



## A weekly question/answer column

## **Am I Underprocessing My Green Beans?**

Charlotte Brennand\* answers:

**Question:** "I processed my green beans at 10 lbs. of pressure and now my neighbor tells me they are underprocessed. Why are they underprocessed when I followed the instructions in my canning guide for green beans?"

**Answer:** If you live at an altitude above 1000 feet, your neighbor is right. Your beans are underprocessed. Ten pounds pressure is only adequate if you live between sea level and 1000 feet elevation. Otherwise, you need to make altitude adjustments for both water bath and pressure canning. Most canning guides discuss altitude adjustments in general but do not include altitude adjustments for specific canning recipes. It is a good idea to note the corrected processing time or pressure on recipes that you use.

Here are some specifics on why and how to make altitude adjustments:

- As altitude increases, the boiling point of water decreases. Since the bottled food is receiving less heat, the processing requirements have to be adjusted. This is done by increasing the amount of time for processing when using a boiling water bath. When using a pressure canner, the pounds of pressure is increased instead of length of processing. If a pressure canner has a weighted gauge, it is necessary to use 15 lbs. instead of 10 lbs. If the pressure canner has a dial gauge, then the exact adjustment depends on the altitude. For example, if your altitude is 4500 feet, you would need to use the adjustment for 5000 feet. This would mean you would process green beans at a minimum of 12 1/2 lbs of pressure. Always round the altitude value up to the next level. If you are at 5001 feet, use the 6000-feet adjustment, not the 5000-feet adjustment.
- It is also important that the pressure does not fall below the correct pressure for the altitude. The general rule is if the pressure drops below the correct pressure, bring the pressure back up and begin timing again. Using a slightly higher pressure than necessary will decrease the chance of having the pressure drop below the desired level.
- The "USDA Canning Guide" shows the altitude adjustments on every canning recipe. It is available on the USU Extension Web page at: http://www.ext.usu.edu/publica/foodpubs.htm

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