fruits and fruit juices (oranges and orange juice, apples and apple juice, bananas, grapes, melons, berries, and raisins)

Assess Your Fruit and Vegetable Intake from Yesterday...

Breakfast

Lunch

Dinner

Why eat fruits and vegetables, anyway?

 Provide vitamins (A, C), minerals (potassium), fiber and phytochemicals (natural plant chemicals as antioxidants)

 A diet high in fruits and vegetables can help protect you against cancer, diabetes, heart disease, overweight/obesity.

 But wait, there's more... Supports muscles, immunity, bones, joints, eyes, skin, digestive system, teeth...

An opportunity: Learn more in the online Nourish class...

- "Nourish" online course modules launches April 8 free and prize opportunities!
 - 30-40 minutes per module and about three months to do the 7 modules

 Register here (or search online for NDSU Extension Nourish):https://www.ndsu.edu/agriculture/extension/programs/nourish

 NOURISH topics: Sleep, muscles, skin, eyes, bones, joints, heart, brain, digestive system

Creative Ways to Include More Fruits and Vegetables in your Menus

 See the Field to Fork website and click through all the handouts.

See the "pocket guide" to fruits and veggies on the site.

 See the "Growing Together" cookbook online, with tested recipes from Fargo-Moorhead gardeners.

Follow our Facebook site for ongoing tips and recipes.

Answer: Meeting the Fruit and Vegetable Recommendations

Adults: 12.3% meet fruit recommendation and 10% meet the vegetable consumption goals. (CDC, 2019)

 Children: 7.1% meet fruits recommendation and 2% meet the vegetable consumption goals.

How to entice children who are selective eaters:

- Set a good example.
- Don't force the issue. (It takes 10-12 exposures)
- Encourage children to help garden, select and prepare.
- Offer less familiar food with familiar foods.
- Try different preparation methods.
- Make mealtime pleasant.

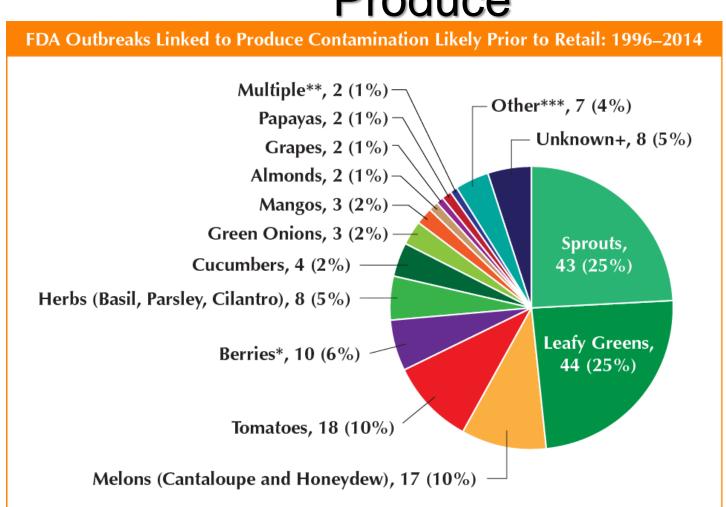
Ideas to Use Fruits and Vegetables

As you listen... What ideas will you try?

Safety First - see Fight BAC! handout

- Check for damage, bruises cut away.
- Clean utensils and rinse with water.
- Keep fresh fruits and vegetables separate from contaminants from store to home.
- Chill cut, peeled or cooked fresh fruits and vegetables within two hours.
- Throw away cut fresh fruits and vegetables that have touched meat juices and will not be cooked.

Outbreaks Associated with Produce



Apples

- Fresh Enjoy apples fresh.
- Boil Chop apples and cook in water for 10 minutes. Drain water, then
 make applesauce or mix with honey, cinnamon and butter for a sweet side
 dish or dessert.
- Grill Slice apples into ¼-inch slices and brush with butter. Place on a grill and cook until grill marks appear. Remove and top with cinnamon or honey.
- Dried Slice apples horizontally into rounds. Soak apples in lemon water for 30 minutes, then pat dry. Arrange apples in a single layer on baking sheets. Add a sprinkle of cinnamon if desired. Bake for two hours at 200 F. Turn off the oven and let apples sit in the oven for one to two hours as they cool further, until desired crispiness.

Bell Peppers



- Fresh Rinse and chop or julienne and enjoy. Great for topping a fresh salad or dipping in vegetable dip or hummus.
- Sauté Cut peppers lengthwise into strips. Heat olive oil in a pan, then add peppers. Cook, stirring occasionally, until peppers are just tender, about 10 minutes.
- Grill Cut peppers lengthwise, brush with oil and place on a grill until grill marks appear (usually 10 to 14 minutes, depending upon desired tenderness).

