where to find it, how to buy it.

LOCAL FOOD

by Jane Grimsbo Jewett and Derrick Braaten
acknowledgements.

authors.
Jane Grimbo Jewett, Minnesota Institute for Sustainable Agriculture
Derrick Braaten, former intern, Minnesota Institute for Sustainable Agriculture

project team members.
Cathy Eberhardt, Land Stewardship Project
Dale Hennen, Archdiocese of St. Paul and Minneapolis
Paul Hugunin, Minnesota Grown — Minnesota Department of Agriculture
Lynn Mader, Food system consultant and registered dietitian
Beth Nelson, Minnesota Institute for Sustainable Agriculture
Terry VanDerPol, Land Stewardship Project
Ruth White, Farmers’ Market Program — Minnesota Department of Agriculture
Wynne Wright, Sociology Department, University of Northern Iowa

series editor.
Beth Nelson, Minnesota Institute for Sustainable Agriculture

design and layout.
Brett Olson, Renewing the Countryside
Eric Drommerhausen, Renewing the Countryside
Meredith Hart

reviewers.
Teresa Chirhart, Minnesota Department of Agriculture
Mary Jo Forbord, Sustainable Farming Association of Minnesota
Elsa Keeler, St. Paul Minnesota
Pam McCulloch, St. Paul Minnesota
Sandra Morgan, Palisade Minnesota
Bob Peterson, Palisade Minnesota
Sharon Rezac-Anderson, former Director Central Minnesota Regional Sustainable Development Partnership

Copyright 2005, updated 2011, Minnesota Institute for Sustainable Agriculture.
Partial funding for this project provided by the Minnesota Legislature.
Additional copies of this item may be ordered from the Minnesota Institute for Sustainable Agriculture, 411 Borlaug Hall, 1991 Upper Buford Circle, St. Paul, MN 55108, email: misamail@umn.edu; phone: 612-625-8235 or 800-909-6472. Also available in full text online at: www.misa.umn.edu

The information given is for educational purposes only. Reference to commercial products or trade names does not imply the endorsement or the partial funding that no discrimination is intended and no endorsement by the Minnesota Institute for Sustainable Agriculture is implied.

Printed on recycled paper with 20% post-consumer content.

Minnesota Institute for Sustainable Agriculture
411 Borlaug Hall, 1991 Buford Circle, St. Paul, MN 55108-1013
t. (612) 625-8235, or (800) 909-MISA (6472)  f. (612) 625-1268
e. misamail@umn.edu

www.misa.umn.edu
The simple joy of eating fresh, delicious, nutritious food is a great reason to buy local! “Local food” simply means food grown or raised within a certain number of miles of your home. If your lunch today was typical of most American meals, the food you ate traveled hundreds -- or even thousands -- of miles to get from the farmers that grew it to you. A lot of resources went into the refrigerating, processing, packaging, and transporting of that food (Pirog, Rich et al.). Buying locally shortens that long supply chain. People nationwide are discovering that for true freshness, flavor, and nutrition, local food is hard to beat.

Often, people assume the term “local food” includes other things they value: farming in a way that conserves natural resources, or humane treatment of animals, or farming without synthetic fertilizers and pesticides. While buying food grown close to home does not automatically mean that you get those other qualities that you value, buying locally does give you the chance to know the farmer, ask questions, and buy food grown in ways that are important to you.

Buying locally grown food is an investment in the economic and social well-being of your community. When you buy locally grown food, you put more of your consumer food dollars into the hands of the farmers who grew the food. This improves farm profitability, helping to keep farms and farmers on the landscape. Rural communities thrive when the farm families are there to be involved in the schools, churches, sports leagues, and community organizations. You’re also helping the local economy by circulating dollars locally, creating a multiplier effect as farmers spend those dollars at local businesses.

When you buy locally grown food, you have the opportunity to vote with your dollars for the kind of farming you want to support. Your food-buying choices can encourage farmers to use methods that are important to you, be they crop rotations to reduce pesticide use and soil erosion, the humane treatment of farm animals, even the setting aside of some acreage for pollinator or wildlife habitat. Your food dollars have power to influence how food is grown.

---

**10 top reasons to buy locally grown food.**

- helps to sustain the environment
- promotes tourism within the area
- grown locally instead of traveling 1,500 miles from field to the table
- promotes healthy food choices
- maximum freshness
- exceptional taste
- unique varieties
- nutritious and affordable
- helps to support our family farms
- retains food dollars in the community

---

—Central Minnesota Farmers’ Markets; “Come Grow With Us.” In Partnership with the University of Minnesota Central Region, (877) 997-7778.
buying club.
A group of people placing a combined order for food. There are varying degrees of formality.

community supported agriculture [csa].
The farmer sells shares or subscriptions for the year’s crop of vegetables (some farms also include fruits or flowers). Customers who buy a share usually pay for it early in the year and then receive a weekly box of produce for a set number of weeks.

direct marketing.
When a consumer buys a product directly from the farmer who produced it, that is direct marketing. Farmers’ markets, Community Supported Agriculture, roadside stands, and direct meat sales are all forms of direct marketing.

farmers’ market.
Usually in the open air, usually on a regular schedule of time and day (or days) of the week, these are gatherings of farmers who set up displays of products for sale.

local food.
Any food that is grown by farmers who live in the same area as the people who buy the food. Local food sales include all of the forms of direct marketing. Local food also includes the sale of food by a farmer or a group of farmers to a restaurant, grocery store, caterer, etc., who will then sell the food to customers.

producer co-ops.
This is a marketing method in which a group of farmers get together and sell their products cooperatively. This is a step away from direct marketing because the co-op acts as a broker and distributor, but it allows the farmers to offer a wider array of products to customers than would be possible if they were each selling independently.

regional food.
Food that is produced in a certain region may come to be identified as a regional specialty. People can buy this food to get a “taste of place.” Minnesota has several regional food networks that are working on building a brand identity for food produced in that region; see Appendix 2: Guide to Minnesota’s Local Food Directories.

roadside stands.
A “Farmers’ Market” of one farmer, these stands are usually set up along roadsides that border the farmer’s property. They display farm products for sale and may be staffed, or unstaffed and on the “honor system” for payment.

seasonal food.
This refers especially to fresh fruits and vegetables, which are available from local farmers only at certain times of the year. For example, rhubarb and asparagus are some of the first fresh foods available in the spring. With season extension techniques like high tunnels, production seasons have expanded for many popular fruits and vegetables.

sustainable.
A farming system or any other kind of system that is sustainable is one that can continue far into the future because it does not overuse its resources. Sustainable agriculture is a farming system that balances economic, environmental, and quality of life benefits for the farmers and their communities.

local food system definitions.

Here can you find great, fresh, delicious local food? Lots of places in Minnesota! Farmers’ markets are located all over the state, and are a great opportunity to meet the people who grow the food. Many farmers sell food right on their farms, giving their customers the chance to really see and touch the farm life. Community Supported Agriculture is a way for consumers to actively buy into a season’s worth of a farm’s production. Some farmers have banded together into groups to offer customers easy access to a wide variety of products. Some grocery stores even sell locally grown foods! Read on to find out just where the local food sources are near you.

farmers’ markets.

Farmers’ markets are an excellent place to purchase fruits and vegetables, as well as many other products, directly from the producer. Many farmers’ markets limit the distance that producers can travel to sell at the market. The farmers usually pick their produce only a day or so in advance of the market, and sometimes even the same day as the market. Besides getting great food, many people simply enjoy the color and character of an open-air market, the ability to visit with those who grow their food, and the chance to meet other community members.

Minnesota farmers’ markets attract people with a wide diversity of incomes, ethnic backgrounds, and lifestyles. Many vendors and entire farmers’ markets now accept SNAP (Supplemental Nutrition Assistance Program) benefits and EBT (Electronic Benefit Transfer) cards. The Farmers’ Market Nutrition Program (FMNP) helps low income families buy high quality food from farmers’ markets. Generally, people eligible for the WIC (Women, Infants and Children) program are eligible for the Farmers’ Market Nutrition Program. There is also a Senior Farmers’ Market Nutrition Program that provides vouchers to low-income senior citizens. Participating farmers’ markets accept vouchers issued by this program. For more information about how to participate in the Farmers’ Market Nutrition Program, contact the agency that administers the WIC program in your area. This is usually the county or city public health office.

Minnesota now has more than 160 Farmers’ Markets located all over the state! Find one near you using the resources in Appendix 1: Farmers’ Markets Information.

If there are no farmers’ markets in your area, you might consider getting one started yourself. Some basic issues you will need to consider are location, licensing and regulation, and farmer and consumer support for the market. The Minnesota Department of Agriculture has a publication called “Starting a Farmers’ Market,” available online: www.mda.state.mn.us/news/publications/food/minnesotagrown/startfarmmkt.pdf. For more information on starting a farmer’s market, contact:

state farmers’ market representative.

ruth white
minnesota department of agriculture
agricultural marketing & development
625 robert street north
st. paul, mn 55155
(651) 201-6494
ruth.white@state.mn.us

fresh from the farm.

