

CLIMATE-SMART COOKING AND THE FUTURE OF FOOD

*Featuring recipes from **Climate Reality Leader** activists ready to eat like their world depends on it!*



The Climate
Reality Project[®]



Chances are you've heard the line that the climate crisis affects all of us, wherever we live and whether we know it or not. But how? Especially if you haven't been personally touched by a climate-related hurricane or drought or other weather event?

You don't have to look far for an answer. **In fact, most of us just need to look at what's on our plates.**

Why? Because if we keep burning fossil fuels at our current rates, food may become harder to grow in many places and harder to access in others, and what does grow could be less and less nutritious.

But it doesn't have to be this way—and people around the world, from farmers to activists like you, are doing their part to change the way we grow, purchase, and prepare food.

The agriculture and land use sector is one of the biggest emitters of CO₂, the greenhouse gas (GHG) most responsible for the changes we're seeing in our climate today. But it also has the potential to play a vital role in helping us end this crisis, and create a safe, sustainable future without carbon pollution. One where we can provide our booming world population with fresh, healthy food grown in a sustainable ecosystem.

And you are the key to helping us get there.

The choices you make drive the consumer market—so when you chose sustainable growers, local farms, and climate-smart ingredients, you're taking action for the planet by putting your money where your mouth is.

If we want a sustainable future for our families and our planet, we've got to make the choices that get us there. Not tomorrow. Not a few months or years down the road. Right now.

In this e-book, you'll discover the ways the climate crisis threatens our farms and food systems and how we can work to both reduce that threat and transform agriculture so that it works for the planet—as well as some yummy recipes from trained activists who are taking climate action right in their kitchens (and you can too).



THE PROBLEM

What's the difference between 32 and 33 degrees or 211 and 212 degrees Fahrenheit on water?

It either freezes or boils, respectively.

Now, consider what just a degree of global temperature rise means for farms both big and small around the world that depend on reliable seasons and predictable, consistent temperatures to grow specific crops in specific regions year after year.

And of course, it's not just rising temperatures—the climate crisis is also supercharging the water cycle. In many areas, precipitation has become either increasingly abundant or in desperately short supply, relative to longtime averages.

It all combines to put in jeopardy one of our most human needs: to sustain ourselves with a diet of fresh, healthy foods.

CLIMATE CRISIS 101

Carbon pollution from burning fossil fuels is warming our planet and driving climate disruption. It's simple: the more carbon pollution in the air, the more the sun's energy gets trapped as heat. Which means things keep getting hotter. These rising global temperatures disrupt natural systems, leading to more and more extreme weather events like severe droughts, flooding, wildfires, and major hurricanes, alongside numerous other impacts that will affect the health and well-being of every person on the planet.

Climate change will not wait for us. It is already affecting our food supplies today.



CHANGING GROWING ENVIRONMENTS

Climate change touches every corner of our planet's ecosystem. As global temperatures have increased at their fastest rates in millions of years, this rise has directly affected things like water vapor concentrations in the atmosphere, clouds, and precipitation and stream-flow patterns.

In short: It's getting warmer. Water from land and sea is evaporating faster. And making matters worse, warmer air can hold more water vapor.

More water in our atmosphere means more intense precipitation in many places—and far less in others. That's right: Both extreme precipitation and extreme drought events are happening more and more often because of the climate crisis.

The impact of drought on agriculture needs little explaining, and a flood will swamp or wash away a field of corn as surely as thirst will reduce it to dust. That's all pretty straightforward—these natural disasters can destroy crops outright. A field leveled by extreme weather certainly can't produce fresh fruits and vegetables.

But even slight changes in long-established rainfall patterns can wreak havoc on crops. And it's important here to remember that about 80 percent of crops worldwide are rain-fed.

Water is the key factor in all agriculture, but the amount of water a plant needs to flourish varies from species to species. Plants that have thrived in one area for thousands of years can be imperiled by even seemingly minor decreases in rainfall, especially when coupled with rising temperatures. On the other end of the spectrum, more rainfall isn't always good for plant life—even if water is not collecting on the surface, soil can become over-saturated, and many plants will drown.

The changes we are seeing to precipitation patterns and temperatures around the globe already imperil our ability to reliably grow food in the same ways and places we have for generations. But without action, we could be walking the plank toward a world where we might not be able to grow much of anything at all.

NUTRIENT DEFICIENCY

The same carbon pollution that is driving these disastrous climate trends all over the globe may itself also be having an impact we are only beginning to understand. Recent research points to a disturbing trend—increased levels of CO₂ in the atmosphere may be making our food less nutrient dense, jeopardizing the wellness of people all over the world.

