

U2L2A3 | Sustainable food choice

overview

This activity will help you discover what are some of the things to consider when making a sustainable food choice by researching sustainability in regards to planet, profit and people.

learning goal

- To understand what are some of the criteria for a sustainable food choice?

success criteria

- Completion of worksheet.

Inquiry question

- What is a sustainable food choice?
1. In small groups you are to complete the worksheet U2L2A3 “What is a sustainable food choice?” Go through the slideshow and then research as a group the answers. There are some handouts that are mentioned in the Sustainable Food Choice PowerPoint that may be of some use. The internet has a wealth of information as well.
 2. Be sure to complete the reflective question at the bottom of the worksheet U2L2A3 “What is a sustainable food choice?”

People	Profit	Planet



Food Facts

Eat Green: Our everyday food choices affect global warming and the environment

What we eat matters. The food choices we make every day have a big effect on the environment. The good news is



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that even small changes in what we buy and eat can add up to real environmental benefits, including fewer toxic chemicals, reduced global warming emissions, and preservation of our ocean resources. Eating “green” can also mean eating fresher, healthier foods while reducing your grocery bill and supporting our farmers.

It’s easy to overlook the environmental impacts of our food because they are spread across all stages of a long process. From farm to fork, food production, processing, and transportation can accumulate enormous amounts of energy, water, and chemicals. We offer the following suggestions to help you and your family make healthy, smart food choices:

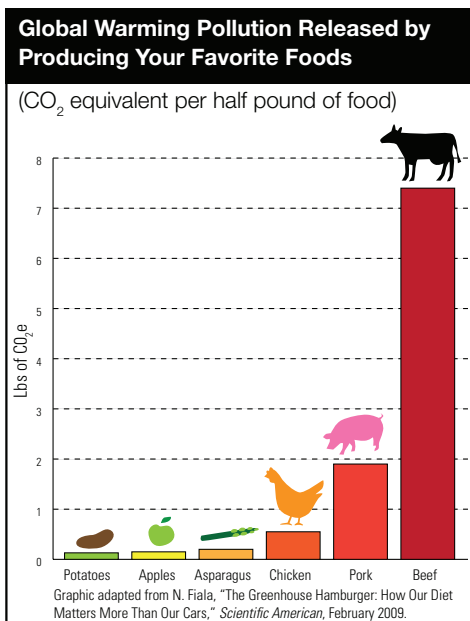
For more information, please contact **Jonathan Kaplan** at (415) 875-6130



www.nrdc.org

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1. Choose Climate-Friendly Food

Food that comes from high on the food chain or arrives to your plate after extensive processing tends to require more energy and release more global warming pollution into the air.

The “carbon footprint” of hamburger, for example, includes all of the fossil fuels that went into producing the fertilizer and pumping the irrigation water to grow the corn that fed the cow, and may also include emissions that result from converting forest land to grazing land. Meat from ruminant animals (cows, goats, and sheep) has a particularly large carbon footprint because of the methane (a potent global warming gas) released from the animals’ digestion and manure. NRDC estimates that if all Americans eliminated just one quarter-pound serving of beef per week, the reduction in global warming gas emissions would be equivalent to taking four to six million cars off the road.

Seafood can also contribute to significant global warming pollution. Open-ocean fishing fleets depend entirely on dirty fossil fuels, emitting an estimated 130 million tons of CO₂ each year.¹ Highly sought-after large fish stocks like bluefin



Eat Green: Our everyday food choices affect global warming and the environment

Learn more! Check out the *OnEarth* magazine online feature story "Graze Anatomy" for a look at the future of the beef industry at <http://www.onearth.org/article/graze-anatomy>

tuna and imported swordfish are more likely to be overfished, resulting in additional sea travel and more global warming pollution. These fish are also high in mercury, which can be harmful to human health.

