

## Toasted Pumpkin Seeds Experiment

**Goals:** To follow a process of toasting pumpkin seeds.  
To compare/contrast salted and non-salted pumpkin seeds.

**Method:** Follow instructions step-by-step.  
Hands-on experience.

**Parent notes:** Questions are interspersed throughout the recipe. Simply walk through step-by-step asking questions where prompted and do a lot of listening to your kids! Give them ample time to make their own comments and created their own hypotheses!

### Materials:

pumpkin  
sharp knife (adult supervision is definitely required with this!)  
large spoon  
big bowl  
table covering  
strainer  
pot large enough for your seeds and a good amount of water  
water  
salt

### Directions:

After covering your table and while cutting the top off of your pumpkin in jack-o-lantern-making fashion, start **asking** your kids questions.

Start with:

How do pumpkins grow?  
Do they grow from a seed?  
From a tree? In the wild?

Then move on to other questions like:

Is this pumpkin solid? hollow?  
What are the parts of a pumpkin (flesh, skin, seeds, stem)?

Once your pumpkin is open, scoop out the insides. My boys loved to get their fingers in there grabbing huge amounts of seeds, but didn't stay at it for long (it got too goopy).

### Ask:

Why is a pumpkin so goopy inside?

Let the kids get distracted with another adult creating their jack-o-lanterns while you move to the next step.

Clean off the seeds the best you can after putting some water on to boil. This is a little challenging, but try to get to the point where you only have seeds, no stringy stuff. This is where the strainer comes into play. Rinse well! Set a few seeds aside to use as a comparison tool at the end of the experiment.

Once the seeds are clean, its time to brine them!

**Brine**

(noun) water saturated or strongly impregnated with salt.

(verb) soak in or saturate with salty water

Measure out the seeds. Let the kids get involved! This is a great time for some math talk! (addition, fractions....)

For every cup of seeds you will need 1 tablespoon of salt and try for a generous amount of water, about 2 cups for each cup of seeds.

**Ask:**

What does the salt water taste like, then try it (provide a little bowl of cooled off salt water).

Why we are 'brining' the seeds?

What could be happening with to the seeds in the saltwater?

Will they taste salty from this step alone?

**Observe:**

What do the seeds look like? (This is best done before being added to the saltwater or even keep one or two out of the brine.)

**Predict:**

What might the seeds look like after the 10 minutes of simmering on the stove is done?

When the 10 minutes of simmering in the saltwater is up, strain the seeds, then carefully spread them onto a few paper towels to dry.

Set a couple seeds aside for your kiddos to do the touch and smell test.

**Observe again:**

Actually pick up the seeds. Describe what they feel like.

Smell the seeds. Describe how they smell. Do they smell different?

Do you think the seeds are different than before they were brined? (Compare and contrast.)

Do you think they will look the same when we take them out of the oven?

Push a few seeds aside to act as a **control group**.

~Toasted Pumpkin Seeds Experiment~

Spread the seeds onto cookie sheets, drizzle them with olive oil and seasonings of your choice  
Try to make a single layer of seeds.

Place the cookie sheets into a 325 degree oven for about 10 minutes.

**Observe** what they look like compared to the few that didn't go into the oven. Give them a little stir, then pop them in for another 10 minutes or so.

Watch for the last 5 minutes so they don't burn! Pull a couple out, let them cool and crack them open to make sure the seed inside isn't burning. Give them a taste test, they may need a few more minutes to get crispy! You want them a nice golden brown.

(Remember to be safe around the hot oven! And remember all ovens are different, yours may need more time after giving another stir, or less time, which is why you should watch your seeds in the final moments of the recommended cooking time!)

Observe the seeds when you pull them out of the oven.

What do they look like?

Compare/contrast with the control group and the ones you didn't brine in the very beginning of the experiment.

Dash a little more salt and seasonings over them if you'd like.

Grab a few seasoned seeds, your unsalted seeds, your plain seeds and your kiddos. Do a taste test and visual comparison and describe your results!

Enjoy your delicious, fresh toasted pumpkin seeds!