When grown under the CO₂ levels expected by 2050, studies suggest an additional 175 million people may become zinc deficient and an additional 122 million people could become protein deficient around the world. And if emissions continue at their current rates, in many countries, declines in key nutrients like iron, zinc, and protein could have dire health consequences.

Zinc deficiencies can dramatically impair immune system function, and cause hair loss, diarrhea, delayed sexual maturation, and eye and skin lesions. Meanwhile, an iron deficit can lead to muscle weakness, immune system and cognitive problems, and headaches and dizziness—and can result in anemia. Pregnant women are especially vulnerable to complications related to iron deficiency.

As for protein deficiencies: “Few nutrients are as important as protein,” [Healthline explains](#). “Protein is the building block of your muscles, skin, enzymes, and hormones, and it plays an essential role in all body tissues. ... Protein deficiency can affect almost all aspects of body function.”

Scientists hypothesize that increased atmospheric CO₂ speeds up photosynthesis, the process that helps plants transform sunlight to food. This makes plants grow faster, but in doing so they pack in more carbohydrates like glucose at the expense of other essential nutrients human beings (and other animals, right down the food chain) depend on.

Some have gone so far as to call this the “junk-food effect.”

LOWER CROP YIELDS, RISING PRICES, AND UNREST

If we keep burning fossil fuels without making any real efforts to cut emissions, we could see average surface temperatures on Earth warm by more than 7.2 degrees Fahrenheit (4 degrees Celsius) by the end of this century. This would devastate global agriculture.

Without effective climate mitigation, “each degree-Celsius increase in global mean temperature would, on average, reduce global yields of wheat by 6 percent, rice by 3.2 percent, maize by 7.4 percent, and soybean by 3.1 percent,” according to four independent estimates compiled and published in the [Proceedings of the National Academy of Sciences](#).

Approximately two-thirds of human caloric intake globally are provided by wheat, rice, maize, and soybeans. These crops are central to the health and well-being of billions of people—and their futures are imperiled at a time of major global population growth.

The world population [is expected](#) to peak in the early 2060s somewhere around 9.7 billion people. With around 3 billion more mouths to feed, “global demand for food could increase by between 59 and 98 percent,” [according to Columbia University](#). “This means that agriculture around the world needs to step up production and increase yields.”

Yet, experts predict precipitous drops in staple crop yield because of the climate crisis.

You know what happens next.

First, prices at the supermarket begin to climb—*impacting those with the least among us first*. And as prices rise and supplies of staple crops continue to diminish, the prospect of unrest grows.

Circumstances like these would be unlikely to remain quarantined to any one place for long, either, in large part because of how most of us get our hands on the food we eat. Food is now a globally traded commodity. So crop failures and unrest in one part of the world can lead to supply chain failures and empty store shelves in another.

BUT IT DOESN'T HAVE TO BE THIS WAY...

...**THE FUTURE OF FOOD CAN BE SO MUCH BETTER**

We're already beginning to see what a warmer future has in store for us—and it is not a pleasant sight.

In ways both big and small, the climate crisis will impact every basic human need. The good news is that we can still avoid the worst of it. But it's not going to happen on its own—and people around the world are already working together to support a better food future.

Will you join them?

The choices you make can drive change. Win-win change. Change that businesses, industry, and, importantly, farmers can get behind. Change that can drive shifts in policy. Change that makes all the difference for the future of food systems everywhere.

A sustainable food future is in sight—**but we cannot take it for granted.**



THE SOLUTION

When many newscasters, pundits, and politicians talk about climate change, they don't emphasize enough the risks to food production. Not because they are not enormous—as we've explained, they are ([and the science backs us up plenty](#))—or well-known. It's because when climate change is discussed at all, it's often in the context of an event like a particularly powerful hurricane, long-lasting drought, extreme heat wave, or historic wildfire.

Decades of slowly declining agricultural production is a far more nuanced disaster, one that doesn't lend itself well to clickbait headlines. But make no mistake: while a little less immediately dramatic, crop failures can be equally impactful and perhaps even more far-reaching.

So how do we turn the tide? The answer is simple:

We change the way we grow things—and do it better.

And we start by focusing on what's right under our feet.

The best news of all is that the same actions you take to keep soil healthy and farms productive also help protect the planet at a time when it needs it more than ever.

But it's not going to happen on its own. **You have to demand it.**

You are part of the solution. And when enough of us join together to call for something, we get what we ask for.



REGENERATIVE AGRICULTURE

Regenerative agriculture is a system of farming principles and practices that seeks to rehabilitate and enhance the entire ecosystem of the farm by placing a heavy premium on soil health while also paying attention to water management, fertilizer use, and more.

