
#EATFORCLIMATE
PURCHASING GUIDE
KISS the GROUND

#EAT4CLIMATE
PURCHASING GUIDE

THIS GUIDE OUTLINES:

How you can eat well, build soil, and regenerate the planet by making conscious purchasing decisions.

AN INTRODUCTION TO WHAT'S POSSIBLE:

Regenerative agricultural systems produce healthier and tastier food, support clean air and water, and contribute to a future we can proudly pass on to our grandchildren. The following guide will illuminate the ways you can help build, support, and contribute to these systems right now.

REGENERATIVE AGRICULTURE

describes farming and grazing practices that, among other benefits, reverse climate change by rebuilding soil organic matter and restoring degraded soil biodiversity—resulting in both carbon drawdown and improving the water cycle.
(thecarbonunderground.org)

the SOIL STORY

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THERE ARE 2 WAYS TO THINK ABOUT EATING FOR THE CLIMATE:

1 *MITIGATION—REDUCING CARBON LOSS/GHG RELEASE*

- Was your food farmed in a way that **released carbon** from the soil?
- How much **nitrogen from applied synthetic fertilizer** was lost to the atmosphere?
- Was your food grown on **land converted from forest** to agriculture?
- How much **energy went into the processes** of growing your food (i.e. pumping water for irrigation, producing fertilizers, running tractors)?
- How much energy went into the **packaging and production** of your food?
- How many **miles did your food travel?**

The agricultural system is responsible for around one third of greenhouse gas emissions. Many of our current industrialized farming practices damage soil ecosystems, reduce biodiversity, and release greenhouse gases into the atmosphere. **We can change this** by introducing new practices to restore and protect soils. By taking care of the land and creating localized food systems, we can cut down on our nonrenewable energy needs, reduce the release of greenhouse gases, regenerate the Earth's arable land, and even sequester carbon in the soil to reverse global warming.

2 *SEQUESTRATION —INCREASING CARBON DRAWDOWN*

- Did the farm that grew your food **build soil carbon?**
- Did the farm **increase biodiversity, water holding capacity, and nutrient cycling** in the soil?

Food can be grown in ways that build healthy soil! Remember photosynthesis? Plants use the energy from the sun to convert carbon dioxide (CO_2) and water into oxygen and carbohydrates (sugars). Plants then release some of these sugars into the soil to feed microorganisms. In turn, the microorganisms make otherwise inaccessible nutrients available for plants! More carbon in the soil = less carbon in the air!

FARMER GABE BROWN'S FIVE FUNDAMENTALS OF SOIL HEALTH

While every farm is different, there are several basic principles that farmers use to build healthy soil. As you get to know your local farmers, be sure to ask them about the practices they use!

And remember, healthy soil supports vibrant, nutrient-dense plants that draw carbon out of the atmosphere and into the soil via photosynthesis. Purchasing from farmers that are building healthy soil is good for both you and the climate.

1 LESS DISTURBANCE

Avoid plowing the soil, and abstain from harmful chemical amendments. These practices are like demolishing a house, making it difficult for the complex soil ecosystem to thrive.

2 SOIL ARMOR

Covered soil (living plants or trampled/dead plant material covering the soil surface) reduces soil erosion from wind and rain and helps keep soil temperatures down.

3 INCREASED BIODIVERSITY

Growing a diversity of plants ensures nutrient-dense soil, increases soil carbon, and reduces the risk of pests and diseases.

4 LIVING ROOTS

Keeping living roots in the ground year-round (or as long as possible) provides a steady source of food for organisms in the soil. In turn, the soil microorganisms help prevent soil erosion, increase water infiltration rates, and provide the plants with key nutrients.

5 ANIMAL INTEGRATION

Remember Old MacDonald? He had all kinds of animals on his farm, but most farms today have none! Including animals in the farming system closes the nutrient loop and reduces the need for imported fertilizers. Of course, the correct farm animals to use will depend on the ecosystem.

Take an hour to go deep on this topic with Gabe Brown, Keys to Building Healthy Soil

? ALSO ASK YOUR FARMERS ABOUT:

No waste/On-Site Fertility:
When you manage the farm as an ecosystem, all of the nutrients are recycled, and the concept of "waste" is eliminated. Composts and animals fertilize the land, so the farmer is freed from using synthetic fertilizers and chemicals.

KISS the GROUND

8 STEPS TO #EAT4THECLIMATE

1 KNOW YOUR FOOD SOURCE

2 GROW YOUR OWN

3 COMPOST

4 EAT LESS MEAT, EAT BETTER MEAT

5 EAT BETTER DAIRY

6 PROTECT OCEAN & RIVER ECOSYSTEMS

7 KNOW YOUR ANNUALS & PERENNIALS

8 GO BEYOND FOOD

KNOW YOUR FOOD SOURCE

In order to create **food systems** that are **healthy for both people and the planet**, we must invest in local food economies.

When you purchase from local sources, you can ask questions about how your food was grown, or even visit the farm to see for yourself. Shop at a farmers market or buy through a CSA (Community Supported Agriculture) whenever you can. Be aware though that some CSAs and even farmers markets contain produce that isn't local, so do some investigating before you make your purchases.

