

- » Rethinking your shopping habits for zero waste
- » Discovering the benefits of zero waste cooking
- » Understanding the framework of food and environment

Chapter 1

Doing Your Best to Waste Less

An estimated 30 to 40 percent of the food supply in the United States is wasted due to loss (never delivered or prepared) and waste (thrown away). That's more than 130 billion pounds of food per year! Hard to imagine, right? Maybe not when you consider how every day, shoppers are enticed to buy food in bulk but often end up throwing away the excess. Or how, all too often, diners bag up restaurant leftovers only to let them languish in the fridge (or, worse yet, in their car's back seat), and then throw them out, packaging and all. What do these examples have in common? Good intentions, yes. But also, unnecessary waste.

Many of us may not even realize how often we waste food, nor the impact that waste can have on our communities. When you make a concerted effort to avoid waste, you won't be throwing away money or nutrition. Reducing your food waste has the potential to have a positive impact on your health, your budget, and the environment. This realization makes it even more convincing to work on wasting less, and that effort begins at home.

What Is Zero Waste Cooking?

Zero waste cooking is a strategy to reduce food waste. It's about using all the food that you purchase, grow, or have access to, and leaving behind as little food and packaging as possible. It's something to feel good about as you save money and reduce your impact on the planet.



REMEMBER

Zero waste cooking is *not* about perfection or self-righteousness. Neither is it about becoming vegetarian or eating less meat. Be wary of statements about avoiding meat and dairy when in the context of zero waste cooking. The goal of zero waste cooking is to reduce all food waste.

Zero waste cooking is about adopting a philosophy to waste less food in your household no matter what your dietary choices are (of course I still want you to make mostly healthy ones!). It's about learning how to grocery shop more mindfully and efficiently to maximize your food and your food budget. It's also about having a plan for the food you buy and storing food properly.

Using food and ingredients wisely

In the United States and many parts of the world, we're blessed with an abundant food supply. We travel to grocery stores, expecting all the food and ingredients that we desire to be there. (Skip to Chapter 2 to learn more about the food supply chain and where your food comes from.) We expect our apples and tomatoes to be blemish-free and our food to be fresh and appealing. We purchase what we need (and sometimes more than we need) and bring it home to store on our shelves or refrigerator or freezer. You could say, we're a little spoiled.

To create a zero waste kitchen, you simply begin by being more thoughtful about your purchases. You then start to rethink your leftovers and plan out how you're going to prepare every ingredient that goes into your shopping cart. You also may have some second thoughts about perfect produce, realizing that a small blemish here or there doesn't impact the safety or nutrition of the food.

Shopping for what you need and storing it properly

Zero waste cooking focuses on shopping for what you *need*, not what randomly "looks good." Grocery stores strategically set up their shelves and displays to entice you to buy more. They place seasonal items at your eye level, and

companies pay a premium for the best shelf placement. But shopping only for what you need will ultimately help reduce your food waste. You'll find lots of tips and strategies for sticking to your food budget and grocery list in Chapter 6.

A good shopping list makes trips to the grocery store more efficient. Your list should include everything you need to create meals for the next week or two. You might break your list into a big order or a few smaller orders, so think of your list as a running inventory as well. These are planned purchases that fit your budget and meal planning. Chapter 4 helps you analyze what you have, what you don't use or need, and what may be ending up in your garbage can too often. Here are a few reminders to get you started:

- » **Use a list.** Consider a digital app or keeping a running list on your smartphone.
- » **Delay a purchase.** When you see that tantalizing endcap, tell yourself to make a note and think about it for your next trip. This will eliminate an impulse buy but not deny the possibility of putting the item into your cart next time.
- » **Don't overspend.** Have a budget in mind before you go and keep a rough total as you shop.
- » **Choose quality over quantity.** In most cases, it's worth paying more for a high-quality food product (say, cheese) than getting a larger portion of it (more than you may need or be able to use).
- » **Store food properly.** Once you bring the food home, storing it properly helps preserve its quality and safety longer, thereby helping you reduce food waste. Chapters 4, 5, and 6 offer you lots of ideas and tips for making food and ingredients last longer. You may be surprised to find out what those best-by dates really mean, or why you shouldn't store avocados near bananas.

