

Floral, Leafy and Stem Vegetables: Safe Handling Practices for Consumers¹

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A healthy diet should include a variety of fruits and vegetables including floral, leafy and stem vegetables. Leafy vegetables include lettuces, cabbage, Chinese cabbage, Brussels sprouts, spinach, and kale. Stem vegetables include asparagus, kohlrabi, and fennel. Floral vegetables are artichoke, broccoli, and cauliflower. Because many of these vegetables may be packed in the field and because some of these vegetables are often consumed raw, care must be taken to decrease risk of foodborne illness. This publication will focus on floral, leafy and stem vegetables. Here are the steps that you can take to reduce your risk of foodborne illness.



Where You Shop:

- Buy floral, leafy and stem vegetables that are **not** bruised or damaged.
- If you buy floral, leafy and stem vegetables in the form of fresh cut, be sure they are refrigerated or surrounded by ice to control growth of microbes.

At Home:

- Refrigerate floral, leafy and stem vegetables, especially those for raw consumption.
- All fresh floral, leafy and stem vegetables should be refrigerated within two hours of cutting.
- Leftover cut or prepared floral, leafy and stem vegetables should be discarded after two hours at room temperature.

During Preparation:

- Wash hands with hot soapy water before and after:
 - handling fresh produce
 - handling raw meat, poultry, or seafood
 - using the bathroom
 - changing diapers
 - handling pets
- Certain types of floral, leafy and stem vegetables such as cauliflower, broccoli, iceberg head lettuce, spinach, and celery are often packed in the field. Keeping these commodities clean is a problem in field packing operations, especially when fields are muddy.
- Consumers need to **always wash or rinse** floral, leafy and stem vegetables well with cool tap water just before preparing or

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eating. **Do not use soap or detergents.**

- Floral, leafy and stem vegetables for raw consumption or for garnishing must be washed individually.
- Cut away bruised or damaged areas before preparing or eating floral, leafy and stem vegetables. Microbes can hide in the damaged tissues.
- Wash cutting boards, dishes, utensils, and counter tops often. Use hot soapy water and rinse well. **Sanitize** them after contact with fresh produce, or raw meat, poultry, or seafood (see box).
- Sanitize kitchen sink frequently to avoid a build up of microbes.
- **Do not** cross contaminate! Use clean cutting boards and utensils for fresh produce.
- If possible, use separate cutting boards for raw meat, poultry, and seafood.
- **Do not** consume ice that has come in contact with fresh produce or other raw products.
- Use a cooler with ice or ice gel packs when you take perishable foods outdoors. This includes cut fresh fruits and vegetables.

To sanitize cutting boards, dishes, and utensils:
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Mix one teaspoon chlorine bleach in one quart water.
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Pour the mixture onto all surfaces or submerge appropriate items into the above solution and let sit at least one minute.

Rinse surfaces well with hot running water.

Counter tops can be sanitized by using the above solution mix, sanitizing sprays or wipes as an additional safety measure.

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



For More Information:

Visit the Food and Drug Administration (FDA) website at: <http://www.fda.gov> or call FDA Consumer Inquiries at 1-888-SAFEFOOD (a toll-free number).