
SUSTAINABLE
LEADERS
IN ACTION
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Sustainable
CONTRA COSTA

MAY AOTM:
BRING A REUSABLE WATER BOTTLE

by Alison Chiu

Are you and your family looking for ways to be more green? Sustainable Contra Costa's Bring a Reusable Water Bottle challenge provides a means for you to both help our environment and your wallet.

The May Action of the Month is using reusable water bottles! Staying hydrated is one of the most important things in maintaining health and the convenience of disposable water bottles is one reason why they are so widespread and popular throughout the world. But if each person needs to drink at least 2.7-3.7 liters of water each day, and the average disposable water bottle is about 0.5 liters, then if almost everybody in the world is consuming 5-7 bottles a day, it would lead to 8 million tons of plastic bottles in the ocean alone per year.

This is happening right now, and combined with the other multiple plastic pollution problems, scientists predict that by 2050 there will be more plastic than fish in the ocean. Despite the dramatic effects of single-use water bottles on our environment, some people still have the mentality that they are only a small fraction of the problem. If every person contributed, the efforts would add up and we would be able to preserve the beauty of nature for future generations to enjoy.

There are so many different alternatives for the disposable water bottle. One very popular alternative is the reusable plastic water bottle. This is just the thicker, more durable counterpart of the disposable bottle. Some other popular alternatives include metal water bottles and glass water bottles. On the other hand, there are also many unconventional substitutes such as silicone water bottles, paper water bottles, bamboo water bottles, and even boxed water. All of these different versions of single-use water bottles are more resilient against everyday use when compared to the flimsy disposable water bottles. Not only that, but reusable water bottles also come in all sorts of different shapes, sizes, and colors.

While disposable water bottles may be cheaper to pay for up front, investing in a reusable water bottle will help you save more in the long run. On average, a person uses 167 disposable water bottles each year in the United States, and the average disposable bottle costs about $1.45. This means a person would pay about $242 every year just for disposable plastic water bottles. But if that person invested as little as $5 in a reusable bottle of any type, they could potentially use one water bottle for two to three years. Think about the difference it could have on our environment if everybody did this!

While the issue of using throwaway water bottles comes up often, it is somewhat treated as a joke. But we're forgetting the actual devastating damage they are having on our environment. Millions of disposable water bottles always end up finding their way to the ocean, polluting it with plastic and other poisonous material. Even though the change might not be a big one, or fix the problem immediately, switching to a reusable water bottle will still pay off, in more ways than one.

Sustainable Kitchen Products

Written by Brooke Abess
Art Collage by Olivia Johnson

If you like to cook or bake, then you'll know the joy of getting to try out fun, new recipes and ingredients. You are also probably not a stranger to the amount of waste that can be produced in the kitchen. From single-use parchment paper to zip lock bags, it can feel rather disheartening to throw these products away and into the landfill. Luckily, there are plenty of eco-friendly and reusable products to solve this problem! Most of us already know about reusable bottles, straws, and other containers, but there are so many more alternatives to commonly used kitchen items. Here are a few products that you might want to consider investing in to make your kitchen more environmentally friendly:

1. Stasher Bags

Say goodbye to plastic bags! Though you can reuse plastic bags, they tend to not last very long and sooner or later end up in the garbage. Stasher bags, however, are made of silicone and designed to last a long time under various conditions. Offered in a variety of sizes and colors, these microwave, dishwasher, and fridge/freezer safe bags are a great investment!

2. Bee's Wrap

Although plastic wrap and wax paper can be convenient and useful, they quickly find their way into landfills. To reduce your waste and save some money, check out Bee's Wrap! These food wraps are washable and reusable, and once they get a bit worn down, they can be composted. They come in a variety of sizes and fun patterns and are made of cotton covered with a beeswax mixture. If you are looking for vegan products, there is an option for you! The beeswax is simply substituted for candelilla wax which is still an environmentally friendly, alternative.

3. Reusable Produce Bags

If you frequently buy produce at the grocery store, you may be familiar with the plastic bags that are provided for the fruit and vegetables. Instead of using these disposable bags, you could opt for reusable produce bags! These bags are easy to wash and reuse, and since they are mesh your produce can still breathe. The drawstring top is especially convenient for keeping everything in the bag when you're on the go, and they come in a variety of sizes to fit any fruit or veg!

