



Harmony Valley Farm

An update for our Community Supported Agriculture Members - Since 1993

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Ginger: Spicy, or Anti-Inflammatory?

By Laurel Blomquist

Welcome to another article in our anti-cancer series. Today's focus is on the tropical rhizome, ginger. Don't forget, these anti-cancer foods also combat neurological, immunological, gastrointestinal, cardiovascular, and metabolic disorders, as well as the process of aging.

Ginger has not yet been studied by Richard Beliveau and Denis Gingras, authors of *Foods to Fight Cancer*. However, they do include it in their appendix as a flavor you should include in your anti-cancer meals, particularly any of an Asian flair. They say, "One of the principal molecules present in this spicy root, known as gingerol, has often been put forward as a powerful potential anticancer agent, for its anti-inflammatory properties as well as its inhibiting activity on cancerous cells." (p. 179)

David Servan-Schreiber also mentions ginger in *Anti-Cancer: A New Way of Life*. He calls out ginger's anti-inflammatory, antioxidant, and protective effects. He cites three studies that demonstrate this, as well as ginger's ability to reduce the creation of new blood vessels. He recommends ginger to alleviate nausea brought on by chemotherapy or radiation, and suggests making a simple tea by slicing an inch of ginger and steeping in boiling water for ten to fifteen minutes. (p. 134)

Ginger has been found effective at inhibiting liver cancer, a particularly fast-growing cancer that spreads rapidly. Researchers in China found that ginger reduced serum liver cancer markers and liver tissue growth factors. Ginger was also found to inhibit inflammation and promote apoptosis (ritual cell death) using three of its compounds: geraniol, pinostrobin and clavatol. 6-shogaol and 6-gingerol, two of ginger's active ingredients, also prohibited metastasis, or the spread of liver cancer to other parts of the body. (Zhou et al. 2016)

I found a laundry list of benefits from ginger in the book *The 150 Healthiest Foods on Earth*, by Jonny Bowden (p. 284-285). For those of you who practice Ayurveda, India's 5000-year old "Science of Life," you may already know that ginger is known as the universal remedy. Bowden reiterates ginger's ability to stave off nausea and vomiting, and adds that since ginger doesn't have side effects, it may be particularly of interest to pregnant women experiencing morning sickness. He lists several active ingredients, including shogaol and zingerone, which are anti-inflammatory and could be used by those suffering from arthritis or fibromyalgia. He cites a study suggesting that gingerols may inhibit the growth of human colorectal cancer cells. Other studies show that ginger

This Week's Box

BRUSSELS SPROUTS: The harvest this year was light, but we're thankful to have enough for everyone this week! Enjoy your favorite sprouts recipe, or consider making a simple side dish by tossing halved, roasted Brussels sprouts with Dijon mustard and honey.

LACINATO KALE: This type of kale is delicious in a warm pot of Italian minestrone or enjoy it in your morning green smoothie.

RED MIZUNA: Fall is our favorite time of the year to eat greens such as this in the mustard family. Their colors intensify in the fall and the flavor is more mild and sweet compared to earlier in the season. Red Mizuna makes a tasty base for a salad along with carrots, radishes, red onions and a flavorful vinaigrette. It may also be simply sautéed, stir-fried or steamed along with fresh ginger, garlic and a drizzle of sesame oil.

SPINACH: Where has Farmer Richard been hiding this spinach!? Enjoy a simple, fresh spinach salad with your favorite vegetable toppings and grilled chicken for a quick weeknight meal, or enjoy spinach quiche for a weekend brunch.

ORANGE CARROTS: Looking for something new to try for breakfast? Try slow cooked steel cut oats accompanied by shredded carrots, applesauce, raisins, pineapple, sugar and pumpkin pie spice. Cook overnight on low and wake up to an amazing breakfast for a crisp and cool morning.

BEAUTY HEART RADISHES: These beautiful radishes are a great vessel for your favorite dip or sliced cheese. Slice the radish and use as you would your favorite cracker. They are also delicious shredded in a salad or slaw.

WHITE SUNCHOKES OR PETER WILCOX POTATOES: We were only able to harvest 3 bins of sunchokes before the rest of the crop was lost to rain with the late September storms. We've been saving them for this box and this will be the last sunchokes we have until the new crop comes in next fall! Refer to the feature article about sunchokes from our May 12/13/14 newsletter this spring. There's also a delicious recipe for Chile and Lime Sunchoke Salsa in that newsletter. It makes a delicious topping for fish, chicken or beef tacos!