Find a local farmer's market or CSA: ***localharvest.org/farmers-markets***

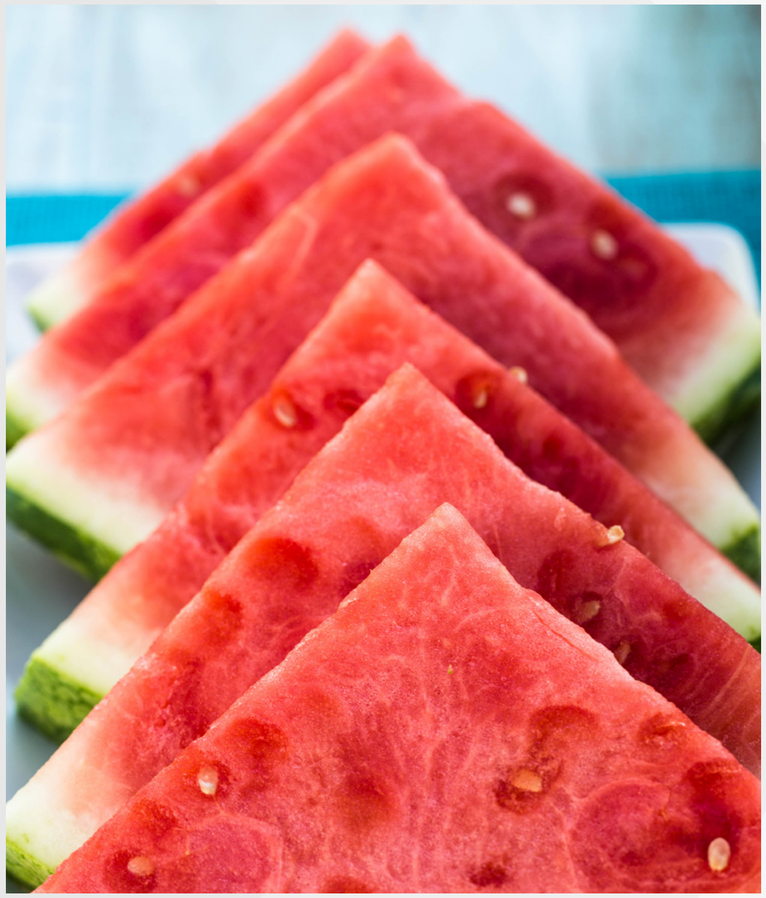
Ask your farmer:

- ✓ How do you keep your soil fertile? Do you add compost? Do you practice no-till agriculture? Do you use cover crops?
- ✓ Do you use synthetic fertilizer, fungicide, or herbicide? Some farms may require the use of synthetic inputs as they build up the soil's fertility, but ultimately these chemicals can destroy soil life and make their way into both the foods you eat and the water you drink.
- ✓ Do you rotate crops? Different crops have different nutrient requirements. By rotating them to different places on the farm, you can ensure that fields don't become deficient in one nutrient or another.
- ✓ Who works on your farm? Some farms view their workers as part of a vital team, and some exploit farm workers as cheap labor.

Beware! "Local" doesn't always mean "good". Local simply means the food was produced near to where you live, making it easier to use your own judgment and investigative skills to know if it was grown in a healthy way. Try to eat a regionally and seasonally appropriate diet that incorporates a variety of foods from farms around you employing good soil practices.

What should you do when you can’t find something grown locally from farmers building healthy soil?

Purchase from companies that practice transparent sourcing and are investing in soil health within their supply chains. There are many companies who care. Get to know the brands you purchase from, check out their ethos, and ask them direct questions about soil health. Utilize third-party certification labels (USDA Organic, Demeter Biodynamic, Fair Trade, etc.) to identify food that’s produced more responsibly.



EAT WHAT'S IN SEASON

When you eat what is grown locally and in season, you are eating more nutrient dense foods, decreasing the demand for food from other bioregions, reducing food transportation miles, contributing to the local economy, and shrinking your carbon footprint.

Plus, you can discover new, locally grown fruits and vegetables. Have you heard of Southern California zapotes or Costa Rican breadfruit? See what's unique to your area!

Are there certain foods you want to eat year-round? When your favorite produce is in season, don't forget that you can preserve or can it! Have fun with friends and family making marinara sauce, pickled veggies, fermented sauces, and canned preserves.

EAT FOODS THAT ARE WHOLE

The more we process foods, the less healthy they are for our bodies and for the planet. More processing means more factory production, more chemicals, more sugar, more preservatives, and more shipping.

- ✓ **Eat** as many whole foods as possible.
- ✓ **Read** the ingredients list. Look for products that use whole foods and just a few ingredients. Avoid ingredient lists that include chemicals or items you can't pronounce or don't recognize.
- ✓ **Remember** that processed foods are designed to be addictive. Stick to whole foods, and your taste buds will quickly adapt and begin to appreciate the amazing taste of fresh fruits and vegetables. Fruits and vegetables that taste the best are often the most nutrient-dense.

Watch this video by Dan Kittredge on taste and nutrition: ***video***

GROW YOUR OWN

Whether you have a potted plant or a full front yard, everyone can grow something. Plus, growing your own food provides you better access to nutritious foods. Fruits and vegetables lose much of their nutritional value in the first day after they're picked. Having your own garden allows you to eat fresh food straight off the vine.

TIPS FOR A SUCCESSFUL GARDEN.

- Test for heavy metals that may be present in your urban soil to protect your health, but don't worry about the other nutrient levels present in the soil test. The nutrient levels in your soil will improve and balance out over time as you add compost and continue to grow a diverse array of plants.
  - » *Heavy metal test (Total Sorbid Metals Test), $55*
- Use Youtube! There are so many gardeners and farmers with helpful instructional videos online. Look for the ones who are growing food without chemicals.
- Ask a gardener in your neighborhood for tips or connect to your local master gardener network.
- Use compost! Make your own or buy organic compost.

COMPOST

REDUCE FOOD WASTE

Reduce food waste by only buying what you need, and take responsibility for your food scraps by returning these nutrient-dense items to the earth. Composting fertilizes future plants, clears space in landfills, and dramatically reduces your personal greenhouse gas emissions.

Globally, over 1.3 billion tons of food worth nearly $1 trillion in retail value is thrown away. Over 51% of the trash going to landfills is compostable, including food scraps, paper, yard trimmings, and wood.

