



Harmony Valley Farm

An update for our Community Supported Agriculture Members - Since 1993

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The Bottom Line: Know Your Farmer

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The debate over whether organic foods are a better choice than conventionally produced foods is not a new topic, however an article published in September 2012 in the *Annals of Internal Medicine* has sparked a flurry of debate in the media that demonstrates some very strong feelings on both sides of the fence. The article was entitled "Are Organic Foods Safer or Healthier Than Conventional Alternatives?: A Systematic Review." This paper outlined the work of a group of researchers at Stanford University who did a meta-analysis of studies comparing organic and conventional foods. A meta-analysis is a type of research review method that does not create new data, but looks at existing studies and combined results to see if there are any identifiable patterns or other data from which conclusions can be drawn.

The conclusion from this study, as stated in the abstract was as follows: "The published literature lacks strong evidence that organic foods are significantly more nutritious than conventional foods. Consumption of organic foods may reduce exposure to pesticide residues and antibiotic-resistant bacteria."¹ But what does this statement mean and how did they draw this conclusion. This study analyzed results from 17 studies on humans and 223 studies of nutrient content in foods. In their review of this set of data, one conclusion they drew was that there were no major differences in the vitamin content of these two groups of foods. This is an interesting comparison since there have been studies published previously which contradict this statement. The subject of somewhat less attention, a similar study also came out of Newcastle University in England showing that organic produce has higher levels of not only nutrients but also secondary plant metabolites.² We wrote an article about these plant components in January 2012 and work very hard to supply our plants with the nutrients they need to make these components since we believe they contribute to the health of the plant and the person that consumes them.

So why the discrepancies with these reviews and how strong are the conclusions of each? Take these claims about nutrient content in foods with a huge grain of salt because neither study accounted for differences in produce quality within organic and conventional categories. Farming practices and soil quality have huge effects on nutrient content that the studies couldn't capture. One of the investigators of the Stanford Study, Crystal Smith-Spangler, was quoted as saying "What I learned is there's a lot of variation between farming practices.... It appears there are a lot of different factors

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that are important in predicting nutritional quality and harms."³ The abstract for the study also states the following as a limitation of the study: "Studies were heterogeneous and limited in number, and publication bias may be present."¹ The bottom line is it is difficult to make significant conclusions about research when the research studies you are comparing have so many differing variables and designs. As consumers are becoming more informed about their food choices, it seems the media is working to make the public believe a carrot is a carrot regardless of where it comes from. Furthermore, most informed consumers who choose organic are also concerned with the pesticides it lacks.

The Stanford study found that organic produce contains, on average, about 30% less pesticide residue than conventional, but specified that both were below the FDA/EPA amounts considered fit for human consumption. These safe levels, though, were determined based on an individual dose and are not meant to account for lifetime exposure. So the huge caveat here is that, if we're eating conventional vegetables and fruits multiple times daily like we should, the aggregate amount of pesticide residue to which we are exposed may not be so safe. Also, it is not clear what the longterm effects of cumulative exposure to multiple agrichemicals administered together may be, especially in children. I guess the safety of food containing pesticides should be determined by the person consuming the food. If you feel comfortable consuming an amount of a toxin that the government considers safe up to a point, then you could classify conventional foods just as safe as organic foods that do not have these chemicals.

Finally, the Stanford study found that organic pork and chicken appeared to reduce exposure to antibiotic-resistant bacteria – but since they contained about the same amount of minerals and protein, who cares about fatal Staph infections, right? As stated in the abstract, "Bacterial contamination of retail chicken and pork was common but unrelated to farming method. However, the risk for isolating bacteria resistant to 3 or more antibiotics was higher in conventional than in organic chicken and pork (risk difference, 33%)."

The bottom line is that studies such as the meta-analyses done by the Stanford and Newcastle groups are subject to interpretation and can be performed using different sets of standards which ultimately will impact the final conclusions. When evaluating research claims, it's important to look at the entire picture for how the research was

done and make conclusions for yourself. Who funded the research? Were there any private interests or conflicts of interest? How well was the study designed and were the results statistically significant. As is often the case with the media, a single conclusive statement can be used interpretively to support one groups interests in any way they want to.