The practices emphasize looking holistically at the agro-ecosystem. The overriding theme: If you take care of your soil, it will take care of you.

Regenerative agriculture practices—like conservation tillage, crop rotation, and the use of cover crops—increase soil biodiversity and organic matter, leading to more resilient soils that can better withstand flooding and drought. Healthy soils beget strong yields and nutrient-rich crops. Healthy soils also diminish erosion and runoff, leading to improved water quality on and off the farm.

Importantly, regenerative agriculture practices also help us fight the climate crisis by pulling carbon from the atmosphere and sequestering it in the ground.

When plants photosynthesize, they take carbon dioxide from the air and—using the sun’s energy, water, and nutrients from the soil—transform it into carbon the plant uses to grow leaves, stems, and roots. The excess carbon created through this process is transported down the plant and stored in the surrounding soil, sequestering the carbon in the ground.

Carbon can remain stored in soils for thousands of years—or it can be quickly released back into the atmosphere through farm practices like plowing and tillage, where soil is prepared for planting by mechanical agitation methods such as digging, stirring, and overturning. But for farms that have adopted regenerative techniques like no- or conservation tillage, that carbon stays where it belongs – in the ground.

For farmers, regenerative agriculture is thus a win-win—it leads to better, more resilient crops using sustainable methods that also fight a crisis that presents an existential threat to all agriculture.

EMBRACE RENEWABLE ENERGY (AND OTHER CLIMATE SOLUTIONS TOO!)

For the future of food security everywhere, it's important to do **every single thing** we can to keep temperatures down and work to mitigate existing climate change and prevent more.

When it comes to the climate crisis, business as usual will not cut it.
Anywhere.

Not in electricity production. Coal plants around the United States and across the world are closing as renewable energy becomes more efficient and cost-competitive with traditional fossil fuels. This is a great trend. But we need to stay on our toes: Natural gas is the “bridge fuel” that just won't quit, and misinformation about its environmental impacts and the industry's long-term financial security abound.

Not in industry. Sourcing power from renewables and investing in energy efficiency measures are clean alternatives to the fossil fuels driving the climate crisis—and engines for job creation. To build the sustainable future we deserve, our industries need to lead the way in the steel towns, tech hubs, and manufacturing centers where the real hard work is done.

Not in transportation. Electric vehicle (EV) sales, while still a relatively small percentage of overall motor vehicle market, have grown precipitously in the last several years—with even bigger growth expected down the road. At the same time, more and more cities are cleaning up their acts with green public transit. But recent rollbacks on vehicle emissions standards and tax credits mean Big Polluters won't be giving up the highways of the future without a fight.

And certainly not in agriculture. The health and vitality of the smallest backyard garden to the largest Midwestern farm is threatened by climate change. The impacts of the crisis are becoming harder and harder for farmers and market gardeners to ignore; food production around the world seems increasingly at the whim of “yet another bad year.”

Changes to the way we farm are just one piece of a massive puzzle that includes **changing how we do, well, just about everything.**

CLIMATE-SMART SHOPPING AND REGIONAL FOOD SYSTEMS

There's a big way you can take action right now—and it's as simple as making a few minor changes to your grocery list.

One of the most basic and potent forms of power we have is our ability to decide where and how we spend our money. You likely already research many of the products and brands you buy for price, quality, and even reputation. *What if you started doing that with your food too?*

The business practices of many major growers and food suppliers are just a few clicks away. Even easier? Talking one-on-one with a farmer from your local community about how they grow the food they are selling at the market.

When you actively seek out and support growers and suppliers that have made real commitments to sustainability and regenerative growing practices, you're not only providing that business with the fuel to keep up its good work—you're showing other farmers, businesses, and brands that there is an important (*and growing!*) consumer base for whom business as usual will not cut it.

All of which is to say, with just a little bit of gumption (and in many cases, an Internet connection), you can lessen your carbon footprint, conserve important resources, and support the growth of climate-smart agricultural practices, all while showing your family, friends, and neighbors how easy it is to take commonsense steps to fight the climate crisis.

You can choose to support a food system that is part of the solution rather than the problem. **Plenty of things exist beyond our control, but the items stocked in our pantries are not one of them.**

CHOOSE YOUR INGREDIENTS WISELY

As many of our trained Climate Reality Leaders activists note in the incredible climate stories and recipes that follow, they often seek out **local, in-season** ingredients as a way of reducing their personal carbon footprint.