The environmental costs of food waste are a staggering 3.3 billion metric tons of carbon dioxide released each year through the production, harvesting transporting and packaging of (ultimately) wasted food. Once the food reaches landfills, the scraps begin to decompose, releasing methane gas into the atmosphere. This is a huge problem, because methane gas has a warming potential 21 times that of carbon dioxide - meaning it has an even larger impact on the global climate than CO_2.

Remember! Food waste is food for your “future” food.

Compost food, paper, yard trimmings, wood, and other materials to both reduce your carbon footprint and regenerate healthy soil. Layer “browns” (dead leaves, twigs, paper) with “greens” (grass clippings, food scraps, coffee grounds) in a compost pile or bin to close the nutrient cycle and put these materials to good use in the form of rich gardening soil.

The Compost Story Video
The Compost Hack with Amy Smart

HOW TO COMPOST AT HOME

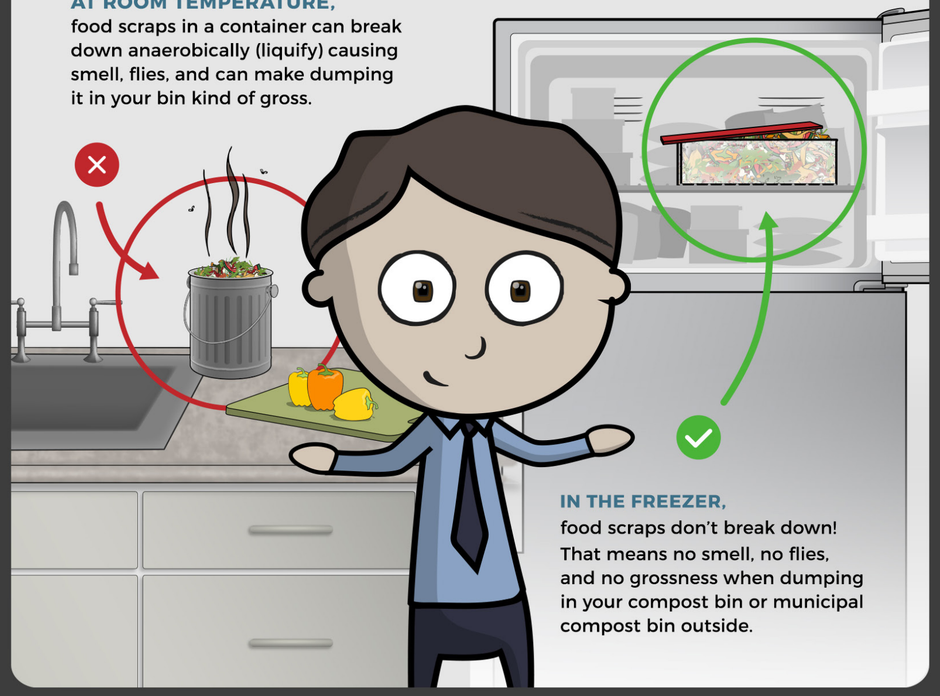
Don't have space to compost at home? *Use your municipal compost bin or a worm composter for inside!*

No municipal compost bin? *Ask your local representative! Most green bins take all food scraps except meat, dairy, and bones and remember never put toxic or non-compostable items in.*

THE GAME CHANGER

For composting at home or municipal compost bins.
Put it in your freezer!

AT ROOM TEMPERATURE,
food scraps in a container can break down anaerobically (liquify) causing smell, flies, and can make dumping it in your bin kind of gross.



IN THE FREEZER,
food scraps don't break down! That means no smell, no flies, and no grossness when dumping in your compost bin or municipal compost bin outside.

A SIMPLE 50/50 MIX OF GREENS & BROWNS

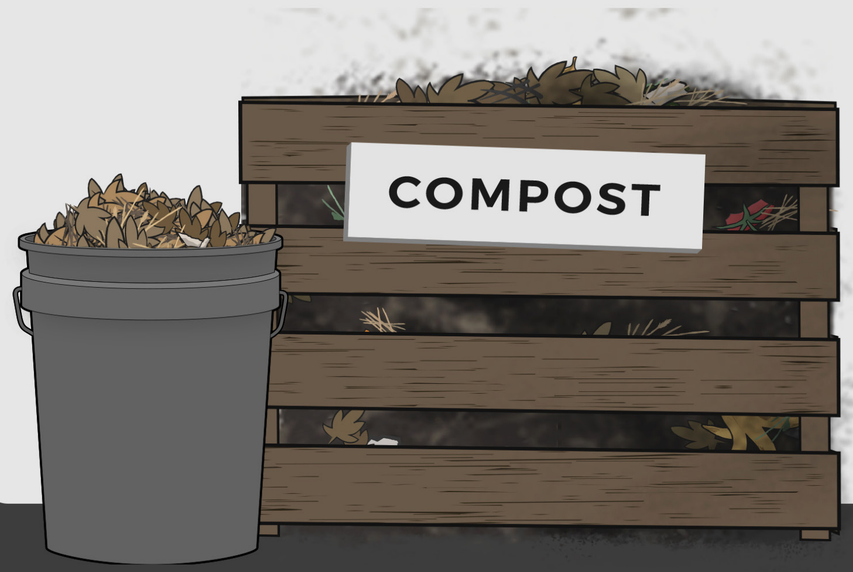
Remember to balance in ***volume*** not weight.

KEEP YOUR COMPOST PILE MOIST AND TURN IT OCCASIONALLY TO ALLOW AIR FLOW

If there are unpleasant odors, add browns, mix, and make sure food scraps remain covered with browns.

KEEP IT COVERED

Prevent pests and smells by always
covering your food scraps with browns.



VIEW THE FULL INFOGRAPHIC

CHOOSE MEAT THAT IS REGENERATING LAND

Animals are an essential part of the nutrient cycle, and managing them properly within our agricultural systems is critical for restoring soils and balancing the climate.