Making the most of scraps and leftovers

There are two kinds of people: those who love leftovers (usually the cooks of the house!), and those who say, meh. I hope this book inspires you to look beyond reheating a plate of turkey and mashed potatoes or a bowl of chili and instead create completely new dishes with those previously cooked ingredients.

As a wise cook once said, "Cook once; eat thrice." Making use of leftovers, as well as doing some batch cooking, will save you both time and money. It'll also take some of the day in, day out stress out of preparing dinner every night.



TIP

You don't have to eat trendy foods to eat a well-balanced zero waste diet. Avocadoes may be all the rage, but they're not the be-all and end-all for nutrition (and they spoil rapidly). No *one* food holds that health halo. It's the totality of your diet through the week that impacts your nutrition status and your environmental footprint. Healthy food doesn't have to be fancy or expensive.

The meal planning ideas in Chapters 6 and 7 use the concept of creating a grocery list with common ingredients that you can use in various ways through the week to make different meals.



REMEMBER

Some foods simply taste better the next day or two. Dishes like chilis, soups, casserole dishes, or lasagna, for instance, get even better after they sit for a while, allowing all the flavors to come together. You won't regret making extra servings when you cook those dishes.

Adopting a Zero Waste Mindset

You probably picked up this book because you want to waste less in your kitchen and you care about the environment. The goal of the book is to help you get started and maintain a mostly zero waste lifestyle (*mostly* because, hey, nobody is perfect). While Chapter 3 gets into the nitty-gritty of creating a zero waste mindset, an overarching theme throughout the book is “progress, not perfection.” As you wrap your mind around the idea of wasting less food, the book addresses several things:

- » How the idea of sustainability fits into a zero waste mindset (see more in Chapter 2)
- » The three pillars of sustainability in agriculture and how they allow for the efficient use of natural resources to feed hundreds of millions of people
- » How various sectors of the food supply chain conserve resources and work to reduce food waste
- » How to analyze your personal food waste habits and create a plan to waste less
- » How to choose foods with both your budget and health needs in mind
- » How to organize a zero waste kitchen
- » How to plan meals, waste less, and cook delicious meals

You may wonder why I cover things like sustainability, the food supply chain, and the U.S. agriculture system that brings you your food. Well, it's important to know how the environmental piece of reducing food waste fits into the larger

picture of where food comes from. There's a lot of conflicting information about the "best diet," the many sources of greenhouse gas emissions, and how various sectors impact the environment. Hopefully, this information will give you more to think about.



REMEMBER

Many things impact climate change. This book assumes that the more than 333 million people in the United States have a variety of food budgets and circumstances. This book was written with the broad spectrum of food budgets and food availability, both rural and urban, in mind. The recipes and meal planning strategies I include were designed for everyone — not just those with a specialty grocer down the block — so they can enjoy eating for good health and learn how to waste less.

Benefiting from a Zero Waste Approach

Zero waste cooking can save you money, improve your diet quality, and help the environment. You could say it's a win-win-win! You may be reading this book because you want to do your part to support a healthy planet, or maybe you want to waste less and save money, but you may not be aware that a zero waste approach may also indirectly improve your health. How? Well, there's money savings in taking a little bit of time to work on your grocery shopping strategy and use of leftovers. And when you become more mindful of food storage, meal planning, and using up fresh fruits and vegetables, you actually end up increasing your consumption of those nutrient-rich foods. Read on, dear reader.

The Environmental Protection Agency (EPA) estimated that, in 2018, 63 million tons of food were wasted, with 40 percent of that coming from households like yours and mine. Check out apps such as Too Good To Go that help connect people in need with surplus food supplies that they can purchase at deeply discounted rates.

Wasting food isn't just an environmental issue; it's a social issue, too. It's estimated that about 10 percent of U.S. households are food insecure at some time during the year. And hunger and undernourishment throughout the world continue to be a major concern.



TIP

Feeding America is an organization that works to reduce food waste and hunger by matching excess food from national food and grocery manufacturers, retailers, government agencies, shippers, packers and growers, and other organizations, with the food banks that need it most. Many agricultural organizations donate milk, meat, and eggs to local food banks and community organizations as well. To get involved, check with your local food bank or go to www.feedingamerica.org/take-action.