Broccoli



- Fresh Enjoy broccoli fresh.
- Steam Add a few inches of water to a pot and let simmer on medium heat. Add broccoli, then cover. Steam for four to five minutes until tender.
- Sauté Add oil to a skillet over medium heat. Add cut-up broccoli and stir frequently. Cook until broccoli is bright green and tender.
- Roast Heat oven to 425 F. Toss broccoli florets on baking sheet with oil and desired seasonings. Roast for 20 to 25 minutes.

Brussels Sprouts



- Roast Heat oven to 400 F. Toss Brussels sprouts on a baking sheet in olive oil and desired seasoning (usually salt and pepper or garlic powder), roast for 35 to 40 minutes until crisp on the outside and tender on the inside. Shake the pan from time to time to brown the sprouts evenly.
- Steam Add about 1 inch of water in a sauté pot. Place a steamer basket on top of the pan, add Brussels sprouts to the steamer basket and cover. Toss occasionally until soft/tender (five to eight minutes).
- Sauté Prepare them whole or cut lengthwise; drizzle with oil in pan. Toss until all are lightly coated with oil. Cook undisturbed on medium heat until sides become caramelized (five to seven minutes). Cook for another six to eight minutes or until tender. Add garlic and a squeeze of lemon for added flavor. Salt and pepper to taste.





- Fresh Enjoy cabbage fresh. Create your own coleslaw recipe.
- Soups Experiment with different variations of cabbage soup.
- Boil Cut cabbage into slices and bring a pot of water to a boil. Add cabbage to the pot and boil five to 10 minutes, then drain.
- Roast Heat oven to 425 F. Cut cabbage into wedges. On a baking sheet, toss with oil, salt and pepper. Bake until the cabbage is golden and tender, about 25 to 30 minutes.

Carrots



- Fresh Rinse and peel carrots.
- Roast Rinse, peel and chop fresh carrots into coin-shaped pieces. Toss with seasoning of choice, such as a mixture of olive oil (or desired oil), cinnamon or chili powder, salt and pepper. Try drizzling them in a glaze of honey and butter. Roast in the oven at 400 F for 25 to 40 minutes, depending on thickness of carrots and desired tenderness.
- Boil Rinse, peel and chop fresh carrots into desired size. Place in a pot of water, bring to a boil and cook for seven to nine minutes, depending on the size of the carrots.

Cauliflower

- Fresh Enjoy cauliflower fresh.
- Roast Heat oven to 425 F. Cut cauliflower into slices. Place cauliflower on a baking sheet and drizzle with olive oil. Add salt and pepper. Bake until deeply golden on the edges, tossing halfway, about 25 to 30 minutes.
- Sauté Cut cauliflower into bite-sized pieces. Heat olive oil in a skillet on medium heat. Once oil is hot, toss in cauliflower and season with salt and pepper. Cook cauliflower until tender and it starts to brown, about 10 to 12 minutes.
- Steam Bring ¼ inch of water to a boil in a pan. Add cauliflower florets to the pan, season, cover and steam for three to eight minutes
- Boil Boil cauliflower with potatoes, then mash to make cauliflower mashed potatoes.

Chickpeas



- Canned Canned chickpeas are ready to consume after being drained and rinsed. Chickpeas are the key ingredient for making hummus. In a blender, blend one can of chickpeas, 1 Tbsp. lemon juice, 1 Tbsp. olive oil, 1 clove of crushed garlic or 1 tsp. of minced garlic, ½ tsp. ground cumin, and salt and pepper to taste. Blend until smooth and let chill for at least two hours before serving. Drizzle with olive oil and extra cumin or cayenne pepper before serving. Serve with vegetable sticks, crackers or pita bread.
- Roast Toss chickpeas with olive oil, salt, pepper and cayenne pepper. Spread on a baking sheet and roast at 450 F for 30 to 40 minutes or until crunchy.

Cucumbers



- Fresh Rinse and chop cucumbers and enjoy fresh as a snack or mixed into a salad.
- Smoothie Rinse and chop cucumbers and add them to your favorite smoothie, then blend.
- Spread Rinse and finely chop cucumbers. Mix with cream cheese and seasonings to make a simple spread or add them to your favorite sandwich spread such as egg or chicken salad.

Dry Beans



- Canned Canned beans are ready to consume after being drained and rinsed.
- Dry Soak dry beans, allowing room to expand. To cook, place in a pan with water and bring to a boil.
 Reduce to a simmer and cook for about one hour or until tender.
- Enjoy beans in soups, salads, tacos or salsas.