CHANGING THE SYSTEM

Most of the animals in our modern food system have been removed from farmland altogether and housed in Confined Animal Feeding Operations (CAFOs). The raising and slaughtering of livestock in this conventional or industrial model breaks the nutrient cycle, creates pollution, and contributes to global warming.

However, a small percentage of farmers and ranchers have figured out how to raise animals in a different way, and rapidly restore landscapes by using livestock to mimic the impact that large herds of herbivores once had on the land. Cows, sheep, and other animals are moved around various pastures on timed intervals to keep the land healthy and resilient, and they can even be allowed to graze amongst trees (a technique called silvopasture) to further promote carbon sequestration and ecosystem biodiversity. Support farmers and ranchers working with animals to regenerate land with your food dollars, and help spread their practices far and wide.

THE PROBLEMS WITH INDUSTRIALIZED MEAT PRODUCTION:

- Land is being deforested to support herds of grazing animals, disrupting the natural ecosystem.
- CAFO animals are often stressed and very unhealthy. 99% of all “animal units” in the

CONTINUED...

CHOOSE MEAT THAT IS REGENERATING LAND

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United States are fed antibiotics and growth hormone to keep them alive.

- CAFOs concentrate animal excrement in large pools that release large amounts of ammonia (a public health concern) and methane (a greenhouse gas) into the air.
- Massive industrialized corn and soybean fields are needed to produce the food to feed CAFO animals, degrading the land and releasing carbon from the soil.
- Mass-scale slaughter is often inhumane and unsanitary.
- The transportation and slaughter of animals, as well as the packaging and delivery of meat have high fossil fuel costs.

THE BENEFITS OF REGENERATIVE MEAT PRODUCTION

- Animals are moved across the land on carefully timed intervals, helping to restore native grasslands.
- Animals are moved quickly across the land in tight bunches, spurring new plant growth and fertilizing the soil.
- As animals stimulate and fertilize the land, biodiversity increases, soil health improves, and carbon is sequestered.
- Animals are stronger and healthier, eating and moving according to natural rhythms and eating the types of food they were designed to eat.

WHEN AND WHERE TO EAT MEAT

Buy and eat meat from ranchers and farmers that are utilizing regenerative models of meat production. Support businesses that are restoring soils and native grasslands, taking good care of their animals, and sequestering carbon through healthy soil practices and holistic management. If you use the same meat budget that you currently have, but align your purchase with animal and planetary welfare principles, you will find that you naturally consume a little less of it. Consider approaching your meat and dairy as a side dish, rather than a main entrée!

CHOOSE MEAT THAT IS REGENERATING LAND

COWS, BISON, SHEEP

Ultimately, cows, bison, and sheep should be allowed to live in the way that their ancestral herds did: moving quickly around grasslands or through trees in tight bunches, eating deeply rooted perennial grasses, legumes, and weeds (plants that readily sequester carbon), and spending no more than a day in any one spot due to predator pressure.

Farmers regenerating land move livestock from pasture to pasture at the right time—allowing the animals to fertilize the land, gently disturb and aerate the soil, and trigger vegetation to re-enter its growth phase. The livestock must be moved onto new pasture before they trample the land or begin to eat too close to the ground (impeding plant growth). When done correctly, planned grazing can actually increase biodiversity and improve levels of soil organic matter.

TIPS FOR PURCHASING:

- ✓ Purchase 100% grass fed, grass finished meat. Be careful—a lot of meat will say "grass fed", but the animal was actually only fed grass at one point in its life (rather than for its whole life).
- ✓ **Cut out meat from CAFOs** from your diet entirely.
- ✓ **Find your local Savory Hub** on ***savory.global/network*** and check out their Land to Market Program.
- ✓ **Look for important food labels:**
  - "Grassfed" by the American Grassfed Association
  - Global Animal Partnership (GAP) Steps 4 and 5
- ✓ **Ask your farmer if they have a grazing plan,** and if they are working with their animals to maximize plant recovery and growth

