Welcome to S&S Homestead and the Real Food on the Farm Workshop. We are a sustainable, biodynamic farm and educational center committed to producing real food for ourselves and for the community.

This workshop is intended to expand the meaning of the words “eating well” and to learn ways to enhance our lives with real food. Many of the foods described in this document are traditional foods, eaten for centuries by our ancestors. They are tried and true, thus earning the title “real.” We know these foods are healthy; not because scientists tell us so, but because humanity has healthfully survived on them for generations. They are not a fad diet. They are not pre-packaged. They are real, as they have always been.

Real food brings us back to the farm, to the local community, and to slowing down enough to recognize and enjoy the richness of quality. It means raw milk from cows eating their original diet. It means eating fruits and vegetables grown in rich soil that has not been chemically treated. Real food encompasses the relationship between farmer and consumer. It means sitting down to a meal, with friends and family, eating food prepared with love. In this modern day, real food means an awareness of where our food is grown, by whom, and how. How are our human values manifested in our eating habits? What are the things we would like to see change?

Today is a day to celebrate real (and really good) food! We hope you enjoy!
Dairy- in the raw

Warm sunshine, open meadows, and green grass all describe what the life of a cow should be. Loveday, our milking cow here at S&S, lives the idyllic life. She is the princess on the farm, and rightfully so. Her milk is plentiful and delicious and perhaps the perfect food. The definition of a “raw” dairy product means it hasn’t undergone pasteurization and homogenization. Raw milk contains a rich supply of vitamins, minerals, and enzymes. It is literally teeming with life. Pasteurized and homogenized milk and milk products have been heated, cooled, chemically treated and, more often than not, shipped long distances. Once you’ve experienced the real, raw, thing it’s difficult to imagine you’d ever settled for less. Unfortunately, unless you have your own dairy cow or a local source for raw milk, you must do just that. The corporate-owned modern milk industry has turned the life and generosity of the dignified cow into that of a disposable machine. Cows are routinely confined to small concrete pads, fed artificial diets their bodies are not equipped to digest, injected with antibiotics to keep them in “operation” (because conditions are often so bad the animals would otherwise become ill) and given synthetic hormones that increase their milk production to as much as four times their normal capacity. Not only does this raise major ethical concerns for the life of these animals, it is also a great assault on the nutritional needs of our human bodies and spirits. There are many studies past and present indicating the superior health benefits of raw milk (for a wealth of information get a copy of Ron Schmid’s *The Untold Story of Milk*). It has only been since the 1940s that milk has been subjected to pasteurization. Our cultural food system presently acknowledges no alternative. To recognize raw milk as vital and nutritious, and pasteurized milk as lifeless and with limited health potential instills a desire to transform the structure of our food system. This entails a shift from distant corporate control to local and community ownership.

Raw Milk

Nutrition
Many people who cannot digest the lactose in pasteurized milk can digest raw milk. This is because raw milk is rich in lactase, the enzyme responsible for breaking down the lactose in milk. Lactase, as well as *all other enzymes* and many nutrients are destroyed in the pasteurizing process. In his book *Traditional Foods Are Your Best Medicine* Ron Schmid states “The medical establishment and public health authorities have failed to recognize that a deficiency of these [heat-labile] nutrients has substantially contributed to the development of the epidemic of diseases plaguing modern civilization.” Raw whole milk from a grass-fed cow is particularly nutritious since only the milk from grass-fed cows contains significant amounts of the essential fatty acid CLA (conjugated linoleic acid).

Preparation
Loveday is our milking cow and co-worker here on the farm. She lives and works around the clock in the pasture, and the majority of her diet is green grass. We milk her twice a day in a stall we clean daily. We sterilize our milking buckets and pay careful attention to the way her milk is handled. As a result her milk is pure, healthy and unadulterated.

Culinary uses
Raw milk is food with immense nutritional and culinary potential. Drink it as is or convert it into one of the many foods described below.
Butter

Nutrition
I was surprised to learn that Americans consume four times as much margarine as butter! Raw butter is a natural animal fat rich in fat-soluble vitamins. Margarine is a hydrogenated oil, or trans-fat. This means a liquid fat has been chemically altered through hydrogen “injection,” which solidifies it. What is your body to do with this foreign substance? Common sense may tell you that fat in its natural form will be healthier than fat created in a lab. Your body recognizes it. While margarine was once praised for lowering LDL (bad) cholesterol levels when compared with butter, studies now show that trans-fatty acids can raise LDL cholesterol and lower HDL (good) cholesterol. People have been eating raw butter for centuries. Have peoples of the past experienced the cancer, cholesterol, and obesity problems we are currently faced with?

Preparation
The taste of fresh butter from raw milk is incomparable and simple to make. Our modern-day method is as follows: using a food processor begin by pouring about a quart of chilled cream in a 14-cup Cuisinart bowl. Let it run for several minutes until the cream has separated into buttermilk and butter. Drain off the buttermilk and save it. Then “wash” the butter by pouring in a cup of cold water and pulsing it in the bowl with the butter for a few seconds, drain, and repeat about 5 times until the water is clear. Put the butter in a bowl and press out the water, being careful not to spread it up the sides of the bowl since this will make it oily. Finally, divide up the butter into palm sized balls, squeeze out any remaining water (remaining moisture will make the butter hard) and freeze whatever you’ll not immediately use.

Culinary uses
Use fresh butter for anything and everything. It can tolerate a certain amount of heat before oxidizing, which makes it a good choice (along with olive oil) for frying.

Buttermilk

Nutrition
Traditionally cultured buttermilk is low in casein but high in lactic acid. As a result people with milk allergies often easily tolerate it. In Holland buttermilk is frequently fed to babies and sometimes prescribed when the protein of ordinary milk is indigestible (Fallon, 2001, 484). The majority of buttermilk you buy today, however, is not traditional. Cultured buttermilk from the store is pasteurized skim milk that has been fermented with the same cultures as those used to ripen cream for butter. It has been heat-treated and therefore cannot be used for purposes requiring live buttermilk.

Preparation
The process of churning cream brings fat globules together to make butter (*see butter section). The thin liquid that remains is buttermilk.

Culinary uses
Buttermilk was used as a beverage in Northern Europe throughout the middle Ages. In the 17th and 18th centuries buttermilk, along with whey, became a fashionable city drink. More recently it is used as a delicious ingredient for pancakes or biscuits. It can also be used to soak whole grain flours for baking (*see whey section).
**Yogurt**

**Nutrition**
Yogurt contains the living organisms Lactobacillus bulgaricus, Streptococcus thermophilus, and other beneficial cultures. The fermentation process, as well as these live and active cultures, make yogurt easy to assimilate and particularly beneficial to the digestive system. Whole milk yogurt is a good source of protein and contains calcium, phosphorus, and potassium as well as vitamins B2 and B12.

**Preparation**
You can make yogurt using raw or purchased milk. Heat one quart of milk to near boiling temperature; it will begin to look frothy (about 185 degrees F). Remove the milk from the heat and allow it to cool to between 100-115 degrees. Pour out a cup of milk and stir in 1-2 heaping tablespoons of commercial organic yogurt. Once dissolved, add this to back to the milk and pour into individual cups of a yogurt maker (people use all kinds of containers and methods to make their own yogurt, but a commercial yogurt maker keeps the culture at a steady temperature). The yogurt should become firm in 4 to 12 hours.

**Culinary uses**
Whole milk yogurt from raw milk is a delicious food. You can eat it plain or mix it with fresh fruit, honey, maple syrup or jam. You can substitute it for sour cream when cooking or use it for baking breads, muffins or cakes. It adds a rich moistness.

**Quark**

**Nutrition**
Quark is a European-style cheese made by fermenting raw milk. It has four times the protein and folic acid as whole milk, twice the B2 and B12 vitamin levels, but one-tenth the fat and cholesterol. It contains a number of minerals, particularly calcium and phosphorus. As with all fermented dairy products (yogurt, clabbered milk and other cheeses) the lactose has been broken down for easy digestion.