CELERIAC: Celeriac is the perfect addition to your favorite chicken noodle soup or stew recipe. It can also be added to mashed potatoes.

ITALIAN GARLIC: Garlic, ginger & onions are the threesome combo that make a great base for any and every stir-fry! This week's box is loaded with other delicious vegetables to make a colorful blend. Add a little protein, your favorite sauce, a pot of rice and you're set!

FRESH BABY GINGER: See this week's vegetable feature and main article for more information on cooking and storage ideas as well as recipes for baby ginger.

RED ONIONS: Sliced red onions are a great addition to sandwiches and spinach salad. The key is in the thickness of the slice: the thinner, the better!

FESTIVAL OR BUTTERNUT SQUASH: Don't forget to save the tender seeds from these squash and roast them in the oven for a crunchy, delicious snack!

has positive effects on the gastrointestinal tract, the cardiovascular system, pain, and fever.

In mice and other animal studies, ginger was shown to lower cholesterol, slow the development of atherosclerosis (arterial plaque build-up), boost the immune system, slow the growth of tumors, and work as an antimicrobial and antiviral agent. Ginger can also improve circulation for those with perpetually cold hands and feet. However, precautions should be taken by those who take prescription medications that thin the blood, such as Coumadin or aspirin, since the effects will be amplified by ginger. Ginger also increases bile acid secretion, which is great for those with Fatty Liver Disease, but not so good for people with gallstones or gallbladder disease. An increase in bile helps the body process and absorb fats, which is necessary to absorb fat-soluble vitamins such as A, E,

D, and K.

The most exciting article I read about ginger cited a recent study that showed 6-shogaol (a compound found in dried or cooked ginger) is 10,000 times more effective than chemotherapy drugs at destroying cancer stem cells! The study was done on breast cancer stem cells, but the research suggests it could be used for any cancer. What is a cancer stem cell? It is the "mother" cell that regenerates to produce new cancer cells, forming tumors and offshoots. Chemotherapy does not kill off these cells, even at very high doses. Chemo also does not differentiate between healthy cells and cancer cells, which is why it typically makes the patient feel sicker in the short term. Killing cancer stem cells is very important for the long-term fight of any patient against cancer. Doctors may be able to remove cancerous cells and tumors, but unless they kill off the stem cells, cancer

may return in the future. For more information on this study, and a link to the study itself, visit: foodrevolution.org/blog/ginger-cancer-treatment.

I used to eat ginger a few times a week, but now I think I'm going to try to incorporate it into my meals or drinks every day. With its distinct flavor and potent anti-cancer compounds, ginger can't be beat!

References

Beliveau, Richard, and Denis Gingras. *Foods to Fight Cancer*. 2007.

Bowden, Jonny, PhD, CNS. *The 150 Healthiest Foods on Earth*. 2007.

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Servan-Schreiber, David. *Anti-Cancer: A New Way of Life*. 2009.

Zhou Y, Li Y, Zhou T, Zheng J, Li S, Li H-B. March 10, 2016. *Dietary Natural Products for Prevention and Treatment of Liver Cancer*. *Nutrients*. 8(3): 156.

Vegetable Feature: Fresh Baby Ginger

By Chef Andrea

We are very excited to deliver possibly the freshest ginger you may ever have experienced! Given our shorter growing season, the ginger we grow is actually considered "Baby Ginger." Ginger has a wide variety of culinary uses and is a common ingredient in the cuisine of many Asian cultures. It is a base ingredient in Chinese stir-fries. It is combined with lemongrass and chiles to make Thai curry pastes and in Japan, it is often served alongside sushi in its pickled form. Ginger has a spicy, warm flavor which also makes it an excellent ingredient to include in baked goods, tea and other beverages.

To use your ginger, cut off a piece from the main chunk and peel it. Remember, this is very fresh ginger and still has a very thin skin so you don't have to peel very deep, rather just gently scrape away the thin skin. You can store ginger pieces for several days at room temperature or if you aren't going to use it right away you can store it in the refrigerator. It can also be preserved for long term storage by freezing it. I like to cut it into smaller pieces before I freeze it so I can just pull out a small portion as I need it. You will find this fresh ginger to be very juicy and crisp with a bright flavor. The long green stems attached to the lower portion contain a mild ginger flavor as well. I cut them into 5-6 inch pieces and use them to infuse a little more ginger flavor into soups, stocks, curries, tea, etc.