Learn more about ***Planned Grazing***

How Does PLANNED GRAZING *Impact Our Earth?*

ABOUT

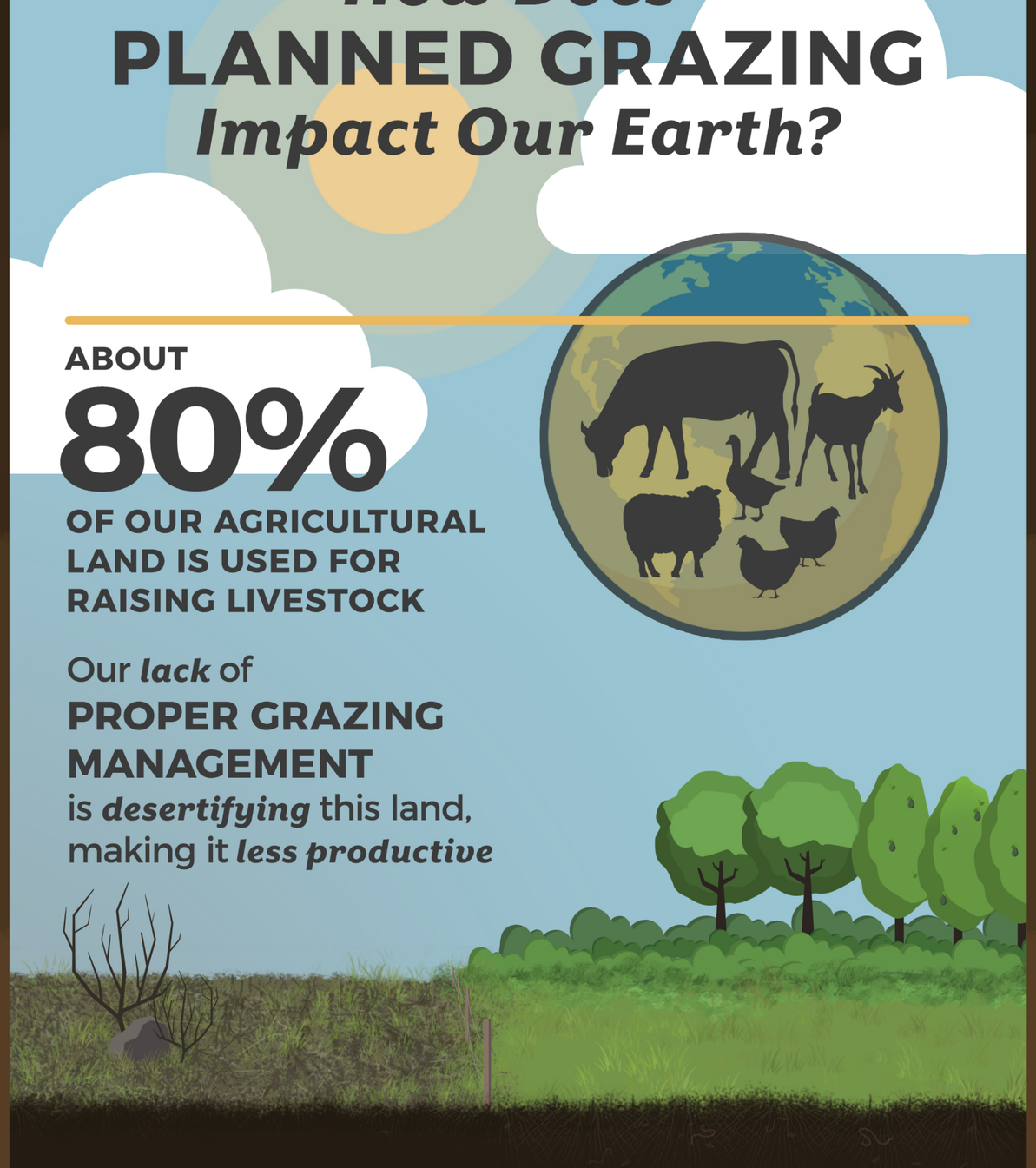
80%

OF OUR AGRICULTURAL LAND IS USED FOR RAISING LIVESTOCK

Our ***lack*** of

PROPER GRAZING MANAGEMENT

is ***desertifying*** this land, making it ***less productive***



The solution:

PLANNED GRAZING

A method of grazing management that focuses on the ***timing & duration*** of animal grazing that can rehabilitate landscapes on a large scale.

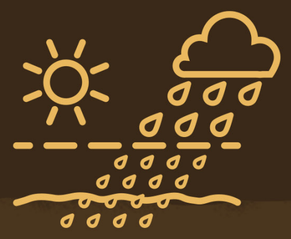
Key features of Planned Grazing

PLANNING

The piece that makes it all work. You need to plan how to move the animals across the landscape – ***moving them at the right time, and for the right reason.***

INCREASE FORAGE & GROUND COVERAGE

When the ground is ***fully covered,*** it ***acts as a buffer*** from rain and sun – ***reducing erosion, runoff and evaporation.***



DISTURBANCE

The soil crust needs to be disturbed by hooves – this ***helps seeds get buried, creates indentations for water*** to collect, and ***breaks down*** dead vegetation.

STOCK DENSITY

Animals are confined to a ***smaller area*** and ***moved more frequently.*** This ensures they eat a ***wider variety*** of plants, and more land gets disturbed and ***fertilized*** by their excrements.

REST

Plan a time the grazing animals are ***not on the landscape*** – this gives the land a ***chance to recover*** and ***avoid desertification.***

CHOOSE MEAT THAT IS REGENERATING LAND

CHICKENS & TURKEYS

Most industrial farms cram their birds into crowded, dark spaces and feed them industrial soy to provide them with large amounts of cheap protein. Unfortunately, industrially produced soy is destructive to the soil because it requires heavy tilling and pesticide use.

The natural diet for chickens includes nuts, seeds, insects, and small sprouts. In a regenerative system, birds instead eat the protein they find naturally on the farm, including insects, worms, seeds, and even nuts and mulberries that fall from trees. They're allowed to behave and feed naturally, eating insects, worms, seeds, and even nuts that fall from trees. Plus, they help to fertilize the soil, aerate the land, and even eliminate some common pests.

Check out *mainstreetproject.org* and their *video*

GOATS

Goats are great at eating everything. They're adept at clearing overgrown land to get it ready for planting and clearing brush for fires. Goats are even great in a city context.

Check out the *Goats in the City video*

CHOOSE MEAT THAT IS REGENERATING LAND

SILVOPASTURE: COMBINING FORESTRY & GRAZING

In the United States, we've mostly separated our animals from farms that grow both perennial and annual crops. However, there are still many farmers worldwide (and increasingly in the U.S.) who are farming in a more integrated way, mimicking a natural forest and allowing farm animals to move freely through the trees.

Pigs in particular are great at eating fruits and nuts that fall to the forest floor, and help till and aerate the soil with their feet. They can be moved around a forested area to help fertilize the soil. Cows, sheep, chickens, and turkeys can also be raised in forested areas.

Watch *Mark Shepard video*

CHOOSE MEAT THAT IS REGENERATING LAND

When we raise animals in a way that mimics nature, there are more opportunities for carbon to be drawn out of the atmosphere through photosynthesis, and for healthy soil to store it.

Bison have evolved with the prairies in North America for thousands of years, and can be used to restore grassland ecosystems if properly managed. Support grass-fed and grass-finished buffalo products from sources you know and trust.

