Fruits and Vegetables
Strategies for Cleaning, Storing and Preparing
May 20, 2020

Today’s Presenters:
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LIVE FOR LIFE at Duke
The new world of social distancing has changed our relationships with food and led to new challenges for healthy eating. Join us for a quick and interactive ZOOM session with Duke Dietitians, as we share ideas, information, and discussion.

NEXT UP ON FOOD MATTERS:

Wednesday, May 27 @ 2pm - Fitting Physical Fitness into Your Social Distancing Routine

Save the Date: June 10 and June 24 @ 2pm
Today’s Topic – Fruits and Vegetables

1. Address Food Safety and COVID-19
2. Tips for Cleaning Produce
3. Strategies to Make Produce Last Longer
Purchasing Tips

Smart shopping choices can help keep you safe! (FDA)

Choose products that are not damaged or bruised.
Choose only pre-cut, bagged or packaged produce that is refrigerated or on ice.
Bag fresh fruits and vegetables separately from raw meat, poultry and seafood.

• Use wipes when handling grocery carts if possible. Avoid touching your face.
• Wear a mask because social distancing is difficult at the store.
• Sanitize your hands before and after touching GROCERY ITEMS and after paying.
• Bring only necessities into the store. Just bring in your list and payment method.
• Wash hands with warm water and soap when home from shopping.
• Go early to avoid crowds and stay 6ft apart from others.

Grocery Store Safety
Shopping for Food During the COVID-19 Pandemic - Information for Consumers

• Currently no evidence of human or animal food or food packaging being associated with transmission of the coronavirus that causes COVID-19.

• This particular coronavirus causes respiratory illness and is spread from person-to-person, unlike foodborne illnesses.

• Improper cleaning/handling of food can lead to contamination such as *E. coli*, salmonella, norovirus and hepatitis A.

Why should we wash fruits and vegetables?

Contamination Risks

- Animal contact
- Harmful substances in soil or water
- Poor hygiene
- Improper handling and/or storage

Pesticide Residue

- Pesticide residues can remain after washing
- Not all foods have same risks for pesticides
- To avoid pesticides, can choose organic options*
  - *Certain pesticides are still allowed per USDA:
    - naturally occurring microorganisms
    - plant-based insecticides
    - some approved synthetic substances
A Note about Pesticides

- EPA has defined limits on pesticide residue
- **Annual USDA report** on pesticide residue findings
- Most recent study (2018) showed 99% of produce samples examined had pesticide residues below the EPA limit

- HOWEVER, some samples were found to have higher levels:
  - Asparagus
  - Cabbage
  - Cilantro
  - Kale
  - Kiwi
  - Raisins
  - Sweet potatoes
  - Snap peas
  - Strawberries
90% of samples of strawberries, apples, cherries, spinach, nectarines, and kale tested positive for residues of two or more pesticides.
The Environmental Working Group’s Clean 15

EWG’S 2020 CLEAN 15™

1. Avocados
2. Sweet Corn
3. Pineapple
4. Onions
5. Papaya
6. Sweet Peas (Frozen)
7. Eggplant
8. Asparagus
9. Cauliflower
10. Cantaloupe
11. Broccoli
12. Mushrooms
13. Cabbage
14. Honeydew Melon
15. Kiwi

Click on the list to download the EWG guide
FDA Guidelines Tips for Cleaning and Preparing your Produce

• Wash hands before and after food preparation
• Removed damaged or bruised areas
• Remove outermost leaves of lettuce and cabbage
• If produce has a skin or peel, rinse before peeling or cutting
• Use clean vegetable brush to clean hard produce (melons, carrots, cucumbers)
• Rub produce under running water
• Dry produce with clean cloth or paper towel
Some plants require extra care

• Place berries in colander and rinse under running water
• Lettuce and other leafy greens should be rinsed in bowl of cold water
• Wait to wash fruit until you are going to eat it, excess moisture will speed up decay
Should I use soap, produce wash, vinegar?

