# Ways to Live Without Plastics by Walt Wojcik, GROW Ecological Commissioner

Plastics were initially designed to be used and thrown away into landfills. (1) Recycling of plastics is extremely difficult as there is contamination from the many different plastics types (1, 2, 4, 5, and 7). In addition, when plastics degrade, they become non-digestible, small plastic particles (Micro- and Nano-plastics / MNPs) which enters our oceans and drinkable water systems like aquifers, rivers, and lakes. These MNPs are ingested by many living organisms including humans. So far, their deleterious effects on various organism and human life are now becoming known. One recent article identified individuals, who have MNPs in their carotid artery plaque, as having a 5 fold higher likelihood of a future stroke, heart attack or even death over a three year period, when compared to similarly matched individuals who did **not** have MNPs in their carotid artery plaque. (2)

NOW we understand that plastics, as they are, may have been a mistake. This article is a summary of the book by Sandra Ann Harris, "Say Goodbye to Plastic". (3) The below text identifies 15 ways to live without plastics and will mainly focus on plastics in the kitchen. (Please look at the weekly Westchester e-Newsletter for how to replace plastics for the other rooms in your home.)

#### Kitchen

- **1.** If consumers do not buy items made from or contained in plastic, manufacturers won't make item. For example, I can buy apple sauce in a glass jar and not a plastic container. If the item you buy only comes in a plastic container even from different manufactures, consider *re-thinking* the need to purchase that item. Find an appropriate replacement (e.g. I have used apple sauce to replace sugar in some recipes.)
- **2. Single ply plastic bag alternative**: When shopping, bring re-usable bags to put your groceries in. Ten years ago, Mariano's sold canvas containers with handles which I still use when shopping even at other stores.
- **3. Plastic baggie alternative:** Use safe, washable metal containers with silicone lids as a container when making a lunch for your school age children or for left overs. (Look at the stackable options from ECOlunchbox at <a href="https://search.app/Lm2RMoURpKkm2Jrk8">https://search.app/Lm2RMoURpKkm2Jrk8</a> ).
- **4. Styrofoam cup/paper coffee cup/plastic water bottle alternatives:** Use reusable, washable metal (or ceramic/glass) sealed travel mugs. Ask if your barista can fill your reusable non-plastic cup when ordering your coffee.
- **5. Single use straws, plastic utensils, etc. alternatives**: Refuse to take items from your "to go" order and replace with reusable glass/metal/ceramic containers with silicone lids and use your washable metal/wood utensils.
- **6. Plastic trash can liner alternative:** Consider new biodegradable bioplastics which degrade best at high temperatures used at an industrial composting facility. Otherwise, reconsider using such bioplastics until more information is available on its safety to soil and ecosystems.
- **7.** Certain bamboo kitchen utensils may not be recyclable or compostable because of their lacquered finish. But if finished with an organic oil, then those are okay to use and dispose of in the trash.
- 8. Black plastic utensils alternative: Note that these utensils are known to leach forever chemicals (PFASs) that are harmful to us. If you have these, discard in trash and do not buy them anymore (4). Rather, use metal, wood or silicone utensils.

- **9**. **Existing plastic containers** in your home can be repurposed using them as non-food storage containers, potted plant containers, etc.
- **10**. **Bread in a plastic bag alternatives:** Rather buy bread that comes in a paper bag (but without the cellophane window). At a bakery, ask to place bread in a paper bag or bring your own clean cloth bag (pillow case?) or waxed cotton bread bag. Store bagged bread in a metal/wood/bamboo bread box at home.
- **11. Tea bag alternative:** Because many tea bags are made from polyethylene (PET) and nylon, you can buy tea in metal containers. Steep tea in hot water using a reusable metal infuser.
- **12**. **Alternatives for Tetra Packs** (cardboard looking outside with foil lining inside) that are used for prepackaged baby food, broth, spaghetti sauces, etc.: This packaging is not recyclable. Rather buy items in glass jars or aluminum/metal cans.
- **13.** Plastic wrap and wax paper alternatives (where the coating is a petroleum product): Instead use paper coated with beeswax or jojoba oil. Also consider using parchment paper that has a coating of silicone or aluminum foil. Used, but clean, aluminum foil is 100% recyclable.
- **14. Kitchen sink (plastic) sponge alternatives:** Note some sponges have antibacterial Triclosan in them, but now this chemical is found to be toxic to humans and marine life. Use steel wool pads, natural loofah or a dish cloth (like your mother may have used).
- **15. Teflon and non-stick pots and pans alternatives:** Note: the non-stick surface can leach forever chemicals (PFAFs and others) that are harmful to humans. (4) Rather, one can cook with a cast iron skillet or stainless steel/ceramic/glass cooking containers, pots and pans.