Where does this leave the consumer who is making the decision to buy conventionally produced foods versus organic food? There are many factors that affect food production. Knowing who is producing your food, whether produce, dairy, meat, or eggs is your best guarantee as to the quality of your food. Growers and producers that invest in the health of their soil and plants will produce high quality products that speak for themselves by their vivid colors, delicious flavors, longer shelf life and the health of those eating these foods.

References

1. Smith-Spangler C, Brandeau ML, Hunter GE, et al. Are Organic Foods Safer or Healthier Than Conventional Alternatives?: A Systemic Review. *Annals of Internal Medicine* 2012; Abstract.
2. Chang, Kenneth. Parsing of Data Led to Mixed Messages on Organic Food's Value. *The New York Times*. October 15, 2012.
3. Brandt, Michelle. Little evidence of health benefits from organic foods, Stanford study finds. *Inside Stanford Medicine*. September 3, 2012.

Winter Radishes with Sour Cream Dressing & Poppy Seeds

Recipe borrowed from *Food and Wine Magazine*, September 2011

Serves 4

1 ½ tsp poppy seeds
1 ½ tsp yellow mustard seeds
½ cup sour cream
2 tsp sherry vinegar or white wine vinegar
½ tsp ground cumin
Salt and freshly ground pepper
2 medium beauty heart and/or black radishes, thinly sliced

1. In a small skillet, toast mustard and poppy seeds over moderate heat until fragrant, about 1 minute. Transfer the seeds to a plate to cool completely.
 2. In a small bowl, combine the sour cream with the vinegar and cumin and season with salt and pepper.
 3. Arrange the radishes on a large plate or platter. Drizzle with the dressing. Garnish with toasted mustard and poppy seeds.
- ***Variation: To turn this into a radish slaw, cut the radishes into matchsticks and toss with the sour cream dressing and seeds.

This Week's Box: Extending the Season

The extended season boxes are packed full of vegetables that will store well into February and are intended to bridge the gap between the end of weekly vegetable deliveries and the dreaded return to the grocery store produce section. To get the most out of your purchase, take time to make sure you store your vegetables properly to preserve them as long as possible.

ROOTS: The key to storing root vegetables is to keep them cold (33-36°F) and hydrated. Store root veggies in a plastic bag or other container with a lid to hold moisture. Check them periodically and if you notice they are starting to get soft, spongy or have a wrinkled appearance, rehydrate them in a bowl of water in your refrigerator or use them in a soup, stew or other preparation where they will be added to a liquid.

BEAUTY HEART RADISHES: Adds a splash to winter slaws, salads, veggie platters, stir-fries and makes a beautiful soup garnish.

CELERIAC: Use in place of a portion of potatoes for hash browns; can also be used raw, simply grate the root and toss it with a creamy dressing and other vegetables or fruits.

PARSNIPS: Can take the place of carrots or zucchini in recipes for quick breads or cookies. Don't forget to decrease the amount of sweetener in the recipe since the parsnips have a lot of natural sugars.

CARROTS: Cut the carrot into long "chips" by cutting them on the bias. Use the carrot chips to scoop up tuna salad, dip, etc.

RED BEETS: Toss cooked beets with a citrus vinaigrette and toasted almonds for a simple salad.

RUTABAGAS: Sweet and mild, rutabagas are best when simply boiled and mashed with butter and a touch of cream.

SCARLET TURNIP: Use in a stir-fry along with red cabbage and orange carrots to create an eye-catching combo.

YELLOW ONIONS & PORCELAIN GARLIC: We store onions and garlic in a cooler held between 34-38°F with low humidity. Most home refrigerators have higher humidity levels than is ideal for garlic and onions, so we recommend storing these vegetables in a cool (but not freezing) location in your home that is also dry. A cool closet, pantry or a dry area in your garage or basement (as long as these areas are insulated and held above 32°F) are appropriate. Check them periodically and remove any that are sprouting or showing signs of decay so they don't accelerate the breakdown of other ones they are near. You can still use most of the onion even if it has started to sprout, just remove the green sprout in the middle.