Grapes



 Fresh – Enjoy fresh grapes mixed in a fruit salad or chicken salad, or on fruit kabobs.

Frozen – Place in the freezer for a refreshing snack.

 Roast – Toss grapes with oil, salt and pepper, and roast for 30 minutes at 425 F. Eat as a side dish, tossed in a salad or as a topping on ice cream.





- Basil Rinse and dry with paper towels. Remove leaves, then stack and roll. Use a knife to cut thin strips from the rolled leaves. Enjoy fresh basil on pizza, or in salads, soups or pesto.
- Cilantro Rinse and pat dry with paper towels. Keep in longer strips or chop finely. Enjoy fresh cilantro in your pasta salad, rice or salsa.
- Dill Rinse and pat dry with paper towels. Remove the large stems and chop the leaves into smaller chunks for garnish, or mince to be used in dishes. Enjoy in potato salads, seafood or salad dressings.

Herbs (continued)

- Mint Rinse and pat dry with paper towels. Remove the leaves, make a stack and roll, then chop into thin strips. Mix in tabbouleh salad, add to lemonade or make your own mint tea by steeping the leaves with hot water for five to 10 minutes.
- Rosemary Rinse and pat dry with paper towels. Cut individual sprigs to use as garnish, or strip off the needles and dice to use in recipes. Use rosemary to season meat dishes such as chicken, turkey, pork and beef. Add to cheesy dishes such as macaroni and cheese or pizza or use it to season roasted vegetables.

Leafy Greens



- Fresh Enjoy a variety of leafy greens as the base of a salad or blended into a smoothie.
- Soups Depending on the type of soup, try adding some spinach, Swiss chard, kale or collard greens.
- Sauté Rinse leafy greens such as kale, Swiss chard or spinach, then sauté in a pan with oil and seasonings of your choice.
- Chips Try turning kale into delicious kale chips. Rinse kale and mix with olive oil, salt and pepper. Spread on a baking sheet and bake in the oven at 325 F for 10 to 15 minutes, until they are crunchy.

Onions



- Fresh Enjoy onions raw on top of a burger or added to a salad.
- Caramelize Spread olive oil over a large pan, about 1 tsp. per onion. Slice onions into long strips and heat in a pan until they condense, stirring occasionally. This will take about 45 minutes. Add a little water as they condense to bring out some additional caramel color from the bottom of the pan. For increased flavor, add some balsamic vinegar with the water during the last step.
- Grill Slice an onion into rings, brush with olive oil and place on grill until grill marks appear.
- Sauté Spread olive oil over a pan and cook sliced onions for five to seven minutes until tender. Add bell peppers for some additional color and flavor.

Potatoes



- Roast Cut red potatoes in half or quarters and mix with olive oil, salt, pepper and any additional seasoning. Roast in the oven at 400 F for 45 to 60 minutes or until crispy.
- Boil Rinse and peel potatoes if desired and boil for about 15 minutes or until soft. Chop the
 potatoes to mix into potato salad or you can make mashed potatoes by mashing them together,
 adding milk, sour cream, salt and pepper.
- Bake Rinse potatoes and wrap them in aluminum foil. Bake in the oven for about 50 to 60 minutes, depending on their size.
- Grill Rinse and cut potatoes horizontally into about ¼- to ½-inch-thick pieces. Place on large sheet of aluminum foil, drizzle with olive oil, add desired seasonings to taste and wrap securely. Place on a grill for about 30 minutes or until tender.
- Fry Chop the potatoes and place in a skillet with oil or butter and add seasoning to taste.
- Air fry Dice potatoes. Toss diced potatoes in a bowl with olive oil and seasonings. Toss until all potatoes are evenly coated. Place them in the air fryer at 400 F for 25 minutes, or until potatoes are crispy and fully cooked.

Pumpkins



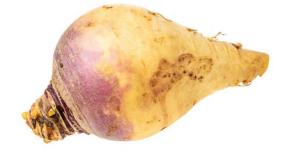
- Puree Cut a whole pumpkin in half and discard the stem, seeds and pulp.
 Place halves on a baking sheet lined with aluminum foil and bake at 375 F for 1½ hours or until soft. After cooking, scoop out the flesh and mash or puree. Use in pasta sauces, smoothies, pancakes and pumpkin bread.
- Roast Chop a whole pumpkin into 1-inch-thick chunks, scooping out the seeds and pulp. The skin on some pumpkins is thin and edible. Peel larger pumpkins with thicker skin. Place on a baking sheet lined with parchment paper. In a bowl, mix together olive oil, salt, pepper and nutmeg, and brush onto pumpkin slices. Bake for 30 to 40 minutes at 425 F or until soft. Add pumpkin to salads or eat it as a side dish.