#### **Bathroom**

- **16.** Plastic bottles of body wash, shampoo and conditioner alternatives: One can buy bars of such items usually sold in cardboard packaging (Whole Foods sells a GOOD bar and 365 bar of soap.) *Note: many liquids contain palm oil which is natural, but our rain forests are being cut down to grow these high demand oil palm trees. We recommend that you minimize purchasing non-food products made with palm oil.*
- **17. Commonly used toilet paper alternative:** Toilet paper can be purchased as recycled, unbleached paper that can be sold individually wrapped in paper or packaged in cardboard cartons.
- **18. Plastic toothbrush alternative:** Use a bamboo toothbrush, but many still use nylon bristles. So snap off the head and compost the handle. Also tooth paste comes now in chewable neem sticks, various powders or pastes sold in glass jars. *Avoid* toothpaste that has scrubbing *plastic* microbead particles.

### **Bedroom-Closets: Clothes**

**19.** Acrylic, fleece, Lycra, nylon, polyester, and Spandex alternatives: These materials that are man-made with plastic fibers. With time and washings, MNPs are released and enter the water system. Current water treatments do NOT eliminate the MNPs from the water. When buying clothing, look for renewable / sustainable materials like bamboo, modal, rayon, and Tencel which are derived from plants. Also, choose natural materials made from bamboo, cotton, hemp, linen, silk, or wool. Note: for clothing that one would prefer to be water repellant or wind resistant, consider buying used clothing made with polyester from a thrift store as this would be better than buying new clothing with man-made plastic fibers.

- **20. Plastic wrapped clothing alternative:** Ask sellers to replace the plastic with wrappings made of paper or cardboard items.
- **21. Extensive and trendy wardrobe alternatives:** Consider wearing your existing clothing as long as you can. Consider *simplifying* your wardrobe.

### **Laundry Room**

- **22.** Wash clothes when needed, consider using a faster wash cycle and use cold water. This lowers the amount of energy used with each wash and reduces the release of MNPs/plastic fibers into the water system. Also, a lint trap placed on the out spout of the washing machine can catch larger fibers containing plastics and prevent some of MNP/plastics from entering the water system.
- 23. To save on electricity or gas, minimize your use of clothes dryers by hang-drying your damp clothes.
- **24.** Liquid or pod laundry detergent alternatives: Consider using laundry detergent that is a powder in a box (like your mother may have used more than 50 years ago Whole Food's 365 sells this soap.) If not available, then consider buying detergent in larger plastic containers to minimize the amount of plastic used and recycle the empty bottle. *Avoid* using fabric softners and dryer sheets. Also, *avoid* laundry detergents encased in a plastic poly-vinyl alcohol film (pods) as this material, when it dissolves, is *still a small plastic particle (MNPs)* and is not removed by waste water treatment plants.