**Preparation**
Skim the cream from one-half to one gallon of raw milk. Heat the milk until it reaches 80 degrees F and pour it into a glass or enamel container and cover it lightly with cheesecloth. Let it sit at 85 degrees for about 2 days. The heat must be constant: Otherwise the milk will turn sour without solidifying. You may try the top of a hot water heater or heated floor.

The quark will be solid when it’s ready and have a bit of fermented butter on top. Skim this off and use it on toast. Cut the quark curd into 1-inch chunks and put them in a colander lined with cheesecloth. Place this over another container to catch the whey and cut the curds again. Place everything in the refrigerator until the whey has drained completely. Lift the quark by gathering the edges of the cheesecloth together and gently squeeze out any remaining whey. Finish the process by pressing the quark through a strainer using the back of a spoon.

**Culinary uses**
Try mixing quark with fruit or honey or spread it on toast with jam for an energizing breakfast. You can mix it with herbs to top potatoes, use in lasagna instead of ricotta or combine it with caraway seed, tomatoes, ham, radishes, cucumber or herring as a side dish. It also makes a stellar cheesecake.
**Whey**

**Nutrition**
Whey is another nutritious milk food. It is the byproduct of cheese-making and consists mainly of water, milk sugar, minerals and lactobacilli. It also has a substantial amount of B vitamins. Whey makes great smoothie drinks and the lactobacilli aids in digestion. Simply combine fruit, whey and honey—indulge!

**Preparation**
Collect the liquid that accumulates during the cheese-making process and store it in the refrigerator. It will keep for months.

**Culinary Uses**
Whey is a valuable ingredient for use as a starter culture for lacto-fermented vegetables, fruits and beverages. It acts as an inoculant, reducing the time needed to produce sufficient amounts of lactic acid to ensure preservation. It also yields more consistent results. It can be used for soaking whole grains or flours by combining several tablespoons with water (buttermilk could also be used). Lactobacilli and other beneficial enzymes and organisms in whey break down and neutralize phytic acid in grain. Phytic acid, if untreated, can combine with calcium and other minerals and block their absorption. Soaking grains overnight (to allow this process to occur) was once common practice.

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**Meat & Eggs—in the pasture**

At S&S Homestead we raise beef, pork, lamb, and eggs. There is a significant difference between the life and function of animals on a sustainable farm and those raised in modern meat “factories”. Animals on S&S do more than provide just meat and eggs. They provide the soil with valuable fertilizer and us with unlimited entertainment: lamb games, chicken quirks and the antics of cattle herds all elicit unexpected moments of humor. What biological character! And their diet is natural. The cows and sheep eat only grass or hay. Chickens are free-range but also receive table and garden scraps with a little ground organic barley (either grown here or purchased from a neighbor). The pigs are fed organic barley, milk, fruits and vegetables. Because our animals are raised here and slaughtered here they do not experience the stressful conditions inflicted on factory animals. Such stress inadvertently affects the quality of the meat and, ultimately, our health.
Fenalaar (cured leg of lamb)

Nutrition
Lamb is very high in niacin, zinc and vitamin B12. It also contains selenium, potassium and phosphorus. Curing meat such as lamb facilitates a form of pre-digestion. This aging process breaks down certain enzymes in the food, relieving our digestive systems of some of the work. As Dr. Edward Howell (who lived to be 102) says in his book *Enzyme Nutrition*, “People around the world have shared in finding unique values in partially digested protein food, such as aged cheese and hung, aged meat.”

Preparation
To make Fenalaar begin with an organic and grass fed leg of lamb. Place one leg of a lamb in a bowl with 1½ kilos salt, (I’m leaving the conversions to you) 50 grams sugar, 1 deciliter honey and 2 deciliters of water, and cover with a towel. Turn it at least twice daily, rubbing the salt into the lamb each time with a large wooden spoon. After one week transfer the lamb into a large crock and submerge in 10 liters of water, 3 kilos of rock salt, and 300-500 grams of sugar (approx 1 lb.). After 1 week remove the lamb, wrap it in cheesecloth and hang it in a cool place to age for at least 4 months.

Culinary uses
Fenalaar is a traditional Northern European food. It is thinly sliced and served with bread, cheese, hard-boiled egg and sweet butter.

Steak Tartar (fresh ground raw beef w/onions, capers, raw egg)

Nutrition
Raw animal protein provides particular health benefits such as heat-labile nutrients and enzymes not available in cooked meats or pasteurized milk. Throughout history most cultures have eaten some of their animal protein raw. According to Sally Fallon, in her book *Nourishing Traditions*, “Almost every world cuisine offers recipes to satisfy what seems to be a universal requirement for raw animal protein: steak tartar from France, carpaccio from Italy, kibbeh from the Middle East, and raw marinated dishes from Scandinavia, Hawaii, Latin America and Asia.”

Preparation
Traditionally steak tartar was prepared with horsemeat. Today it is made with beef. Some claim the dish is best prepared by scraping a cut of beef with a dull knife, but any method of chopping or grinding will do. Then simply mix in the other ingredients (there are many variations). We use onions, capers, parsley and raw egg. It is important to know the source of meat when preparing it raw. According to the USDA, freezing fresh raw meat for 14 days will kill all parasites. Our meat has been frozen.

Culinary uses
Steak tartar has many variations. The degree to which the beef is ground can vary from pureed to coarsely chopped. The ingredients can be mixed together or served on the side. Its name derives from its traditional companion: tartar sauce. This was made with pureed hard-boiled egg yolks, vinegar, chives and oil—nothing like the modern-day version.
Aspic: gelatinized pork

Nutrition
Many of the same health properties of gelatin (as in broth or stock—*see Broth), carry over to aspic. Gelatin supplies hydrophilic (water attracting) colloids to the diet. While raw foods attract liquids and digestive juices, making them easier to assimilate, many cooked foods are hydrophobic, meaning they repel liquids and are harder to digest. Proteinaceous gelatin, however, has a property that attracts liquids and therefore makes food easier to digest.

Preparation
To make aspic boil a clean pig’s head, feet, and ear along with vinegar, onion, carrot, salt and spices for at least 25 hours. All the meat will drop from the bones and a thick gelatin should form under a layer of flavorful fat. This fat, called schmaltz, tastes delicious as a spread.

Culinary Uses
Aspic is savory and mild in flavor. After the aspic is through cooking, strain the liquid into a bread loaf pan to set, and then thinly slice. Sometimes other foods are set in aspic, such as pickles and hard-boiled eggs. Traditionally aspic is served with dark bread, mustard, green salad, and beer.

Boudin Blanc (white sausage)

Nutrition
Making your own sausage, in contrast to what you may purchase, ensures the meat is of high quality. In Joy of Cooking the author claims, “As for the commercial types their contents can be a mystery wrapped in an enigma.” Isn’t this the truth! USDA allows up to 30% fat, 10% water, 20% corn syrup and 3 ½ % cereal or dry milk fillers. Preservatives, in the form of nitrates or other common meat preservatives, are often added. A homemade sausage such as ‘Boudin Blanc’ is made with the finest cuts of meat.

Preparation
This recipe is from The Joy of Cooking. Begin with a sausage casing tied at one end and fitted on a meat chopper.. Mince ¼ lb. pork leaf lard or hard back fat. Grind once with the finest blade ½ lb. pork loin and ½ lb chicken or rabbit breast. Combine the meat and fat and add; 2 tsp salt, 1 tsp fresh white pepper, 1/8 tsp each cloves, nutmeg, and ginger, and ¼ tsp cinnamon. Regrind with 2 cups of chopped onion. Add ¼ cup of warm cream, and ½ cup of bread crumbs. Add 3 beaten eggs to the crumbs. Combine everything and fill casings only ¾ full, twisting and tying at 6-inch intervals. Plunge sealed casings in boiling water, and reduce the temperature to 190 degrees for 20 minutes. Puncture any sausages that rise to the surface to prevent bursting. Brush with melted butter and grill.