What you can do:

- Eat lower on the food chain by adding more fruits, vegetables, and grains to your diet and limiting your intake of red meat. This can reduce your risk of coronary disease and colorectal cancer, while reducing your grocery bill.²
- Choose locally caught, sustainably managed fish or herbivorous farmed stocks like tilapia, catfish, and carp.³ Seafood lower on the food chain includes clams, mussels and squid. The Monterey Bay Aquarium website has a great guide to safe seafood, available at www.seafoodwatch.org; Blue Ocean's "Fish Phone" can send instant recommendations to your cell phone (<http://www.blueocean.org/fishphone/index.html>).
- Look for fresh foods with the fewest process steps from farm to plate. Freezing, packaging, processing, cooking, and refrigerating food all increase energy use. One study reports that bringing home a frozen bag of carrots has nearly triple the associated global warming pollution relative to purchasing a fresh bunch.⁴

2. Buy Organic and Other Sustainable Certifications

Eco-labels like USDA Organic and others give us a way to reward environmental performance in the marketplace. Organic agriculture, for example, is a safer choice for the environment and your family because organic growers don't use synthetic pesticides and fertilizers. Pesticide use degrades air and water quality, while threatening the health of workers, farmers, and communities. Organic agriculture is also often better than conventional agriculture in reducing global warming pollution.

What you can do

- Buy organic and other certified foods when you can. Visit the Consumer Reports website at <http://www.greenerchoices.org/eco-labels/> for a review of what labels to look for.

3. Watch Your Waste

The USDA estimates that an astonishing 27 percent of all food (by weight) produced for people in the United States is either thrown away or is used for a lower-value purpose, like animal feed. A recent study estimated that the average household wastes 14 percent of its food purchases—a loss of significant value for most families.⁵ In addition to the water, energy, pesticides, and global warming pollution that went into producing, packaging, and transporting this discarded food, nearly all of this waste ends up in landfills where it releases even more heat-trapping gas in the form of methane as it decomposes.⁶

What you can do:

- Purchase foods that you can consume before they expire to help minimize food waste and shrink your grocery bill.
- Compost your food waste, reducing greenhouse gas emissions and the need for synthetic fertilizer.

4. Eat Locally

A typical American meal contains ingredients from five foreign countries, and even domestically grown produce travels an average of 1,500 miles before it is sold.⁷ Buying locally can help reduce the pollution and energy use associated from transporting, storing and refrigerating this food—that's especially true for food that is imported by airplane, including perishables such as cherries, blueberries, blackberries, raspberries, tomatoes, bell peppers, and asparagus. In California, which imports food distributed throughout the nation, NRDC estimates that the smog-forming emissions from importing fruits and vegetables are equivalent to the annual emissions from 1.5 million cars.

What you can do:

- Choose local food options whenever possible and avoid purchasing food imported by airplane. But keep in mind that the type of food and how it was produced may be of greater environmental significance.

¹ Bijal Trivedi, "What is Your Dinner Doing to the Climate?," *New Scientist*, Sept. 11, 2008, available at: <http://www.newscientist.com>.

² Anthony J. McMichael, et. al., "Food, livestock production, energy, climate change, and health," *Lancet* 1253, 1256 (2007), available at: http://www.eurekalert.org/images/release_graphics/pdf/EH5.pdf

³ See Trivedi, endnote 1

⁴ http://randd.defra.gov.uk/Document.aspx?Document=EVO2007_4601_FRP.pdf

⁵ Jeff Harrison, "Study: Nation Wastes Nearly Half Its Food," *Univ. of Ariz. News*, Nov. 18, 2004, available at: <http://uanews.org/node/10448>.

⁶ Andrew Martin, "One Country's Table Scraps, Another Country's Meal," *The New York Times*, May 18, 2008 (citing a 1997 study by the USDA's Economic Research Service, available at: <http://www.ers.usda.gov/Publications/FoodReview/Jan1997/Jan97a.pdf>).

⁷ NRDC, "Eat Local: Does Your Food Travel More than You Do?," <http://www.nrdc.org/health/foodmiles/>

Forget fad diets: sustainable food is healthier and more eco-friendly

If you want to eat in a healthier and more cost-effective way, then follow a sustainable diet of home-grown vegetables and cut down on the meat

Tess Riley

Thursday 22 January 2015 11.16 GMT

Now that the frantic period of making and breaking New Year's resolutions is over, we can start taking a more honest look at the year ahead.

The problem with all that resolution malarkey is three-fold. One, ambitious goals are all too easy to make before you have to start actually achieving anything; two, who in their right mind wants to train for a marathon in freezing January anyway; three, cake.

With January comes the calls for fad diets - and with them the long list of things you're no longer meant to eat. But this year it's time to do things a little differently - to ditch the drudge and take up some sustainable food resolutions you're likely to keep for life.

