

*Module 11, Lesson 1 Handout:*  
**Toxins & Pollution**

It's really hard to not get political when talking about environmental concerns, pollution and climate issues, but when you're discussing these issues with your clients, stick to the science and how these issues relate to health.

**Impact of Climate Change on Human Health**

According to the World Health Organization, air pollution kills 7 million people a year, and one-third of all deaths from stroke, lung cancer, and heart disease are due to air pollution.

Diabetes is also linked to climate change; a researcher from the Netherlands found that a 1-degree Celsius rise in environmental temperature could account for more than 100,000 new diabetes cases per year in the USA alone. Science is also revealing the intimate connection between obesity and climate change, and we know climate change impacts injuries, fatalities and mental health because of severe weather. We also know asthma and cardiovascular disease can be due to air pollution, and there are even heat related illnesses and deaths from high temperatures.

This is just a small snapshot of the statistics out there. It's pretty clear to say climate has a strong impact on health, and the choices we make in our everyday lifestyles have an effect on climate. This all falls under the Live Consciously pillar of a Nutritious Life. Rather than focusing on the negative impact that pollution and climate change has on our lives and health - because it's clear that it's there - let's focus on steps we can take to make changes in our individual lives. Encourage clients to "go green" by making simple swaps in their routines and habits.

**How to Support a Greener Environment & Help in Reducing Pollution**

1. Use energy wisely by turning off electrical appliances and unplugging them when they're not being used (with the energy efficient appliances these days, unplugging them doesn't make a *huge* difference, but every little bit helps.) Buy energy star and energy-efficient brands and swap your light bulbs for more sustainable options such as LED bulbs. Homes and commercial buildings combined account for 74 percent of electricity in the United States, so making these swaps at home and in your office can play a big role in cutting greenhouse gas emissions and reducing pollution.

2. Support renewable energy. If it's an option, look into alternative energy sources for your home, such as solar panels, which do not produce air pollution, water pollution, or greenhouse gases
3. Choose local, organic and seasonal foods at farmers markets. Some supermarkets will carry local foods as well. Local food cuts down on the emissions associated with transport (the energy that goes into gas and refrigeration, for example) and we've discussed the benefits of organic farming in another handout
4. Compost your scraps and waste. This helps cut down on food waste and can play a role in role health
5. Green your commute by walking or biking whenever possible, or carpool and choose public transportation. It makes a difference and you get to squeeze in some precious steps while you're at it
6. Consume less and waste less. Bring reusable bags to the market, buy only what you will need to avoid having food end up in the trash, and shop more frequently to prevent food from spoiling
7. Avoid foods with known toxins, including the following list. You can also use the database on [ewg.org/foodscores](http://ewg.org/foodscores) to find out more about other potentially harmful ingredients.
  - a. **Bisphenol A (BPA)**, which is found in plastic and the linings of some food containers, can leach into food and is an endocrine disruptor. Avoid it by minimizing the BPA specific plastic that touches our food. It is found mostly in water bottles and plastic wrap but may also be in canned products. We also know that the BPA replacements that are now commonly used in plastics might be just as harmful, so it's best to choose glass whenever possible
  - b. **Refined oils**, such as highly processed vegetable oils, throw off our fatty acid balance and this is linked to cancers and obesity. Cook with unrefined oils (coconut oil, olive oil, avocado oil) and cut down on packaged processed foods that often contain refined oils
  - c. **Heterocyclic amines**, which are found in burned meats. We know the charred skin and burned red meat is linked to cancers, as discussed in another handout
  - d. **Artificial trans fats**. Those bad boys are mostly off the market by now, but still remind clients how detrimental they are for heart health. Avoid anything with partially hydrogenated oil and cut back on consumption of red meat, which contains some natural trans fat
8. Choose natural cleaning supplies and hygiene products. EWG has a comprehensive database where you can search different products. They give each product a score and provide info about the ingredients in the product ([www.ewg.org/guides/cleaners](http://www.ewg.org/guides/cleaners)).