There is nothing quite as satisfying as knowing the person who grew your food. A whole lot of Minnesota consumers are making direct connections with farmers, to buy the food those farmers produce. There are people in the countryside who will be delighted to sell you fresh vegetables and fruits, eggs, chicken, honey, and meats—not to mention grains, flowers, homemade soap, and wool.

Buying direct from the farmer takes a little effort. You might have to make a telephone call, or send an e-mail, and maybe drive out to the farm. There are plenty of possibilities for making that connection. If the farmer sells at a farmers’ market, she or he can bring along “special request” items on market days. Some farmers or farmer groups have storefronts or drop sites to make things easy for their customers. Nonperishable foods can be shipped right to your address. In return for your extra effort, you get to learn exactly where and how your food was grown—and the name and the face of the person who grew it.

Find out where to get all kinds of foods and other fresh-from-the-farm products in Appendix 2: Guide to Minnesota’s Local Food Directories. A number of organizations in the state have put together lists of farmers that sell directly to consumers. You can find the directory that covers your part of the state, and see what’s available right in your own neighborhood.

If you are interested in buying meat in bulk directly from a farmer, it helps to know what regulations the farmer needs to follow. You can find all of the details in Appendix 3: Consumer Information on Buying Meat Direct from Farmers. That section tells you everything you need to know—in fact, it might actually be more than you need to know! If you are buying meat or poultry at a farmers’ market or through a cooperative, that meat has been processed according to rules that allow it to be sold as a retail product. In those situations you just buy the meat like you would in a grocery store.
local food system definitions.

antibiotic-free.
This means that no antibiotic drugs have been given to the animal in its feed or by injection.

free-range.
Often used to describe poultry and sometimes pork, “free-range” usually means that the animals have room to run around outside. It does not necessarily mean that the animals can go anywhere they please. Fences may be used to keep the animals from destroying crops or to protect them from predators.

grain-fed.
Some livestock producers use this term to mean that the grain fed to their animals is 100 percent grain, and contains no animal by-products such as rendered fat or blood meal.

green-fed.
This term is regulated by the USDA, and means that the animal was fed 100% grass or forage for its entire lifetime (except that young animals will nurse their mothers for milk). www.americangrassfed.org

green-finished, grass-based, or grazing-based.
Refer to a production system for grazing (grass-eating) animals such as cows, bison, goats or sheep in which the animals spend nearly all their time outside eating grass or other plants in a pasture. They may be fed some grain too, but generally less than non-pastured animals.

hormones not used.
In beef production, this means that the animals have not been given synthetic growth hormones to make them grow faster. In dairy, this means that the cows have not been given injections of bovine growth hormone to increase their milk production.

humane-raised.
This is a term that means many different things to different people, so ask the person using the term to explain exactly what they mean. There is a label for “Certified Humane Raised and Handled” meat, and farmers using this label have to meet some standards of animal care. You can learn more about this at www.certifiedhumane.org.

natural.
This is a word that has been used to mean so many different things that it is now almost meaningless. If you hear this, ask for more specific information.

organic.
Food that is labeled as organic has been grown according to the National Organic Standards. Synthetic fertilizers and synthetic pesticides cannot be used on crops. Antibiotics and growth hormones cannot be used on livestock, animals must eat organic feed, and animals cannot be fed animal by-products. Genetically modified organisms are prohibited. In addition, organic farmers are to have a management plan to improve their soil and to manage weeds and other pests without harming the environment. (“Answers to your organic certification questions.” James Riddle, Organic Inspector, Chair of The New Farm® Answer Team. Online:www.newfarm.org/certification/intro.shtml.)

pasture-raised.
This is a production system in which the animals spend most of their time living on a pasture, with access to shelter. Pasture-raised is a little different from grass-fed. Pork and poultry can be pasture-raised, but because hogs and chickens have a different digestive system from grazing animals like cows, they do not eat just grass. Hogs and chickens will eat some green plants, but usually get a grain ration as well.

> farmers who sell food directly to customers often use certain words to describe how that food is produced. “organic” and “grass-fed” are terms that are regulated by the United States Department of Agriculture, but the other terms do not have similar regulation. > they can mean different things to different people. <
For a summertime day-trip, how about a visit to a pick-your-own berry patch, orchard, or pumpkin patch? At a pick-your-own patch, you get to—of course—pick your own fruit, and it doesn’t get any fresher than that! Start with strawberries in June, move on to raspberries and blueberries in July and August, then apples in September, and both apples and pumpkins in October. Some people follow the turning of the leaf color in the fall, visiting scenic spots in northern Minnesota first and then moving farther south in the state as the season advances. You can do that in reverse with berries. Strawberries are ripe in southern Minnesota in early June. As the season progresses, you can still pick strawberries in northern Minnesota in July.

Minnesota Grown, a program of the Minnesota Department of Agriculture, has a listing of more than 80 pick-your-own farms all over Minnesota. Also take a look at the advertising sections of local newspapers during the summer and early fall, because berry patches and orchards often place local ads.

Visit Appendix 2: Guide to Minnesota’s Local Food Directories to find out where there is a CSA near you. There are some CSAs from outside the Twin Cities metro area that have metro-area drop sites, so don’t automatically rule out a CSA that seems far away. Choose a CSA that has payment and delivery procedures that work for you, and a farmer you can relate to. A good relationship between the farmer and the customers is really important to the success of a CSA. CSA customer Lisa Genis talks about her experiences with Community Supported Agriculture in the profile that follows.

Community Supported Agriculture in the United States got its start in New England in the 1980s. Now there are CSA farms in all 50 states. When you join a Community Supported Agriculture farm, or CSA, you enter into a direct partnership with the farmer. As a CSA customer you pay up front, in early spring, for a “share” of the CSA farm’s production for the whole summer season. In return for your up-front support, the farmer commits to providing you with a container of fresh vegetables every week throughout the growing season. Paying in advance means that you share in the farmer’s risks of bad weather, insects, and so on that might damage crops. Payment in advance also means that the farmer has money to work with to produce the crops—to buy seeds, equipment, and hire help.

Every CSA farm is different in the way that it sets the price for a share, the weekly amount and variety of vegetables, and how the produce is packaged and delivered. Some CSAs in Minnesota run for 16 weeks, some for a few weeks longer. Some CSAs send out newsletters and recipes with the packages of vegetables. Some offer fruits, flowers, or eggs in addition to vegetables. Some even have storage areas for root crops so they can offer “winter shares.” Many CSAs encourage their members to come out and visit the farm, and they might even offer a reduced price on shares if you agree to spend some time helping out on the farm during the summer. Buying a “working share” is a terrific way to really get connected to the food you eat.
Minnesota has networks of farmers, distributors, and retailers that bring locally grown food to people through their grocery stores. Food co-ops, mainstream grocery chains, and independent grocery stores in Minnesota may offer locally grown foods.

Food co-ops are grocery stores that are member-owned, member-governed businesses. You do not need to be a member to shop at a food co-op. In addition to fresh produce, these stores often offer local dairy and meat products, a wide variety of organic foods and personal care items. The food co-ops have been leaders in the development of local food systems in Minnesota. They and their members have been reliable, committed customers for local and organic food. The buying power of co-ops has helped organic farmers expand their farms, expand their product lines, and extend their growing seasons. Minnesota boasts more than 40 food co-ops in communities all around the state.

Find all the details of location, store names and telephone numbers online:

co-op directory service.
www.coopdirectory.org/directory.htm#Minnesota
thegang@coopdirectory.org
This directory lists food co-op stores in communities all over Minnesota.

Other online directories also list food co-ops, as well as farmers’ markets, on-farm stores and other retailers in a searchable map format:

food routes.
www.foodroutes.org
RR#1 box 25
Troy, pa 16947
(570) 673-3398
info@foodroutes.org

local harvest
po box 1292
santa cruz, ca 95061
(831) 515-5602
www.localharvest.org

Mainstream grocery chains in Minnesota have been developing and expanding local food offerings, often with the help of distributors who are making a point of buying vegetables and fruits from Minnesota farmers. The large customer base and buying power of these major chains makes them important purchasers of locally grown food, even though local food is a small percentage of their total store inventory. Watch for signs in the produce department that announce locally grown vegetables and fruits in the summer and fall.

Lots of independent grocery stores have been selling local products for years without much fanfare. Some carry local potatoes or other root crops in the fall, local rhubarb or asparagus in the spring, and local sweet corn in the summer. Some have honey from local beekeepers. Some even carry local meats and dairy products. Ask the store staff whether they have any local products. If the answer is no, let them know that you are interested in buying locally grown foods—maybe you will get something started.

“Organic” refers to the way the food is produced. The word “organic” is a regulated marketing claim. Farmers and food companies must comply with detailed national standards and undergo a yearly audit in order to use the word “organic” to describe their products. Organic farmers must follow strict production standards that include crop rotations and following management plans for soil fertility and pest control. With very few exceptions, organic farmers may not use synthetic fertilizers or pesticides. Organic farmers may not plant genetically modified (GM or GMO) seeds. They must handle manure and compost carefully to protect food safety. Livestock must be allowed to go outdoors, and ruminants (cows, sheep, goats) must have pasture. No antibiotics or hormones can be used on livestock. Organic food is not necessarily local food. While there are many organic farmers in Minnesota, organic food for sale in stores may be shipped in from far away – even other countries.

