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Waste Not, Want Not!

How to save food, money, time and resources by reducing, recycling, reusing, preserving, and proper storage of edibles which might otherwise be wasted.

How much food is wasted in America?

Here's some "food" for thought:

- While *the world wastes about 2.5 billion tons of food every year*, the United States discards more food than any other country: *nearly 60 million tons — 120 billion pounds — every year.*
- That's *almost 40 percent of the entire US food supply, 325 pounds per person.* That's like *every person in America throwing 975 average sized apples right into the garbage* — or rather right into landfills, as most discarded food ends up there.
- *Food is the single largest component taking up space inside US landfills, making up 22 percent of municipal solid waste (MSW).*
- The amount of *food wasted in America has an approximate value of nearly \$218 billion – the equivalent of 130 billion meals.*

Source: Recycle Track Systems, www.rts.com

Why do we waste so much food?

- More than 80 percent of Americans discard perfectly good food because they misunderstand expiration labels.
- Food in the United States is plentiful and less costly, and often this contributes to not appreciating or valuing it the way other communities around the globe do.
- Americans are often impulsive in their food purchases, unrealistic about how much food is required, thus buying more food than needed or food they won't actually eat.
- Our take-out society doesn't use food in its entirety the way our ancestors used to.
- We underutilize leftovers and toss food scraps that can still be consumed or composted.
- Composting isn't part of our food-prep routine, so we continue to add fuel to the fire in increasing the sheer size of US landfills.

Source: Recycle Track Systems, www.rts.com

Easy ways to reduce your food waste

1. Shop Smart
 - Most people tend to buy more food than they need.
 - Buying in bulk may be convenient, but research has shown that this leads to more food waste.
 - To avoid buying more food than you need, make frequent trips to the grocery store every few days rather than doing a bulk shopping trip once a week.
 - Use up all the food you from the last trip to the market before buying more groceries.
 - Make a list of items that you need and stick to that list. This will help you reduce impulse buying and reduce food waste as well.

2. Store Food Correctly

- Many people are unsure how to store fruits and vegetables, which can lead to premature ripening and, eventually, rotten produce. For instance, potatoes, tomatoes, garlic, cucumbers and onions should never be refrigerated. These items should be kept at room temperature.
- Separating foods that produce more ethylene gas from those that don't is another great way to reduce food spoilage. Ethylene promotes ripening in foods and could lead to spoilage. Foods that produce ethylene gas while ripening include:

Bananas
Cantaloupes
Green onions

Avocados
Peaches
Tomatoes

Pears

Keep these foods away from ethylene-sensitive produce like potatoes, apples, leafy greens, berries and peppers to avoid premature spoilage.

3. Learn to Preserve

- Pickling, drying, canning, fermenting, freezing and curing are all methods you can use to make food last longer, thus reducing waste. Not only will these methods shrink your carbon footprint, they will save you money as well. What's more, most preservation techniques are simple and can be fun.
- For example, canning an excess of ripe apples and turning them into applesauce, or pickling fresh carrots from the market will provide you with a delicious and long-lasting treat that even kids will enjoy.

4. Don't Be a Perfectionist

- Did you know that rummaging through a bin of apples until you find the most perfect-looking one contributes to food waste? Though identical in taste and nutrition, so-called "ugly" fruits and vegetables get passed up for produce that is more pleasing to the eye. The consumer demand for flawless fruits and vegetables has led major grocery chains to buy only picture-perfect produce from farmers. This leads to tons of perfectly good food going to waste.
- It's such a big issue that major grocery chains like Walmart and Whole Foods have started offering "ugly" fruits and vegetables at a discount in an attempt to reduce waste.
- Do your part by choosing slightly imperfect produce at the grocery store, or better yet, directly from the farmer.