Culinary Uses
People have been making sausage for 3000 years. There are now over 200 varieties all over the world. White sausage can be eaten right away or frozen, and can be served with a variety of foods. It’s best grilled, sliced or whole, right after cooking. Serve with foods prepared with sage or thyme, as this will support its digestion, and taste delicious.
Summer Sausage

Nutrition
Summer sausage is also known as ‘dry sausage.’ They are often called summer sausages because they were made in the winter and would keep for many months-throughout the summer- with no refrigeration. This year our summer sausage is made with pork and lamb (last year it was beef) and the nutritional data is equivalent to that of both animals.

Preparation
After the animals are slaughtered on the farm they are sent to a butcher who processes the meat into sausage. He adds a variety of spices to the meat and smokes it for 24-36 hours. It is then ready for long-term storage. We freeze it.

Culinary uses
Summer sausage may turn the most hesitant meat eater into a sausage enthusiast! Here at S&S homestead we eat our summer sausage nearly every day for lunch. It is dense and moist with rich satisfying flavor. We simply slice it onto bread, and sometimes add a little cheese. Delicious!

Liver Pate (beef)

Nutrition
Liver is renowned for its nutritional properties. Cultures throughout the world eat liver, as well as other organ meats, largely for the immense health benefits. Liver is rich in antioxidants and contains, in great quantity, vitamins A and D, iron, copper and zinc. Recent nutritional advice cautions against eating liver. This is due to the toxins that can accumulate in the organ because of conventional agricultural practices. However, organic, locally raised liver from grass fed animals is a superior food.

Preparation
This recipe is from Joy of Cooking. To make liver pate boil 1 cup of water, 1 chopped onion, and 3 chopped celery ribs with leaves for 5 minutes. Add 1 lb. sliced beef, pork, or lamb liver and simmer for 2 minutes. Drain and reserve the liquid. Put the liver, vegetables and 2 slices of bacon through a meat chopper. Place in a bowl and add 2 beaten eggs, ¼ tsp salt, 1/8 tsp pepper, 1 cup bread crumbs, ½ tsp dried thyme, and 1 cup of reserved liquid or milk. Pour ½ cup of ketchup into a greased loaf pan. Place the meat on top and bake for 40 minutes in a pre-heated oven at 350 degrees.

Culinary uses
Spread pate on homemade bread or crackers, or eat with fried potatoes, green salad, pickles, and beer.
**Broth/Soup Stocks**

**Nutrition**
Properly prepared meat stocks are extremely nutritious, containing the minerals of bone, cartilage, marrow, and vegetable electrolytes in a form that is easy to assimilate. (Fallon 2001, 116). Adding acidic wine or vinegar while cooking will help to draw minerals—particularly calcium, magnesium and potassium—into the broth. Meat broths also contain proteinaceous gelatins that aid in digestion and allow the body to more fully utilize the complete proteins. As one South American proverb puts it, “Good broth resurrects the dead.”

**Preparation (for chicken broth)**
If you are starting with whole chickens, cut them into rough parts, and include the skin, heart, liver and stomach. Cook as often as possible to ensure having plenty of broth on hand. Place the chicken parts in a large, stainless steel pot, and cover with water. Add chopped carrots, celery, onion, garlic, sage, peppercorns, salt, thyme, and bay leaves. Simmer slowly until the meat drops off the bones. Strain the broth. Keep some for immediate use, and freeze or pressure can the rest.

**Culinary uses**
Auguste Escoffier claims, “Indeed, stock is everything in cooking…without it nothing can be done.” This is quite a statement! Well, indeed cooking can be done without stocks, but the dish may be much healthier and more delicious if stocks are used. The most likely use for stocks is as a base for good soups or gravies. In more traditional European cuisines it’s used as a base for many sauces.

**Eggs**

**Nutrition**
Eggs from pasture fed chickens constitute the most complete, nutritious, economical form of animal protein available (Fallon, 2001, 32). Egg yolks contain vitamins A, D, and B-complex, as well as the minerals iron, phosphorus, chromium, potassium and calcium. A recent study funded by the USDA Sustainable Agriculture and Research Education Program (SARE) showed that eggs from pastured hens had 10 percent less fat, 40 percent more vitamin A, and 400 percent more omega-3 fatty acids than eggs from caged birds.

**Propagation**
Almost anyone who has a yard can raise chickens. If you already own chickens and notice a hen acting “broody” then you may be successful in hatching your own chicks (unfortunately most breeds have had the “broodiness” bred out of them). These days most people order chicks from the local feed store and pick them up when they are only 1 or 2 days old. You’ll need a place to contain them, along with a heat lamp for warmth. They will be mature enough to lay eggs when 6 months of age.

**Culinary uses**
Local, organic, pasture-fed eggs are very different in taste and color from those you purchase at the store. The yolks will be deep orange-yellow, and the flavor vitally rich and complex.
Fermentation—preservation & pre-digestion in action

Microorganisms are everywhere. They live in the air, soil, water, in our houses, and in our bodies. Without them we could not live, nor could anything else. In our culture we learn to fear microorganisms. The displays of anti-bacterial soaps and cleaners scream out in demand for a sterile environment. This is a skewed “goal” which will never be achieved! (and studies show no correlation between reduced illnesses and the use of anti-bacterial products, only stronger strains of microorganisms) Rather than learn the ways microorganisms can harm us, let us learn how they can help us. Indeed, in relation to food, they forever have. In days past, before refrigerators and a global market, people ate what they hunted, raised, gathered, or grew. Fresh foods such as vegetables, milk, and meat are highly perishable, so naturally the need developed to preserve food when it was plentiful. Cultures around the world have harnessed microbial action (including yeasts and molds) and developed their own methods of preserving foods. Many of the most loved foods, such as wines, cheeses, beer, and breads, are fermented. Not only does the fermentation process preserve food, it also breaks down the nutrients into more easily digestible forms. It can also serve to create new nutrients, such as antioxidants, the B vitamins, and omega-3 fatty acids. When you eat live fermented foods you are supplying your digestive tract with the living cultures necessary for breaking down and assimilating nutrients. Live fermented foods are largely missing from our modern diet. Many fermented foods you buy in the store, such as sauerkraut, have been pasteurized and/or made with vinegar. This kills all microorganisms and the benefits they bring. Let us learn to understand and utilize these tiny creatures so prepared to assist us in achieving our own longevity and survival.

Gravlaks (fermented salmon)

Nutrition
Salmon is an excellent source of vitamin D and omega-3 essential fatty acids. Recently focus has been given to the importance of the essential fatty acids in our diet. Studies show that while Americans consume too much fat they do not eat enough good fat. Essential fatty acids are essential to good health and protect us from heart disease, strokes, cancer, arthritis, and autoimmune disorders. While it’s worth eating salmon for these reasons alone, it also contains the added benefits of vitamins A, E, B-complex, as well as iron and iodine. Raw salmon, as with gravlaks, contains vitamin B-6, which would otherwise be destroyed in cooking.

Preparation
Begin with a 3 ½ to 4 pound salmon fillet that has not been farm raised. Chop 1 bunch of fresh dill. Cut the salmon into two equal pieces, removing the head and tail. Remove as many bones as possible using a knife and tweezers. Next, combine ¼ cup kosher salt, ¼ cup sugar, and 2 teaspoons of freshly ground pepper. Lay one half of the fillet skin side down on a clean surface. Spread on half of the spice mixture, and top with the juice of one lemon and the fresh dill. Take the other fillet and spread on the rest of the spices. Lay it on top of the other fillet, so both skin sides are out, like a sandwich. Gently place the salmon in a seal-able plastic bag; making sure to remove all the air. Place the salmon, in the plastic bag, on a plate in the refrigerator with a weight on top. Turn it every 12 hours for at least 36 hours.