Shopping sustainably

There are a wealth of innovative business models out there that help students say sayonara to supermarkets and salut to the sustainable spread.

When it comes to shopping locally, there's a perception that local food equals expensive food, but that's not often the case. The Food Assembly, for example, enables people around the UK to buy directly from producers, with weekly collection points so customers can meet those who've produced their food.

"I was a little unsure at first," says Food Assembly customer Jamie Ellen from Hackney Wick. "The meat does cost a bit more than the stuff I usually buy. However, I'm now a massive convert - I'm not only eating better, tastier meat, I'm eating less of it (which I'm told by my girlfriend is good for my carbon footprint) and eating lots more vegetables. Overall, I'm spending less and enjoying my meals more."

Beyond fresh, tasty, seasonal food, shopping at farmers' markets or from projects like The Food Assembly and Big Barn tends to mean that you radically cut down on packaging, too. With plastics having made a bad name for themselves where human health is concerned, this can only be a good thing.

Cutting the meat

According to Ben Williamson, press officer at People for the Ethical Treatment of Animals (Peta), interest in meat-free living has skyrocketed in recent years, with 12% of UK adults now following a vegetarian or vegan diet - and up to 20% for those aged 16-24.

“Whereas previous generations have been brought up addicted to fatty flesh and artery-clogging dairy products,” says Williamson, “today’s health-conscious youngsters are more aware than ever that a plant-based diet is better for our bodies.”

Health aside, Williamson points out that the meat industry has made a name for itself as an eco-no-no, pointing out that the UN has described it as “one of the most significant contributors to the most serious environmental problems, at every scale from local to global”.

For those who know that, realistically, they aren’t going to give up meat, what about at least cutting down? The Meat Free Monday campaign is a good place to start, or you could follow Manchester-based student Toral Dadral’s top tip and take up the 7pm rule:

“Meat’s always been a big thing in our family, and when I suggested that we try to cut down, my parents weren’t up for it,” says Dadral. “Eventually we agreed to try not eating meat before 7pm each day. Now my parents love it and have even bought a juicer to fuel their new-found addiction to carrot juice.”

Growing gains

If you’ve not tried growing your own produce before, you’re in for a treat. With even a little space, you can turn a small, nondescript space into a flourishing container garden, as this brilliant video from Vertical Veg demonstrates.

For those in colder climes who are keen to get going right away, why not have a go at growing indoors. Start with this article on growing the likes of mung beans and alfalfa sprouts, and this one on how to build your own mini greenhouse at home - extending the growing season in the process.

When growing anything, the most important skill to have is an ability to embrace the wonky. Unusually-shaped veg are one of the brilliant outcomes of non-supermarket food. Indeed, when seeking alternatives to cake, Buzz Lightyear carrots and duck-shaped tomatoes may just do the trick.

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33 Ways to Eat Environmentally Friendly

If you started using reusable bags exclusively starting at age 25, you could save more than 21,000 plastic bags in your lifetime. Point being: sustainable eating doesn't have to be hard, and it also doesn't have to be all-or-nothing. A single change can make a difference

By Laura Newcomer | Greatist.com Aug. 24, 2012 13 Comments

Correction Appended: Aug. 27, 2012

The sustainable food movement is sweeping the country. Farmer's markets, organic produce, genetically modified foods, cage-free eggs — they've all become part of the cultural lingo. While a lot of this conversation focuses around whether organic foods are better for people's health, let's not forget that these trends are also good for the planet. Read on to learn about the 33 environmentally friendly eating habits that are making a difference for our bodies and our earth.

At the store:

1. Reuse it. Bring a reusable bag on your next shopping trip, and you've already helped out the planet. The U.S. alone uses about 100 billion new plastic bags each year, and (brace yourself) this

massive production costs 12 million barrels of oil. Worldwide, only about 1% of plastic bags are recycled — which means that the rest end up in landfills, oceans or elsewhere in the environment. Why does it matter? Plastic bags don't biodegrade, but light exposure can degrade them enough to release toxic polymer particles — most of which end up in the ocean. Approximately 1 million birds and 100,000 turtles and other sea animals die of starvation each year after ingesting discarded plastics and other trash debris, which block their digestive tracts. And public agencies spend millions of dollars on litter clean-up each year. (In case you're wondering, paper bags aren't much better. Each year, 14 million trees are cut down to make paper shopping bags via a process that requires even more energy than the making of plastic bags.)