4. Silicone Baking Mats

Silicone baking mats have been around for awhile and are a great alternative to parchment paper. Parchment paper certainly makes any cooking or baking clean-up much easier, but unlike these mats, it's not reusable. Silicone baking mats are easy to use, clean, and store, and they will save you from needing to restock with parchment paper. The popular brand Silpat (https://us.silpat.com) has offered these silicone mats for a while now, however, they are considered more of a luxury brand and are rather expensive. But there are plenty of other more affordable options which still have great reviews!

5. Food Huggers

If you're ever cooking and have used only part of your produce, your first instinct may be to store the remainder in a plastic bag or reusable container. However, containers often take up quite a bit of space in the fridge, and clearly, plastic bags are not very environmentally friendly. A great alternative to store your partially used produce is a silicone Food Hugger. Food Huggers are silicone covers that you can put directly on your food to ensure it stays fresh. They come in a variety of sizes to fit all kinds of fruits and vegetables, and they even have some made specifically for avocados!

These are only a few of the sustainable kitchen products on the market, but there are many more you can check out! One great website which sells a variety of sustainable products (including most of the products mentioned in this article) is Earth Hero. When it comes to shopping for environmentally friendly alternatives, some of the products may seem expensive at first, however, they will definitely save you money in the long run. Some products are more affordable than others, but at the end of the day, it's all about trying your best and making changes that can fit into your lifestyle!

By Ani Jamgotchian

Illustrations by Kyle Suen

Our planet is 70% water. Plants contain water. Animals contain water. Even the air we breathe contains water. So why is it so important to conserve water? According to USGS, only 2.5% of the water on Earth is freshwater. Of the freshwater we have, 98.8% is trapped in glaciers and ice caps or stored as groundwater. When you look at all these statistics, it is clear that freshwater should be treated as a precious resource, however, it is something that many take for granted

There are many easy, hygienic, and impactful ways to save water. One of the easiest ways to save water on a daily basis is by taking shorter showers or using a shower head with a shut-off valve. Using a shut-off valve allows you to turn off the water while you wash without losing that optimal shower temperature. These showerheads are a perfect way to save water and will save you money at the same time.

Another way to save water in your home is to scrub all your dishes prior to turning on the water. This way you won't leave the water running while you lather your dishes and you can still get them squeaky clean. An alternative to washing your dishes by hand and fiddling with the water temperature is to use a dishwasher. Dishwashers are known to use less water than hand washing, and we are seeing more and more companies updating dishwashers to use less water. Lastly, when washing fruits and veggies at home, collect the water in a bucket or container. This water can then be used to water your garden or any plants you have inside.

In conclusion, there are many ways to save water on a daily basis, and in this article, we just barely scratched the surface! Not only is saving water easy and will save you money it is an important habit to develop in today's world.

President Biden's Climate Plan & Recent Action

Written by Abigail Stofer, Artwork by Riley McIntosh

During the 2020 presidential primaries, President Biden introduced a $1.7 trillion plan that aimed to make the nation carbon neutral by 2050. This plan was not popular among many progressives and young climate activists who felt it lacked detail and paled in comparison to the more aggressive plans of opponents such as Senator Bernie Sanders (I-Vt.) and Senator Elizabeth Warren (D-Mass.). Biden's challenge became satisfying the demands of these critics and incorporating their ideas into the revised plan. The final result was a more aggressive plan and included the elimination of carbon pollution from the electric sector by 2035, rejoining the Paris climate accord, and spending $2 trillion over four years to boost renewables and create incentives for more energy-efficient cars, homes, and commercial buildings.

Throughout his campaign, Biden walked a fine line between trying to win over the young liberal voters without alienating moderate Republicans in swing states. Notably, his plan did not include banning hydraulic fracturing for natural gas (aka fracking) or ruling out nuclear power and other technologies that have long split environmental advocates. Instead, he framed his plan as a jobs program, making it clear that he wanted to pour resources into transitioning the United States away from fossil fuels in order to boost the economy after the pandemic. However, announcing the plan and going through with it are two very different things. It's time to check up on what Biden has been doing for our Earth in his first few months in office.