Culinary uses
Slice fermented salmon thinly and serve like smoked salmon.
Sauerkraut

Nutrition
Sauerkraut is probably the best known of all fermented foods in the western world. Throughout history it has saved many from scurvy, as most of the vitamin C found in fresh cabbage is preserved in sauerkraut. It has other nutritional benefits such as the bacteria lactobacilli. These microorganisms work to promote better nutrient absorption and the growth of healthy intestinal flora and are excellent for cleansing and rejuvenating the digestive tract.

Preparation
To make one quart of your own sauerkraut shred and core one cabbage and mix it in a bowl with 2 tablespoons of non-iodized salt and 1 tablespoon of caraway seeds. Press it with a meat hammer, your knuckles, or wooden spoon for 10 minutes to release the juices. Put it in a quart-size mason jar and press firmly until the juices cover the cabbage. The top of the cabbage should be at least 1 inch below the top of the jar. Keep at room temperature, covered tightly, for 3 days, before transferring to cold storage. The longer it ages the more the flavor will develop. It can also be made in larger quantities in a crock. Ferment, place in jars, cap and keep cool.

Culinary uses
Cooking sauerkraut will destroy all those beneficial enzymes created during the fermentation process, so heat it gently-if at all. Many combinations can be formed with sauerkraut- try mixing it with any one or more of these ingredients: juniper berries, coriander seeds, caraway seeds, cranberries, apples, stock, or wine. The most famous sauerkraut dish, ‘choucroute garnie,’ comes from the Alsace region in France. This is sauerkraut served with salt pork, bacon and pork sausages, accompanied by potatoes.

Bean paste

Nutrition
Legumes are rich in B vitamins, minerals, and contain both omega-3 and omega-6 essential fatty acids. When mixed with grains all amino acids become available to provide a complete protein. Research indicates that protein assimilation may become greater if a small amount of animal protein is eaten with this combination. Fermenting beans, as in making bean paste, serves another function. Beans can be high in phytic acid and enzyme inhibitors, which can make for difficult digestion and “gastric distress.” Fermenting beans breaks down the phytic acid and other inhibitors for easy assimilation.

Preparation
To make one quart of fermented bean paste process one peeled and coarsely chopped onion and 3 cloves of garlic in a food processor. Add 3 cups of cooked and drained beans, 1 tablespoon of sea salt, and 4 tablespoons of whey. Process until smooth. Put it in a quart size Mason jar, leaving a 1 inch space at the top. Cover tightly and leave at room temperature for 3 days, then put in the refrigerator.

Culinary uses
Fermented bean paste makes a tasty dip for tortilla chips or crackers. You can use it as a spread for sandwiches or in Mexican-style dishes.
Dill Pickles

Nutrition
Microorganisms cannot live in the presence of vinegar, so technically our pickles are not fermented. However, they have not been processed by the conventional canning method. They have been covered in an herbed-vinegar brine and left in a crock in a cool place since last summer. You can also make lacto-fermented pickles called cornichons, which use whey mixed with water instead of vinegar. Consult Nourishing Traditions by Sally Fallon for the recipe.

Preparation
Follow this recipe to make unpasteurized pickles. Place 1 clove of garlic, 1 tablespoon pickling spices, several sprigs of fresh dill, 1 tablespoon of dill seed and a pinch of alum in each canning jar. Combine 1 ½ gallons vinegar, 1 ½ gallons water and 1 cup non-iodized salt in a saucepan and heat just until boiling. Divide about 10-12 pounds of small cucumbers, or cucumber slices into the jars and cover to within ½ inch of the top with vinegar brine. Cap and store in a cool, dark place. This recipe can also be used to make one large crock of pickles.

Culinary uses
Eat pickles as a snack or to complement lunch. Traditionally they have been served with sausage or other preserved meats. Pickles help dissolve the high levels of uric acid found in these meats.

Pickled beets, carrots, and rutabaga

Nutrition
This pickled combination makes a good internal body cleanser. Beets lubricate the intestines and are recommended for constipation. Carrots stimulate almost every system in the body, giving an abundance of easily assimilated vitamins including the anti-oxidant beta-carotene, minerals such as silicon and potassium, and enzymes. Rutabaga is also recommended for constipation and contains dithiolthiones, known to have anti-cancer and anti-oxidant properties.

Preparation
To make one quart of pickled root vegetables: Carrots and rutabaga need only to be cleaned and sliced. Beets will need to be pricked and cooked on a baking sheet at 300 degrees F for 3 hours or until soft. Cut into ¼ inch julienne pieces- do not use a food processor. Place vegetables in a quart size jar and press down with a wooden spoon. Mix in 1 cup or more of filtered water, 1 tablespoon of non-iodized salt, and 4 tablespoons of whey. The top of the vegetables should be at least 1 inch below the top of the jar. Cover tightly and keep at room temperature for 3 days, then place in cold storage.

Culinary uses
Serve pickled beets, carrots, and rutabaga alongside any meal. Many cultures serve a side of fermented food with every meal. In Korea they eat kimchi, in India chutney, in Germany sauerkraut. The fermented “condiment” promotes healthy intestinal flora.
Biodynamic and Organically Grown Vegetables—in the garden

The benefits of local, organic, sustainably grown biodynamic vegetables is as old as it is new. Locally grown foods support the economic and social aspects of the community. Sustainable agriculture maintains that we give back to the land that so graciously provides for us. Biodynamic agriculture follows a philosophy that takes us one step further. It brings vital force to the soil and everything that grows in it. This life force is comparable to what in Polynesian culture is known as mana, in India as prana, and in China as chi. Biodynamic agriculture follows a philosophy that food should not only sustain us, but should allow us to thrive. It is amazing how conventionally grown fruits and vegetables, using chemicals, herbicides and pesticides have become just that - conventional. How healthy is food grown in nutrient-depleted soil and fed with chemicals? Organic, and especially Biodynamic agriculture offers practical advice on improving this system. It presents us with a way to understand the farm as a whole. It makes us aware that the farm is full of life and vitality in ways that extend far beyond “the bottom line.” As we facilitate the growth of vegetables they facilitate our growth in a complex cycle of birth, growth, death and decay, and rebirth - all as one supporting unit. This is the real thing, it’s not a simulation. Food is the most basic need. What can be more intimate than taking something into your body several times a day?

Chard

Nutrition
Chard is rich in calcium, iron, magnesium, vitamin C and carotenoids. It has a high oxalic acid content, which causes opinions to differ about the best way to prepare it. One source claims it is more beneficial in its raw form and harmful when cooked because the oxalic acid becomes inorganic and is destructive to calcium. Another reputable source claims that chard should always be cooked, as cooking neutralizes the oxalic acid. We feel healthy eating it both ways.

Propagation
Chard will grow year round in a cold frame or hoop-house. It tolerates cold and heat better than most greens and grows well in a range of soils. Cut the outer leaves as they grow back from the center.

Culinary uses
Add chard to soups and salads, or stir-fry it with sesame oil and top with sesame seeds. It can be used in many of the same ways as spinach, and be substituted in many recipes, cooked or raw. Oftentimes the stalks are tender enough to cook with the leaves (we like the colored stems).
Kale

Nutrition
What an excellent winter green! Kale is “full of cancer-preventing enzymes; it has as much protein as milk (and only 43 calories per cup); each cup provides you with more vitamin C and vitamin A than you need in a day, and it’s loaded with folate, potassium, and iron” (OG Nov/Dec 1999, 48).

Propagation
Kale grows year round and thrives in cooler, cloudy climates. It is easy to cultivate and continuously grows new leaves after the older, outer ones are picked. It tastes particularly good after a frost as cold weather heightens and sweetens the flavor.

Culinary uses
Kale’s beautiful frilled edges and shades of frosted blue and purple are a beautiful addition to many dishes. It is a wonderful green for soups and great with potatoes. It’s also good steamed or stir-fried, although it takes longer to cook than most greens. You can also eat it raw as part of a green salad. Its flavor is stronger, and texture denser than most greens, so you may decide to use it moderately (you can also choose the younger, milder leaves).