The environmental considerations of adopting a localized approach to in-season produce procurement are [more complicated than you might expect](#)—and to be sure, not everyone can afford the sometimes higher prices charged at the local farmers market. But when it comes to reducing your “food miles”—the distance traveled by food from farm to plate, often in large, refrigerated trucks and ships—for at least part of the year, shopping local just can't be beat.



Local, in-season produce is also often more nutritious than store-bought produce too because it is picked at peak ripeness (rather than early, like a lot of in-store produce, so it can travel and be stocked and sold before going bad) and doesn't spend an extended amount of time in refrigerated transit.

And of course, money spent locally tends to stay in the community, helping to create more jobs, improve local networks and public health, and support equitable community wide growth—all of which only serves to reinforce an ever-more robust local food scene.

It's sort of like a [feedback loop](#) in its own way—but an awesome one.

But we cannot stress this point enough—buying local alone won't necessarily help you lower your personal carbon footprint and fight the climate crisis. Buying **local and in-season** is a different story.

The distinction is an important one: A small farm down the road from your home could just as easily have an energy eating hot house where it grows tomatoes and peppers as any major grower across the country. So shopping in-season is key to finding fresh fruits and veggies that have not required any kind of season-extending energy to make it to market.

DON'T GET IT TWISTED:

More than 97 percent of climate scientists agree that climate change is real and that it is principally man-made.

And we would be remiss to not note that eating a diet heavier in vegetables and plant-based foods, and lighter in meats (particularly red meat), more generally, can actually lessen your personal carbon footprint by more than simply shopping local and in-season. That's because carbon-storing forests and wetlands are often cleared to make way for animal agriculture, resulting in vast amounts of carbon emissions and the loss of important ecosystems that pull in, capture, and sequester CO₂.

REGIONALIZED AND REGENERATIVE GROWING MAKE OUR FOOD SYSTEMS MORE RESILIENT

We hope you've gathered a few things so far from this e-book, but the brittleness of our global food system—and how it could create problems for us in a climate change-exacerbated future—is at the top of the list.

In the US and in many other parts of the world, efficiency and cost management are highly prized in the food system. This has resulted in an industrialized, highly commodified food industry run by relatively few major agribusinesses.

In a system like that, the potential for catastrophe is high; when one domino falls there isn't another for it to fall into. And COVID-19 offered us a preview of how problems in our current system can quickly escalate.

The availability of many products, including some fruits and vegetables, became scarce early in the pandemic as supply chains dried up when manufacturers were forced to close farms and processing plants due to state mandates and illness among workers, and trucks and other modes of transport were temporarily halted.

The situation showed us that the more distribution channels we have—particularly for necessities like food—the better. Regional supply chains proved to be far more flexible and better able to deal with constantly evolving state-level mandates and regulations than national supply chains were, especially with farm goods.

Now, apply this same logic to the climate crisis.

The majority of the world's population does not produce its own food. What happens when the day comes that widespread flooding in one place, or a long-lasting heatwave in another, or a record-setting drought on the other side of the planet, all made worse by escalating climate change, significantly depletes or even wipes out the food product of one of those handful of major agribusinesses?

An awful lot of people will have to go without.

But what about a world teeming with robust, resilient regional agricultural production scenes? Smaller, successful farms using climate-smart growing practices to feed members of their own and nearby communities.

Imagine a big paradigm shift in how we source our fresh food that benefits both farmer and consumer. Imagine all those food miles saved. All those acres that were never cleared or tilled. All those great jobs created in communities just like yours.

Imagine a world like that.





CLIMATE-SMART COOKING

The Climate Reality Leadership Corps is a global network of activists committed to spreading awareness of the climate crisis and working for solutions to the greatest challenge of our time.

These friends, neighbors, and colleagues are working to bring clean energy to their towns, fight fracking and fossil fuel developments, get people civically engaged, support justice and equity, and *so much* more. They are making a real difference for our climate when it matters—and **one place they are making that difference is the kitchen.**

Climate Reality Leaders live the climate fight. Many work hard in their personal lives to be as clean and green as they can be, from using public transit or biking to work to—you guessed it!—taking steps in the kitchen to make sure their diets reflect the same commitment to a better future that they talk about in presentations, town halls, and in meetings with city councilors, state legislatures, and other leaders the world-over.

We hope you're inspired to discover how several of our Leaders are taking action in the kitchen—and of course, enjoy the delicious, climate-conscious recipes they have cooked up!





Amy's Food Story

During my master's degree on sustainable food systems, I began to realize how disconnected I was from the food on my plate and that my food choices no longer aligned with my expanding value system. And in fact, many of those choices were simply reinforcing an unsustainable, unethical, and unjust food system.