On his very first day in office, much to climate activists' delight, Biden re-committed the United States to the Paris climate accord, which his predecessor had pulled the country out of. Additionally, Biden started an immediate review of the harmful rollbacks put in place by the Trump Administration of standards that protect air, water, and communities most impacted by climate change and revoked the March 2019 permit for the Keystone XL pipeline. He cited reasons of prioritizing the development of a clean energy economy instead and maintained that the commencement of the project would undermine the United State's climate leadership credibility.

A few days later, on January 27, 2021, Biden signed a slew of executive orders relating to the climate. He created and re-established many governmental agencies and positions dedicated to combating climate change such as the President's Council of Advisors on Science and Technology, National Climate Taskforce, Special Presidential Envoy for Climate, and the White House Environmental Justice Interagency Council. He also signed an order to leverage the federal government's carbon footprint and buying power in order to lead by example, directing federal agencies to procure carbon pollution-free electricity and clean, zero-emission vehicles to create good-paying, union jobs and stimulate the clean energy industry. He also directed the Secretary of Interior to pause entering into new oil and natural gas leases on public lands or offshore waters, launch rigorous reviews of existing practices, and identify steps that could be taken to double renewable energy production from offshore wind by 2030. Finally, he directed the government to preserve 30% of all land and water by 2030 and issued a memorandum elevating climate to a national security priority.

In late March, President Biden's economic advisors drafted and presented to the president a $3 trillion infrastructure plan that will, hopefully, reduce carbon emissions as well as boost the economy. A large chunk of this spending would go towards clean energy deployment, the development of "high-growth industries of the future," and one million affordable and energy-efficient housing units. However, whether this bill will muster Republican support will depend on how the bill is paid for, as many are staunchly against raising taxes on corporations.

As of mid-April, the Biden administration was nearing agreements with Japan, Korea and Canada to bolster carbon emission reduction targets ahead of the anticipated summit of global leaders on Earth Day, April 22, but similar deals with countries such as China, India, and Brazil, countries that together produce more than a third of global emissions, remain elusive.

All this is a great start for approaching climate change from a whole-of-government angle, centering the climate crisis in foreign policy and national security considerations, and spurring economic opportunity, however, when it comes to the climate crisis, there is no settling for a "great start." Biden has not yet delivered on steeply and rapidly reducing greenhouse gas emissions. There is little hope of a carbon tax or another mechanism to put a price on greenhouse gas pollution since that legislation would have to pass through the tricky 50-50 senate, and therefore the Biden administration has to rely on the regulatory process to curb emissions and improve fuel efficiency. Critics are also calling for a full ban on all new fossil fuel extraction on federal lands and waters, rather than just pausing on new leases.

It is important to celebrate the advances made in climate legislation, but it is equally important to remember where we should be and push for the ideal and not just the attainable. Settling is not an option in this case, and it is up to the voters to hold President Biden accountable for his past promises and future actions.

COOKING SEITAN

By Alexi Lindeman

Seitan and starch water noodles!

Ingredients

- Flour (preferably bread flour)
- Water
- and that's it

Materials

- Large stainless steel bowl
- Large wooden spoon or spatula
- Pitcher or large container to hold the starch water in

Produces

- 4 cups flour makes about 1 cup of seitan and 2-3 cups starch batter

Seitan is an excellent protein-rich meat substitute! The best part is that everyone can make it. If you mess up, that's okay, try again! There are multiple ways to make seitan so a lot of it comes down to trial and error to see what works best for you. Here are some other recipes to refer to!

Fried "chicken"

DIRECTIONS

Make a dough ball

Mix together flour and water to create a dough ball. The dough ball can be as big as you want; just keep a ratio of 2 cups flour to 1 cup water. Add water or flour to create a soft, moldable, non-sticky dough ball.

Personally, I put the water in a big stainless steel bowl and slowly mix the flour in a cup at a time with a wooden spoon until I can knead the dough. I add in more flour as I knead and put a lot on my hands to avoid sticking.

Soak

Submerge the dough ball for 1-8 hours. The gluten will start clumping and separating from the starch.

Wash

Start kneading the dough ball under the water. The water should turn white. Keep kneading the dough under water until the water is white as milk and leaves starch traces on your hand. Pour the water into a large pitcher. This starch water can be used later. Fill the bowl slightly with water and repeat several times. (takes 20-30min)

I avoid putting a lot of water in as it's harder to make the water concentrated with starch. Wash until the dough feels like slime, looks like a brain, and the starch is largely gone. Some people say wash until the water is clear, but that takes far too long and will make the seitan chewier.