2. Strip down. Look for products with minimal packaging, like unwrapped

produce or meat straight from the deli counter or butcher. Excess packaging is often made out of unsustainable materials and contributes to waste that ends up in landfills. Perhaps the worst culprit is polystyrene (a.k.a. Styrofoam),

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which is a suspected carcinogen and is manufactured through an energy-intensive process that creates hazardous waste and greenhouse gases.

3. Don't buy the bottle. Millions of tons of plastic are used to produce billions of plastic water bottles each year. Save money and lessen waste by drinking tap water from a reusable water bottle. Worried about your health? Try a water filter, or take courage from the fact that a lot of bottled water is likely no better than what's on tap.

4. Shop different. Choose to give your money to stores that demonstrate care for the planet, both in their company practices and in the food selections they provide. Look for a selection of local and organic foods as well as store practices that limit waste (think doors on the refrigerated sections so that energy isn't wasted, minimal and/or recyclable packaging and a store-wide recycling program).



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Produce:

more nutrients — than food shipped across the globe.

6. **Eat more of it.** Eat more produce than any other food category, and you've already made an impact for the planet (not to mention [your body!](#)).

 7. **Go organic.** The definition of organic can be a little confusing, but [food labels](#) can help. Certified organic foods are [grown and processed](#) using farming methods that recycle resources and promote [biodiversity](#), without the use of synthetic pesticides, bioengineered genes or petroleum- or sewage-sludge-based fertilizers. (Weird. Who wouldn't want their food grown in sewage sludge?) Though their benefits to the environment have a long-term payoff, organic foods can be pricier — if you're on a budget, find out which foods are most worth [buying organic](#), and limit your organic purchases to the ones that make the biggest impact.

 8. **Eat it raw.** Chomp down on a raw carrot instead of boiling or sautéing it, and save energy that would otherwise have been used to power cooking appliances.

 9. **Eat in season.** Seasonal nomming allows you to eat locally — and we've already covered how important local purchasing is for the environment. [Check out what's growing nearby right now.](#)

 10. **Preserve it.** Want to eat more locally, but love to eat strawberries year-round? Learn how to [preserve](#) fruits and vegetables so you can eat locally grown produce all year long (it's bound to impress Grandma, too).

 11. **Grow it.** You don't need to live in the wild to grow your own fruits and veggies. Join a community garden, or, if you're cramped for space, create a [vertical garden](#) right inside your window.

 12. **Get some community support.** Not into the idea of growing your own? Consider joining a [CSA](#) (short for community supported agriculture), which allows you to reap the benefits of locally grown produce without getting your hands dirty.
- ### Meat:
13. **Eat less of it.** Industrially farmed meat has the [greatest impact of any food product](#) on the environment. In addition to the tips outlined below, consider making meat less of a staple in your diet. Can't give up the stuff? Try going meat-free for just one day per week (or one meal per week if you're really attached).

 14. **You guessed it: buy local.** We've said it before and we're saying it again: buying local is a great way to cut down on the environmental impact of your food. Just imagine how much energy it would take to haul a side of beef from, say, New Zealand, in comparison to transporting it from the local butchershop.

 15. **Go organic.** When it comes to meat, the definition of "organic" changes a little. Obviously, chickens aren't grown in the soil, nor are they (we hope!) conventionally grown with pesticides. Rather, [organic livestock must have access to the outdoors and cannot be supplemented with antibiotics or growth hormones.](#)

 16. **Be anti-antibiotics.** It's common practice these days to feed growth-producing antibiotics to animals raised for meat, but this results in [health risks](#) for the animals — and, by extension, the [people who eat them.](#)



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1. Go out to pasture. Pasture-raised livestock make less of a [negative environmental impact](#). They're also treated more humanely than their industrially raised counterparts.

Seafood:

18. Look for the label. Figuring out how to buy sustainable seafood is tough: turns out "wild caught" [doesn't necessarily](#) mean it's environmentally friendly, after all, while [some farmed fish are](#). The easiest way to sort through all the confusion is to look for the label of the [Marine Stewardship Council](#), which guarantees that a product has successfully met requirements for sustainability.