Lisa Genis has always enjoyed “playing in the dirt.” During her childhood her mother was an avid gardener, even convincing some of their neighbors to grow a garden. Over the years Lisa has come to value a real connection to her food and its source. For the past ten years she has been getting almost all of her vegetables during the growing season through membership in a local CSA. The letters CSA stand for Community Supported Agriculture.

A CSA farm sells season-long subscriptions to its vegetable production, and customers get a weekly container of produce. This innovative approach to direct marketing of locally grown foods has grown rapidly in the past decade. Lisa’s experience is shared by many people throughout Minnesota and the rest of the U.S.明细

local? organic?

If you go into a grocery store or a food co-op, shop at a farmers’ market or join a CSA, you are likely to see some local products and some organic products. You may also see products that are both local and organic. What’s the difference? What does “organic” really mean?

Lisa Genis has always enjoyed “playing in the dirt.” During her childhood her mother was an avid gardener, even convincing some of their neighbors to grow a garden. Over the years Lisa has come to value a real connection to her food and its source. For the past ten years she has been getting almost all of her vegetables during the growing season through membership in a local CSA. The letters CSA stand for Community Supported Agriculture.

A CSA farm sells season-long subscriptions to its vegetable production, and customers get a weekly container of produce. This innovative approach to direct marketing of locally grown foods has grown rapidly in the past decade. Lisa’s experience is shared by many people throughout Minnesota and the rest of the U.S.

Lisa Genis has always enjoyed “playing in the dirt.” During her childhood her mother was an avid gardener, even convincing some of their neighbors to grow a garden. Over the years Lisa has come to value a real connection to her food and its source. For the past ten years she has been getting almost all of her vegetables during the growing season through membership in a local CSA. The letters CSA stand for Community Supported Agriculture.

A CSA farm sells season-long subscriptions to its vegetable production, and customers get a weekly container of produce. This innovative approach to direct marketing of locally grown foods has grown rapidly in the past decade. Lisa’s experience is shared by many people throughout Minnesota and the rest of the U.S.

“A CSA farm sells season-long subscriptions to its vegetable production, and customers get a weekly container of produce. This innovative approach to direct marketing of locally grown foods has grown rapidly in the past decade. Lisa’s experience is shared by many people throughout Minnesota and the rest of the U.S.”

“Organic” refers to the way the food is produced. The word “organic” is a regulated marketing claim. Farmers and food companies must comply with detailed national standards and undergo a yearly audit in order to use the word “organic” to describe their products. Organic farmers must follow strict production standards that include crop rotations and following management plans for soil fertility and pest control. With very few exceptions, organic farmers may not use synthetic fertilizers or pesticides. Organic farmers may not plant genetically modified (GM or GMO) seeds. They must handle manure and compost carefully to protect food safety. Livestock must be allowed to go outdoors, and ruminants (cows, sheep, goats) must have pasture. No antibiotics or hormones can be used on livestock. Organic food is not necessarily local food. While there are many organic farmers in Minnesota, organic food for sale in stores may be shipped in from far away – even other countries.

“A CSA farm sells season-long subscriptions to its vegetable production, and customers get a weekly container of produce. This innovative approach to direct marketing of locally grown foods has grown rapidly in the past decade. Lisa’s experience is shared by many people throughout Minnesota and the rest of the U.S.”

“Organic” refers to the way the food is produced. The word “organic” is a regulated marketing claim. Farmers and food companies must comply with detailed national standards and undergo a yearly audit in order to use the word “organic” to describe their products. Organic farmers must follow strict production standards that include crop rotations and following management plans for soil fertility and pest control. With very few exceptions, organic farmers may not use synthetic fertilizers or pesticides. Organic farmers may not plant genetically modified (GM or GMO) seeds. They must handle manure and compost carefully to protect food safety. Livestock must be allowed to go outdoors, and ruminants (cows, sheep, goats) must have pasture. No antibiotics or hormones can be used on livestock. Organic food is not necessarily local food. While there are many organic farmers in Minnesota, organic food for sale in stores may be shipped in from far away – even other countries.

“A CSA farm sells season-long subscriptions to its vegetable production, and customers get a weekly container of produce. This innovative approach to direct marketing of locally grown foods has grown rapidly in the past decade. Lisa’s experience is shared by many people throughout Minnesota and the rest of the U.S.”

“Organic” refers to the way the food is produced. The word “organic” is a regulated marketing claim. Farmers and food companies must comply with detailed national standards and undergo a yearly audit in order to use the word “organic” to describe their products. Organic farmers must follow strict production standards that include crop rotations and following management plans for soil fertility and pest control. With very few exceptions, organic farmers may not use synthetic fertilizers or pesticides. Organic farmers may not plant genetically modified (GM or GMO) seeds. They must handle manure and compost carefully to protect food safety. Livestock must be allowed to go outdoors, and ruminants (cows, sheep, goats) must have pasture. No antibiotics or hormones can be used on livestock. Organic food is not necessarily local food. While there are many organic farmers in Minnesota, organic food for sale in stores may be shipped in from far away – even other countries.

“A CSA farm sells season-long subscriptions to its vegetable production, and customers get a weekly container of produce. This innovative approach to direct marketing of locally grown foods has grown rapidly in the past decade. Lisa’s experience is shared by many people throughout Minnesota and the rest of the U.S.”

“Organic” refers to the way the food is produced. The word “organic” is a regulated marketing claim. Farmers and food companies must comply with detailed national standards and undergo a yearly audit in order to use the word “organic” to describe their products. Organic farmers must follow strict production standards that include crop rotations and following management plans for soil fertility and pest control. With very few exceptions, organic farmers may not use synthetic fertilizers or pesticides. Organic farmers may not plant genetically modified (GM or GMO) seeds. They must handle manure and compost carefully to protect food safety. Livestock must be allowed to go outdoors, and ruminants (cows, sheep, goats) must have pasture. No antibiotics or hormones can be used on livestock. Organic food is not necessarily local food. While there are many organic farmers in Minnesota, organic food for sale in stores may be shipped in from far away – even other countries.

“Organic” refers to the way the food is produced. The word “organic” is a regulated marketing claim. Farmers and food companies must comply with detailed national standards and undergo a yearly audit in order to use the word “organic” to describe their products. Organic farmers must follow strict production standards that include crop rotations and following management plans for soil fertility and pest control. With very few exceptions, organic farmers may not use synthetic fertilizers or pesticides. Organic farmers may not plant genetically modified (GM or GMO) seeds. They must handle manure and compost carefully to protect food safety. Livestock must be allowed to go outdoors, and ruminants (cows, sheep, goats) must have pasture. No antibiotics or hormones can be used on livestock. Organic food is not necessarily local food. While there are many organic farmers in Minnesota, organic food for sale in stores may be shipped in from far away – even other countries.

“Organic” refers to the way the food is produced. The word “organic” is a regulated marketing claim. Farmers and food companies must comply with detailed national standards and undergo a yearly audit in order to use the word “organic” to describe their products. Organic farmers must follow strict production standards that include crop rotations and following management plans for soil fertility and pest control. With very few exceptions, organic farmers may not use synthetic fertilizers or pesticides. Organic farmers may not plant genetically modified (GM or GMO) seeds. They must handle manure and compost carefully to protect food safety. Livestock must be allowed to go outdoors, and ruminants (cows, sheep, goats) must have pasture. No antibiotics or hormones can be used on livestock. Organic food is not necessarily local food. While there are many organic farmers in Minnesota, organic food for sale in stores may be shipped in from far away – even other countries.

“Organic” refers to the way the food is produced. The word “organic” is a regulated marketing claim. Farmers and food companies must comply with detailed national standards and undergo a yearly audit in order to use the word “organic” to describe their products. Organic farmers must follow strict production standards that include crop rotations and following management plans for soil fertility and pest control. With very few exceptions, organic farmers may not use synthetic fertilizers or pesticides. Organic farmers may not plant genetically modified (GM or GMO) seeds. They must handle manure and compost carefully to protect food safety. Livestock must be allowed to go outdoors, and ruminants (cows, sheep, goats) must have pasture. No antibiotics or hormones can be used on livestock. Organic food is not necessarily local food. While there are many organic farmers in Minnesota, organic food for sale in stores may be shipped in from far away – even other countries.
Community Supported Agriculture is a risk-sharing venture between the farmer and the customers. The customers pay for their share up front. If weather conditions are poor, there will be fewer vegetables in the weekly deliveries.

On the other hand, many CSAs will let members take all they want of surplus vegetables if there is a bumper crop. Lisa said she usually paid for her share all at once, but one year she also paid part in March and the rest by May first.

The Red Cardinal CSA near Stillwater, MN, was Lisa’s CSA from 1995 to 2000. Lisa also worked part-time at the Red Cardinal farm, cooking food for the field hands a couple days a week. She would also prepare sample foods for other members to try when they picked up their produce, often including the recipe and ingredients in their boxes.

In 2000 the owners of Red Cardinal stopped farming, and Lisa shopped... ...for a new CSA. She became a member of Riverbend Farm, run by Greg and Mary Reynolds and located in Delano, MN, about 40 miles west of the Twin Cities.