Setting

Submerge the dough ball for 1-8 hours. The gluten will start clumping and separating from the starch.

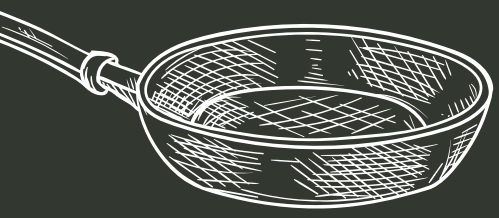
Cooking

1. To achieve that flakey meat texture in the seitan, twist and knot the dough however you wish (patties, strips, nuggets etc.).
2. Sumberge and cook the seitan in a broth for 25 min. Sear, fry, grill, or just eat the seitan from here.

- *You can use vegetable broth, chicken stock, or make your own by adding seasonings like soy sauce, onions and garlic to water.*
- *I cook them half submerged in a large pan until the broth is completely boiled off. This way the broth turns into a sauce that I use for flavoring the noodles or seitan.*

Don't throw away the starch water!

1. Make some noodles! You might want to look at this recipe too.
2. For bacon, use this recipe here!
3. How about vegan cheddar cheese?
4. Or try starch water tortillas. I even used the dough to make bread!



CLIMATE TRIVIA

TEST YOUR KNOWLEDGE!

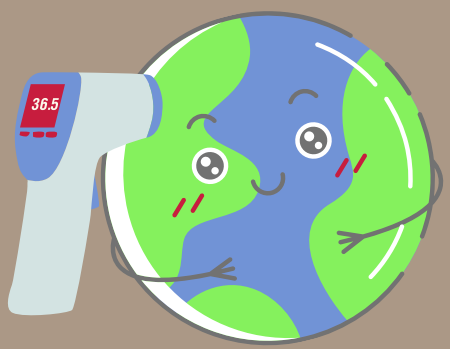
We know that learning about climate can be overwhelming and confusing. So let's test your knowledge with some fun trivia questions about climate change! Let's see how many you can get!

1) Which of the following gases does not trap heat?

a) Water vapor
b) Carbon dioxide
c) Nitrogen
d) Methane

2) How much have average global temperatures increased in the last century?

a) 2.1 degrees fahrenheit
b) 3.2 degrees fahrenheit
c) 1.4 degrees fahrenheit
d) 0.7 degrees fahrenheit



3) How much have sea levels risen in the past 100 years?

a) 3 inches
b) 7 inches
c) 2 inches
d) 12 inches

4) What is the biggest source of greenhouse gas emissions in the United States?

a) Producing electricity
b) Transportation
c) Manufacturing
d) Heating and cooling buildings

5) What is the goal that 195 countries agreed to in the Paris Climate Agreement of 2015?

a) To reduce global temperature by 0.5 degrees
b) To pursue a goal of 100% clean, renewable energy
c) To limit sea level to 3 feet above current levels
d) To limit warming to "well below" two degrees Celsius above the preindustrial average

6) How much carbon dioxide does the average American add to the atmosphere each year?