5. Keep Your Fridge Clutter-Free

- You've probably heard the saying, "out of sight, out of mind." This rings especially true when it comes to food. While having a well-stocked fridge can be a good thing, an overly filled fridge can be bad when it comes to food waste.
- Help avoid food spoilage by keeping your fridge organized so you can clearly see foods and know when they were purchased.
- A good way to stock your fridge is by using the FIFO method, which stands for "first in, first out." For example, when you buy a new carton of berries, place the newer package behind the old one. This helps ensure that older food gets used, not wasted.

6. Save Leftovers

- Leftovers aren't just for holidays.
- Although many people save excess food from large meals, it is often forgotten in the fridge, then tossed when it goes bad.
- Storing leftovers in a clear glass container, rather than in an opaque container, helps ensure you don't forget the food.
- If you happen to cook a lot and you regularly have leftovers, designate a day to use up any that have accumulated in the fridge. It's a great way to avoid throwing away food. What's more, it saves you time and money.

7. Eat the Skin

- People often remove the skins of fruits, veggies and chicken when preparing meals. This is a shame, because so many nutrients are located in the outer layer of produce and in poultry skin. For example, apple skins contain a large amount of fiber, vitamins, minerals and antioxidants.
- In fact, researchers have identified a group of compounds present in apple peels called triterpenoids. They act as potent antioxidants in the body and may have cancer-fighting abilities.
- Chicken skin is packed with nutrients as well, including vitamin A, B vitamins, protein and healthy fats. What's more, chicken skin is an amazing source of the antioxidant selenium, which helps combat inflammation in the body.
- These benefits are not limited to chicken and apple skin. The outer layers of potatoes, carrots, cucumbers, mangoes, kiwis and eggplants are also edible and nutritious.
- Not only is eating the skin delicious, it's economical and reduces your food waste impact.

8. Eat the Yolk

- Although most people are moving away from the once-popular low-fat dieting trend, many still avoid egg yolks, opting for egg-white omelets and scrambled egg whites instead.
- Avoiding egg yolks mostly stems from the fear that they increase cholesterol levels. Many people assume that eating foods high in cholesterol, like eggs, has a major impact on cholesterol levels. However, studies have shown that in most people, dietary cholesterol only has a small effect on cholesterol levels.
- Your liver actually makes the majority of the cholesterol you need and your body closely regulates levels in the blood. When you eat foods that contain a high amount of cholesterol, your liver simply compensates by producing less.
- Evidence shows that most people, even those with high cholesterol, can enjoy whole eggs risk-free.
- What's more, egg yolks are packed with nutrients, including protein, vitamin A, iron, selenium and B vitamins.
- If you simply don't like the taste or texture of egg yolks, you can add them to other recipes to mask the flavor. You can even use yolks as an ultra-moisturizing hair mask.

9. Be a Seed Saver

- Out of the 1.3 billion pounds of pumpkins produced in the United States every year, most end up getting thrown away.
- While carving pumpkins can be fun for the whole family, there are ways to reduce the waste that comes along with this activity.
- Aside from using the tasty flesh of your pumpkins in recipes and baking, a great way to cut waste is to save the seeds. In fact, pumpkin seeds are tasty and packed with nutrients. They are very high in magnesium, a mineral that is important for heart and blood health and helps control blood pressure and blood sugar levels.
- To save pumpkin seeds, simply wash and dry the seeds, then toss them with a little olive oil and salt and toast them in the oven. Acorn and butternut squash seeds can be prepared in the same way.

10. Blend It Up

- Blending up a nutrient-packed smoothie can be a delicious way to reduce food waste.
- While the stems, ends and peels of produce may not be appetizing in their whole form, adding them to a smoothie is a way to reap their many benefits. The stems of greens like kale and chard are packed with fiber and nutrients, making them a great addition to smoothies. The tops of beets, strawberries and carrots also make great add-ins.
- Other items that would otherwise be discarded can also be thrown into a nutritious blend, including fruit and vegetable peels, wilted herbs, overripe bananas and chopped broccoli stalks.

