

# SPROUTING SAFELY

*Sprouts are tasty and extremely wholesome but, like any raw food, safety precautions should be taken.*

**Basic Safety Steps:** There are a few straightforward steps to take to ensure sprouts are safely grown.

1. The first step is to ensure that your supplies are clean; water, sprouting vessel and seeds. The quality of water you should be just as sanitary as the quality of water you drink. As far as your sprouting vessel is concerned, you'll want to wash it after each use, just like washing dishes after a meal. It is possible that the seeds could also be contaminated and there are a few basic steps to ensure that even your seeds are free from bacteria (see additional information below).
2. **Caution:** Stay away from sprouting seeds in the Solanaceae family (commonly referred to as nightshade). These include peppers, tomatoes, potatoes, and eggplants. Plants in this family have can have a high level of alkaloids which can be toxic so it is best to just play it safe and avoid them as a sprout.
3. As you sprout the seeds, straightforward procedures such as washing your hands, washing the sprouts and properly drying the sprouts before storage can greatly mitigate any bacterial risks. Most of all use common sense. If something doesn't smell right or look right don't eat it!

## Specific Safety Steps:

Clean supplies:

1. Water – it is absolutely necessary to ensure you have a clean water supply, if unsure use a filter or bottled water.
2. Sprouting vessel – whether using a jar, sprout tray, or hemp bag ensure that you have either sterilized, or at least sanitized, all items that will come into contact with your seeds and sprouts.
  - a. *Sterilizing* – this is the safest option, simply boil items for 10 minutes. If you are using a sprout bag this is your best option. Turn the bag inside out, use soap and water to clean bag, rinse out remaining soap and boil bag. Note your bag will likely discolor over time, this is normal and should be viewed as a badge of honor, just like those comfortable jeans!
  - b. *Sanitizing* – there are a number of good options for sanitizing:
    - i. Bleach – follow the directions on the container, usually 3/4<sup>th</sup> cups of unscented bleach per gallon of water. Soak for at least 5 minutes and then rinse with clean water (see above).
    - ii. Star San – available at most brewing stores. I like this sanitizer because it does not leave any “off flavor”. Follow directions on package.
3. Seeds – as a seed company we hate to think that seeds can be the start to bacteria but the reality is that it can happen. Commercial sprout houses typically use a 2% hypochlorite solution for 10 minutes to treat their seeds, but at these levels this procedure is not recommended for the average home user. I use the procedure recommended by UC Davis in publication 8151 (link in endnotes<sup>1</sup>).
  - a. On your stove heat 3% hydrogen peroxide (what you will typically find at the store) to 140°F (60°C). Use a thermometer, a digital seems to be easiest to use, to maintain your temperature. The temperature range is key to maximizing your ability to kill bacteria but you also want to be careful to not get too hot or you will kill the seed (i.e. lower the germination).
  - b. Put seeds in a small mesh strainer and lower them completely into the solution for 5 minutes, swirling every minute or so to ensure all seeds make contact with the peroxide.

4. Rinse seeds for a minute under room temperature water and discard peroxide solution. Since peroxide breaks down into water and oxygen it is safe to just pour down your drain.

### **Clean sprouting process**

1. Wash your hands every time you handle the seeds or sprouts – do it right, don't give it the quick rinse. A bit of hand sanitizer after a good wash is not a bad idea either.
2. After soaking your seeds skim off anything floating on the surface. Research has shown that these “floaters” may be more likely to cause problems.
3. No matter what sprouting method you use rinse your seeds/sprouts do it frequently, and of course, with clean water. At least twice a day is recommend, I usually rinse 3 to 4 times a day.
4. Completely drain your seeds/sprouts after each rinse. Rinsing is key to safety and keeping the seeds/sprouts moist is needed for germination but standing water can lead to mold and bacteria so get rid of the excess.
5. As sprouts develop use a clean fork to break up the sprouts before rinsing, as you rinse allow any seed hulls or other “floaters” to rinse out.
6. After your sprouts have developed do a final rinse in a clean bowl, use a clean fork, or your clean hands, to remove any final floaters or other non-sprout material.
7. Dry sprouts with a clean paper towel or use a fine mesh salad spinner to remove all excess water (or use a paper towel to line your salad spinner if the mesh is too large). Store in a clean bag or other sealed container in the refrigerator.

Most of all use common sense. If something doesn't smell right or look right don't eat it (note however some things, such as broccoli sprouts, give off a natural “sulfur” type smell this is normal and it is that awesome sulfaraphane, along with other great things, that has cancer researchers so intrigued with broccoli sprouts). And, as the FDA and CDC suggest young children, elderly persons, or persons with weakened immune systems may want to avoid them.

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<sup>i</sup> <http://postharvest.ucdavis.edu/datastorefiles/234-412.pdf>