MEAT CERTIFICATIONS:

When purchasing meat, it's important to understand which certifications are supportive of health and the environment, and which are misleading.

LOOK FOR THESE CERTIFICATIONS:

- ✓ Global Animal Partnership Certified (Steps 4 and 5)
- ✓ Raised without Antibiotics
- ✓ Pasture Raised
- ✓ American Grassfed Association (AGA Certified)
- ✓ Animal Welfare Approved

DISREGARD THESE MISLEADING LABELS:

- × Natural
- × No added hormones
- × Cage Free
- × Free Range
- × USDA Grassfed

CHOOSE DAIRY THAT IS REGENERATING LAND

Make the choice to purchase dairy from animals that are raised on land (not in confinement as most dairy animals are), grass-fed and grass-finished, and raised by farmers who consciously rotate their animals to produce the healthiest pastures they can.

Be aware that for animals to produce milk, they must have recently given birth. Take the time to learn about how the animals are being treated before you purchase dairy products.

Watch how one dairy is following regenerative principles: ***video***

PROTECT OCEAN & RIVER ECOSYSTEMS

According to the *Food and Agriculture Organization (FAO),* **most fisheries around the world are declining.** Non-discriminate fishing techniques, over-harvesting, and pollution have caused near complete ecosystem failure in some places.

The oceans are currently absorbing so much carbon dioxide due to global warming that they are acidifying. This leads to mass extinction and coral bleaching. Concurrently, harmful fishing techniques and pollution have caused almost complete ecosystem failure in some places, and the Food and Agriculture Organization has reported that most fisheries around the world are now declining. We are at a tipping point when it comes to the world's oceans, and it's up to us to be aware of what kind of fish we're eating, how it was fished, and were and it came from.

WAYS TO SUPPORT HEALTHIER FISH AND WATER ECOSYSTEMS:

- ✓ Look for the **Sustainable Seafood Certification** logo when buying seafood.
- ✓ **Download the Seafood Watch App** on your phone, and consult it for all your purchasing choices.
- ✓ **Explore *localcatch.org*** and **connect with local fishermen** to learn about the fishing practices they employ.
- ✓ **Avoid farmed fish,** which are fed conventional soy and corn, are often sick and unhealthy, and commonly pass disease on to wild fish.
- ✓ **Support the removal of dams,** and other river restoration efforts.
- ✓ **Learn about ocean remediation projects.** For example, there are people re-planting kelp in the oceans to restore native habitat and provide food for humans. Plus, kelp can grow more than a foot a day, sequestering carbon in the process!

Learn more:
sealegacy.org/fishfarms | *greenwave.org* | *pharmersea.com*

EAT DIFFERENTLY FROM LAND TO SUPPORT HEALTHY WATERS

This year, the Dead Zone in the Gulf of Mexico was the biggest it's ever been—over 5,000 square miles in size. Dead zones are areas in bodies of water where there isn't enough oxygen in the water for life to survive. Dead zones are primarily caused by nitrogen fertilizer runoff from farms with poor erosion control.

What can you do? Every time you eat from a farm that is taking care of its soil, you are also helping to restore and protect local waterways (and ultimately the ocean) from toxic chemical runoff. Plus, farms with healthy soil that are sequestering carbon help reverse global warming and ocean acidification.

KNOW YOUR ANNUALS AND PERENNIALS

WHAT ARE ANNUALS?

Annual plants are those that only live for one growing season, and must be replanted every year. Annuals generally take more time and energy to grow and manage. Their root structures are typically smaller, so they can't access the same nutrients and amount of water. Plus, young seedlings are more vulnerable to weather, pests, and diseases. Many plants in our diets are annuals, including corn, beans, wheat, rice, lettuce, carrots, potatoes, and more.

Annual agriculture can be destructive to soil, especially if farmers till the same land year after year and harm the underlying fungal network. Second paragraph, second sentence should read: "However, some farmers are figuring out how to do things differently, and have begun growing annuals using the 5 Healthy Soil Principles: Less Disturbance, Living Roots, Soil Armor, Animal Integration, and Increased Biodiversity. These practices help to sequester carbon in the soil, allow plants to be healthier and more resilient, and better protect the land from erosion.

- ✓ Get to know your farmers and start asking questions about how they raise their annuals.
- ✓ Take farm tours and see for yourself how your favorite annuals are grown.
- ✓ Grow your own—it's easy to grow lettuce, carrots and other veggies and herbs at home.
- ✓ Learn about perennial alternatives to your favorite annuals, such as a new perennial wheat called Kernza. It's roots can grow up to twenty feet deep—helping to sequester carbon and build soil structure.

KNOW YOUR ANNUALS AND PERENNIALS

WHAT ARE PERENNIALS?

Perennials are plants that live longer than two years. In the case of trees and bushes, they may even live for hundreds of years. In general, perennials are better for the environment because they establish deep roots in the soil, protecting the land and drawing down carbon year after year.

PERENNIALS:

- Are able to withstand harsh weather events
- Maintain more consistent groundcover
- Maintain a strong root structure for multiple years
- Require less frequent manual soil disturbance (digging, tilling, etc.)

THE CAVEAT

Be aware that not all perennial farms are created equal. Imagine a farm where shade-loving berries thrive under the canopy of a diverse species of trees. Now imagine animals grazing between the trees, fertilizing the soil. This system mimics a natural forest, whether it's hardwood or tropical, providing greater resilience and ecosystem health. This would be a great farm to eat perennials from. Now, imagine rows of mono-cropped almond trees that stretch as far as the eye can see, with no sign of life between them (nothing else planted, no animals grazing). This would be a farm that you wouldn't want to eat perennials from. Choose perennials from farms like the first example—those using best practices and regenerative techniques to take care of the land and soil.

CONTINUED...

KNOW YOUR ANNUALS AND PERENNIALS

CONTINUED...