19. Know your fish. Check out [these guides](#) to figure out which fish are least endangered and most likely to be farmed sustainably, and use them to guide your buying decisions.

20. Be a patriot. Buy U.S. caught or farmed fish. It's as close as you can get to buying "local" when you live in a land-locked state, and it also means that the product has had the chance to be reviewed by the Marine Stewardship Council, so you have a better sense of the conditions under which the fish were caught.

21. Try something new. Instead of eating the ever-popular Alaskan salmon along with everybody else at the restaurant, expand your diet and distribute your impact by trying different varieties of fish. Check out these

Dairy:

1. Be hormone-free. (Wouldn't *that* have made adolescence easier...) Just as livestock raised for consumption are often pumped full of antibiotics, [dairy cows are often fed artificial hormones](#) to up their milk production. This has big [health impacts](#) for the cows, the people who consume their milk and other dairy products, and the environment ([manure lagoons](#) sure don't sound like a good thing to us). Industrial dairy production is also linked to [massive greenhouse gas emissions](#). Luckily, hormone-free dairy products are readily available.

2. Surprise! Go local. As always when buying local, you'll be reducing the distance that food must travel — and the energy it takes to do so — on its way to your plate.

3. Go organic. It's [better](#) for the [environment](#) and for [your body](#).

4. Cut back. The production of one pound of cheese might produce [upwards of 11 lbs.](#) of [carbon dioxide](#), the primary greenhouse gas emitted by human activities and a big driver of climate change. As with meat, you can quickly lessen your environmental impact simply by [eating less dairy](#). Bonus: eliminating common staples from your diet one or two days a week is a chance to experiment with fun new [recipes](#).

At a restaurant:

2. Order from the tap. Cut down on packaging; ask for tap water instead of bottled. Likewise, save the beer bottle and order on tap.

3. Eat local. Just because you're not at the farmer's market doesn't mean the market's bounty isn't available to you. More and [more restaurants](#) are incorporating locally sourced items into their menus.

4. Don't be afraid to ask. There's no shame in asking your server or a manager how your food was grown or processed (though it's probably best not to take it to this [extreme](#)).



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Eating at home:

21. **Reduce waste.** Use cloth napkins and real plates, bowls and utensils.

1. **Turn waste into a resource.** If you've got the inclination and a little bit of free time, give composting a try and turn food scraps into a [resource that keeps on giving](#).

2. **Revamp leftovers.** Instead of dumping leftovers in the trash, turn them into [new meals](#). It'll reduce waste and also save on the energy it would have taken to cook a different meal the next day.

3. **Double your recipes.** Leftovers will last twice as long, and you'll use less energy than you would if you cooked multiple meals.

4. **Cook one local meal per week.** Challenge yourself to cook one meal a week (or month) that is composed completely of local ingredients. Get some friends in on the action and revel in doing something [good for your health](#) and the health of the planet.

Do you practice any of these habits on a regular basis? Have we missed any? Share your strategies for eating well for the planet in comments!

Correction: *The original version of this story stated that approximately 1 million birds and 100,000 turtles and other sea animals die of starvation each year after ingesting plastic bags, which block their digestive tracts.*

However, any product that is littered — not just plastic bags — can pose a threat to wildlife. The story has been updated to reflect that fact.



Why Food Sustainability Matters and 10 Things You Can Do About It



Most of the food found in the grocery store is the product of an unsustainable food system.

This food is dependent on foreign oil, is destroying soil, contaminates water, has caused disease outbreaks, and may be robbing our grandchildren of the ability to grow food at all.

It is often said that consumers hold a lot of power, but I believe that to stop being a consumer is even more powerful. Choosing not to support the industrial food system is the beginning of sustainable eating.

So what is sustainable eating and how do you do it?

Why Food Sustainability Matters and What You Can Do

The more I learn about our food system and how it came to be, the more concerned I am for our children and grandchildren.

GROWING CONCERNS:

- Animal products are increasingly raised purely for profit, without regard



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to proper stewardship or health.

- We are **monocropping**, and the government is subsidizing it.
- Food is transported and processed using large amounts of non-renewable resources.
- Food is being genetically modified, cloned, and patented.

The problem is that we are separated from the origins of our food.

So while we may realize that buying organic is important, organic is now just as industrialized as conventional foods.