The Riverbend CSA offered the option of working shares. Working shareholders were required to come out to the farm on two days during the growing season to help with weeding, transplanting, harvesting, and other tasks. In return, they receive a discount on the cost of their share. Some CSA farms offer the working share option to encourage their customers to learn more about how their food is produced.

Beginning with the 2003 season, the Reynolds decided to focus on those wholesale accounts and to end the CSA part of their farm. Lisa and a number of other former Riverbend customers became members of David and Melinda Van Eeckhout’s “Hog’s Back Farm CSA.” The Hog’s Back CSA sold 30 shares for its first season in 2003. By 2005 the CSA had grown to 85 shares, and had begun to offer winter shares in addition to the more common summer shares. Storage facilities for root vegetables and other season-extension techniques allow some CSAs to offer weekly deliveries outside of the ordinary growing season.

Lisa’s box of vegetables from her CSA changes with the seasons. Boxes usually include a large number of heirloom varieties of popular produce such as lettuce, spinach, arugula, turnips, beets, carrots, potatoes, tomatoes, peppers, squash, onions, and herbs, as well as numerous seasonal items. Members of a CSA usually do not know exactly what will be included in their weekly box of produce. Lisa said this can be a thrill. When she gets her weekly box, she asks herself, “OK, what do I have to work with this week?” As she put it, “You have to be flexible, like any thing that is weather- and people-dependent.” Often the CSA farmers will include a newsletter or some recipes that offer suggestions for how to prepare the unusual vegetables. www.hogsbackfarm.com/almanac/archive.php

For part of the growing season customers may get a 12-15 lb. box of produce each week, and during other parts of the season, the box may weigh up to 30 lbs. Most CSA producers have an average weight for the weekly boxes, and ensure that their customers are getting fair value and quantity in exchange for their share money. A single person or someone who does not cook a lot may find it difficult to use all the vegetables in their weekly box. Many CSAs offer half-shares for people who need smaller quantities. Some CSAs also offer a variety of specialty products such as eggs or maple syrup.

Producers with CSAs usually try to make things as convenient as possible for their customers. The CSA farmers may ask the members to come out to the farm to pick up their weekly box of vegetables, but most also offer delivery to a central location. Many Minnesota and western Wisconsin CSAs offer metro-area pick-up locations. Lisa’s home is a pick-up location for Hog’s Back CSA customers. Boxes of produce from the farm are dropped off at her home once a week, and CSA members come within about a two-hour time period to pick up their boxes. Lisa says, “I do my best to create a sense of community;” and adds that her dog loves pick-up day because she gets to play with the children who come along with their parents.

Despite changes in the CSA farms, Lisa Genis has always continued her close connection to her CSA. She appreciates the opportunity to have a tangible connection to her food and how it is grown, and to meet others who share her values. For her, a CSA is the perfect way to support local food and farmers.

Lisa Genis, CSA customer

>benefits of consumer cooperatives<
benefits of consumer cooperatives

some cooperatives are members of organizations, such as food alliance midwest, which helps them to carry a larger variety of local foods.

they help to promote a sense of community, and foster a healthy and informed relationship between people and their food.

some co-ops are “volunteer co-ops” that allow members to receive a significant discount on their groceries for volunteering some of their time each month.

local foods are marked as such, and usually include other information about the source of the food.

they stock as much local food as possible.
Some farmers have found that they can connect better with consumers if they work together to market their products. Producer cooperatives or similar groups can offer a wide variety of products on one product list, so that you do not have to contact each farmer individually. Ordering from a producer group can often be done online, or with a telephone call.

Producer organizations can offer much more than a convenient system for ordering a large variety and quantity of sustainably produced farm products. They also offer consumers a chance to meet the farmers—either through farm profiles that are on the group’s website, or through special events where the farmers and consumers meet each other face to face.

These producer organizations work very well with businesses such as grocery stores or restaurants; and with groups of consumers. In fact, some of them require that orders be placed by a business or a group. The producer group may have specific delivery dates and drop sites for orders, so it makes a lot of sense for several people to get together and place a larger order than any of them could by themselves. Some consumer groups are informal groups of a few friends or neighbors, some are members of a religious congregation (Congregationally Supported Agriculture), and some are formal buying clubs. If you are interested in joining a buying group—or forming your own—contact one of the producer organizations. They can tell you about how they handle orders and deliveries, and where their existing buyer groups are. Some of this information is available online as well.

Around 2001, Tom and Dorothy Davey made a decision about the food they ate. They came to realize that their food choices had impacts that reached far beyond their own dining room. Dorothy said, “I grew up on a farm, but agriculture has changed tremendously since then.” Indeed, the global food system impacts peoples’ lives around the world on a scale unprecedented in history.

They heard about Whole Farm Co-op through JoAnne Rohricht, the chairperson of the environmental affairs committee at the First Congregational Church of Minnesota. Although Tom and Dorothy now order from Whole Farm Co-op through someone outside the church, their experience represents a variation of Community Supported Agriculture called “Congregationally Supported Agriculture.” The Whole Farm Co-op has about thirty drop sites throughout the Twin Cities metro area, and more than half of these are at religious congregations.
Dorothy explained their motivation: “I think one of the things that we were concerned about was the antibiotics being fed to the cattle and the way the chickens were raised, so we were happy to have an opportunity to buy our meat from people who had the same feelings.” Tom also added, “I think originally it was the loss of the family farm, the idea of big corporations taking over all the farms I didn’t like.” Indeed, such motivations are behind many of the current local food system initiatives. People like Tom and Dorothy are becoming aware of the impact that the agricultural system has on the environment and peoples’ health. The Whole Farm Co-op was an excellent opportunity to support an agricultural system that strives to maintain its sustainability far into the future.

The Whole Farm Co-op, based in Long Prairie, Minnesota, brings together thirty member families from throughout Central Minnesota, all of whom are committed “to creating farms that nourish our families spiritually and economically, sustain the environment, and provide eaters not only with safe wholesome food but with a clear sense of who and where their food came from” (Whole Farm Co-op, www.wholefarmcoop.com). In addition to the many benefits offered to the environment and the consumers, these producers are currently receiving between 70 to 85 percent of the retail value of their products, while producers active in the conventional food system are often receiving 10 percent or less. This is a very encouraging statistic for those interested in seeing the family farm and rural areas survive and thrive.

The ordering system for Whole Farm Co-op has been simplified since they first began ordering. There is now a web page with price lists and order forms. Members can now check the foods they want on the online order form, and then e-mail their order straight to the co-op. They pick up their orders from a friend’s home on the first Wednesday of every month. This person acts as the go-between for the co-op and several of its customers. It is especially convenient that these members can send their orders up to the Monday before the pick-up date, so food may be ordered and received within three days. People purchasing food through the co-op are billed when they pick up their food, and they simply send their check in the mail. People purchasing products from Whole Farm Co-op can get anything from free-range chicken to cheddar cheese to wild rice.

Tom and Dorothy purchase all of their meat products through the Whole Farm Co-op, and occasionally other products as well. Tom mentioned that one of the coordinators “sends us e-mails quite a lot if they have specials on vegetables and things like that this time of year, as that stuff becomes available.” Customers of the cooperative have a large variety of options.

Tom and Dorothy also pointed out a few challenges to purchasing foods through the co-op. Dorothy said “Our problem is there’s just the two of us and sometimes the things we get are way too big for us.” She wasn’t the only customer with that concern. Co-op members responded to customer feedback by offering cut-up chicken or half a chicken as well as the whole chicken, and pork chops now come in packages of two as well as four. Dorothy mentioned that cooking the free-range and grass-fed animals required slower and longer cooking times. Other challenges to buying all of their meat through the co-op were a limited amount of freezer space and, at times, slightly higher prices. But as Tom said, “we don’t buy it because they’re cheap.” They have found some creative ways to adjust their meal planning to use the foods offered by the Whole Farm Co-op.

Besides producing good food in ways that are good for the environment and humane for the animals, projects like the Whole Farm Co-op also take into account the social sustainability of the food system. As Tom put it, “It’s better for families, and I think it builds a bond between the people in the city and the people on the farms that they wouldn’t have otherwise. It makes us more related. We know where the food is coming from and in some cases we’ve met the farmers who are producing it.” The Whole Farm Co-op arranges several field days every year where customers can meet member farmers and tour their farms, getting to know firsthand where and how their food is produced. Overall, Tom and Dorothy Davey seem to have found a way to purchase meat that offers them peace of mind. They can assure that their food is produced in an environmentally, socially, and economically sustainable manner, and animals are raised under humane conditions. As Tom said, “We are preserving the family farm. At least it’s a little effort. It makes me feel better.” Dorothy adds that it’s “a little opposition to the corporate farms.” Tom and Dorothy’s experience is an excellent example of how people with concern for environmental, social, and economic sustainability can do their part through their food purchasing decisions.
People with lots of experience in buying locally grown food estimate that it costs them 20 to 25 percent more than buying typical supermarket fare. Wait—wait—don’t go away! There are also many ways to add some locally grown foods to your diet without breaking your grocery budget. Read on to find out more.

why do locally grown foods sometimes cost more?