Growing up in a male-dominated family, vegetarian or plant-based meals were unfathomable. Meals without meat? Not a chance—a meal without meat was not 'proper' food. This thinking informed so many of my food preferences and choices that I initially struggled to make changes that reflected my values. Slowly, with lots of patience and time, I began to change my habits: **reducing my meat consumption, growing more of my own food, and where possible, buying locally produced food.**

Five years later, I have come a long way by eating a plant-based diet most of the time and the occasional eggs from the chickens on our smallholding property in Midrand. We also grow our own food as well as buy fresh produce from an elderly female farmer and beekeeper in our community. I feel a much deeper sense of satisfaction and contentment from knowing my farmers and making food choices that reflect my values.

Amy Giliam is a Climate Reality Leader and the branch manager of the African Climate Reality Project.





Amy's Spinach & Quinoa Patties

Makes 10-12 patties

INGREDIENTS:

- 2 cups / 500 milliliters water
- Coconut oil, butter, olive oil or ghee for frying
- 1 cup / 200 grams uncooked organic quinoa OR 2 1/2 cups pre-cooked quinoa (black, white, or red)
- 3/4 cup / 3 ounces / 80 grams rolled organic oats
- 4 free-range eggs
- 7 ounces / 200 grams sheep's feta cheese/vegan parmesan cheese
- Half a cup of sundried tomato
- 100 grams / 4 cups fresh organic spinach, chopped
- Sea salt & pepper
- Fresh coriander, chopped



HOMEMADE GUACAMOLE:

- 2 medium to large avocados
- 1 to 2 teaspoons of crushed garlic
- 1 tablespoon of olive oil
- Juice from half a lemon

INSTRUCTIONS:

Cook the quinoa: Place water, rinsed quinoa, and a pinch of salt in a medium-sized saucepan. Bring to a boil, lower the heat to a bare simmer and gently cook for about 15 minutes, or until you see small tails on the quinoa seeds. Set aside to cool.

In a large mixing bowl, place cooked quinoa, oats, eggs, feta cheese, chopped spinach, salt, and pepper, and combine until all is mixed.

Place in the fridge to set for 30 minutes.

Make the guacamole: Scoop avocados out of their skin, add the garlic, lemon juice, chili, salt, and olive oil in a bowl and blend together.

Take the mixture out of the fridge and form 10 to 12 patties with your hands.

Heat the oil in a frying pan on medium heat. Add the patties and fry for about 2-3 minutes on each side or until golden brown. Serve with a roast vegetable salad and the homemade guacamole.

(The patties keep for 3-5 days in the fridge and freeze well!)



Mariana's Colorful Pancakes

By now, many of us are aware of all the impacts food can have on the environment and climate change. We also know that eating is much more than just feeding our bodies with necessary nutrients; food nourishes our senses and why not say it: our souls! So what if we cooked delicious and yet ecological food?

These colorful pancakes are healthy, eco-friendly, and most importantly, delicious! You can simply add some veggies to the recipe and be creative with the topping of your choice. So, if you have kale on your fridge, you can make a beautiful green pancake that pairs perfectly with grape tomatoes, basil, and cheese (or vegan cheese, that's up to you!). Or, if it's butternut squash or pumpkin time, your orange pancake will be tasteful with quinoa and red pepper or with a fruit spread, if you crave some sweet delight.



Last but not least, remember to use fresh, locally grown products whenever possible—it lowers your carbon footprint and helps the local economy.

Consuming veggies and fruits of the season is a good choice for the environment. So if you love cherries, for example, enjoy them in summertime and make jelly for eating later, in the fall or winter.

Get creative and help the planet. Enjoy!

Mariana Alvarenga is a Climate Reality Leader trained during our first-ever virtual Global Training in July 2020, and is a member of Climate Reality's Boca Raton chapter.



Mariana's Colorful Pancakes

INGREDIENTS:

- 1 cup of almond or any nut milk
- 2 eggs
- 1 cup of precooked, diced or chopped vegetable (kale, pumpkin, butternut squash, beets, carrots, etc.)
- 1 cup of whole wheat flour
- 1 tablespoon of vegetable oil
- 1 tablespoon baking powder

SALT AND SPICES:

- Turmeric enhances yellow color, if you use carrots or pumpkin; paprika enhances red, for recipes using beets; basil, oregano, and/or parsley enhance green-colored pancakes.
- If it is a sweet pancake, use a little salt and 1 teaspoon of brown sugar or maple syrup.



INSTRUCTIONS:

Blend the nut milk, eggs, and the vegetable until the mix is smooth. Add the remaining ingredients and whisk until a thick batter is just formed.