11. Make Homemade Stock

- Whipping up a homemade stock is an easy way to use excess food.
- Sauté vegetable scraps like the tops, stalks, peels and any other leftover bits with some olive oil or butter, then add water and let them simmer into an aromatic vegetable broth.

- Veggies aren't the only scraps that can be transformed into a flavorsome stock.
- Rather than letting the chicken carcass or meat bones leftover from your dinner go to waste, simmer them with veggies, herbs and water to make a homemade stock that will put store-bought broth to shame.

12. Perk Up Your Water

- Many people don't drink enough water simply because they don't like the flavor, or lack thereof.
- Luckily, you can make water tastier and reduce your food waste impact at the same time.
- One of the easiest ways to increase your water intake is to make it taste good. Use peels from citrus fruits, apples and cucumbers to add a kick to your glass of water or seltzer. Wilted herbs and berry tops also make excellent additions to your water bottle.
- After finishing your water, toss the leftover fruit or herbs into a smoothie for a zero-waste nutrition boost.

13. Keep Your Serving Sizes in Check

- Overeating is a problem for many people. Making sure your portion sizes stay within a healthy range doesn't just help keep your weight down, it also reduces food waste.
- While you may not think twice about scraping the leftover food on your plate into the trash, remember that food waste has a major impact on the environment.
- Being more mindful of how hungry you actually are and practicing portion control are great ways to reduce food waste.

14. Get Friendly With Your Freezer

- Freezing food is one of the easiest ways to preserve it, and the types of food that take well to freezing are endless.
- For example, greens that are a bit too soft to be used in your favorite salad can be put in freezer-safe bags or containers and used at a later date in smoothies and other recipes.
- An excess of herbs can be combined with olive oil and chopped garlic, then frozen in ice cube trays for a handy and delicious addition to sautés and other dishes.
- You can freeze leftovers from meals, excess produce from your favorite farm stand, and bulk meals like soups and chilis. It's a great way to ensure you always have a healthy, home-cooked meal available.

15. Understand Expiration Dates

- "Sell by" and "expires on" are just two of the many confusing terms companies use on food labels to let consumers know when a product will most likely go bad.
- The problem is, the US government doesn't regulate these terms; the task is often left to food producers to determine the date they think a product is most likely to spoil by. The truth is, most food that has just passed its expiration date is still safe to eat.
- "Sell by" is used to inform retailers when the product should be sold or removed from the shelves.
- "Best by" is a suggested date that consumers should use their products by.
- Neither of these terms means that the product is unsafe to eat after the given date.
- While many of these labels are ambiguous, "use by" is the best one to follow. This term means that the food may not be at its best quality past the listed date.
- A movement is now underway to make the food expiration labeling system clearer for consumers. In the meantime, use your best judgment when deciding whether food that is slightly past its expiration date is safe to eat

16. Compost If You Can

- Composting leftover food is a beneficial way to reuse food scraps, turning food waste into energy for plants.
- While not everyone has room for an outdoor composting system, there's a wide range of countertop composting systems that make this practice easy and accessible for everyone, even those with limited space.
- An outdoor composter may work well for someone with a large garden, while a countertop composter is best for city dwellers with houseplants or small herb gardens.

17. Pack Your Lunch

- Although going out to lunch with coworkers or grabbing a meal from your favorite restaurant may be enjoyable, it is also costly and can contribute to food waste.
- A helpful way to save money while reducing your carbon footprint is to bring your lunch to work with you.
- If you tend to generate leftovers from home-cooked meals, pack them up for a satisfying and healthy lunch for your workday.
- If you're strapped for time in the morning, try freezing your leftovers in portion-sized containers. That way, you'll have premade, hearty lunches ready to go each morning.