Sometimes locally grown foods are more expensive than the typical supermarket price because of the production system. Farmers may sell grass-fed beef or dairy products, or pasture-raised pork or chicken. In these systems, unlike conventional meat production, the animals can move around outdoors on grass pasture and harvest (by grazing) all or some of their own food. The farmers’ focus is on producing a quality product, rather than producing the absolute maximum possible volume of meat. Similarly, locally grown vegetables are produced with attention to quality, freshness, and flavor rather than the conventional production focus on maximum yield and long storage life. When you buy these local products you are getting fresh, high-quality, specialty foods. The higher price reflects the quality, and the extra effort and labor that went into raising that quality.

Sometimes a locally grown food is more expensive because it is an item that grocery stores may sell at a loss to attract customers. This is a common grocery store practice with basic items such as bread, eggs, and potatoes. Farmers who direct-market their products cannot match the grocery store’s strategy of taking a loss on some products. The farmers need to charge a price on every item that is high enough to give them a profit.

why do locally grown foods sometimes cost less?

Some foods sold directly by farmers to customers have less processing and less packaging than similar foods sold in a supermarket, so they cost less. Sometimes the customer buys a large quantity at one time, and this cuts their cost per pound. An example that shows both of these cost-cutting measures is a quarter of beef bought directly from the farmer. The customer gets about 100 lbs. of beef, and several different kinds of cuts such as roasts, hamburger, and steaks. The packaging of this meat can be a lot simpler than the packaging needed for sale in a grocery store. Also, the farmer and the processor do not have to do a separate sale of each kind of cut—the customer is taking them all. That savings in packaging and labor means that the cost per pound of a quarter of beef is often less than the cost of buying the same cuts in the grocery store.

Sometimes locally grown vegetables cost less than vegetables in the supermarket because they are “in season.” When it is the right time of year for strawberries to be ripe in Minnesota, for instance, there is a temporary large supply of fresh strawberries. Often you can buy fabulous, fresh strawberries at that time for less than you would pay in the supermarket. The hitch is that the fabulous, fresh strawberries don’t last very long—the season is short—so enjoy them while you can, and put some in the freezer for later!

how can you buy local food without breaking your budget?

Think about your food budget as a whole. Buying some local products that are cheaper than the supermarket, such as a quarter of beef and fresh vegetables in season, can offset the higher price for locally pasture-raised chicken and eggs.


The table on page 15 shows how a family might add local foods to their diet over the course of a year, with only a small increase to their overall food budget. For some items you can save money by buying bulk quantities and doing some of your own processing. Additional savings could come from shopping around, using the local food directories in Appendix 2.

what about the time it takes to prepare local foods?

Locally grown foods tend to be fresh and unprocessed, and so you need to do some food preparation. Cooking a meal together is a great family activity! Children are more likely to enjoy a nutritious meal—including vegetables—when they helped to make it.

Remember, “buying local” doesn’t have to be an all-or-nothing diet of local foods. You might just have a couple of locally grown ingredients in your main dish a couple of nights each week, or maybe local fruit for dessert. There are plenty of ways to prepare local foods that are quick and easy. Take a look at the list of ten easy ways to prepare local foods, on the next page.
## Product

<table>
<thead>
<tr>
<th>Product</th>
<th>&quot;Buy Local&quot; Price</th>
<th>USDA Prices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Half beef. [about 220 lbs]</td>
<td>$770-860 [includes processing]</td>
<td>$884</td>
</tr>
<tr>
<td>Whole hog. [about 135 lbs]</td>
<td>$450-600 [includes processing]</td>
<td>$420</td>
</tr>
<tr>
<td>Twenty chickens. [4 pounds each]</td>
<td>$200-295 [includes processing]</td>
<td>$108</td>
</tr>
<tr>
<td>Dry pinto beans. [25 lbs]</td>
<td>$45</td>
<td>$34</td>
</tr>
<tr>
<td>Eggs. [50 dozen]</td>
<td>$180</td>
<td>$82.50</td>
</tr>
<tr>
<td>Potatoes. [200 lbs]</td>
<td>$24-40</td>
<td>$124</td>
</tr>
<tr>
<td>Apples. [1 bushel, 48 lbs]</td>
<td>$60-80 [first quality]</td>
<td>$54 [red delicious]</td>
</tr>
<tr>
<td>Apples. [1 bushel made into 16 quarts of sauce]</td>
<td>$26-44 [sauce quality]</td>
<td>$38 [applesauce]</td>
</tr>
<tr>
<td>Strawberries. [6 gallons - 36 lbs]</td>
<td>$58 [pick-your-own]</td>
<td>$93</td>
</tr>
<tr>
<td>Flour. [100 lbs]</td>
<td>$94 [organic]</td>
<td>$138 [organic]</td>
</tr>
<tr>
<td>Oatmeal. [50 pounds]</td>
<td>$79 [organic]</td>
<td>$63 [non-organic]</td>
</tr>
</tbody>
</table>

## Totals

<table>
<thead>
<tr>
<th>Totals</th>
<th>Using midpoint of &quot;buy local&quot; price ranges</th>
<th>USDA reported retail price for comparable quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remainder of $9,100 annual budget</td>
<td>$2,219.50</td>
<td>$2,091.50</td>
</tr>
<tr>
<td>Remainder of $9,100 annual budget</td>
<td>$6,880.50</td>
<td>$7,008.50</td>
</tr>
</tbody>
</table>

## Sources of Data

- "Buy Local" prices for chicken, pinto beans, cheese, eggs, flour, and oatmeal were taken from the Whole Farm Co-op price list, http://www.wholefarmcoop.com/. "Buy Local" prices for beef, pork, chicken, potatoes, apples, strawberries and tomatoes were taken from informal survey of producers. USDA prices from Economic Research Service reports. For beef, pork, chicken, and eggs: http://www.ers.usda.gov/Data/meatpricespreads/.
- Beef and pork prices shown are averages of all retail cuts for 2010. Chicken and egg prices shown are averages of monthly reports from April 2010 through April 2011. USDA average 2009 retail prices for apples and strawberries:


## 10 Easy Ways to Add Some Local Foods to Your Diet

> Serve crisp Minnesota-grown apples for dessert. <

> Use a bread mix from the whole farm co-op in your bread machine. <

> Whip up pancakes using a mix from the whole farm co-op. Top with locally grown berries, honey, or maple syrup. <

> Make a batch of egg salad for sandwiches, using local pasture-raised eggs. <

> Make cornbread with locally grown cornmeal to go with soup or chili. Serve with locally grown butter and honey. <

> Make a big, crunchy salad from CSA or farmers’ market veggies: lettuce, romaine, carrots, cucumbers, sweet peppers, tomatoes, zucchini, etc. Divide leftovers into small containers and keep in the fridge for lunch. <

> Make a batch of granola for quick and satisfying breakfasts using locally grown oatmeal and honey. <

> Cook a soup or stew on your days off with fresh local vegetables and pasture-fed beef. Freeze in small containers for lunches during the week. <

> Take a beef, pork, or lamb roast or a whole chicken out of the freezer in the morning and put in a slow-cooker or crockpot set on medium heat. It will be ready for supper that evening. Slice leftovers and use for sandwiches. <

> Pick up a ready-made pizza crust on your way home. Mix one 6-ounce can of Italian tomato paste with one can of water for pizza sauce. Brown one pound of local pastured pork sausage for the pizza, and top with shredded locally produced cheese. Bake at 400°F for 17 to 20 minutes. <
All the kinds of foods that you need for a healthy diet are available from Minnesota farmers. The USDA ChooseMyPlate guide below shows the kinds and amounts of foods that make up a healthy diet.

Below is a list of Minnesota-grown foods that fit into each food category. You can find out where to get these locally grown foods in Appendix 2: Guide to Minnesota’s Local Food Directories.

the ChooseMyPlate choices available from Minnesota producers.

dairy.
Butter, cheese, milk, ice cream, yogurt, kefir

protein.
Beef, bison, elk, deer, goat, lamb, pork, chicken, turkey, duck, goose, pheasant, dry beans, hazelnuts, eggs

grains.
Barley flour, buckwheat flour, corn meal, corn flour (masa), flax, oatmeal, spelt, whole wheat flour, white flour, wild rice, rye flour, popcorn, bread mixes, pancake mixes, breads

fruits and vegetables.
Wide variety; availability changes with the seasons. See the Seasonal FoodGuide on page 15.

minnesota farmers sell sweet things too!
jams, jellies, honey, maple syrup, cookies
Fruits and vegetables that you buy locally and in season are the freshest possible! Use the chart below to find out what is available in each season of the year. The chart was developed by Pride of the Prairie, a collaborative project of area farmers and citizens, Land Stewardship Project, University of Minnesota-Morris, University of Minnesota Extension, West Central Sustainable Development Partnership, and the Sustainable Farming Association of Minnesota.

You can find an even wider variety of locally grown foods than those listed on the Seasonal Food Guide. Minnesotans with Asian, Latin American, or African heritage are contributing to the agriculture of the state. Using season extension techniques such as hoop houses and high tunnels, farmers are able to extend the season of popular fruits and vegetables.