Lettuce

Nutrition
Lettuces contain the B-complex vitamins, carotene, phosphorus, potassium, and silicon. Romaine is the most nutritious of the lettuces (as a general rule, the darker green the leaf, the more nutritious it is). Unfortunately iceberg lettuce is the most popular and the least nutritious, containing mostly water and fiber. It also accumulates cadmium, a toxic metal (Fallon, 2001, 177), which is best avoided.

Propagation
Lettuce likes humus-rich soil that’s high in nitrogen. The fast-growing leaf lettuces tolerate warmer temperatures than the head lettuces do. They grow well as outdoor plants in spring and summer and in cold frames during the winter months. You can continuously harvest the outer leaves of the leaf lettuce (these are also the most nutritious), and the lettuces will grow back from the center.

Culinary uses
In China most lettuce is cooked before being eaten. This seems a waste of valuable, vital enzymes! Here we gain the nutritional and textural benefits by eating it raw on sandwiches and in salads. You can make a variety of homemade dressings (a good way to get that raw garlic) to enhance your greens. Fresh herbs are a simple way to add dimension to your salad as is introducing uncommon ingredients, such as spiced and toasted nuts, cheeses and pears. Topping cold salads with warm ingredients, such as rice and beans, is particularly delicious.
Mache (lambs lettuce or corn salad)

Nutrition
Mache contains many of the nutritional benefits of other greens being high in the B-complex vitamins, carotenoids, and various minerals. It has a large organic water content (lots of live enzymes!) which ranges from 92-95 percent.

Propagation
This hardy green is very popular in France and Germany where it’s been cultivated from a wild variety. We grow it year round, using cold frames during the winter months. It grows quickly and can be harvested at maturity, or on a cut-and come again basis.

Culinary uses
Mache leaves are small, succulent, and form fine-looking rosettes that are delicious, as well as pretty in salads. You could also use it as an edible garnish for many dishes, particularly creamed soups. It has a mild, almost flowery, flavor.

Nettles

Nutrition
The young spring shoots of the nettle are high in iron, vitamin A and vitamin C. An infusion of the leaves, also known as nettle tea, is known as a treatment for rheumatism, kidney disorders, and to improve the function of the liver, gallbladder, and intestines. We’ve tried it, with mild success, as a treatment for seasonal allergies. The Tibetans say that Milaraspa, their world-famous poet and saint, lived solely on satuk, nettle soup, for many years until he turned green. Indeed, there is something mystical about the nettle.

Propagation
You may grow nettles in the garden if you like, but they also grow in the wild, seemingly everywhere. You can gather nettles and place them in a large bucket for “ripening”. After several weeks apply it to your compost to enhance microbial activity.

Culinary uses
Pick nettles, with gloves on, in the spring while they are young and tender. Cooking or drying them will destroy the formic acid that gives them their sting. Nettles are a delicious spring green. They have a fresh, earthy flavor and can be used in many of the same ways as spinach (they’re great in omelets). Nettle soup is also a famous European dish, and is used to make nettle and ginger beer. You can infuse them fresh or dried for nettle tea.
**Potatoes**

*Nutrition*
Potato skins provide vitamins C and B complex, as well as potassium, calcium, iron and plenty of fiber. The skin is also reputed to contain acidophilus culture, beneficial in the renewal of intestinal flora (Onstad 1996, 216). Complex carbohydrates in whole foods like potatoes are broken down into simple sugars before they are absorbed into the bloodstream. This provides a steady flow of energy.

*Propagation*
Potatoes grow best when the soil has been fertilized in the fall with well-rotted compost. They need plenty of space, sunshine and drainage. Leave them in the ground for 2 weeks after foliage dies back- this allows the skin to set and increases storage ability. Store them in a dark and cool place (40F) and enjoy them for many months (cut off any green before cooking).

*Culinary uses*
Potatoes rank among the top three vegetables eaten by Americans. However, this is mostly in the form of french fries! This leaves much to be desired from a nutritional perspective. Steaming potatoes retains most of the vitamins and minerals as does eating them raw (however, this may be gastronomically unappealing). There are endless ways to cook and prepare potatoes. Roasting them in the oven with garlic, olive oil and rosemary makes pure comfort food. Just be sure to leave the skin on.

**Garlic**

*Nutrition*
Garlic ranks among the worlds oldest medicines. It is anti-bacterial and anti-fungal (one raw crushed garlic clove contains the antibiotic equivalent of 100,000 units of penicillin!), and one of the most beneficial foods for the digestive system, as it hinders the growth of intestinal parasites and germs. It contains sulfur, selenium, calcium, phosphorus and iron as well as vitamins B and C.

*Propagation*
S&S Homestead has been growing the same garlic for over 30 years. It’s a juicy, mild flavored variety that stores well throughout the year. It’s planted out in the fall and is ready to harvest in August. Once harvested, we tie them in small bundles to dry in a cool, shady, well-ventilated area. The barn is well-suited for this. After 2 weeks they’ll be ready for braiding, decoration, and storage.

*Culinary uses*
Garlic in any form will add dimension and flavor to almost any food except sweets. To acquire the many benefits of garlic it’s best eaten raw, as the active component allicin is destroyed in cooking. This is easily done if you make homemade salad dressing, or if you add it to dishes at the end of cooking.
**Onion**

**Nutrition**
Onions are rich in vitamin C and B-complex, carotenoids, calcium, magnesium, and the bioflavonoid quercetin (which is not destroyed through cooking). They contain sulfur compounds which help remove heavy metals and parasites from the gastrointestinal tract. If you eat them raw they “promote transpiration and cleanse the pores as effectively as a good sauna bath.” Onions are valued for their antibacterial qualities. According to research cited in the *Whole Foods Companion*, chewing a raw onion for five minutes will kill all the germs in your mouth, including those that cause tooth decay.

**Propagation**
There are a wide variety of onions available to plant from seed, transplants, or sets. If grown from seed they will take about 5 months to mature. They may also be more susceptible to disease. Transplants are generally bought at a nursery or ordered. They are seedlings started the same growing season and sold in bunches. We plant onion sets, which are immature bulbs grown the previous year.

**Culinary uses**
All cuisines of the world use the onion or a member of its family. Most meals here at the farm begin with chopped onion sautéing on the stove, while we pick from the garden or gather eggs for breakfast. We store onions year round in a cool dry place.

**Radish**

**Nutrition**
Radishes contain enzymes that aid in the secretion of digestive juices; these are particularly beneficial if you’re eating a starchy meal, such as potatoes or pasta. They also contain volatile ether, which acts as a solvent for mucus or phlegm, clears the sinuses, and relieves hoarseness and sore throats. Consuming radishes regularly will help prevent viral infections such as colds or the flu. They have a considerable amount of potassium, vitamin C, and calcium.

**Propagation**
There are three types of radishes: spring, mid-season, and late cultivars. Only the winter (late) variety is suitable for storage. For spring or summer varieties, make small successive plantings in loose well-drained soil, as they grow very quickly. Harvest as soon as they’re ready and you’ll avoid eating a cracked, tough radish.

**Culinary uses**
Pluck the radish fresh from the garden and rinse, rub it over a piece of butter, sprinkle it with salt, and eat it with homemade bread and butter. You can also add it to salads for color and zest. If you steam them lightly they will become sweet like a turnip.
**Shallots**

**Nutrition**
Like other alliums shallots contain sulfur compounds and flavonoids. One tablespoon of chopped shallot contains 600 I.U of Vitamin A.

**Propagation**
Shallots will tolerate most soil types not overly acidic. The plants put down long feeder roots, about 8 inches, so dig deep beds. You can, however, plant them close together, spacing them at about 2-3 inches apart. Propagate by dividing bulb clusters. Each clove will produce 4-8 new bulbs. Plant in the fall or February-March, placing each clove no more than an inch below the surface. Don’t fertilize. They will be ready to harvest in early summer.