- FDA does NOT recommend the use of soap, detergent or any type of special “produce wash” to clean your fruit & veg

- Soap, detergent and bleach can leave unsafe residues

- Produce wash is safe, may not be necessary
  - Can be expensive ($3-$9/bottle)

- Vinegar may extend shelf life of berries
  - Make your own vinegar rinse: 3 cups of water to 1 cup vinegar
Storage Hacks

- Potatoes – store in paper bags rather than plastic. Store close to apples, not onions.
- Asparagus – trim off 1 inch, then store in vase or mason jar in fridge with a couple inches of water.
- Greens/lettuce – store with a dry paper towel in air-filled bag.
- Pineapple – cut leaves off the top and store upside down so sugars redistribute before cutting.
- Celery – wrap in aluminum foil to stay crisp.
- Mushrooms – store in paper bag.
Ethylene is a gas released by some fruits and vegetables that causes produce to ripen faster.
Refrigerator Drawers

Low-humidity Drawer (Crisper)

• Vent should be open to allow Ethylene gas to escape
• Best for fruits & veggies that rot easily
• Best for apples, pears, cantaloupe, peaches, kiwi, avocado
• Work best at 2/3 full

High-humidity Drawer

• Closed vent allow moisture to stay in the drawer
• Best for veggies that are likely to wilt
• Best for greens, broccoli, Brussel sprouts, green beans, asparagus, lemons, strawberries.
Tip: Revive Wilted Greens

01 WILTED: Submerge wilted greens into a bowl of cold water and place in refrigerator for 12 hours or until ready.

02 REVIVED: Gently shake off excess water, pat dry and place into a container. Keep refrigerated until use.
Prepping Fruits & Veggies

• Consider prepping ahead of time
  • Easy snacking
  • Salad toppers
• Store chopped/sliced produce in clear containers
• Prepping may increase consumption
  • More likely to grab it if it is ready to eat!
Freezing Fruits & Vegetables

1. Chop/cut produce
2. Blanch Veggies – place in boiling water for 2-3 minutes, then place in bowl of ice water
3. Spread out fruit or vegetables in a single layer on large baking sheet
4. Freeze until solid
5. Transfer to freezer bags

Produce that does NOT freeze well includes: cucumbers, radishes, tomatoes, watermelon, uncooked greens
More Freezer Tips

• Ice cube trays – not just for ice!
  • Freeze fresh herbs in water or olive oil
  • Freeze pesto, sauces, broth, baby food
• Reduce food waste
  • Freeze vegetable scraps for making stock
  • Freeze bananas that are going bad to use for banana bread, smoothies
• Freeze stale bread to turn into bread crumbs
Vegetable Stock Recipe: Easy crockpot recipe for making stock with veggie scraps!

**Ingredients**

- 3-4 cups veggie scraps any size
- 10 cups water
- 1 bay leaf or other herbs, optional
- 1 tsp peppercorns, optional
- 1 tsp salt to taste, optional

**Instructions**

1. Add the veggie scraps to your crock-pot, then add water.
2. Add the optional herbs and spices, if using.
3. Cook the broth on low for 10-12 hours, or on high for 4-6 hours.
4. Strain the vegetable broth. Discard or compost the veggies.
5. Store the broth in the fridge for up to 1 week, or up to 6 months in the freezer.

Tip for freezing: Can freeze cooled broth in quart-size mason jars, freezer bags or ice cube trays (and then store the frozen broth cubes in a baggie).
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<tr>
<th>Produce to Store at Room Temp</th>
<th>Produce to Store in the Fridge</th>
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<td>Basil</td>
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<td>Cucumber</td>
<td>Blueberries</td>
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<td>Eggplant</td>
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<td>Garlic</td>
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**Store These on Your Counter, Then Move to The Fridge When Ripe**

- Apricots
- Avocados
- Kiwi Fruit
- Mangoes
- Melons
- Nectarines
- Papayas
- Peaches
- Pears
- Pineapple
- Plums
Now might be a good time to plant a garden!

- Plant a few of your favorite vegetables or herbs in containers
  - Great option to avoid weather concerns and critters
- Make sure you have plenty of sun
- If in doubt choose a bigger pot – holds moisture and nutrients longer
- Great options for containers:
  - Potatoes, lettuce, tomatoes, peppers, eggplants, summer squash, peas
  - Herbs – often one plant can cost as much as each individual pack at the grocery store
Most Farmers Markets are still open with New Social Distancing Policies

Check out the Duke Mobile Market!

The Alternative 2020 Duke Spring/Summer Mobile Market connects local farmers with the Duke community to help in meeting the demands for fresh, safe produce.

Find out about your local market here

Tips for Shopping at Farmers Markets Amidst COVID-19
-source: NC Cooperative Extension
Thanks and have a great week!

https://hr.duke.edu/wellness/nutrition-programs

www.healthy.duke.edu