You may wonder what little old you can do about all of this.

More than you think.



Photo by [galant](#)

VOTE WITH YOUR FOOD DOLLARS

What if every time you made a food purchase you could make a difference? Every dollar spent at a farmer's market is one less dollar supporting the industrialized food system. Every piece of food grown in your own backyard becomes a symbol of freedom.

The moms who feed their families have more power than they know.

What Sustainable Eating Looks Like

We have all been told to "read labels" when we're choosing our foods. That's not bad advice, but **most sustainable foods do not have labels.**

SUSTAINABLE FOODS DON'T NEED LABELS BECAUSE THEY...

- are real foods that our bodies were designed to eat.
- are healthy for us, the soil, and the animals.
- do not harm the environment.
- are humane for both the workers and the animals.



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- provide a fair wage to the farmer without the use of government subsidies.
- support the local economy instead of large corporations.

Sustainable food is what people ate for thousands of years, up until 20th century.



Photo by [oakley originals](#)

10 Tips For Sustainable Eating

My journey to sustainable eating hasn't been easy, and it certainly isn't over. Here are ten steps that we have taken to become mindful eaters.

1. LEARN TO COOK.

Without basic cooking knowledge, none of this is possible. Learning to cook your favorite foods using local ingredients can really make all the difference.

2. EAT LOCALLY.

If you care about delicious food, health eating, proper stewardship of the planet, and supporting your local economy then you must [source out local ingredients](#).

3. EAT SEASONALLY.

This goes hand-in-hand with eating locally. Eat root vegetables and hearty greens in the fall and winter. Eat salads, fruit, and tomatoes in the summer. Even milk and eggs are more abundant during certain times of the year.

4. PRESERVE THE HARVEST.

If you eat locally or seasonally then you'll have to learn to preserve the harvest. Try canning, dehydrating, freezing, and lacto-fermentation. Look to Simple Bites for a helpful how-to series later in the season.



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Photo by [Isimonsa](#)

5. GROW SOMETHING... ANYTHING.

Start with herbs or lettuce. Radishes are really fast and fairly simple. Even if you rent you can [create a container garden](#). Once you catch the gardening bug you will just want to grow more. Simple Organic had [a great article for beginning gardeners](#).

6. GIVE UP STORE BOUGHT CONVENIENCE FOODS AND MAKE YOUR OWN.

You can make your own [taco seasoning](#), [yogurt](#), [chicken stock](#), [pesto](#), [granola](#), [tomato sauce](#)... the list goes on and on. If you buy it from the store, do a quick recipe search and try making it at home.

7. BUY FAIR-TRADE.

When you don't know your farmer because you're buying from a foreign country look for the words "Fair-Trade". [TransFair-USA](#) ensures that farmers are treated justly and paid fairly for their work.

8. KNOW THE COST OF CHEAP FOOD.

Do you ever wonder why some supermarket food is *just so cheap*? You may not pay for it at the cash register, but the cost to your health, the soil, and the environment are there. I rambled about the cost of a nourishing diet not [once](#), but [twice](#). It really is important.

9. EAT ANIMAL PRODUCTS.

I know this may be controversial, but locally grown animal products can be more sustainable than those grains and beans from the bulk bins. I have seen the "organic" bins be filled with bags from China. I know that not everyone feels the same way, but it is my personal belief that locally, biodynamically raised animal products are a better choice than monocropped grains and beans.



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10. BE WILLING TO GIVE UP CONVENIENCE.

This may be the hardest part of changing the way you eat. On the other hand, it forces you to simplify your food in a way that promotes health and flavor. The simple truth is sustainable food does not outsource its preparation.

Eating mindfully may take a bit more effort, but the rewards – for your family and their future – are too big to pass up.

What do you think defines sustainable eating?



About Shannon

Real food, sustainability, and homesteading are inextricably intertwined on the off-grid homestead Shannon, her husband and three children inhabit. She shares the insanely beautiful and shatteringly hard of it all on her blog [Nourishing Days](#). She also works as a content writer and blog editor for [Cultures for Health](#).

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OrganiCouncilOntario and Maureen Kirkpatrick. 2011. Sharing the Harves—A Retailer describes why she loves organic by the Organic Council Ontario video:

www.youtube.com/watch?v=L_F18AZIcWA