A message from Maggie Adler, Suppers Summer Intern, and Dor on water filters...

No matter where you go in the Suppers literature, you will bump into the line, "Experts disagree with one another..." This goes for water too.

My first inclination is to say that we ought to be able to rely on our water authorities and drink the water that comes out of our taps. Most places, I will do this -- especially in New York City -- reminding myself that it is important to drink water and not live in fear.

That's not good enough for everyone, particularly for people who must devote their lives to detoxifying.

Our summer intern Maggie has prepared the following document for Suppers facilitators and members as a springboard to discussions at meetings about water. Just like there is no right diet for everyone, there is no rule about water for everyone. Just like the healthiest foods for some of us are really hard on the environment, the best water is hard on the environment if plastic containers and long journeys are involved.

Our most intimate relationship is with what we put in our bodies; it becomes our cells; it becomes who we are. So we offer these considerations about water...."

According to the Environmental Protection Agency only 90% of US public water systems meet its standards, therefore you may want to use a water filter to further ensure your water's safety. There are multiple pollutants that could be in your water including arsenic, aluminum, prescription drugs, chlorine, fluoride, disinfection byproducts, and a host of other substances that are known carcinogens. A water filter is an economical and environmentally safe way to protect yourself and your family from many of these pollutants, but there are so many options to choose from including counter-top filters to under-the-sink and whole house filters it can become overwhelming. Here is some information that may be useful when deciding which option to go with.

1. Different kinds of water filters, which use a lot of water, which do and don't get out chlorine, cost ranges. This information was paraphrased from, http://www.waterfiltercomparisons.com

	Under-the Counter Filter	Faucet Filter	Pitcher Filter	Whole House Filter
Pro's	 Clean water always available Reduces 10x more pollutants than pitcher filter Convenient Hidden system Typically long lasting (compared to pitcher/countertop) 	 Clean water always available Uses water pressure rather than gravity (pitcher), superior filtration system Longer lasting than pitcher 	 Low purchase price Removes chlorine taste/odor Portable Easier to find/purchase 	 Can keep your entire home filtered on one system (ideal for homes with many faucets/showers) Fewer ongoing costs, no need to buy multiple filters Can reduce odors, tastes and impurities Long lasting
Con's	 Purchase price is usually more expensive Installation is more involved than other types of filters 	 Can be installed to simple faucets, not sprayers, etc. Can take up a lot of space in sink or on countertop 	 Short life span Higher cost throughout lifetime Frequent replacement cartridges Gravity filter system is slower Filtration system is ineffective compared to others Sometimes will not remove VOCs, heavy metals and fluoride 	 Higher up front cost (must be professionally installed) Can require additional plumbing/electricity if the system requires "backflushing"
Price Range	Can Range From: \$100-\$700	Can Range From: \$30- \$115	Can Range From: \$15-\$130	Can Range From: \$1,000-\$3,500
	Brand: Aquasana- AQ 5300 Drinking Water Filter Removes: (66 Contaminants) Asbestos, Lead, Mercury, Chloramines, Chloring Turkidity	Brand: Aquasana AQ-4000 Removes: (60 contaminants) Asbestos, Lead, Mercury, Chloramines, Chlorine, Turbidity, Cysts, VOCs	Brand: Aquasana- Powered Water Filtration System (AQ- PWFS) Removes: (60 contaminants, 10x more than standard pitcher filters)	Brand: Aquasana - EQ- 600 Rhino Whole House Filter Features: No back- flushing required, no loss in water pressure, no electricity required, dual tapk design easy
	Chlorine, Turbidity, Cysts, Volatile Organic Chemicals (VOCs, which includes pesticides, herbicides, etc.)	System Cost: \$114.27	pitcher filters) Asbestos, Lead, Mercury, Chloramines, Chlorine, Turbidity, Cysts, VOCs	dual-tank design, easy replacement, excellent chlorine reduction System Cost: \$1,143
	System Cost: \$285.70		System Cost: \$129.99	

2. How to get chlorine out for free, like boiling, letting it sit out, does vitamin C powder really work.

Boiling Water to Remove Chlorine: Boiling water is a simple and inexpensive way to remove chlorine from water, although it can be time consuming to boil all of the water that one needs. Boiling for 15-20 minutes is efficient to remove the chemicals.

<u>Vitamin C Powder to Remove Chlorine</u>: Vitamin C Powder is a newer way to neutralize chlorine in water. There are two forms of vitamin c powder that will work, ascorbic acid and sodium ascorbate.

Here is a link to how to use Vitamin C Powder: http://www.fs.fed.us/t-d/pubs/html/05231301/05231301.html

Letting Water Sit Out: Another effective and inexpensive way that some may use to remove chlorine is to let the water sit out which will allow the chemicals to transform into a gas and go into the air. This can also be time consuming as it can take up to two days to remove all of the chlorine from the water.

Here is a link with more information: http://alifeunprocessed.blogspot.com/2012/02/get-chlorine-out.html

3. How to decide if we're better off filtering our city water or getting bottled, and what kinds of plastics are safest?

Bottled Water has been getting a negative ratings recently and for very good reasons. After various in depth research in has been found that plastic bottled water can pose dangers to both our health and environment. Some of the worrisome data revealed include:

- Chemicals from the plastic bottles can leech into the water itself and therefore wind up into our body
- Long storage of plastic water bottles in warm climates can increase the likelihood of bacterial growth
- Most bottled water is no better than tap water as far as the pollutants that are carried
- Many types of plastic bottles contain BPA (Bisphenol A), a hormone disruptor that can imitate estrogen.
- Bottled water bottles are a major source of consumer waste each year

There are various options that still have similar convenience to a plastic water bottle. Here are some options.

- Glass water bottles and Stainless steel water bottles provide a safe alternative to plastic water bottles and an be reused therefore creating much less waste, saving money and having a convenient drink with you at all times.
- Both glass and steel water bottles come in many colors, styles and sizes for every member of the household and will be an easy way to reduce your carbon footprint.

• Here is a link to a site with many options for both glass and stainless steel water bottles: http://mightynest.com/shop/water-bottles/water-bottles

With so much information out about plastic, it can be overwhelming to understand what plastics are safe and which must be avoided. It is recommended to never heat plastics or use plastics after being left in extreme heat. Additionally it is important to recycle plastics once they begin to crack or breakdown.

Here is some more information and guidelines about the common types of plastics: Information from (http://www.care2.com/greenliving/which-plastics-are-safe.html)

1. PET or PETE (NYLON)

This type of plastic is typically thin and clear and used in water bottles, soda, cooking oil and peanut butter containers. Research on this type reveals that it is best to only use this plastic once and not to reuse/reheat these bottles.

2. HDPE (High-density Polyethylene)

This plastic is more thick and opaque than others. It is commonly used in milk and water jugs, juice bottles, detergent containers, toys, etc. This plastic should be used sparingly and can be recycled.

3. PVC (Polyvinyl Chloride)

This plastic may be rigid or flexible and is typically found in bibs, mattress covers and commercial-grade plastic wrap. Research has revealed that this plastic should be avoided because it creates carcinogen with can harm humans, animals and the environment. Additionally PVC can contain phthalates, which have been linked too male reproductive problems and birth defects. It is not easily recyclable.

4. Hydration

Hydration is essential to the health of your body. Here is a document written by Karen Flicker, a medical advisor to The Suppers Programs. In the document she describes the importance of staying hydrated and ways to do so.

http://www.thesuppersprograms.org/content/hydration-information