Pour about 1/4 cup of the batter in a pre-heated skillet (it must be really hot).

Cook until bubbles break the surface of the pancake and the undersides are golden brown; flip it and cook for about one more minute.

Add the topping of your choice and enjoy your colorful pancakes!



Debi's Dahl

A few years ago, I went on holiday to India and while I was there, I discovered Dal Makhani, which I absolutely loved. When I got back to Australia, I searched online for recipes for this staple dish, which I have adapted to fit my taste and diet.

The beauty of this dish is that it is vegetarian, and the ingredients are easy to obtain. **A vegetarian diet can have about half the carbon footprint of a meat-lover's diet**, so any time you can trim the literal fat, you should take it.



Recently, on a trip with friends through the Simpson Desert in Australia, we all took turns making the evening meal (*pictured below*)—and it was quite a challenge for some to source their ingredients and keep them refrigerated until they were called upon to cook. Not me! And my meal was voted the best of the trip.

It has cream in it, so it's not vegan, but that could probably be substituted with coconut or cashew cream. The cream is necessary, though, as it does add an essential something to the dish.

I experiment with spices and use whatever is available and it always seems to taste good.

Deborah Thornton is a Climate Reality Leader trained during our first-ever virtual Global Training in July 2020.



Debi's Dahl

INGREDIENTS:

- 2 tins/cans of lentils (dried black lentils make this dish even nicer)
- 1 tin kidney beans
- 1 tin butter beans
- 1 onion
- 1 bird's eye chili or chili flakes
- 1 inch ginger
- 6 garlic gloves
- 2 tins crushed tomato
- 3 cloves
- 1/2 teaspoon cumin seeds
- 3 cardamom pods—crushed
- 1 cinnamon stick
- 1/2 teaspoon red chili powder
- 1/2 teaspoon grated nutmeg
- 1/2 teaspoon fenugreek seeds
- 1 bay leaf



- 125 milliliters / 1/2 cup of cream
- Butter or oil (butter is better)

INSTRUCTIONS:

Melt butter in a large cast iron pot and add the whole spices – cinnamon stick, cloves, cumin seeds, bay leaf.

Sauté until they become aromatic.

Add finely chopped onion and sauté until golden.

Remove the bay leaf and the cinnamon stick.

Add finely chopped ginger, garlic, and chili, and sauté for a minute.

Add the chili powder and nutmeg, along with the tinned beans in the liquid.

Crush the beans with a fork.

When most of the beans are crushed you can add the lentils and the tomato.

Add water, if necessary.

Simmer, stirring often—the longer the better.

Just before serving, season with salt and add the cream.

Serve with basmati rice.

Enjoy!



Amanda's Vegan Binthe Biluhuta Gorontalo

In Gorontalo, the land of my ancestors on the island of Sulawesi, Indonesia, most of its traditional foods are coconut-based, either cooked with freshly grated coconut, coconut milk, or homemade coconut oil. Coconuts are useful for condiments, appetizers, snacks, main courses, desserts, and drinks.

Most foods there are hot and spicy.

My favorite dish to enjoy coconut is binthe biluhuta, a traditional corn soup, and a comfort food to many in the area. It is a healthy, fresh, and versatile dish, **one in which local ingredients can be adjusted according to personal preference, and seasoning is to taste.**

Just looking at the ingredients that have carbohydrate, protein, fat, and fiber, we know that binthe biluhuta is refreshing, increases endurance, and is good for digestion.

Amanda Katili Niode, a founding member of the International Environmental Communication Association, is the manager of The Climate Reality Project Indonesia.





Amanda's Vegan Binthe Biluhuta Gorontalo

INGREDIENTS:

- 500 grams of fresh corn kernels
- 75 grams of tofu, cut in small cubes*
- A quarter of half-mature coconut, grated
- 1,750 milliliters (1.75 liters) water
- 2 teaspoons of salt
- 5 small shallots, peeled and sliced
- 2 bird's eye chilis, sliced
- 2 curly red chilis, sliced
- A small bunch of lemon basil leaves

**Tofu is optional*

CONDIMENTS:

- Chili paste (6 curly red chilis and 2 small shallots, ground)
- A small bunch of lemon basil leaves
- Fried shallot3 limes
- Salt to taste



INSTRUCTIONS:

Boil corn kernels in a pot of water until tender.

Add sliced shallots, bird's eye chilis, and curly red chilis.

Add grated coconut, tofu, and salt.

Stir.

Reduce heat to a simmer for about 10 minutes.

Toss in the lemon basil leaves.

Remove from heat.