<table>
<thead>
<tr>
<th>Season</th>
<th>Vegetables</th>
<th>Fruits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring</td>
<td>asparagus, cauliflower, garlic greens, greens, arugula, beet, bok choi, chard, collard, cress, dandelion, kale, mustard, sorrel, turnip, kohlrabi, lettuce, mushrooms, parsnips, peas</td>
<td>radishes, rhubarb, scallions, spinach, sprouts, turnips</td>
</tr>
<tr>
<td>Summer</td>
<td>asparagus, cauliflower, garlic greens, greens, arugula, beet, bok choi, chard, collard, cress, dandelion, kale, mustard, sorrel, turnip, kohlrabi, lettuce, mushrooms, parsnips, peas</td>
<td>radishes, rhubarb, scallions, spinach, sprouts, turnips</td>
</tr>
<tr>
<td>Fall</td>
<td>asparagus, cauliflower, garlic greens, greens, arugula, beet, bok choi, chard, collard, cress, dandelion, kale, mustard, sorrel, turnip, kohlrabi, lettuce, mushrooms, parsnips, peas</td>
<td>radishes, rhubarb, scallions, spinach, sprouts, turnips</td>
</tr>
<tr>
<td>Winter</td>
<td>asparagus, cauliflower, garlic greens, greens, arugula, beet, bok choi, chard, collard, cress, dandelion, kale, mustard, sorrel, turnip, kohlrabi, lettuce, mushrooms, parsnips, peas</td>
<td>radishes, rhubarb, scallions, spinach, sprouts, turnips</td>
</tr>
</tbody>
</table>

The table includes a list of vegetables and fruits available in each season, along with examples of local produce that can be found throughout the year. For more information, visit the Pride of the Prairie website at [modelled after the regional food guide, Wilkins and Bokaer-Smith, Cornell University, 1996.](http://www.prideoftheprairie.org)
Buying and eating local fruits and vegetables in season might taste so good that you want to extend the experience! You can, with a little bit of food storage and preservation. This might bring to mind images of aproned women working for hours over a hot cookstove. Actually, some basic food preservation is pretty easy. It can be a fun family activity that involves even the smallest children.

**freezing.**

A simple food storage activity for the whole family is freezing of berries, other fruits, tomatoes, pumpkin and squash, and sweet corn. Even very small children can help clean (and eat!) berries, slip skins off tomatoes, and help measure pumpkin and corn kernels into bags. Use plastic freezer bags of any brand.

For best keeping quality, it is important to squeeze as much air as you possibly can out of the bag before sealing the bag. There are vacuum-sealer units on the market that do this, but here's a very cheap and effective method: fill a deep pan or a sink full of water. Fill a plastic freezer bag with your fruit or vegetable, then put the bag in the water almost-but-not-quite up to the top of the bag. This forces air out of the bag. Squeeze the bag if needed to bring air bubbles up to the surface. Then, without taking the bag out of the water, close it up; either by "zipping" shut the zipper-type bags, or twisting the top closed of bags with a twist-tie closure. Now take the sealed bag out of the water and dry it off with a towel before putting it in your freezer.

**berries.**

Pick out any leaves and stems, wash berries, and measure into plastic freezer bags. Seal the bags, label, and put them in the freezer. Nothing to it! You can also put a thin layer of berries on a cookie sheet and freeze them before putting them into bags. This technique keeps the frozen berries from sticking together. In the winter, toss a few berries into your cereal, or use in muffins or fruit salad.

**squash or pumpkin.**

The easiest way to cook a squash or pumpkin for freezing is to just bake it whole. Place the squash or pumpkin on a cookie sheet or a disposable metal foil baking pan. Prick it a couple of times with a fork to release steam, and put it in the oven at 350° F for about an hour. Test it with a fork while it's baking; when the fork goes in easily, it is done. Let it cool, then peel off the skin and separate the flesh from the seeds and membrane. You can run the flesh through a strainer if you want to, but it isn't necessary. Measure cooked squash or pumpkin into freezer bags, seal the bags, label, and freeze. Heat up squash with butter, salt, and pepper for a side dish with any meal; use pumpkin or squash for muffins, cake, and pie.

**sweet corn.**

This is a little more complicated than squash or fruit, but so worth it. Imagine getting that just-picked-five-minutes-before-cooking sweet corn flavor in the middle of January! Here's how: boil a large pot of water and shuck (peel) the ears. Drop four or five ears in the pot and time for four and one-half minutes. Remove the ears to a pan or sink of cold water (a tongs is invaluable for this). Repeat the process until you run out of corn. Keep the cold-water bath cold by running more cold water or adding ice; this cools the cobs quickly to stop the cooking process so that your kernels won't be overcooked. Then, on a cutting board, stand a cob on end and slice off kernels from tip to base with a sharp knife. You need to make four or five vertical cuts per cob to get all of the kernels.
Measure the cut kernels into freezer bags; plan about one-third cup of kernels per family member for a meal. Seal bags, label, and freeze. Let the children eat the spilled kernels. Wash off sticky fingers!

Use corn as a vegetable at any meal. Thaw the bag just enough to be able to slip the frozen corn out of the bag, then put the frozen corn in a pan with a little water and heat to simmering, breaking the frozen chunks apart with a fork as it begins to thaw. After corn is completely thawed, simmer for a couple more minutes to complete cooking and heat thoroughly.

Onions and garlic are good vegetables to store in a cool spot. Potatoes and apples do well in moist air, such as in a basement; but onions and garlic need to be dry. Hang a bag or braided rope of onions or garlic from a hook in a cool closet or entryway. Carrots, parsnips, beets, turnips, and rutabagas dug in September or October will keep for a couple of months in an unsealed plastic bag in your refrigerator. If you have an unfinished section of your basement that is chilly (under 40° F) and not too dry, you can keep these kinds of root vegetables there in boxes or bags for several months. Use several smaller containers instead of one large container. That way, if you have some spoilage in one container, it won’t affect all of your stored vegetables.

With any kind of cool storage of apples or root vegetables, look over your stored food fairly often. Throw out anything that is starting to spoil. If you really want to get into this easy and inexpensive type of food storage, here is a superb reference:

root cellaring: natural cold storage of fruits and vegetables.

canning.
Canning is a very useful food preservation practice. Properly canned foods will keep well on a shelf for an extended period of time. Canning is more complicated than cool storage or freezing, but not difficult. Mainly it requires attention to detail. You must carefully follow modern canning instructions to ensure the safety of the canned food. It is very important to make sure that all spoilage- and disease-causing organisms in the food are killed during the canning process.

Canning may seem like a slow process the first couple of times that you try it, but once you get used to the process it becomes very easy. There are some good reference books and websites that explain how to can just about anything. While there are many resources available on food preservation, it is important to use up-to-date resources (written after 2005) to ensure food safety.

cool storage.
The easiest food preservation activity, if you are lucky enough to have a cool but not freezing storage spot, is to store some sacks of potatoes or apples in that cool storage area. Potatoes and apples will keep for a couple of months at 50° F, but cooler is better. Around 40° F is ideal for keeping them all winter. If you have a chilly corner in a basement, or an entryway, or an upstairs closet, you have a good potential food storage location.

ball blue book guide to home canning, freezing, and dehydration.
Available at some hardware stores, and online:

extension food preservation publications.
www.extension.umn.edu/topics.html?topic=6&subtopic=35

national center for home food preservation.
www.uga.edu/nchfp

so easy to preserve.
Can be ordered for $18 at www.uga.edu/setp/... Includes up-to-date food safety information and detailed instructions on a variety of food preservation techniques.

USDA complete home guide to canning
www.uga.edu/nchfp/publications/publications_usda.html
Order an $18 bound copy at https://mdc.itap.purdue.edu/item.asp?item_number=AIG-539

saving local food for year long eating.
Buying local is good for the farmers who grew the food, good for the communities where the farmers and their customers live, and good for the people who eat the food. Locally grown food on your table means that you have chosen to be connected in a positive way to your local environment, your local economy, and to the people in your community. Good for you!

Canning does require some special equipment. Fruits, tomatoes, pickles, jelly, and jam—foods that are high in sugar or that are acidic—can be safely canned using a boiling water “bath.” Equipment needs for water bath canning:

- A “canner” or other pot large enough to hold several jars and deep enough that water can completely cover the jars. If using a pot that was not designed as a canner, you must also have a rack to hold jars up off the bottom of the pot.
- Glass canning jars (these come in half-pint, 12-ounce, pint, and quart)
- A jar tongs for lifting hot jars out of boiling water
- Canning lids and bands for the jars.
- A jar funnel and ladle for getting food into the jars without spilling

All of these basic needs can be found at hardware stores. The two common brands of jars and jar lids are Ball and Kerr, and the lids and jars of these brands are interchangeable.

The Lehman’s Non-Electric Catalog website has pictures of all this equipment. Go to www.lehmans.com, click on “Kitchen Implements,” then on “Home Canning and Preserving,” then on “Canning Helpers.”

If you want to can meats or vegetables other than tomatoes, you need to do pressure canning. This requires a pressure canner: a pot with a lid that locks on tightly so that steam pressure can build up inside the pot, which increases the heat inside the pot to hotter than boiling. Pressure canners can be found at hardware stores. The other equipment—jars, lids, tongs, etc.—is the same for either water bath or pressure canning.

If you want to make canned tomato juice or applesauce, you need a food mill or strainer. There are several kinds on the market that vary in price and ease of use.