Saving green while going green

Sure, you want to save the earth, but don't forget that creating a zero waste kitchen is also going to save you money. All that food waste adds up to more than \$160 billion each year (retail and consumer waste). Some estimate that this equates to about \$1,500 a year per household. Whew! That's a lot of missed meal creations.

Just think about all the fun experiences you could buy with the money you're going to save on your zero waste journey. Or maybe you can donate some of that money to a worthy charity of your choice.



TIP

One way to start working on this right away is to designate a “food scrap bowl” to keep in your refrigerator. This bowl or container can hold things that you normally might throw away (old bananas, carrot tops, bruised fruit, dried-out tomatoes). After a few days, check out what you have and head to Part 3, where you'll find recipes that are especially versatile for cooking with bits and scraps.



TIP

Consider using a community-supported agriculture (CSA) system to purchase seasonal produce from local farmers. The way this works is locally grown produce is shipped to your door weekly, which can save you money on your food bill and saves gas and transportation. You could even split it with a friend or neighbor.

Another great way to save money is by buying “ugly” or imperfect produce. Your local grocer may have a reduced-price shelf. There are several companies that funnel less-than-perfect produce from processors to sell directly to consumers at discounts, too. Keep in mind that farmers and food manufacturers are also always working toward reducing food waste. For instance, a bruised apple doesn't get bagged, but it goes into the apple juice or applesauce line at the packaging plant. Find more ideas in Chapter 6.

Enjoying better nutrition and health

Using a CSA may also inspire you to enjoy a wider variety of food, but so can simply adopting a zero waste kitchen strategy. Fruits and vegetables are often the items that get forgotten in the refrigerator. Sure, you had big intentions for them when you put them into your grocery cart, but then, oops, a few too many days go by.

When you adopt a better shopping strategy, you'll soon find you're getting more creative and seeking out more recipes to use up the food and produce items you have. In the end, that's a win for nutrition — and the planet!

My nutrition philosophy is to educate about food and nutrition, guide people in how their food choices may impact their personal health and lifestyle, and then allow them to make choices within that framework.



REMEMBER

As you make the most of what you have and you create a plan going forward, your overall diet will likely, coincidentally, improve as well. Consider times when you ordered takeout and would forgo cooking what was in the fridge. A zero waste mindset can give you that little nudge you need to rethink some food waste decisions, saving you money and improving your diet. Maybe you still order takeout, but you make a firm plan to cook up the previously planned meal the next day. Another win!

Sharing the plate

Full disclosure: I'm an omnivore. I enjoy a variety of food, and my diet has the framework of a Mediterranean DASH diet (check out the latest edition of *DASH Diet For Dummies*). This is what works for both my health and my eating preferences.

Instead of pressuring fellow omnivores to avoid meat, I'd rather encourage them to add more vegetables and grains to their dishes, so in this book, I try to offer a variety of recipes that may appeal to many palates. In Part 3, you find many plant-based recipes, such as the Penne Bake with Veggies, Bow Ties with Peas, Lentil-Stuffed Zucchini, and the Mushroom Turkey Burgers. Of course, you may find Roast Pork Loin with Apples and Onions, Grilled Marinated Flank Steak, and Foil-pack Greek Chicken with Olives, Feta, and Peppers to be appealing as well.



TIP

Smaller portions of meat can share the plate with fruits, vegetables, grains, and dairy products. Saturated fat is what is most linked to disease. Saturated fat isn't just found in meat, however; it's also found in coconut and palm oils, ghee, butter, and processed baked goods.

Balanced eating

With the wide range of information (and misinformation) out there about diet and nutrition, we've lost sight of simple, balanced eating. Including a variety of foods in your diet, especially fruits, vegetables, beans, and grains, defines balanced eating.

As the surrounding sections point out, there are many benefits of zero waste cooking. You've got to find that sweet spot, where you're balancing your plate, wasting less food (and perhaps getting more creative), and, of course, enjoying what you eat, too!



REMEMBER

If reducing the environmental impact of food waste and your diet and behaviors is your primary goal, that's great. However, I don't recommend abandoning health guidelines. Including a vegetarian dish once or twice a week isn't about shaming meat; it's about adding more variety and nutrition to your diet.