18. Don't Toss the Grounds

- If you can't fathom getting ready for your day without a hot cup of coffee, chances are you generate a lot of coffee grounds.
- Interestingly, this often-overlooked leftover has many uses.
- Those with a green thumb may be delighted to know that coffee grounds make excellent fertilizer for plants. The grounds are high in nitrogen, phosphorus and potassium, which are nutrients that plants crave.
- Coffee grounds also make a fantastic natural mosquito repellent.
- In fact, research has shown that sprinkling spent coffee grounds in grassy areas deters female mosquitos from laying eggs, reducing the population of these pesky insects.

19. Get Creative in the Kitchen

- One of the great things about cooking your own food is that you can tweak recipes to your liking, adding new flavors and ingredients.
- Including parts of foods that aren't usually used is an excellent way to repurpose scraps when you're experimenting in the kitchen. Stems and stalks make tasty additions to sautés and baked dishes, while garlic and onion ends can bring flavor to stocks and sauces.
- Whipping up a fresh pesto made with broccoli stalks, soft tomatoes, wilted spinach or cilantro rather than the traditional basil is an inventive way to add a tasty twist to favorite dishes.

20. Pamper Yourself

- If you want to save money while avoiding potentially harmful chemicals found in some skincare products, try preparing a scrub or mask at home.
- Avocados are packed with healthy fats, antioxidants and vitamin E, which makes them a perfect addition to a natural face mask.
- Combine overripe avocado with a bit of honey for a luxurious combination that can be used on the face or hair.
- Mixing used coffee grounds with a bit of sugar and olive oil makes for an invigorating body scrub. You can also apply cool used tea bags or excess cucumber slices to your eyes to reduce puffiness.

The Bottom Line

- There are endless ways you can reduce, reuse and recycle your food waste.
- Not only will these practical tips help you waste less food, they may save you money and time as well.
- By thinking more about the food your household wastes every day, you can help create positive change to conserve some of the earth's most valuable resources. Even minimal changes to the way you shop, cook and consume food will help reduce your impact on the environment. It doesn't have to be difficult.
- With a small amount of effort, you can cut your food waste dramatically, save money and time, and help take some pressure off Mother Nature.

Source: www.healthline.com/nutrition/reduce-food-waste

When in doubt - throw it out

- DANGER - Never taste food that looks or smells strange to see if it can still be used. Just discard it.

Recipes

Watermelon Rind Pickles

Yield: about 4 or 5 pint jars

3 quarts (about 6 pounds)
Watermelon rind (unpared)
 $\frac{3}{4}$ cup salt
2 quarts (2 trays) ice cubes
9 cups sugar

3 cups white vinegar (5%)
3 cups water
1 tablespoon (about 48) whole cloves
6 cinnamon sticks, 1-inch pieces
1 lemon, thinly sliced, with seeds removed

1. Trim the pink flesh and outer green skin from thick watermelon rind. Cut into 1-inch squares or fancy shapes as desired. Cover with brine made by mixing the salt with 3 quarts cold water. Add ice cubes. Let stand 3 or 4 hours. Drain; rinse in cold water. Cover with cold water and cook until fork tender, about 10 minutes (do not overcook). Drain.
2. Combine sugar, vinegar, water, and spices (tied in a clean, thin, white cloth). Boil 5 minutes and pour over watermelon; add lemon slices. Let stand overnight in refrigerator.
3. Heat watermelon in syrup to boiling and cook slowly 1 hour.
4. Wash and rinse canning jars, lids and rings; keep jars hot until ready to use.
5. Pack hot pickles loosely into clean, hot pint jars. To each jar add 1 piece of stick cinnamon from spice bag; cover with boiling syrup, leaving $\frac{1}{2}$ -inch headspace. Remove air bubbles and adjust headspace if needed. Wipe rims of jars; adjust two-piece metal canning lids.
6. Process in a boiling water or steam canner for 10 minutes at 0-1,000 feet elevation, 15 minutes at 1,001-6,000 feet, 20 minutes above 6,000 feet.
7. For boiling water canner, remove lid and wait 5 minutes; for steam canner, wait 3 minutes before removing lid. Remove jars from canner. Let cool, undisturbed, 12-24 hours and check for seals. Remove rings, clean and label jars. Store sealed jars in a cool, dry, dark location.