- Fresh Enjoy raspberries fresh, or add them to smoothies, fruit salads or a garden salad.
- Sauce Boil together raspberries, sugar and water in a medium saucepan. After they begin to boil, thicken with a cornstarchwater mixture. For each cup of liquid, use 1 tablespoon of cornstarch, then add cold water and stir well to make a slurry. Add gradually to boiling berry mixture. Remove from heat and add vanilla and salt. Enjoy this sauce over ice cream, cheesecake or pancakes.

Rutabagas



- Mashed Peel rutabaga, then cut into chunks. Boil, then let simmer for 25 to 30 minutes, until tender. Drain rutabaga, then mash. Add salt, pepper and butter as desired.
- Roast Peel rutabaga and dice into 1-inch pieces. In a large bowl, toss diced rutabaga in olive oil, salt and pepper.
 Spread rutabaga on a baking sheet and bake for 40 to 50 minutes at 425 F until tender and lightly browned.

Snap Peas



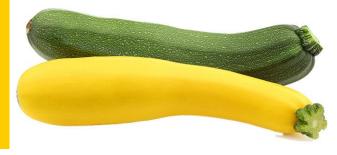
- Fresh Enjoy snap peas fresh.
- Sauté Remove stem and string end from each pod. Heat oil in a pan and add snap peas, salt and pepper. Sauté for three to five minutes until pods are tender.
- Boil Boil the snap peas for about three minutes or until tender. Remove from water and toss in oil or butter, salt and pepper.
- Roast Toss snap peas with olive oil, salt, pepper and any other seasoning such as parsley, garlic or Parmesan cheese. Spread pods on a baking sheet lined with parchment paper and bake at 400 F for 15 to 20 minutes or until crispy.

Strawberries



- Fresh Enjoy strawberries fresh.
- Sauce Combine sliced strawberries, sugar and lemon juice in a saucepan and bring to a boil. Reduce heat and let simmer for 20 to 25 minutes until the sauce thickens. Enjoy as a topping for ice cream, pancakes or cheesecake.

Summer Squash



- Fresh Enjoy summer squash fresh.
- Sauté Cut squash into chunks and place in an oiled pan with salt, pepper and any other desired seasoning. Sauté for two to three minutes or until tender.
- Roast Cut squash into chunks and toss with olive oil, salt, pepper and any other seasonings. Bake at 400 F for about 10 minutes or until brown and tender.
- Steam Cut up squash and steam in a microwave for about five minutes or until tender. Add any desired seasoning.
- Chips Slice squash into ½-inch rounds. Coat squash in olive oil, salt, pepper and preferred seasonings. Place squash on baking sheet and bake at 450 F for 10 minutes. Flip squash to other side, and bake an additional eight minutes, or until golden brown.

Sweet Corn



 Boil – Shuck the corn and place in a pot of salted, boiling water. Bring water back to a boil and let cook for five to seven minutes.

 Grill – Lightly oil the corn and season as desired. Place corn on the grill and cook for about 10 minutes, rotating often until evenly charred.

Tomatoes



- Fresh Enjoy tomatoes fresh on hamburgers, on a salad or in fresh salsa.
- Roast Halve or quarter the tomatoes and toss with olive oil and any desired seasoning such as basil, rosemary or thyme. Roast on a baking sheet lined with aluminum foil at 400 F for 30 minutes or until soft.
- Stew Place whole tomatoes in boiling water for one minute; immediately transfer to cold water so you can peel the skin easily. Cut the tomatoes into quarters and place in a large saucepan with salt. Simmer for 20 to 30 minutes, stirring occasionally.

Winter Squash



Roast – Cut squash in half and scoop out the seeds.
 Brush with olive oil, salt, pepper and any additional ingredients such as maple syrup or brown sugar. Place the flesh side down and roast for about 40 to 45 minutes at 400 F.

Turnips



- Fresh Enjoy turnips fresh.
- Roast Heat oven to 400 F. Trim and peel turnips. Cut into desired sized pieces or leave whole. Place on a baking sheet and drizzle with olive oil or other oil. Add salt and pepper. Roast turnips until tender and browned, about 45 minutes.
- Sauté Peel and chop turnips. Toss in a pan with oil, salt and pepper. Cook on medium heat until tender, about 10 to 12 minutes.

Summary

- Most adults and children do not meet the recommendations for fruits and vegetables.
- Aim for a variety of colorful fruits and vegetables from all the subgroups to meet nutrition needs.
- Be creative in your approach to vegetable preparation.
- Check out the free resources.

Questions?