**Culinary uses**
Shallots have a blue-green stem that’s best used when young. Its mild-flavored bulb (which can be stored like an onion) is used much like a mild-flavored garlic. It can be eaten raw in salads and is also good when cooked, such as in the famous French Bernaise sauce. In Southeast Asia shallots are used to make pickles.

**Spinach**

**Nutrition**
Spinach is very nutritious, being exceptionally high in carotenoids, vitamin C, iron and calcium. However, there is evidence that the iron and calcium contents may be in a form that makes them difficult for the body to absorb. The carotenoids and chlorophyll in spinach are powerful cancer fighters. Raw spinach is great for the lower bowels; it soothes intestinal inflammation, promotes peristalsis, detoxifies the digestive tract, restores pH balance, and provides organic mineral salts.

**Propagation**
Spinach is a great plant for the cooler seasons. You can set up cold frames and enjoy fresh, dark green leafy spinach during the winter months. It grows easily in the garden in spring and likes a soil temperature of at least 35 degrees F. It will grow in sun or light shade but prefers the shade in warmer weather. It’s a “cut and come again” plant, meaning you can cut the large outside leaves and let the newer leaves grow from the center.

**Culinary uses**
Spinach is wonderful raw in salads, sandwiches, or lightly steamed with a little butter or cream as a side dish. It combines beautifully with eggs; try it as a filling for omelets, or in quiches. Spinach also freezes well, although it will lose half its vitamin C in the freezing process.
Sprouts

**Nutrition**
Sprouts are incredibly nutritious; high in digestible protein, fiber, and anti-oxidants. Through sprouting, vitamin and enzyme content increases dramatically and nutrients are pre-digested making them easier to assimilate and metabolize. The life energy and enzymes in fresh sprouts will also stimulate the body’s inherent self-cleansing and self-healing abilities (Onstad, 1996 230).

**Propagation**
All seasons are sprout season, and you needn’t have any special equipment. Begin by filling about 1/6 (or less) of a quart size Mason jar with seeds, cover securely with cheesecloth or a lid that allows the seeds to breathe, but with holes small enough so the seeds won’t fit through. Soak them in water overnight. In the morning drain the water through the cheesecloth, and rinse. From this point on they should be kept moist, not wet. Keep them in a dark place at room temperature and rinse them at least twice a day. They should be ready to eat in approximately 3 days.

**Culinary uses**
There are many ways to enjoy sprouts. We’ve been known to heap only raw clover sprouts high on a plate and top them with homemade garlicky dressing! On a more moderate scale you could add them raw to salads, sandwiches or stir-fries. You can also mill sprouted grains, seeds or beans and add them to your bread recipe or baked goods.

Rhubarb

**Nutrition**
Rhubarb is better known for its delightful character and spring tang than for its nutritional value. The stalks contain a high amount of oxalic acid, which can be harmful if eaten in excess. The only health benefit rhubarb may have is it’s immediate laxative effect (Onstad, 1996, 127).

**Propagation**
Botanically a vegetable, rhubarb is a hardy, long-lived perennial. Plant it in a sunny spot where it can establish itself for one full year before you harvest from it. You’ll want to harvest for 8-10 weeks in spring before the leaves are fully-grown. Stems should be at least 12 inches long, but no longer than 24 inches because they become too tough to eat.

**Culinary uses**
A traditional and delicious combination is rhubarb and strawberries in a pie or tart. It can also be used in almost any baked good or dessert. It calls out for fresh, springtime creativity. To prepare, trim off both ends of the stalk (leaves are poisonous), and cut remaining stem into 1-inch chunks. From this point you could freeze it for use all year long. For immediate gratification, simply stew or bake it with plenty of honey or sugar.
**Fresh herbs - always in season**

Herbs have the power to stimulate digestion and enhance and enliven the most basic of foods. They are instrumental for the seasonal cook during those long months of potatoes and winter greens. It’s hard to grow tired of fresh thyme or rosemary. Add these to what you’re able to dry and store for the winter months and you’ll have an abundance of creative culinary power!

**Parsley**

**Nutrition**

Parsley is high in vitamin C, A, and the minerals iron, calcium, manganese, copper, and potassium. It has a very high chlorophyll content, which works to absorb odors. This is why it is often paired with garlic in dishes. Parsley is also one of the richest sources of glutathione (a combination of 3 amino acids), which acts as an antioxidant, particularly helpful in protecting against cataracts.

**Propagation**

Parsley seed takes a long time to germinate, needing at least a month. It’s a biennial, meaning it will grow leaves the first year, bloom the second year, and then die. When harvesting, cut from the outside and all the way to the ground.

**Culinary uses**

Chopped, fresh parsley mixed into a dish right before serving adds life and vibrant color. It goes well with most savory dishes, soups and salads. There are 2 main varieties of parsley, flat and curly leaf. The curly is more decorative and frequently used as a garnish. Flat leaf, sometimes known as Italian parsley, is generally considered the more flavorful and desirable of the two.

**Rosemary**

**Nutrition**

Rosemary isn’t recognized for its nutritional benefits, (although it is high in calcium), but rather for its culinary and medicinal uses. It’s said to be helpful in the alleviation of headaches, and respiratory troubles, and its diuretic properties can help with rheumatism, gout, and kidney stones.

**Propagation**

Plant your rosemary bush in a sunny and preferably sheltered spot, in well-drained soil (it’s a dry weather shrub). When you harvest, do so as if you were pruning a shrub. You can cut from it year round and flavors will be more or less potent depending on the time of year.

**Culinary uses**

Fresh rosemary is an absolutely wonderful, essential and versatile herb. It’s a classic for meats so try it, together with garlic, poked into lamb or pork. If you’re grilling add a few branches to the hot coals just before adding the food. It also works well in baking; just stir a minced tablespoon or two into your dough or batter. For desserts, try it added to simple sweets like shortbread or poundcake, or with desserts containing apple or pears. It especially complements other herbs such as bay, chervil, chives, parsley and thyme.
Sage

**Nutrition**
Sage extracts have powerful antioxidant activity due to their content of phenolic acids. Sage has the ability to stimulate the production of digestive juices and relax muscles.

**Propagation**
Sage is a perennial, woody, evergreen shrub that grows best in arid climates. Cut it back after it flowers in spring. If it doesn’t flower, then cut just as it’s beginning to put out new growth.

**Culinary uses**
Sage is traditionally used in poultry dishes and with fatty meats like pork, goose and sausages. Not only does it add flavor, but helps with the digestion of heavier meats. You may know it as a flavorful ingredient in stuffing, but it also goes well with cheese, beans, and in squash dishes. Dried sage retains a good deal of its fresh flavor.

Thyme

**Nutrition**
The green leaves of thyme contain vitamins B, C, and D. It is known to aid the digestion of lamb, pork, and beans.

**Propagation**
Thyme is an evergreen here in the Northwest. It attracts bees in profusion, so is a good plant for the orchard. It’s also recommended to plant thyme here and there in the garden as it deters cabbage worms and whiteflies.

**Culinary uses**
Thyme is one of the best herbs for cooking. It is wonderful chopped fresh and added to an oil and vinegar based salad dressing. It complements many vegetables such as potatoes, cabbages, tomatoes and zucchini. Thyme, dried from your garden, retains its fresh flavor for months.

Chives

**Nutrition**
Chives are said to have a stimulating effect on the appetite and to be energizing to the stomach and liver. They have a high sulfur content, as do other members of the onion family, giving them antiseptic qualities.

**Propagation**
Chives are one of the first herbs available in spring, and are the most delicate member of the allium family. If cut regularly they will grow and the stalks will remain tender. If left too long they have a tendency to get tougher. During the dormant season (winter) the clumps can be spread by division of the small bulbs.