We have more recipes available on our website from past newsletters. A few of my personal favorites include Golden Milk, Chai-Spiced Bread, Ginger-Cardamom Tea and Pickled Ginger. Have fun using and experiencing this tropical Wisconsin treat!

Crystallized Ginger

Recipe adapted from Alton Brown, *The Food Network*

- 8 oz fresh ginger root
 - 4 cups water
 - ½ lb granulated sugar, or as needed
1. Spray a cooling rack with non-stick spray or brush lightly with oil and set it in a sheet pan lined with parchment paper.
 2. Clean and peel the ginger. Because the ginger is so young and fresh, a spoon or knife scraped against the root should work well for peeling.
 3. Slice the ginger into ⅛ inch slices. Place ginger and water into a saucepan and bring to a boil. Cover, lower heat, and simmer for 35-50 minutes, or until the ginger is tender.
 4. Drain the ginger, reserving ¼ cup of the liquid. Weigh the ginger and add an equal amount of granulated sugar. Return the ginger, sugar and up to ¼ cup of the reserved liquid back to the pan. You only need to use enough liquid to dissolve the sugar.
 5. Stir over medium-high heat and bring to a boil. Reduce the heat to medium, and continue stirring and watching as the syrup thickens. Keep stirring and cooking until the syrup has dried and the sugar has recrystallized, about 20 minutes. The transformation will be obvious. Immediately move the ginger to the wire rack and cool completely. Store in an airtight container for up to 2 weeks.

HVF Note: Use the crystallized ginger in the carrot-ginger soup recipe in this newsletter or add it to banana bread, sugar cookies, ginger snaps, citrus salad, granola bars, cakes, pies, muffins, cupcakes, shortbread, pancakes, waffles, over ice cream, in lemon pound cake, cranberry relish or in pear or apple crisp. Save any gingery sugar crystals to put in your coffee or tea. You can even add the ginger water that you made in the first step to tea, but be careful - it's spicy!

Carrot-Ginger Soup

Recipe adapted from *The Complete Vegetarian Cookbook* by America's Test Kitchen

Yield: 6 servings

HVF Note: This recipe aims to keep it simple by amplifying the sweet flavor of carrots by using a few basic aromatics and lots of carrots, including carrot juice. If you've been stockpiling your carrots for the last few weeks, this would be a great recipe to use. The addition of baking soda is to tenderize the carrots and ginger, producing a perfectly creamy soup.

- 2 Tbsp unsalted butter, ghee or vegetable oil
 - 2 onions, chopped fine
 - ¼ cup minced crystallized ginger (see recipe, opposite)
 - 1 Tbsp grated fresh ginger
 - 2 garlic cloves, peeled and smashed
 - 2 tsp salt
 - 1 tsp sugar
 - 2 pounds carrots, peeled and sliced ¼ inch thick
 - 4 cups water
 - 1 ½ cups carrot juice, divided
 - 2 sprigs fresh thyme
 - ½ tsp baking soda
 - 1 Tbsp cider vinegar
 - Salt and pepper, to taste
 - Optional Garnishes: chopped chives, sour cream, croutons
1. Melt butter in large saucepan over medium heat. Stir in onions, crystallized ginger, fresh ginger, garlic, 2 tsp salt, and sugar. Cook, stirring often, until onions are softened but not browned, 5-7 minutes
 2. Stir in carrots, water, ¾ cup carrot juice, thyme sprigs and baking soda. Increase heat to high and bring to a simmer. Reduce heat to medium-low, cover and simmer gently until carrots are very tender, 20-25 minutes.
 3. Discard thyme sprigs. Working in batches, process soup in blender until smooth, 1-2 minutes (caution: vent the blender carefully, as steam will be released). Return pureed soup to clean pot and stir in vinegar and remaining ¾ cup carrot juice.
 4. Return soup to brief simmer over medium heat. Season with salt and pepper to taste. Serve, garnishing individual bowls with chives, sour cream and/or croutons.

End of Season Offerings

Check out the Special Offers link at harmonyvalleyfarm.com for holiday sampler, "pack your own" extended season shares and wood products available for Delivery in December.

Some wood items are limited - so order early before your selection is sold out!

Email (csa@harmonyvalleyfarm.com) or call (608.483.2143) with questions.