a) 16 metric tons
b) 5 metric tons
c) 14 metric tons
d) 9 metric tons

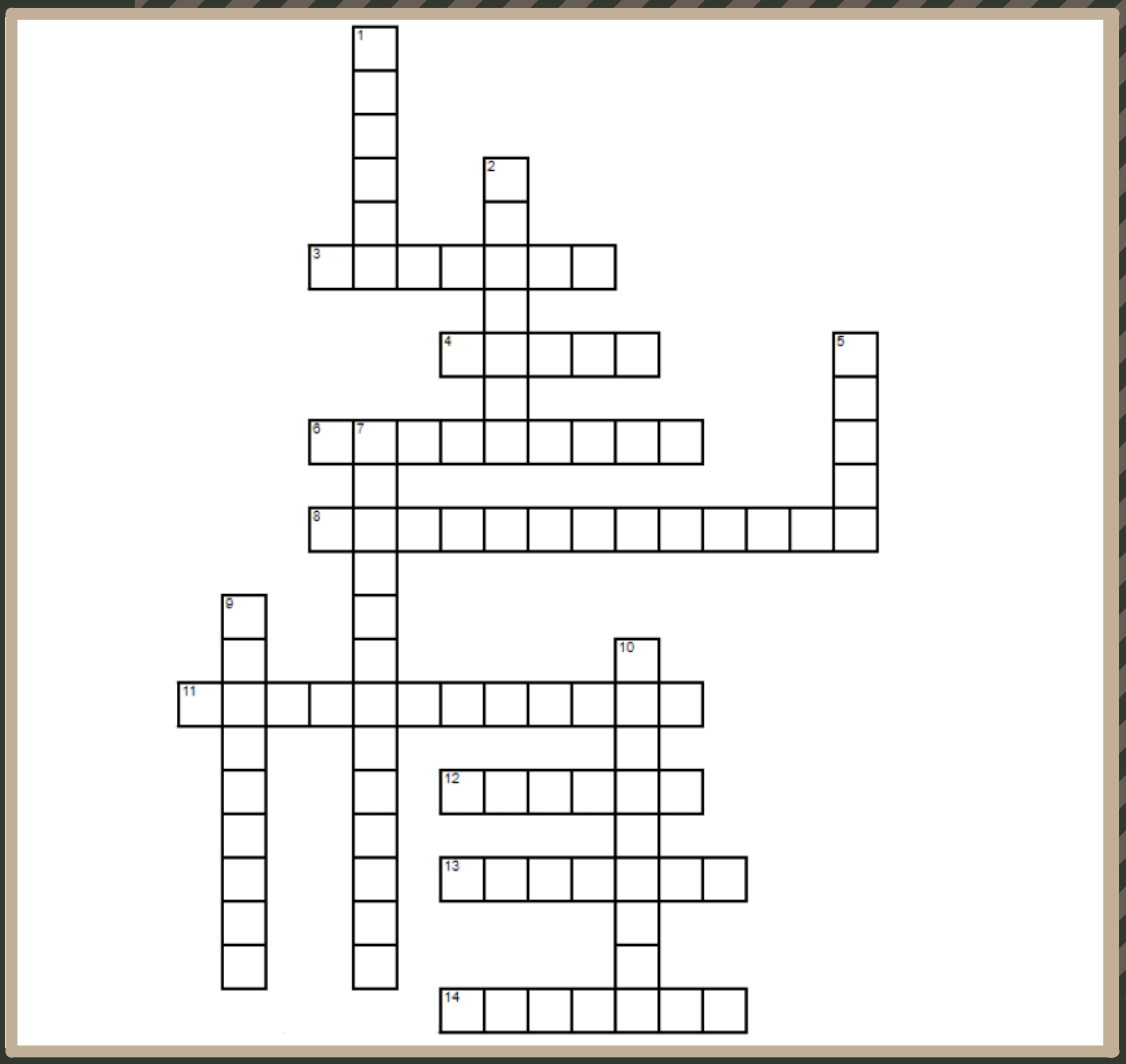
So how'd you do? If you didn't do so hot- don't worry about it! Just keep reading and keep learning. We believe in you!

Answers:

1. C 2. C 3. B 4. A 5. D 6. A

SUSTAINABILITY

Crossword Puzzle



ACROSS

3) A branch of Biology that studies organisms, their environments, and their interactions.
4) Energy derived from the sun's rays to create energy.
6) A community of living organisms that interact with one another.
8) Products that can be decomposed by natural resources.
11) The act of preserving a natural resource and protecting it from destruction.
12) The action of using materials and rating a product.
13) A non-living component in an ecosystem.
14) Products that are all-natural without any use of artificial factors.

DOWN

1) A living component in an ecosystem.
2) The study of life and organisms.
5) An act of using something more than once.
7) The change in the planet's climate that is very harmful and long-term.
9) Regions of the Earth that work as ecosystems for living organisms.
10) The introduction of substances to an environment that can be destructive.

ANSWERS : 1. Biotic 2. Biology 3.Ecology 4. Solar 5. Reuse 6. Ecosystem 7. Climate Change 8. Biodegradable 9. Biosphere 10. Pollution 11. Conservation 12. Recycle 13. Abiotic 14. Organic

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SUSTAINABLE LEADERS IN ACTION