#### References

- 1. The Fraud of Plastic Recycling. D. Allen et al. Center for Climate Integrity, Feb., '24. https://www.climateintegrity.org/plastics-fraud
- 2. https://www.nejm.org/doi/full/10.1056/.NEJMoa2407616
- 3. Sandra Ann Harris "Say Goodbye to Plastic A survival guide for plastic-free living" Hatherleigh, 2020. Sold at Amazon for \$14.53
- 4. What are the health effects of PFAS? Agency for Toxic Substances and Disease Registry https://search.app/Dexi92Kyx9RGn9KS8

### **GREEN FACT**

The largest plastic patch is 0.6 million sq. mi. in size (2x the size of Texas or 3x the size of France) and called Great Pacific Garbage Patch found in the Pacific Ocean between Hawaii and California. Most of the plastics are micro-plastics and not easily visible from satellites. See Wikipedia <a href="https://search.app/wotdMTWd1mobwxEh7">https://search.app/wotdMTWd1mobwxEh7</a>

### Recipe of the Month

### **Lentil Bolognese**

## Ingredients

- 1 ½ tablespoons olive oil
- 1 large onion, diced
- 4 garlic cloves, minced
- 1 teaspoon dried oregano
- 1 teaspoon dried thyme (or use more oregano)
- 1 ½ teaspoons kosher salt, plus more to taste

Freshly ground black pepper to taste

- 1 (5.3-ounce) tube of tomato paste
- 1/2 cup dry red wine (optional)
- 3 cups vegetable broth
- 1 cup red lentils, soaked (see step #1)
- ½ cup walnuts (or pecans), crushed finely
- 1 (14.5-ounce/410g) can of crushed tomatoes or whole peeled tomatoes, crushed by hand
- 12-16 ounces long, wide pasta (such as pappardelle or fettuccine; or pasta of your choice)
- 1 tablespoon high-quality balsamic vinegar

Flat-leaf Italian parsley or fresh basil, chopped or slivered (optional)

#### Instructions

- Soak the 1 cup of lentils in water for 30 minutes, or up to 60 minutes.
  Meanwhile, prep all the other ingredients (i.e., chop the onions and garlic, chop the walnuts, etc.)
- 2. Heat a 12-inch deep sauté pan or Dutch oven on medium-high heat. Add the olive oil, and once it's shimmering, add the onions and season with a pinch of salt. Stir occasionally and cook the onions until a light brown fond starts to form on the surface of the pan, about 5 minutes. Add a few spoons of water to deglaze the pan, and stir. Continue cooking the onions, adding more water every few minutes and stirring frequently to prevent burning, until the onions are softened and golden brown, 9-10 minutes.
- 3. Add the garlic, thyme, oregano, 1 1/2 teaspoons kosher salt, and pepper to taste. Stir frequently and cook for 60-90 seconds.
- 4. Stir in the tomato paste and cook for 2-3 minutes to caramelize, stirring very frequently, until it's darker red in color.
- Optional: If using the red wine, pour the wine into the pan and deglaze, scraping up any browned bits. Cook for 1-2 minutes, until the smell of alcohol has burned off and the mixture is jammy.
- 6. Pour in the broth to deglaze the pan, stirring any browned bits on the bottom of the pot and stirring the broth into the tomato paste to combine. Add the lentils and walnuts, and stir to incorporate. Heat until the mixture comes to a boil, then reduce the heat to medium-low to maintain a rapid simmer for 20 minutes, stirring occasionally.
- 7. Add the crushed tomatoes and simmer for another 15-20 minutes, or until the lentils are tender but still al dente, stirring occasionally to prevent burning and sticking. If using crushed tomatoes, you may need to add a little water or lower the heat as needed to prevent burning. I prefer to cook for 20 minutes for a more developed flavor.
- 8. Meanwhile, bring a large pot of water to a boil and salt generously. Add the

- pasta and cook until just *al dente*. Reserve a ladle or so of pasta water (may not need it). Drain the pasta but do not rinse it.
- 9. Taste the bolognese for seasonings, adding more salt and pepper to taste. Finish with the balsamic vinegar and stir to combine.
- 10. Add the hot cooked pasta to the bolognese and toss until well coated in the sauce, adding a bit of pasta water as needed to ensure the sauce coats the noodles. Garnish with chopped parsley or basil, if using.

Source: www.rainbowplantlife.com

Have a plant-based recipe you'd like to share with the community? Send it to <a href="mailto:GROW@westchester-il.gov">GROW@westchester-il.gov</a> for consideration for future newsletters.