DRIED BEANS & PEPPERS: These are easy to store, simply keep them dry. Either store in the sealed plastic bags we've delivered them in or transfer them to a jar with a tight fitting lid. Keep them on a shelf away from moisture and you can store the beans for several months and the peppers for up to a year.

CRANBERRY BEANS: This bean is similar to a pinto or cannellini bean. They are an excellent choice for soups, but can also be incorporated into winter salads, dips, etc.

SUPER CHILES: Similar to a Thai chili, these are one of the hottest peppers we grow. A little will go a long way, so use to your liking. They can be crushed or ground in a spice grinder to be used as a seasoning ingredient or you can use them whole. Use the pepper flakes to spice up pasta dishes, soups and pizza, or incorporate them into stir-fry sauces, curries, etc.

CABBAGE: This is your winter "salad" green and is nature's answer to continuing to eat your greens even in the middle of a Wisconsin winter. Store your cabbage in a plastic bag or a container that can be sealed and keep it in the cold part of your refrigerator. You don't have to use the entire head at one time. Just store the remaining portion until you are ready for it. The previously cut edge may look dry or start to brown. Simply trim this portion off and use the remainder.

GREEN SAVOY CABBAGE: This is a versatile cabbage good for use in raw salads and slaws or cooked dishes.

RED CABBAGE OR RED SAVOY CABBAGE: Beyond the traditional braised red cabbage, this veggie is great for adding a splash of nutrient rich color to salads and stir-fries. It pairs well with other veggies including onions, green cabbage and winter radishes. It also works well in slaws and cooked dishes when paired with apples, pears and citrus.

SQUASH & SWEET POTATOES: Both of these vegetables should be stored out of the refrigerator to protect them from chill injury. Squash is optimally stored at 45-50°F and sweet potatoes should be stored at about 55°F. Watch them for signs of decay, and if you notice a small bad spot forming use the vegetable immediately and simply trim away the affected portion. To make sure you don't lose any vegetables to decay, you can also cook them and then freeze them for use later in the winter.

KABOCHA OR FESTIVAL SQUASH: Both of these varieties are excellent when cubed and roasted. Toss with other roasted veggies or roast them on their own. At the end of cooking time, season them with a little chili pepper and a squeeze of lime.

SWEET POTATOES: Peel 2-3 medium sized sweet potatoes and cook them in a pan with 1 can of coconut milk and the juice and zest of 1 lime or orange. When the potatoes are tender, puree them and spread the puree in a baking dish. Top the potatoes with shredded coconut and chopped pecans. Bake in the oven for 10-15 minutes or until coconut and nuts are toasted.

Warm Bean Salad with Smoked Trout

Recipe borrowed from *Food and Wine Magazine*, October 2012

½ pound Cranberry beans or other dried white bean, sorted and rinsed

2 ounces sliced bacon, chopped

1 garlic clove, minced

1 large carrot, cut into ½-inch dice plus 1 medium carrot, shredded

1 tsp finely chopped rosemary

¼ cup plus 1 tablespoon extra-virgin olive oil

1 ½ tablespoons fresh lemon juice

Salt and freshly ground black pepper

5 ounces skinless smoked trout, flesh flaked

2 tablespoons chopped flat-leaf parsley

1. Soak the beans in water for 4-6 hours. Drain off the soaking water and rinse the beans. Put the beans in a medium pot and add the bacon, garlic, carrot, rosemary and 1 tablespoon of the olive oil. Add 3 cups of water and bring to a boil. Cover and simmer over medium heat until the beans are tender and creamy in texture. (Note: Dried beans that have only been stored for several months from the time of harvest will cook much more quickly than beans that have been stored for more than 4-6 months after harvest)

2. Once cooked, cool beans to room temperature. If there is extra cooking liquid from the beans, drain it off. Once at room temperature, toss beans with the lemon juice and remaining ¼ cup of olive oil. Season with salt and black pepper. Arrange the beans in a large serving bowl or on a serving platter. Top with shredded carrot and trout. Sprinkle with parsley and serve.