**Culinary uses**
Chives have a light flavor that will enhance sauces, and dishes with eggs, cheese, soup, potatoes, and fish. Add them at the end of cooking. The flowers are edible and can be added to salads.
Oregano

Nutrition
Oregano will help expel gas from the intestinal tract, strengthen the stomach, and help rid the body of poisons.

Propagation
Like marjoram (the two are closely related), oregano likes full sunshine and well-drained soil. It can become invasive, so keep an eye out for this. *The Herbfarm Cookbook* suggests cutting oregano back by 2/3 after it flowers to encourage new growth. Like marjoram, planted here and there in the garden will improve the taste of many vegetables.

Culinary uses
Greek oregano (there are many weaker, inferior, varieties) has a hot peppery flavor that will blend well with other strong flavors, such as garlic and olives. It pairs well with other strong herbs such as sage, rosemary, and thyme, and the milder vegetables, eggplant and zucchini.

Marjoram

Nutrition
Marjoram is used medicinally to aid a sour stomach or loss of appetite. It relieves abdominal cramps and improves circulation. Stories regarding the origin of marjoram consider it a symbol of happiness, youth, and beauty.

Propagation
Marjoram is a perennial herb that likes full sun and well drained soil. Planted here and there in the garden, marjoram is said to improve the flavor of most vegetables.

Culinary uses
Marjoram is delicious added to tomato sauce. Add it just before serving, as the flavor lessens considerably with heat. It also pairs well with carrots, zucchini., beets, green beans, potatoes, and egg dishes.

Spearmint

Nutrition
All mints are known for their ability to soothe an upset stomach.

Propagation
I like the gardener’s saying, “You don’t have mint; mint has you.” If not kept contained mint will spread rampantly throughout your garden. It’s best to plant it in pots where its roots will be contained, or in an area all its own (such as a pasture). It will grow in most soil conditions.

Culinary uses
Spearmint is “aromatic and sweet” and pairs well with a variety of foods. Potatoes, peas and particularly cucumbers are enhanced with mint. Chocolate and mint are a classic combination. (Unfortunately for us cocoa beans don’t grow here on this farm!) When cooking it is best stirred in at the end, as it will quickly lose its flavor when heated.
Lemon Balm

Nutrition
Lemon balm helps relax the nervous system. It also contains anti-bacterial and anti-viral properties.

Propagation
Lemon balm is vigorous, easy to grow, and adaptable to many environmental conditions. It prefers semi-shade where it will spread rapidly if allowed to go to seed. It is a good companion to cabbage and tomatoes in the garden, since it improves the health and flavor of these vegetables. It also deters white cabbage moth.

Culinary Uses
Lemon balm is most commonly used fresh or dried in beverages. It makes a delicious tea. It is also good, at the height of summer, in vegetable dishes. Chop and add to carrots, beets, zucchini, peas, green salads, and fruit salads.

Pansies

Nutrition
Pansies are among a large group of edible flowers. Flowers are normally consumed in small quantity as an addition to salads and as edible garnishes. As a result there is little nutritional information available.

Propagation
Pansies are a biennial that bloom in a range of colored “faces.” They begin blooming in spring, and begin to die back as the weather becomes hot. They like sun with part shade and well drained soil. Pinch off dead flowers and they will continue to bloom.

Culinary Uses
Pansies’ aesthetic appeal in salads cannot be underestimated. I’ve also seen recipes for candied pansies and flower sorbets. Both sound absolutely decadent and delicious. Pansies have a mild, slightly sweet, mint flavor.
Preserved Fruits- on the shelf; in the freezer

Modern technology and industry have extended the means by which we’re able to process and preserve food. Home canning and processing may seem old because this is what Grandma used to do, but these methods are new within the scope of human history. As discussed earlier, fermentation is the oldest method of food preservation. Today we are largely dependent on non-sustainable methods to process and preserve our food. However, there are traditional preservation methods to put into practice. This is a significant reason we are fermenting, curing, and aging more of our foods at S&S Homestead. Nevertheless, it is a slow process, and when there is bounty there must be a way to preserve these foods quickly and in quantity. From this perspective canning and freezing remain important.

Canning involves putting food into a sterilized jar, capping it, and placing it in a hot water bath for a determined time, usually 10-15 minutes which makes it air-tight, killing all good and bad microorganisms. This allows the food to stay preserved for months, if not years. It was a method first developed by the French in the mid 1800s after years of trial and error. At first canned foods were used as a “luxury” item, then for long expeditions, until finally becoming a major market item. Nutritionally speaking, canned foods should play a limited role in the diet. They lack enzymes, and many of the vitamins and minerals are destroyed. One food that becomes more nutritious through canning is tomatoes. Canning tomatoes are picked at the peak of ripeness, and have a high carotene content- much higher than most fresh tomatoes sold in stores. Carotenes survive the canning process.

On the other hand, freezing fruits and vegetables preserves most of the nutrients. Aside from fresh and fermented foods, this would be the next best choice. Drying is an old method of food preservation, and a good one as well. If temperatures are hot and humidity low enough, you can do this outside. Otherwise a warm oven or food dehydrator works well.

Pears (canned)

Nutrition
Pears are an excellent source of water-soluble fibers, phosphorus, and carotenoids. Canned pears are nutritionally inferior to home grown fruit, but superior to non-organic “fresh” fruits available at the store.

Propagation
It’s recommended to plant pear trees in the months of October and November, once the leaves have fallen. They will begin to bear fruit 3-5 years after you plant them. If you leave pears to ripen on the tree they’ll form “stony granules,” so it’s best to harvest them beforehand.

Culinary uses
Pears are delicious companions for bread, yogurt, sharp cheeses, and wine. They also pair beautifully with chocolate, such as in a pear chocolate tart.
Apples (dried)

Nutrition
Dried apples provide quick energy and are a good source of the gel-forming fiber pectin. European research shows that pectin binds with radioactive residues and removes them from the body, along with toxic heavy metals such as lead and mercury. Apples are also rich in boron which helps prevent osteoporosis. Although apples themselves are not high in iron they contain an element that improves the assimilation of iron in companion foods. In the drying process only a few nutrients are lost, mostly vitamin C.

Preparation
Many of apples’ health benefits are in the skin or just beneath, so dry them with the skin on. Use your own apples, or those that have been organically grown. Conventionally grown apples are one of the most contaminated fruits- not something worth preserving. At the peak of the season, thinly slice the apples, immerse them in lemon juice (this prevents them from oxidizing and adds tartness) and place them in a food dehydrator (there are also other methods for drying, such as solar dryers or a warm oven). Freezing them after drying extends freshness and makes them crispy.

Culinary uses
Dried apples themselves, or mixed into a “trail mix,” are a sweet treat. You can also reconstitute them by covering them with hot water and letting them sit for several hours. They are a very versatile fruit. You can use them in salads, main dishes, and desserts. If you purchase dried fruit, apples or otherwise, be sure it’s unsulphured and unsweetened. Both are unnecessary additives.

Raspberries (frozen)

Nutrition
Raspberries lead all the berries in nutrition; they are almost entirely assimilated by the body during digestion. Like all berries they are high in vitamin C, fiber, and ellagic acid. Berries are also rich in anti-oxidants. This is due to their pigment: the darker the berry is, the stronger its protective function. Cooking destroys many of its nutritional benefits; however, making your own raspberry jam is far better than purchasing it. By canning at home you not only use your home grown berries, but you can control the amount of sweetener you use.

Propagation
Raspberries thrive in deep sandy-loam soil high in organic matter. There are two types; one bears fruit in summer, the other in fall. Each has specific pruning requirements. Cut the fall bearing raspberry bush back to the ground after fruiting. Prune summer raspberry canes by removing the “spent” floricanes and thinning the remaining canes to 2-4 per foot of row.