Pros and cons to plant-based eating

Eating more plants is good for your health. We know that a diet rich in fiber and low in saturated fat supports heart and brain health and may reduce the risk of some cancers. In addition to reducing disease risk, adding these foods may even help you live longer. That's good reason to try adding more vegetables and beans to your diet.



TIP

Beans are truly a superfood and definitely a food-to-include if you want to shift to plant-based eating. They're an affordable source of protein and an excellent source of fiber, and they provide iron, folate, potassium, and magnesium. In fact, the U.S. Dietary Guidelines recommend that you include 3 cups of legumes every week. Check out Chapter 6 for more information about incorporating them into your diet.

FROM ZERO WASTE TO MORE TIME AT THE TABLE

As you think about ways you can reduce food waste and incorporate more grains, beans, nuts, fruits, and vegetables into your diet, consider this: Eating this way may help you live longer.

Author Dan Buettner is a National Geographic Fellow whose work identified five areas in the world where people live the longest, healthiest lives: Okinawa, Japan; Sardinia, Italy; Nicoya, Costa Rica; Ikaria, Greece, and Loma Linda, California. The common ground in each culture is a plant-based diet, connections with family and friends, laughter, and daily physical activity. For example, in Sardinia, they eat a diet focused on whole grains, vegetables, beans, and goat's milk. They include meat as a flavor enhancer and accent to plant-based dishes. They also enjoy a Pecorino cheese made from sheep that supplies high levels of omega-3 fatty acids. They stay close with their family, enjoy shared meals and red wine, laughter with friends, and regular walks.

This sort of lifestyle is worth considering, no matter where you live! Slow down, prepare more meals to share with family and friends, laugh, and take a walk after dinner.

Helping the planet

Reducing your food waste may also help mitigate climate change because food is the single largest category of material placed in municipal landfills. When food rots, it produces methane, a greenhouse gas (GHG) that is related to climate change. Landfills are the third-largest source of human-related methane emissions in the United States.



REMEMBER

When you throw away food, you're also throwing away all the energy and emissions from the production, packaging, and delivery of that food.



WARNING

So what about eating less meat to save the planet, you ask? I recently read a magazine article that claimed that eating one less serving of beef a week for the year could be equivalent to driving 348 fewer miles. Statements like that are questionable. I have no idea how the author came to that conclusion (because no proven algorithms exist for it), but I often see “meat shaming” as a tactic to help save the environment. The article went on to say that ruminant animals are the “worst offenders” when it comes to greenhouse gas emissions and advised that the reader look for third-party certifications such as Animal Welfare Approved. These types of statements are misleading and without context. In addition, while animal welfare is important, it doesn't have a direct impact on greenhouse gas emissions.



REMEMBER

Agricultural systems are quite complex, as is the entire food supply chain. In any large system, there's always a need for ongoing reevaluation and improvement. This book doesn't aim to address all aspects of climate change and greenhouse emissions and the environment. As consumers, we're responsible for the choices in our own households. You do you.

Food waste and animal welfare are separate topics. However, in my experience, when people use terms such as *factory farming* and *animal welfare*, they're often taking a particular vegetarian-leaning stance. Large livestock farms in the United States are generally managed by people whose families have owned the land for many decades — which may not be what comes to mind when you hear the term *factory farm*. They're large, family-owned farms. I maintain that most of the beef, veal, pork, lamb, and poultry that you find at your local food markets were raised and slaughtered as humanely as possible.



REMEMBER

As a registered dietitian, I advise on nutrition and healthy lifestyle habits. Specific choices are yours to make; my goal is to share the science (as the body of evidence in how diet impacts health) and to help you keep all the chatter about food, diet, the planet, and health in perspective.

THE CONSCIENTIOUS OMNIVORE: JARGON OR ADVOCACY?

The term *conscientious omnivore* was likely coined about 15 years ago. Perhaps a former vegetarian, who wanted to feel good about eating meat, thought that making statements about “only eating ethically raised meat” would make them feel good.

After visiting more than a dozen farms, including a large beef operation and a small grass-finished beef farm, the farmers I’ve met take caring for the land and their animals very seriously. My definition of conscientious omnivore is one whose diet focuses on legumes, vegetables, fruits, and grains (that is, plant foods) but can include small amounts of meat and dairy, too.