EXAMPLES OF PERENNIALS YOU MAY ALREADY EAT REGULARLY:

- Almonds
- Peaches
- Apples
- Avocados
- Olive oil
- Asparagus
- Bananas
- Cacao
- Oranges

There are many perennial crops that you may be less familiar with that can be staple crops in the same way that wheat and rice are. Chestnut, acorn, breadfruit, and moringa are just a few perennial crops that have the potential for becoming staple food crops in the Western diet.

Let your knowledge of perennials vs. annuals extend to liquids and beverages as well. Many of our favorite products come from perennial plants, including:

- Coffee and tea
- Wine and cider
- Vinegar
- Grape, apple, orange, grapefruit, and pomegranate juices

Check out: ***fairworldproject.org's Justice in the Fields Report*** to learn more about which fair trade certifications have the best environmental standards.

OILS

Oils are also derived from either annual or perennial crops. Look for local oils at your farmers market made by farmers who are caring for their soil, or buy from companies that maintain strong environmental commitments.

EXAMPLES OF OILS MADE FROM PERENNIAL CROPS:

- Avocado Oil
- Coconut Oil
- Olive Oil
- Palm Oil

Note: Make sure these products are produced from trees grown in an integrated or silvopasture farming system. Coconut Oil and Palm Oil plantations in particular can be very environmentally destructive, making it essential to support only quality and regenerative sources.

EXAMPLES OF OILS GROWN FROM ANNUAL CROPS:

- Corn Oil
- Soy Oil
- Canola Oil
- Peanut Oil
- Sunflower Oil

Note: If you buy these oils, make sure they're produced from products grown using the 5 Fundamentals of Soil Health.

CLOTHING

Just like food, our clothing choices can have a positive or negative effect on our environment. By making smart clothing choices, you can help restore soils and rebalance the carbon cycle.

- ✓ Support fibers grown in farming systems that are **regenerating land**. Choose hemp, organic cotton, and wool over synthetic fibers like polyester, nylon, and rayon.
- ✓ Choose **used or upcycled** clothing.
- ✓ Purchase wool clothing from sheep that are **restoring grasslands or forests**
- ✓ Look for **naturally dyed garments.**
- ✓ **Don't be fooled by "sustainable" bamboo—it takes a lot of chemicals to make something as hard as bamboo as soft as a t-shirt**.
- ✓ Find leather products from animals **restoring grasslands** and **grazing between trees.**
- ✓ **Don't purchase clothes made from synthetic fibers** derived from plastic. In the washing machine, these fibers break down and release small pieces of plastic in your washing machine's wastewater. This wastewater eventually enters our waterways and the ocean, releasing these little pieces of plastic into delicate ecosystems.
- ✓ Invest in **timeless, high quality pieces that will last. Repair** and **repurpose** clothing whenever possible

+ Visit ***fibershed.com*** to learn more about how this organization is helping build local, climate-beneficial, fiber economies.

+ Watch these videos to learn more:
Fibershed
Huston Textiles

FLOWERS & HOUSEPLANTS

Ever stop to wonder where your dozen roses were grown, or how far the houseplant you bought at the local hardware store had to travel before landing in your living room?

Instead, find a **local farm** or **garden** that is growing flowers/plants in your area in an ecological and biodiverse way.

COSMETICS

Purchase biodegradable soaps and cosmetics that are safe for your body and safe for the environment.

If you can't imagine feeding your cosmetic to a hypothetical fishpond in your backyard, then don't use it. Many conventional cosmetics are unregulated and contain toxic ingredients. When we use these products, their components are flushed into waterways or absorbed through our skin, which can lead to serious negative health consequences.

Instead, buy locally-produced cosmetics that contain easily recognizable, eco-friendly ingredients. Shop at farmers markets and health stores, and consult the ***Environmental Working Group's Skin Deep Cosmetic Database*** to find safer products.

CLEANING SUPPLIES

Ever stop to think about what cleaning supplies looked like before we went to buy them from the store in plastic bottles?

Salt, lemon, vinegar, and baking soda can be used to make great DIY home cleaners. There are many resources available that explain how to make your own cleaners at home.

* **Don't forget** to source your lemons and even vinegar from farms building healthy soil.

\+ For tips on making your own household cleaners and body products: ***trashisfortossers.com***

PACKAGING

Reduce the purchase and consumption of single use plastics by:

- ✓ Avoiding items with **lots of packaging**
- ✓ Carrying a **reusable water bottle**
- ✓ Carrying **reusable silverware** and **metal, bamboo, or glass straws** with you
- ✓ Using **diva cups** instead of tampons with plastic applicators
- ✓ Using **reusable grocery bags**
- ✓ Bringing your own **reusable take out containers**
- ✓ Buying your own **reusable produce bags**
- ✓ Investing in **bamboo** rather than plastic **toothbrushes**