Culinary uses
Because raspberries are soft when fully ripe, pick them early in the morning and nearly every day during the harvest. Wash them only if absolutely necessary, and eat them fresh and raw whenever possible. Freezing raspberries is next best to eating them fresh because only a minimal amount of the nutrients will be lost. You’ll be elated during the dark winter months, pulling your own scrumptious raspberries from the freezer to top your hot cereal, bake into muffins, or make into a pie for a Christmas treat.
Juices (current, plum, apple)

Nutrition
On the farm we extract juices by way of heat to allow for storage. For optimum nutrition, of course, freshly juiced fruits are ideal. However, if you desire drinking your own juice year round, then canning is a means to do this. While we feel nutrients and enzymes are important so is self-sufficiency, and while the nutrient content of canned juices is reduced, it remains substantial.

Preparation
The juicer used at S&S is stainless steel and consists of three sections. The bottom layer is filled with water, on top of that is a funnel where the juice accumulates, and a plastic hose from which it is drained. The top layer is a colander where the fruits and berries go. The steam that rises from the bottom layer cooks and sterilizes the fruit and it dribbles down into the second layer. It is then placed in jars and given a brief hot water bath to seal.

Culinary uses
Juice made this way is concentrated, so that one quart of canned juice will make 2 quarts of drinking juice.

Strawberries (frozen)

Nutrition
Strawberries are high in vitamin C, and the content increases the longer the berries remain unpicked in the sun (when purchasing strawberries on supermarket shelves, shipped from distant places you can be sure they “ripened” on the road). Fresh berries are also high in ellagic acid, an anti-cancer compound, as well as being a highly rated skin-cleansing food. As with most fruits, cooking strawberries reduces their beneficial properties, so when possible eat them fresh.

Propagation
Strawberries may bear fruit in as little as three months after planting, although it is wise to pick off early blooms until the plants have grown strong roots. Avoid planting them where raspberries, potatoes, tomatoes, or strawberries grew previously. After they’re established, it’s best to tend to the plants immediately after the harvest to ensure a good crop the following year. After the harvest, spread mature compost between strawberry rows being careful not to touch the plants themselves because they are highly susceptible to fungus. Rather than cut back foliage, allow it to die back in the winter (you can trim back the older plants in spring).

Culinary uses
Deep red, just picked, still warm from the sun- this is edible heaven. In European tradition strawberries may be served fresh with cream, sour cream, or red wine. The “real” strawberry season is relatively short, limited to a 3-4 weeks in the summer. Strawberries purchased fresh at any other time may look brilliantly red and ripened (not to mention ridiculously large!) but will have a taste far inferior to those grown at a small scale and in season. Conventionally grown strawberries are also first on the list of contaminated foods because they contain multiple pesticides, herbicides, and fungicides. It’s wise to grow and preserve your own strawberries by freezing them or making jam. Frozen strawberries are wonderful and healthful in smoothies, mixed with yogurt, and as a sauce for dessert.
Homemade Bread- in the oven

There is no competition for the homemade loaf. It is in a league of its own. While the smell alone is reason enough to bake your own bread, so is the satisfaction of creating an artisan food that has been crafted for centuries.

French Bread

Nutrition

Traditionally French bread is made with all-white flour. This is what makes it so soft, airy, and light. However, because of the superior nutritional benefits of whole-wheat flour, substituting half of the white for organic whole wheat will still produce a light loaf. You may want to try other flours as well, such as rye, barley, or spelt. However the bulk of the flour should be a white and whole wheat combination since these contain gluten, which enables the bread to rise.

The recipe for French bread is determined by law- 6 cups flour, 2 ½ cups water, 1 Tbsp salt, and 2 pkgs yeast. It was developed by chef Careme early in the 19th century and is still used by every baker in Paris today- that’s 1200 bakers! Since here at S&S Homestead we’re not governed by French law, we’ve modified the flour-to-water ratio (*see recipe) However, the secret to pain ordinaire is not in the recipe, but the way it is used (such as, adding the salt during the last 5 minutes of kneading). Bread baking is a subtle craft to which every baker lends her/his technique and style. If you’ve never made bread before, or even if you have, experiment with this basic recipe. Kneading method, temperature, humidity, time rising, your mood- all determine the quality of your loaf.

Recipe

4-4 ½ cups organic flour
2 cups water
1 Tbsp sea salt
2 Tbsp yeast
optional-a touch of honey
Place 100-115 degree water in a bowl and stir in yeast (+honey)
Stir and allow to dissolve for 5 minutes
Add flour, adjust amount as necessary, knead (add olive oil)
Add salt and knead longer
Allow to rise for 30-40 minutes, shape into loaves on a baking sheet laced with cornmeal, and place in a cold oven. Turn oven on to 400 degrees F and bake for 25 minutes, until hollow sounding. (remember to experiment!)

Whole Wheat Bread

Nutrition

Whole wheat flour, in comparison to white, has the benefit of the wheat bran and the wheat germ, which contain most of the vitamins, minerals, fiber, and fats. If grown in fertile soil, whole wheat will be high in calcium, iron, and the B vitamins. Although the overall fat percentage in whole wheat is low, the fat is high in the essential omega-3 fatty acid (again, the wheat must be grown properly to contain this fat). Wheat has high levels of protein, but it is incomplete, lacking the
amino acid lysine. Therefore, to assimilate the protein from wheat, other food containing this amino acid must be eaten; beans, peanuts and cashews are good sources. Recently more people are discovering they experience an allergic reaction to wheat. Wheat is mass-produced and largely refined, resulting in a low-quality food. It is also present in many processed foods, so we are consuming it in large quantity. Generally, people with wheat allergies respond well to organically grown whole-wheat, as well as the heirloom wheat spelt and kamut. Sprouted wheat rarely causes an allergic reaction.

Propagation
On the farm we are experimenting with growing eight different varieties of heirloom wheat in order to produce enough flour to meet our household needs. In the meantime, we buy organic flour from a mill in Bellingham.

Recipe
This is fast bread that requires no kneading.

7 C organic whole-wheat flour
1 T sugar or honey
3 T yeast
4 C warm water (approximately)
4 TB molasses
2 TB salt

Put the flour in a large bowl and put the bowl in the oven turned to the lowest setting. Both the flour and the bowl should be warm when you make the dough. Put the sugar or honey and yeast in a large bowl, add 2 cups of warm water (110-115 degrees F), and gently whisk and allow the yeast to dissolve. Gently whisk in the molasses and allow the mixture to proof. Add another cup of water. Combine the flour, salt, and yeast mixture. Stir, adding more warm water (about 1 cup) to make a wet, sticky dough. Place directly into 4 greased bread pans. Cover and set in a warm spot to rise by one-third its original size. Preheat the oven and bake at 350 degrees F for 35 minutes.

German Sourdough Rye

Nutrition
Sourdough bread has the advantage of natural yeasts and fermentation. As a result sourdough breads generally have a more complex flavor and longer shelf life (as a general rule, the longer the bread takes to make, the longer it will keep). Rye is said to “build muscles and promote energy and endurance.” (Onstad 1996, 284)

Recipe (this is enough to make 5 or 6 loaves-they freeze well)

5 C sourdough- (most breadbaking books will give instructions on how to start your own)
1 bottle dark beer
1 C dark molasses
5 tsps salt
5 C dark rye flour
A sprinkling of caraway seed
Enough warm water to make the starter a bit liquid
Mix after adding each ingredient. Cover the starter and leave it in the kitchen overnight.

The next morning, you will need

About 5 C mix of organic white and whole wheat flour-adjust as needed to make a firm, moist dough
5 T yeast
4 C warm water –100-115 degrees F
2 T sugar or honey

Combine water, yeast, and sugar/honey and allow to proof. Pour the yeast mixture into the starter and add the flour, cup by cup. Turn out onto a well-floured surface and knead, adding flour as necessary until dough is smooth and firm. Place in a bowl coated with olive oil and allow to rise until doubled in size. Divide the dough into 6 equal pieces, knead again, and place in greased bread pans. Let it rise again, and then bake at 350 F for about one hour.

Bibliography


