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working with communities to improve access to affordable and healthy food - from field to table

Good Food NEWS

Understanding Genetically Modified Food Plants

Based upon Paul F. Lurquin's BIOTECH HARVEST - by Mark-Jan Daalderop

I have, for a long time, considered genetic modification of plants (GMO's) to be "bad" or "unsafe" or just plain "stupid". But when I picked up a book on genetically modified food plants, I realized that I knew very little about GMO's. Here is look at how we modify plants, why we modify plants and why we should or shouldn't do it.

Although a type of genetic modification has been around for centuries (selectively breeding crops) it was only in 1983 that we had the technology and knowledge to insert genetic information from one species (plant or bacteria) into another directly at the gene level. From 1950 to 1983 researchers discovered that a bacterium in the soil was inserting genetic information into plants causing the growth of a plant tumor called Crown Gall. Dr. Mary Dell Chilton, of the University of Washington, discovered that a clump of genetic information within the bacteria, called a plasmid, contained a vehicle for inserting the genetic information into plants. They reasoned that if they could insert desired genetic information into the plasmid vehicle, they could insert almost any genetic information into plants that they wanted. They were right. The birth of genetic engineering was born.

Genetic modification of plants has a number of applications: Modification can aid in plant protection by genetically modifying the plant to produce insecticidal toxins. Modification can also aide plant protection by inserting genes (from Petunias for example) that make plants resistant to certain plant herbicides like Round-Up. Modifying has also been used to increase plant yields (rice), improve shelf life (tomatoes), improve nutrition (rice), increase resistant to salty or acidic soils, increase tolerance to frost, and create natural plastic. Phew!

My thought is that many of the goals of modifying plants are well-intentioned. In South East Asia, vitamin A deficiency affects 70% of children; many suffer blindness as a result. The Rockefeller Foundation helped fund a project to genetically modify rice to be enriched with pro-vitamin A (though there is evidence that this vitamin deficiency is a result of western agricultural experts' advice to third world farmers to employ mono cropping, thereby eliminating the nutrient-rich edible greens that grew and were harvested in the fields.) Another example is the development of herbicide resistant crops which increase plant yields and potentially decrease the amount of herbicide applied. In theory GMO's have some very exciting and beneficial applications but what about the dangers of GMO's? Are they worth using?

There is a danger of GMO's transferring genetic information to related wild plants and creating herbicide resistant "superweeds" or insecticide producing weeds. GMO's also threaten to reduce the variety of crops as farmers purchase exclusively the few GMO varieties available. Diversity aids in food crop's overall resistance to drought, disease, and destruction by pests.

The safety of consuming GMO foods is also under question. 60 per cent of our processed foods contain some genetic modifications. Advocacy groups such as Greenpeace and the Council of Canadians argue GM foods are a health risk. They say the food industry should be more transparent in its creation and testing of GM foods. They believe that consumers have a right to know if they are consuming GMO foods.

A major fear is that the Biotech corporations, who have the patents for many GMO technologies and operate for profit, will control our food production. The development of Terminator Technology, which makes the seeds of plants infertile and forces farmers to purchase seeds from Biotech companies instead of saving their own, is proof that these companies put profits first. Saskatchewan farmer and anti-GMO campaigner Percy Schmeiser was sued by biotech giant Monsanto for having their patented Round-Up Ready Canola on his property. He did not plant them--the Canola had spread to his field by wind pollination. Not his fault right? The courts said it didn't matter that he had not planted them and sided with Monsanto. Percy lost the case and had to give up his livelihood as a farmer since his fields and seeds were contaminated. GMO's are spreading fast throughout the world, by wind pollination and seed contamination. Soon having GMO-free soy, corn or canola will be nearly an impossible act.

Whether genetically modifying food plants will be ultimately beneficial or detrimental to our lives is still up for debate. FoodShare believes that labelling of foods containing GMO's is important because how else can we track whether effects are from GMO's or not. If you have concerns about GMO foods please e-mail me: mark@foodshare.net or call me at 416-392-1670. I have petition forms for mandatory labeling of GMO's and a guide on what foods contain GMO's and what foods do not.

FoodShare

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recipes

Penne with Ricotta and Green Garlic Sauce

1 1/2 cups	fresh whole-milk ricotta
1/2 cup	finely minced green garlic
2 TBS	minced parsley
1 pound	dried penne or fusilli pasta
2 TBS	butter
1/4 cup	freshly grated Parmesan cheese plus grated Parmesan for the table

Salt and freshly ground pepper to taste

Combine the ricotta, green garlic and 1 tablespoon of the parsley in a large bowl; season with salt and pepper. Meanwhile bring a large pot of salted water to a boil over high heat. Add the pasta and cook until al dente. Just before pasta is done, remove 1/2 cup of the boiling water. Whisk enough of the hot water into the ricotta to make a smooth, creamy sauce. Drain the pasta and add to the sauce along with the butter. Toss well. Add 1/4 cup Parmesan cheese and toss again, adding a little more of the hot water if needed to thin the sauce. Taste and adjust seasoning. Serve on warm plates, topping each portion with some of the remaining parsley. Pass additional Parmesan at the table.