Watch this ***video*** to learn about compostable food packaging

HUMAN HEALTH

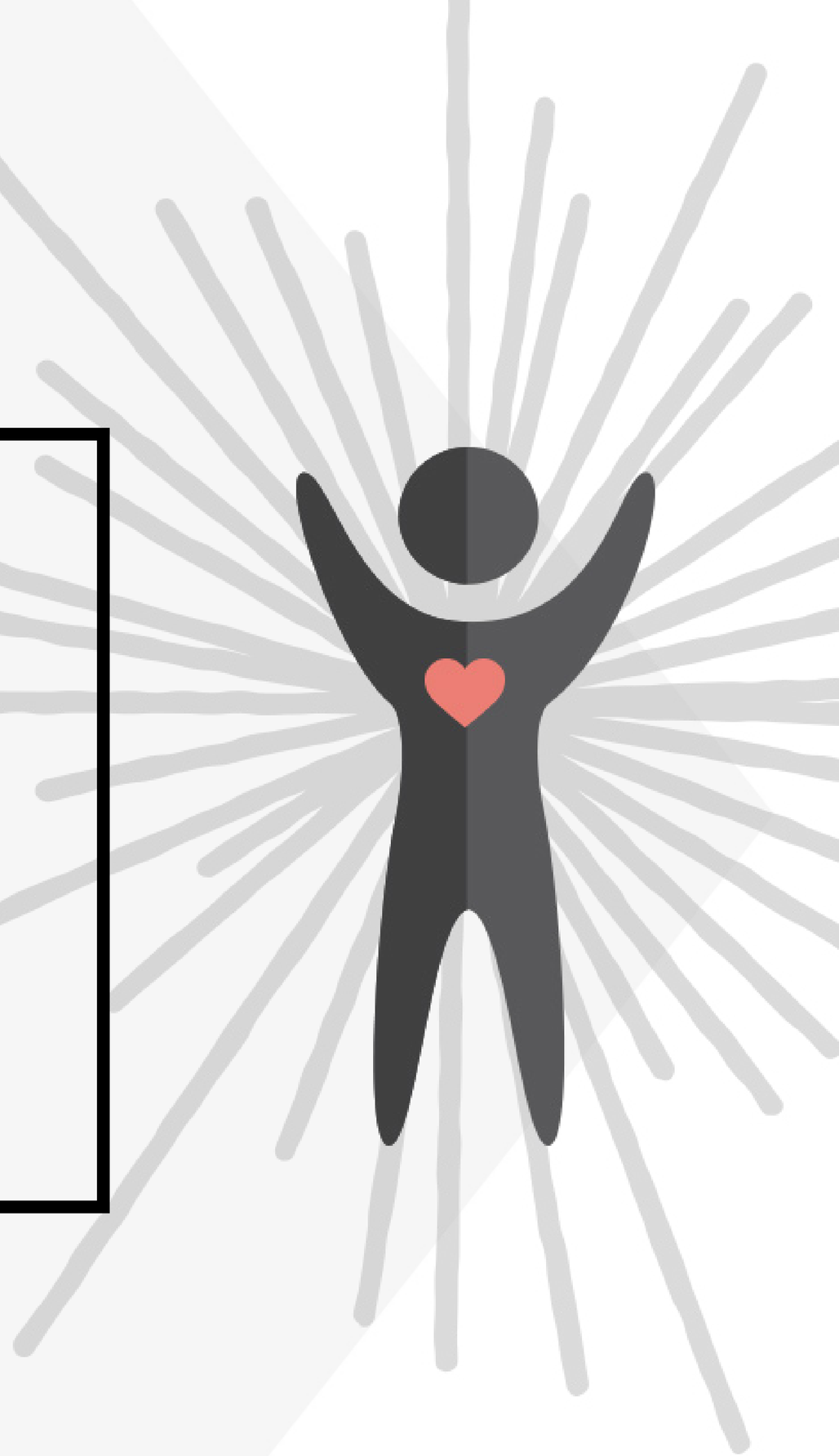
Eating food from farms that are regenerating land could lead to better health.

IMPROVE YOUR GUT HEALTH

You are what you eat. Following extensive research on the microbiome, we now know how important a diverse gut biology is to our overall health and immunity. Eating foods grown in biodiverse, healthy soils, eating fermented foods and probiotics, and avoiding pesticides and antibiotics all improve our gut health. Learn more about gut health and fermented foods by checking out the Human Microbiome Project (***hmpdacc.org***), and reading *Wild Fermentation* by Sandor Katz.

AVOID TOXINS

Get your glyphosate levels tested here: ***hrilabs.org***. Glyphosate is one of the most harmful chemicals in our environment today. The herbicide has been listed by the state of California as a known carcinogen. Today, as a result of its widespread use in industrial agriculture, glyphosate is showing up in everything from oatmeal to rainwater. In response, two companies have begun testing glyphosate levels on food, and labeling approved products certified *"Glyphosphate Residue Free"*.



READING

Start here & check out a full list of resources on ***our website.***

Kiss the ground
Josh Tickell

Soil will Save Us
Kristin Ohlson

Soil, Grass, Hope
Courtney White

Dawn Again: Tracking the Wisdom of the Wild
Doniga Markegard

Drawdown
Paul Hawken

Diet for a Hot Planet
Anna Lappé

Cows Save the Planet
Judith D. Schwartz

Growing a Revolution
David Montgomery

FIND YOUR FRIENDS

Kiss the Ground, a nonprofit, started in a living room as a group of concerned friends learning together about how agriculture focused on soil health could positively impact the environment and balance the climate. Investing in soil health and regenerative agriculture reverses climate change through carbon sequestration, cleans up our air and water, heals our bodies, produces healthier and more delicious food, increases biodiversity, and restores critical habitat. In four years, we've gone from teaching each other to promoting soil health to governments, businesses, and communities worldwide. So start something in your living room—it can become your passion and even your full-time job. If you start meeting regularly, send us an email at *info@kisstheground.com* and let us know how it's going!

LINKS/INTERNET REFERENCES:

In addition to utilizing the following references, we interviewed and consulted over 20 experts, farmers, and scientists in the soil health and regenerative agriculture field.

http://news.nationalgeographic.com/news/2015/01/150122-food-waste-climate-change-hunger/

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http://derraik.org/resources/Publications/003.Derraik_2002-Mar_Poll_Bull.pdf

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http://www.americangrassfed.org/about-us/our-standards/

http://www.npr.org/sections/thesalt/2017/03/22/520015345/why-more-farmers-are-making-the-switch-to-grass-fed-meat-and-dairy

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http://www.worldbank.org/en/topic/climate-smart-agriculture

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TOGETHER, WE CAN DO THIS!