

Best Practices for Reusable Grocery Bags

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Introduction

Reusable bags are commonly used for grocery shopping at a chain grocery store or the farmer's market because they:

- Are sturdy and allow for carrying heavier loads
- Save money for users who live in areas where there is a fee for using plastic or paper bags
- Come in different designs and are made from different fabrics like canvas, nylon, among others, which allow the user creative expression
- Are an environmentally friendly alternative to single-use plastic bags



Figure 1. A person holding a reusable bag at the farmer's market (Florida Farmers Market).

Food safety with reusable bags

Reusable bags can be used multiple times to carry different food commodities including meat, poultry, seafood, fresh produce, etc. Because these bags are 'reused', they present a food safety risk, especially if users do not dedicate individual bags for specific classes of food items (e.g., meats, produce). Repeatedly using these bags without cleaning and sanitizing them introduces an additional risk

What the science is saying

Recent research indicates that harmful bacteria such as Listeria monocytogenes and Salmonella can survive on reusable bags, regardless of the material, for up to 21 days, if contaminated. These bacteria can transfer from the surfaces of contaminated reusable bags to food products like fresh produce. One of the primary factors facilitating this transfer is the presence of moisture. Frequently, unpackaged food items may retain residual moisture, such as bundled asparagus stored in water or leafy greens stored in coolers or transported on ice. Adding wet or moist items to your reusable bags can promote bacterial transfer. Therefore, it is crucial to keep your bags dry, separate raw meats and fresh produce (or other items consumed raw/uncooked) and clean/sanitize your bags regularly.

How to take care of your reusable grocery bags

Separate

Use separate bags for meat, seafood, poultry, readyto-eat foods, and fresh fruits and vegetables. You can label your reusable bags or purchase bags of different colors and/or dedicate specific color bags for specific food items.

Use plastic bags

Put meat, seafood, and poultry in plastic bags before putting them in your reusable bag. This will contain any juices that leak from these food items and prevent potentially contaminating the bag. Throw away plastic bags that have been used to hold meats immediately after use and never reuse them.

Only groceries

Do not use reusable bags to carry non-food items like gym clothes, sports gear, shoes, or trash. They should be used for groceries/food only. This will reduce the risk of contamination and the spread of harmful bacteria.

Wash frequently

Reusable bags can be made from natural or synthetic fabrics (Figure 2 and Figure 3 respectively). The cleaning procedure for these bags will vary based on fabric type and design, hence it is important to review fabric care instructions on the bags before washing. Clean bags immediately after use.

The cleaning process generally includes:

- Machine-washing cloth bags with water and detergent, then machine-drying.
- Some fabrics and/or designs may require handwashing with hot water while paying special attention to seams. These bags should be air-dried.

Keep them dry

Make sure that your reusable bags are dry before storing them. Store them in a clean and dry place. It is important to always keep these bags dry, as moisture can contribute to bacterial growth and increase the risk of bacterial transfer (if bags become contaminated).



Figure 2. Reusable bags are made from A) jute and B) canvas fabric. (Pinterest and Nashville Wraps)



Figure 3. Reusable bags are made from A) nylon and B) cordura fabric. (Risdstore and Tsuchiya Kaban)

Keep pets away

We all love our pets, but they can contribute to contaminating our reusable grocery bags. Plus, they may leave some fur on bags that can find its way onto or into your food.

Do not keep bags on dirty surfaces

While it may seem like a good idea, it is not recommended that you store your reusable grocery bags in your trunk. Most trunks serve as storage for many other items like hiking/gym shoes or transport of trash. Trunks can also get warm and humid, and those conditions can promote bacterial survival and or growth. Do not place your reusable bags on uncleaned surfaces or floors, as those surfaces may be contaminated which can contaminate your reusable bags. Bags should be stored off the ground/floor.

Important Reminder

Cold foods must be kept cold. Regardless of what kind of bag you are using, you should refrigerate food items that need to be refrigerated within 2 hours of purchase. If the outside temperature gets to 90 °F (32.2 °C), refrigerate food within 1 hour.

References

Etaka, Cyril A., Kim Waterman, Alexis Hamilton, Tuan Le, Donald W. Schaffner, and Laura K. Strawn. n.d. "Quantification of Generic Escherichia coli Cross-Contamination from Different Tree Fruit Harvest Bag Material Types to Apples." Accessed September 5, 2023.

- Etaka, Cyril A., Kim Waterman, Alexis Hamilton, Tuan Le, Daniel L. Weller, Donald W. Schaffner, and Laura K. Strawn. n.d. "Survival and Transfer of Listeria monocytogenes and Salmonella spp. from Different Tree Fruit Harvest Bag Material Types to Apples." Accessed September 5, 2023a.
- Etaka, Cyril A., Kim Waterman, Alexis Hamilton, Tuan Le, Daniel L. Weller, and Laura K. Strawn. n.d. "Survival of Generic Escherichia coli on Different Tree Fruit Harvest Bag Material Types." Accessed September 5, 2023b.
- Government of Canada. 2013. "Reusable Grocery Bags and Bins." 2013. https://www.canada.ca/en/healthcanada/services/general-food-safetytips/reusable-grocery-bags-bins.html. Accessed 9 September 2023.
- New York State | Department of Health. 2020. "Reusable Grocery Bags: A Smart Choice but Play It Safe." 2020. https://www.health.ny.gov/publications/2827/.

Accessed 9 September 2023.

- The American Cleaning Institute. 2022. "Cleaning Reusable Bags." 2022. https://www.cleaninginstitute.org/cleaningtips/clothes/fabric-care/cleaning-reusable-bags. Accessed 9 September 2023.
- University of Delaware. 2023. "Could Your Reusable Grocery Bag Be Making Your Family Sick?" 2023.

https://www.udel.edu/academics/colleges/canr/n ews/2021/may/could-your-reusable-grocery-bagbe-making-your-family-sick/. Accessed 9 September 2023.

Yale University. n.d. "Why Everyone Should Use Reusable Shopping Bags." The Yale Ledger. Accessed September 1, 2023. https://campuspress.yale.edu/ledger/whyeveryone-should-use-reusable-shopping-bags/. Accessed 9 September 2023.

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