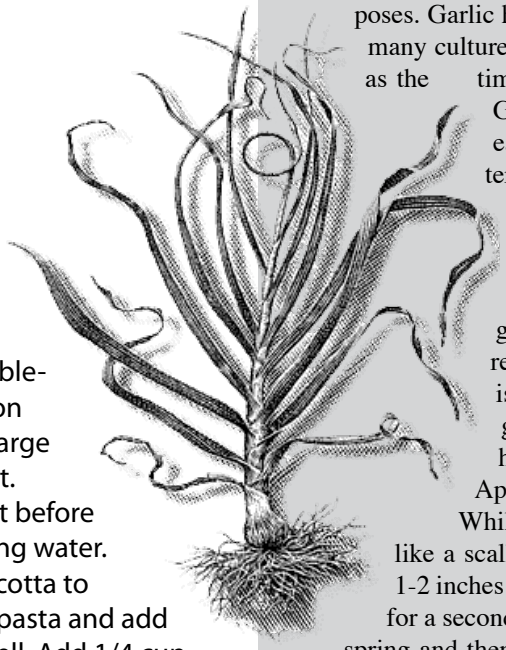
Kale and Leek Torta

1 bunch	kale
2	red skinned potatoes (any boiling potato)
2	leeks (medium) white & light green parts only
1 stem	green garlic
3 TBS	olive oil
6	large eggs

Salt and pepper to taste

Wash the kale and remove the stems, then chop and steam the leaves until tender but not pasty. Meanwhile, boil the potatoes until tender, then dice. Beat the eggs, then add the kale, potatoes, plus salt and pepper. Carefully clean leeks making sure to wash away all the sand trapped between the leaves. Dice the leeks and 1 stem of green garlic. Sauté in the olive oil over medium heat Raise the heat, then add the egg mixture and reduce heat again. Cook without stirring until the bottom is set and lightly brown, 3 to 4 minutes. Carefully slide the torta onto a large plate. Invert the skillet on top of the plate and turn the plate and skillet over together, flipping the torta back into the pan. Cook until the eggs are set and the underside is slightly browned. (Alternately, you can brown the top under the broiler in your oven, rather than flipping the torta).

featured this week: GREEN GARLIC



Garlic, a member of the Allium family whose close relatives include the onion, shallot, and leek. Garlic has been used throughout recorded history for both culinary and medicinal purposes. Garlic has been used as both food and medicine in many cultures for thousands of years, dating as far back as the time that the Egyptian pyramids were built. Garlic is claimed to help prevent heart disease, including atherosclerosis, high cholesterol, high blood pressure, and to improve the immune system. Garlic may also protect against cancer.

Green Garlic or garlic greens or spring garlic is a spring culinary treat that does not receive as much fan fare as it deserves. It is essentially the tender new leaves of the garlic bulb, planted the previous fall and harvested when 12 to 16 inches tall during April or May, before any bulbing has started. While many prefer to harvest the entire plant, like a scallion, it is possible to trim the greens about 1-2 inches above the ground and have decent regrowth for a second harvest. They can even be planted in early spring and then again at intervals of 4 to 6 weeks to become a summer-long garden treat.

One stalk of green garlic is equivalent to one or two cloves of garlic. If you are going to purchase green garlic look for green stalks that are not yellowing or blemished. If you are growing the garlic then harvest right before you use it. Green garlic can be stored in the refrigerator for up to three or four days.

These greens yield a flavor that is gentler and subtler than chopped garlic, but stronger than chives. Prepare similar to leeks, green garlic stalks trap dirt and sand within the leaves. Rinse each stalk carefully. Once washed, the entire stalk can be used. In general green garlic can be used in any recipe that calls for mature garlic. The end product will produce a delicate flavor, more mild than matured raw garlic. Raw green garlic can be minced and added to salads, or salad dressing. Cooked Green Garlic uses: Poach the last 4" of the tips and dress with a mustard vinaigrette; or dice and sauté the tender portions and add to an omelet or frittata; chop and add to stir-fries; chop and add to homemade potato soup.

DELIVERIES

for the week of: May 8th
orders are due 5 pm Tues. *May 1st*

for the week of May 15th
orders are due 5pm Tues. *May 8th*

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