Source: National Center for Home Food Preservation, 2024

Garbage Soup

NOT the most appetizing name, but it can save you a lot of cash over time. What do you do with the skins of the onions you use? The carrot and potato peels? Root ends of celery? Chicken bones and skins? Shrimp shells? Try putting all of the veggie scraps into a big zip bag (yes, even the papery skins from the onions – great color). Put the meat scraps into another, squeeze air out of both and just stick them in the freezer).

Frozen (or fresh) veggie-scraps

Frozen meat (or dried, canned, or fresh), skin and bone scraps

1. When the veggie bag is full, dump it into a stockpot, add garlic and black peppercorns.
2. Bring to a boil, reduce heat and simmer about an hour or so.
3. Strain and press any remaining liquid out of the bag.

You now have some very tasty, and FREE vegetable stock. The stuff in the strainer will break down in your compost pile MUCH faster.

If you want a chicken/meat/seafood stock, sear the bones/fat/skin etc. in a skillet and simmer in the veggie stock another hour or so, Strain again and skim off excess fat. DO NOT compost the meat scraps, or you will get bad smells and rats.

Source: www.seasonedcitizenprepper.com/survival-soup-garbage-soup

Candied Citrus Peel

Yield: about 2 pints

Peels, including pith, from 6 oranges or other thick-skinned citrus fruit

1 cup water, plus more for boiling peels

5 cups sugar

1 vanilla bean

1. Cut the peels into ¼-inch strips. Cover the peels with cold water in a large nonreactive saucepan and bring to a boil, stirring to ensure that all of the peels are heated through. Strain and repeat two more times to remove the bitter flavor from the pith and to soften the peels. After the third round, set aside the peels to drain while you make the syrup.
2. Bring 1 cup water to a boil and gradually add 4 cups of the sugar, stirring to dissolve. Add the peels and the vanilla bean. Return to a boil, and then reduce to a simmer, cooking gently until the peels are translucent and tender, about 1 hour.
3. Using tongs, remove the peels to a drying rack placed over a baking sheet and separate them so they don't touch. Let drain, and then dry for 4 to 5 hours.

Hint: Save the sugar syrup in the refrigerator and use in your tea, iced tea, water, smoothies, etc.!

4. When quite dry but still tacky, roll the peels in the remaining 1 cup sugar to coat.

5. Peels keep, stored in an airtight container, for up to 1 month.

Source: Put 'em Up!

Tomato Powder

Fresh tomatoes, ¼-inch slices

or canned pureed tomatoes

or tomato skins left from other peeled tomato products

1. Place sliced tomatoes, puree, or skins on dehydrator tray and dry until crisp.
2. Place dried tomato in blender, herb, or coffee grinder and blend until a fine powder.
3. Use powder in a variety of dishes from soups to meat loaf. Refer to the reconstitution information below:

Tomato Paste: 1 cup dried tomato powder, 1¾ cup water, ½ teaspoon sugar.

Tomato Sauce: 1 cup dried tomato powder, 3 cups water, ½ teaspoon sugar.

Tomato Soup: 1 cup dried tomato powder, ¾ cup water, ½ cup dry milk. Season to taste.

Remember: The flavor of dried tomatoes is more concentrated so use sparingly in your cooking.

Source: The Ultimate Dehydrator Cookbook, 2014

Resources

National Center for Home Food Preservation: <http://nchfp.uga.edu/>

Complete Guide to Home Canning. 2015. http://nchfp.uga.edu/publications/publications_usda.html

So Easy to Preserve, Sixth Edition. 2016. Bulletin 989. Cooperative Extension/University of Georgia, Athens

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