The cheapest, and slowest, is a funnel-shaped metal strainer with a wooden plunger. You pour cooked tomatoes or apples into the strainer and mash with the plunger to squeeze juice and pulp out the sides of the strainer. Then you scrape seeds and skin out of the inside.

A step up is the “Foley Food Mill,” a metal pan with a strainer-type bottom, little metal “feet” that hold it on to a pot or bowl, and a hand crank on top that turns a metal plate inside the pan. You pour the cooked tomatoes or apples into the pan, and turn the hand crank to squeeze pulp and juice out the bottom of the mill. Turn the crank in reverse to loosen seeds and skin for removal from the pan.

The top of the line is a food mill with a large funnel on top to take the cooked tomatoes or apples, that funnels into a cone-shaped screen with a large screw inside it. You turn a hand crank on the side of the unit to turn the screw and squeeze juice and pulp through the screen. A little chute directs the juice and pulp to a container, and seeds and skins come out the end of the cone. This type of unit is sold under the brand names “Victorio,” “Roma,” and “Squeezo.”

Ball Blue Book Guide to Home Canning
Available at some hardware stores, and online: www.freshpreserving.com/pages/new_products/2.php?product=304
The number of farmers’ markets in Minnesota has increased greatly in the past few years. Because this trend is likely to continue, we have not included a list of farmers’ markets in this printed publication. You can check the sources given below for updated lists of farmers’ markets. You could also check with your local Extension office or Chamber of Commerce to find out about farmers’ markets in your area.

**State Farmers’ Market Representative.**

- Ruth White  
  www.mda.state.mn.us  
  Minnesota Department of Agriculture  
  Agricultural Marketing & Development  
  625 Robert Street North  
  St. Paul, MN 55155  
  (651) 201-6494  
  ruth.white@state.mn.us

**Sources.**

- IATP mini markets  
  www.iatp.org/localFoods/project-miniMarkets.cfm

- Minnesota Grown Directory, Minnesota Department of Agriculture; online, minnesotagrown.com. You can search online, download, or request a free print copy of the directory at http://www.mda.state.mn.us/food/minnesotagrown/mgdorderform.aspx or contact:

  - Brian Erickson  
    Minnesota Department of Agriculture  
    625 Robert Street North  
    St. Paul, MN 55155  
    (651) 201-6539

- Minnesota Farmers Market Association, MFMA; online, https://www.mfma.org/membersdirectory.php. Contact the MFMA using the online contact form: https://www.mfma.org/mfma_contact_us.php; or leave a message with Ruth White (contact information above).

- University of Minnesota localfoods.umn.edu

**Appendix One: Farmers’ Market Information.**

**About.**

There are quite a few different local food guides or farmer directories in Minnesota. Which one should you use? That depends on where you live, and what kind of product you are looking for. Some of these directories cover the whole state, and some cover a smaller region. Some include a whole range of foods and other products, and some are focused on a few kinds of products. Most of the directories include both certified organic and non-certified products. Our list below will help you find the most useful directory for you. Visit the website of the Minnesota Institute for Sustainable Agriculture (MISA) and look at the “Directories of Local Food” section (www.misa.umn.edu/FarmFoodResources/LocalFood/DirectoriesToLocalFood/index.htm) to find links to Minnesota and national directories of local food.

**Appendix Two: Guide to Minnesota’s Local Food Directories.**

**Buy Fresh Buy Local St. Croix Valley.**

Contact: Dana Jackson danaj@landstewardshipproject.org  
(612) 722-6377  
The St. Croix River Valley Chapter includes partners in or near the land that drains to the St. Croix River and is one of 74 Buy Fresh Buy Local chapters in the United States coordinated by the national Food Routes Network, www.foodroutes.org. A local partner of the St. Croix River Valley Buy Fresh Buy Local chapter is a farm, a small scale processor utilizing local farm products, a farm stand, farmers’ market, or a retail food business, such as a restaurant, food cooperative, or locally owned retail grocery store selling local products. Partners can also be organizations, government agencies, chambers of commerce, tourism bureaus and individuals (called “Vocal Locals”) who endorse the chapter goals and participate in chapter activities.

**Community Supported Agriculture (CSA) Directory.**

www.landstewardshipproject.org/csa.html. Call (612) 722-6377 or e-mail info@landstewardshipproject.org to request a print copy. Produced by the Land Stewardship Project, this directory includes CSA farms in the Minnesota, western Wisconsin, and northeastern Iowa. Most of these CSAs make deliveries to the Twin Cities metro area. Community Supported Agriculture customers buy a season-long share of vegetables from the farm. Many CSA farms also produce meat, eggs, and other products.

**Food Alliance Midwest Certified Farmers.**

www.foodalliance.org/client-search  
The Food Alliance Midwest is a nonprofit organization that certifies that farmers are meeting strict environmental and social standards. The certified farmers are located throughout Minnesota and Wisconsin, plus a few in South Dakota and North Dakota. Products include: dairy, chicken, beef, pork, apples, vegetables, and berries.

**Stewardship Farm Directory.**

www.landstewardshipproject.org/cbfed/buy_food.html. Call (612) 722-6377 or e-mail: info@landstewardshipproject.org to request a print copy. The Land Stewardship Project produces this directory of their farmer-members. The directory covers the whole state of Minnesota as well as parts of surrounding states, and includes a variety of products: beef, pork, fruits, vegetables, poultry, eggs, turkeys, lamb, wool, herbs, goat, dairy products, flowers, and grains.
local foods partnership.
www.localfoods.umn.edu. Northwest Minnesota Regional Sustainable Development Partnership, University of Minnesota; Linda K Ingery, Executive Director, 262 Owen, 2900 University Ave, Crookston, MN 56716. (877) 854-7737. kinge002@umn.edu. Products include: all types of meat, a wide variety of fruits and vegetables, beef, goat, lamb, poultry, syrups, jams and jellies, wine, flowers, and gift baskets; also some services such as milling, catering, and meat-processing.

superior grown directory.
www.superiorgrown.org. Call (218) 834-0846 or e-mail: info@silvercreekinstitute.org for more information. This regional directory includes farmers in northeastern Minnesota and northwestern Wisconsin. It includes a variety of products, such as: goat meat and goat milk, eggs, beef, pork, vegetables, berries, herbs, flowers, apples, pears, lamb, wool, poultry, Christmas trees and wreaths, bison meat, maple syrup, grains, and rabbit meat. The Directory also includes retail stores, farmers’ markets, restaurants, and other places where consumers can find locally grown foods.

minnesota grown.
www.minnesotagrown.com. Call (651) 201-6539 to request a print copy. This directory is published annually by the Minnesota Department of Agriculture. It covers the whole state, but is broken down into regions. The online version allows you to search by region and product type and lists more than 900 places to purchase directly from the producer. Products include: fruits, vegetables, bakery products, bed & breakfast inns, nursery plants, meat and poultry, fish, Christmas trees, farm tours, farmers’ markets, dairy products, eggs, soap, honey, maple syrup, textiles, and specialty gift items.

whole farm co-op.
www.wholefarmcoop.com. Whole Farm Co-op, 33 2nd St S, Lower Level, Long Prairie, MN 56347. (320) 732-3023. info@wholefarmcoop.com. This is a group of about 30 farm families located in central Minnesota that have joined together to offer an array of products. They make regular deliveries to drop sites around the Twin Cities metro area. Products include: beef, bakery products, candles, cheese, soap, fish, gift items, lumber, honey, lamb, organic coffee, variety of grains and flours, pork, and poultry.

prairiefare.
www.prairiefare.com. moonstone@moonstonefarm.net. Prairiefare is a group of five western Minnesota farms. Their products include: beef, pork, lamb, chicken, apples, vegetables, and ornamental corn and gourds.

pride of the prairie.
www.prideoftheprairie.org. For a print copy, contact Land Stewardship Project, 301 State Road, Suite 2, Montevideo, MN 56265. (320) 269-2105. tlvdp@landstewardshipproject.org. Pride of the Prairie is a collaborative effort of the University of Minnesota (the Morris campus, West Central Regional Sustainable Development Partnership, West Central Research and Outreach Center, and Extension), Sodexho Campus Services, Land Stewardship Project, Sustainable Farming Association, Morris Prairie Renaissance, Pomme de Terre Food Coop, Prairie Renaissance Cultural Alliance, area farmers and the Upper Minnesota River Valley community. The directory lists locally produced food available in western Minnesota: eggs, elk, flax, grains and flour, wide variety of fruits and vegetables, flowers, herbs, honey, goat and lamb, poultry, milk, and wool. Pride of the Prairie is part of the national “Buy Fresh Buy Local” program of Food Routes Network, www.foodroutes.org.

simple, good, and tasty.
www.simplegoodandtasty.com. Simple, Good, and Tasty helps people make healthy food choices by connecting them to the producers and providers of local, organic, and sustainable food. The “Good Food” directory includes: farms, CSAs, restaurants, co-ops, grocery stores, breweries and wineries, local artisans, and organizations.
about.