HOW TO SERVE:

- Pour corn soup into five small bowls.
- Add condiments (lime juice, salt, chili paste, lemon basil leaves, and shallot) to taste.



Ashleigh's Food Story

Potatoes have traditionally been the staple of the Irish diet. Spuds, as they are called in Ireland. The name spud comes from the digging of soil (or hole) prior to the planting of potatoes. Grown underground, it is the soil nutrients that gives potatoes their delicious taste.

Healthy soil grows healthy vegetables. Yet due to current farming practices, increased development and industrialization, our food is less nutritious than it used to be. The soil we have today is virtually lifeless, depleted of its nutrients. A huge variety of vegetables and diverse vegetation have also sadly been lost.



This year, in June 2020, Met Éireann (the Irish National Meteorological Service) issued a potato blight warning for Ireland. Following tropical storms, the outbreak of the coronavirus, and a global lockdown, we braced ourselves for yet another treat.

Blight caused the Irish Potato Famine from 1845-1850. A period of mass starvation and disease, the Great Famine killed over a million Irish people and forced a further 1-2 million to emigrate.

The thought of such a recurrence looms on the horizon...

...What if another blight strikes?

Ashleigh Downey is a Climate Reality Leader from Wicklow Town, Ireland.



Ashleigh's Boxy Loaf—Irish Potato Loaf

This recipe for Boxy Loaf is my ode to the potato. Based on a traditional Irish potato pancake, this savory recipe is perfect for breakfast, brunch, and lunch. Made from grated raw potato (or left over mash) this versatile recipe is delicious served with poached eggs, scrumptious with spinach or mushroom, and delightful with salad.

INGREDIENTS:

- 1 kilogram peeled potatoes
- 300 milliliters buttermilk
- 1 additional tablespoon regular milk
- 1/2 teaspoon baking soda
- 150 grams plain flour
- Pinch of salt



INSTRUCTIONS:

Prepare in 1x2 lb. loaf tin, lightly buttered and lined with parchment paper.

Preheat oven to 180 degrees Celsius / 350 degrees Fahrenheit.

Grate the potatoes.

Strain the starch out of the potatoes by putting them into a cloth, linen bag, or clean pillowcase, and squeezing out the liquid.*

Put the grated potatoes into a large bowl and quickly stir in the buttermilk. This will stop the potatoes from discoloring.

Combine the baking soda with the extra drop of milk. Stir this into the potatoes, along with the salt and flour. Mix well.

Spoon the mixture into a prepared (buttered, lined) loaf tin. Smooth the surface with the back of a spoon.

Bake in the oven until golden brown, approximately 1 hour.

Cool fully before turning it out of the tin.

**You can skip this step if making pancakes instead of a loaf.*

HOW TO SERVE:

Boxty is best served warm.

- Cut slices from the Boxy Loaf.
- Gently fry in butter until warm and golden brown.
- Ready to serve with whatever strikes your fancy!

AN ALTERNATIVE: BOXY PANCAKES

- Follow steps 1-4.
- Heat oil / butter in a pan over medium-high heat. Drop a heaped tablespoon of potato mixture into the pan.
- Flatten into a round pancake.
- Fry until golden brown, 3 to 4 minutes per side.

GETTING MORE FROM YOUR INGREDIENTS:

Food waste is a big problem. So instead of wasting potato peels, I like to turn them into potato chips. A yummy sustainable snack! Simply place the peels on a baking tray with oil and seasoning. Cook for 10-20 minutes until crispy. Turn the peels halfway through to crisp both sides properly.



Lynda's Food Story

Growing your own food is a great way to do your part for our climate.

Before putting in the raised boxes, I did a technique called [lasagna mulching](#). If you're interested in measuring the growth of healthy soil, take baseline soil samples to record all kinds of things, including soil organic carbon. Then, you put down cardboard and newspaper with layers of cow manure, compost, mycorrhizal fungi, worm castings, and more. The idea is to create a composting layer (like 6-12 inches in depth) that over time will create really healthy soil.



I've incorporated a groundcover crop of clove and lots of woody perennials [in the garden] along with lots of diversity in plant types (root depth, leaf size, etc.) **all designed to create a healthy and balanced ecosystem.**

While the base is "cooking," I put raised beds on top so I could have a vegetable garden in this first year. Next spring, I'll take more soil samples and gauge how I'm doing. The crops are doing wonderfully, and so far, I don't see any disease.

A sign that this is all coming together is that there are so many birds, bugs, small animals, etc. What's happening is the balanced ecosystem is resulting in the beneficial bugs that are eating the not beneficial ones. The good and bad things work to keep the balance. The trick is to keep the balance and that will come over the years through continued incorporation of diversity of plants, use of the right cover crops, no tilling, planting right into the residue of the last year, and crop rotation. No chemicals have been used!