- From a clinical nutrition standpoint, a diet high in fiber that is balanced for carbohydrate, protein, and fat (mostly healthy monounsaturated fats), and is limited in sugar and sodium, is related to the lowest disease risk. Fresh beef, pork, and poultry are good sources of protein and provide a lot of important nutrients, including B vitamins (thiamin, B6, B12, and niacin) and minerals (phosphorus, iron, zinc, and selenium). Animal foods do contribute cholesterol to the diet, but when you’re eating small portions, it’s not an issue.
- From an ethical standpoint, livestock is raised for food by farmers and ranchers who know what they’re doing and raise and harvest animals in an ethical manner.
- From an environmental standpoint, being a conscientious omnivore can lower your overall food waste, reducing what ends up in landfills.

A vegan, on the other hand, may feel differently, and that’s okay, too. It’s important to keep in mind that there are a few different agendas here: health, the environment, and animal welfare. This book focuses on reducing food waste in your kitchen, not the ethics of eating or not eating meat.

I cover more about agriculture and sustainability in Chapter 2, but to set the record straight: It’s your choice to be either an omnivore or an herbivore. In both cases, you can have a positive impact on your food budget and the environment when you waste less food (and switching to a zero waste kitchen may also improve your health).

Getting Started: How to Waste Less Food Today

You already have this book in hand, so you likely have already given some thought to your food waste habits. Perhaps you know what you waste but aren't sure how to change. Or maybe you know you can do better but aren't sure exactly how much you waste or where to start. No worries. This book meets you wherever you are in your food waste journey. Maybe the topic just sparked your interest, and you want to learn what zero waste cooking is all about. Or maybe you're already on a food waste journey and need more inspiration and tips to keep going. This book is here for you. Peruse from chapter to chapter and feel free to dog-ear it up!



REMEMBER

This book isn't going to guilt-trip you into literally wasting "zero" amounts of food or scraps. You don't have to be a perfectionist. My hope is to send you upon a journey toward zero waste. Like the Tortoise, slow and steady wins the race. Every small amount of food diverted from landfills can help the environment — and certainly your pocketbook.

Wherever you are on this journey, wasting less food starts with better understanding about what you throw away and why. For example, one of the reasons you may discard foods is reliance on best-by dates marked on packages. Those dates do relate to peak quality, but they're not food safety indicators. So, yes, you can still eat many foods past the best-by dates. Find out more about this in Chapter 4.

Walk over to your kitchen trash bin and take a look.

- » Is it filled with vegetable peels and coffee grinds, or whole pieces of rotten fruit or leftover cooked food?
- » Do you fill a kitchen garbage bag more than once a week? Or every day?
- » Do you find that you habitually throw away certain food items due to expiration (produce, bread, dairy)?

Now peek inside your refrigerator.

- » Are you storing food optimally?
- » Are there containers shoved to the back?
- » Is there fruit or spinach rotting in a drawer?

What about your pantry or wherever you keep dry goods?

- » Are there boxes or cans that you've had a long time and haven't used?
- » Are the foods dry, clean, and well-sealed? Are the packages in good physical condition?
- » Do you still stock snacks that are no longer your child's favorites?
- » Do you have enough rice and ramen to feed an army?

Depending on your answers, you may need to focus your efforts in one or more of the following areas:

- » If your kitchen trash can is heavy with rotten bananas, Thursday's uneaten leftovers, or moldy bread, then it's time to coordinate a shopping list and meal plan and utilize your freezer. Head to Chapters 5, 6, and 7.
- » If you found long-forgotten take-out leftovers pushed to the back of your fridge, then it's time to evaluate take-out orders or consider a weekly fridge check. Find related tips in Chapter 21.
- » If your produce drawer contains more slime than fruit, then an evaluation of storage habits is in order. Find storage guidelines in Chapter 5.
- » If your household of two always ends up with a bag of 4 or 5 extra buns, consider individual buns from the bakery instead next time.
- » If you've stockpiled more cereal in your pantry than you can eat in a year, then it could be time to mark that item off your grocery list and walk away from those tempting end cap sales.



REMEMBER

A little planning goes a long way! Smart shopping, storage, and food prep not only reduces your food waste, but it saves you money and helps save our planet. Once you put some of the ideas in this book into practice, come back here and revisit these questions to see you far you've come.