Lynda Hanshaw is a Climate Reality Leader trained in Atlanta, Georgia in April 2019.





Lynda's Save the Planet Tomato Basil Pasta with Pine Nuts Pasta

The best food is all fresh and from your save-the-planet garden—grow the tomatoes, basil, onions, zucchini squash in pots, raised beds or directly in the ground.

For all ingredients, use quantities as needed to achieve the number of servings desired. Use lots of tomatoes—they carry all the other ingredients.

INGREDIENTS:

- Tomatoes
- Basil
- Pine or other locally grown nuts
- Angel hair pasta (also great with zucchini pasta)
- Seasoned pepper and garlic to taste
- Chopped onion
- Dash of lemon juice

(Optionally add a meatless or meat product as you like.)

INSTRUCTIONS:

Cook the pasta. Chop the tomatoes.

Sautee the onions and then add the meat or meat substitute (if applicable); cook to your liking.

Tear or chiffonade cut the basil.

Once the pasta is ready, combine and mix all the other ingredients, except the pine nuts, into a large bowl.

Add the contents of the bowl into a skillet lightly greased with olive oil. Cook over medium heat just long enough to heat the tomatoes and other ingredients. Avoid overcooking to retain the benefit of the antioxidant lycopene from the tomatoes.

Toss in the cooked pasta and garnish with pine nuts. Yum!



KEY TAKEAWAYS

It's clear that the climate crisis poses a very real threat to food security across the globe. If no action is taken, millions—perhaps billions—of people are at risk of malnutrition as staple crops and other fruits and vegetables become harder to grow, more expensive, and less nutritious.

At the same time, with just a little bit of know-how and the will to try, you can do your part to prevent the worst of it. By making a few simple changes, you can lessen your carbon footprint and help conserve important resources, all while showing your family, friends, and neighbors (and the businesses vying for your hard-earned dollar) how much you care about commonsense solutions to the climate crisis.

Solutions they can then take back to their own kitchen tables.

Here are the two key things to know:

1. *Our food systems are in jeopardy.*

- **Warming temperatures and changing precipitation patterns** are altering where and how well things can grow, and worsening extreme weather events are putting more and more crops in immediate jeopardy.
- Certain foods are becoming **less and less nutritious** as the climate crisis speeds up their growing cycles.
- At the same time that there are more people than ever to feed, **crop yields are falling**—and will continue to fall as growing conditions worsen—leading to rising prices and eventually, the prospect of social unrest as disputes over resources escalate.

2. *There's plenty we can do to fight back.*

- In addition to a long list of incredible benefits for farmers and their crops, **regenerative farming practices** create fewer emissions than traditional agriculture while at the same time pulling carbon from the atmosphere and sequestering it in the ground.
- You can support climate-smart agricultural practices **through the choices you make at the supermarket.**

- + Research brands to find out about their environmental policies.
- + Look into growers to make sure they are using regenerative or other sustainability practices.
- When the time is right, reduce your “food miles” and keep resources in your community by shopping **local and in-season** at a community farmers market.
 - + Robust, diverse, and successful regional food systems are far less vulnerable to widespread supply outages in times of crisis than food systems supplied by a handful of large agribusinesses.

Bottom line: it’s a direct connection from burning fossil fuels and supporting the food system status quo to a world where nutritious fruits, vegetables, and grains become scarce. But today, we can skip the dirty stuff and power our lives with clean and affordable renewable energy. We can protect our health by farming in ways that improve our lands, provide us with stable yields, and fight climate change. And we can shop in ways that “put our money where our mouth is” when it comes to working toward a better, healthier, and more sustainable tomorrow.

Because we can do this.

But remember: no one else is going to do it for us.

We’ve got to be the change we wish to see in the world.





The Climate Reality Project[®]

Founded and chaired by former US Vice President and Nobel Laureate Al Gore, The Climate Reality Project is dedicated to catalyzing a global solution to the climate crisis by making urgent action a necessity across every sector of society.

Today, climate change is standing in the way of a healthy tomorrow for all of us. But we know that practical solutions are right in front of us. We can create a healthy, sustainable, and prosperous future by making a planet-wide shift from dirty fossil fuels to clean, reliable, and affordable renewable energy.

At Climate Reality, we combine digital media initiatives, global organizing events, and peer-to-peer outreach programs to share this good news with people everywhere and build overwhelming popular support for policies that accelerate the global transition to a clean energy economy. To learn more, visit www.climaterealityproject.org.