If you are interested in buying meat in bulk directly from a farmer, you can find all of the details here about buying a quarter, half, or whole animal. In fact, this section might actually tell you more than you need to know. If you are buying meat or poultry at a farmers’ market or through a cooperative, that meat has been processed according to rules that allow it to be sold as a retail product. In those situations you just buy the meat exactly as you would in a grocery store, and the information in this section is more than you need.

minnesota regulations for direct-marketed meat.

A popular type of meat processing in Minnesota is in “State Equal-To” processing plants. These processors offer an inspected slaughter similar to federally inspected slaughter, but done by state inspectors. Inspected slaughter assures that the animal was healthy at the time of slaughter. Farmers who use either a USDA or State Equal-To plant can sell beef or bison by the quarter, half, or whole animal; hogs by the half or whole animal; and lamb and goat by the whole animal. Farmers that have their animals processed under inspection and also have approved freezer facilities may sell meat in smaller packages. Farmers need not have a food handler’s license to sell meat from their own animals; but if they are selling a meat product prepared with off-farm ingredients (such as sausage or smoked products), then they would need to have a license.

State Equal-To plants and USDA plants are not common in some areas of Minnesota, so buying locally raised meat often means buying “custom processed meat.” Farmers who are using custom-exempt processors must sell live animals, and must allow their customers to inspect and choose their animals. Customers can share an animal, so a farmer might have two customers who each buy half of the same hog, or four customers who each buy a quarter of the same beef animal.

Custom processed animals are processed specifically for the end user, to be consumed by him or her, family members, and nonpaying guests. The meat is not to be sold subsequently to other people, and packages are labeled “not for sale.”

State or federal inspection of the animals is not required during custom-exempt slaughter and processing because it is assumed that the customer has chosen a healthy animal to buy. All facilities that hold custom-exempt certificates are themselves licensed annually and inspected by the state several times per year.

buying an animal for custom processing.

You agree to purchase the animal prior to slaughter.

The buyer has a right to inspect the animal before agreeing to buy it.

The farmer may ask the buyer to sign a form verifying that he or she chose the animal, and may ask for a down-payment.<

The animal is then slaughtered and processed.<

You will pay the farmer for the animal and its transportation to the processing plant, and then pay the processor separately for the processing. Buying an animal for custom processing does not mean that you will pick up and take care of a live animal. Farmers will typically provide transportation for the animal. The buyer then needs to contact the processor with instructions on how to process the meat (for example: steaks, roasts, ground meat, and sausage).

buying poultry directly from farmers.

Poultry producers are permitted to process and sell up to 1,000 birds per year directly from their farm without a license. The birds must be processed on the farm under sanitary conditions, and the farmer must be registered as an exempt poultry producer with the Minnesota Department of Agriculture. Only whole processed birds may be sold directly to consumers from the farm premises. No further processing (such as cutting, smoking, etc.) is permitted under this exemption. Poultry processed under an exemption cannot be sold to grocery stores for resale. However, poultry producers who have birds processed at a USDA facility or state Equal-To facility can sell their whole birds or cut-up parts to grocery stores, restaurants, institutions, or at farmers’ markets. The farmer needs no license for this unless other ingredients are added.

appendix three: consumer information on buying meat direct from farmers.

...how to buy locally produced meat.

questions to discuss with the producer.

> Do you have animals for sale in the amount—whole, side, or quarter (for beef and bison)—I want? Farmers using custom-exempt processing must sell whole animals; if you want less, you may have to wait until another customer agrees to share your animal.<

> When will the animal be ready?<

> Can you provide customer references?<

> When can I come out to look at the animal? If you want to, you have the right to see the animal while it is still alive.

You can waive this right and let the farmer choose a healthy animal for you.<

> What is the cost of the animal, and what are the payment terms? If you are using custom-exempt processing, the farmer and the processor must be paid separately.

The farmer may request a down-payment on your animal.<

> Which of us will contact the processor?<

> Will you haul the animal to the processor? There may be a limit to the distance the farmer will haul the animal.<

> How much will hauling cost? Is hauling included in the animal’s price?<
why buy meat from local sources?

background: why buy meat directly through local livestock producers?

> It’s a great chance to meet the person who raised the animal, and learn how the animal was raised.<

> You can have the meat processed to your own specifications.

> The price is often less than the average retail price.

> You contribute toward a more sustainable regional economy, supporting our local farm and rural economy.

calculating costs.

Understanding the price of an animal purchased whole, or by the side or quarter, is a little more complicated than looking at retail stickers. The final cost of a custom processed animal is often determined by the “hanging weight” of the carcass. Individual meat cuts are not priced separately.

The following chart provides typical figures to help you calculate approximately how much you would pay for and how much you would take home, based on a whole animal. Note that prices, amounts and proportions vary depending on the specific animal.

what are you getting?

In general:

> A beef carcass divides up roughly into 15 to 25 percent steaks, 25 percent roasts, 25 to 35 percent ground beef, and 25 percent bone and fat.

> A hog carcass divides roughly into 55 percent chops, steaks and roasts, 13 percent ground/stir-fry, 10 percent ribs, 5 percent hocks, and 6 percent bone and fat.

> A lamb divides up roughly into 25 percent leg roast and steaks, 50 percent chops and roasts, 20 percent riblets, 20 percent bone and fat.

Note that custom processed meat is not graded.

getting the meat home.

Purchasing custom processed meat means buying meat in greater volume than many people usually do. In order to preserve meat quality and safety, you should prepare in advance to keep it frozen during transport and storage. A larger freezer, such as a chest freezer, is invaluable.

meat is frozen by the processor.

To ensure food safety, all meat products are frozen right after they are cut and wrapped. They will need to stay frozen from the time you pick them up, through the time you put them in your freezer, up until you thaw them for use.

having the meat processed.

There are a number of questions that the processor will have about the meat that you have processed. Both producer and processor can help you with these decisions:

> How thick would you like your steaks cut?

> How many steaks or chops per package?

> How many people will you be serving (to determine size of individual packages)?

> How much of the roast or stew meat do you want ground and how much left whole?

> What size would you like your roasts?

> What size packages do you want ground meat in (typically one or two pounds)?

> How lean would you like your ground beef?

> Would you like any special products or services—such as smoking, deboning the meat, or making the meat into sausage?

> Would you like to have the heart, tongue, liver, tail, etc.

Also make sure you know:

> How much is the basic processing cost?

Ask about additional charges for sausage making, deboning, smoking or beef jerky; and ask what the payment terms are.

> Is there a wait (especially during deer hunting season)?

> When will the meat be ready for pick up, and at what location?

Not all processors also conduct slaughter. Unless you have the capacity to do your own slaughtering, find someone who does both.
space requirements.

In general, 30 pounds of meat takes up one cubic foot. Make sure that you have ample freezer space at the time that you order your meat, before you get the meat home!

transporting meat in the car.

If you are picking up the meat, be prepared to keep the meat frozen for the entire trip home. Take along several good quality coolers with you when you go to pick up your meat. Two regular size camping coolers will usually hold half a hog or a quarter of beef. Total trip time from picking up the meat to putting it in your freezer should be no more than 4 hours.

storage.

Meat freezes at 28.6° F. Refrigerator life at 30 to 32° F is normally five to seven days. Long-term storage of meat should be at 0° F. Vacuum-sealed meat keeps longer than meat wrapped in white butcher paper, but the vacuum-sealing process is also more expensive and not every butcher offers it. Beef and other red meats generally keep their quality longer in the freezer than pork or chicken. Try to plan your purchases so that you use all of your pork within six months, and all beef or other red meat within a year.

other resources.

To find a livestock producer: See Appendix 2: “Guide to Local Food Directories in Minnesota.” You can also visit the “Directories to Local Food” section of the MISA website, www.misa.umn.edu/FarmFoodResources/LocalFood/DirectorystoLocalFood/index.htm.

To find a meat processor: The MISA website has a list of processors in Minnesota, www.misa.umn.edu/FarmFoodResources/LocalFood/MeatPoultrySales/MeatProcessingPlants/index.htm

For more information on buying meat directly from the processor, see Iowa State University’s Beef and Pork Whole Animal Buying Guide: www.extension.iastate.edu/Publications/PM2076.pdf.

also check your county extension office.

> In Minnesota, www.extension.umn.edu</br> > In Wisconsin, www1.uwex.edu</br>

meat

<table>
<thead>
<tr>
<th>weight</th>
<th>hypothetical cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>beef</td>
<td></td>
</tr>
<tr>
<td>live weight</td>
<td></td>
</tr>
<tr>
<td>hanging weight</td>
<td></td>
</tr>
<tr>
<td>edible product</td>
<td></td>
</tr>
<tr>
<td>1,100 lbs.</td>
<td></td>
</tr>
<tr>
<td>670 lbs.</td>
<td></td>
</tr>
<tr>
<td>450 lbs.</td>
<td></td>
</tr>
<tr>
<td>Cost for 450 lbs. edible beef product: 670 lbs @ $2.10/lb. = $1,409, plus about $375 or more for processing.</td>
<td></td>
</tr>
</tbody>
</table>

pork.

<table>
<thead>
<tr>
<th>weight</th>
<th>hypothetical cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>live weight</td>
<td></td>
</tr>
<tr>
<td>hanging weight</td>
<td></td>
</tr>
<tr>
<td>edible product</td>
<td></td>
</tr>
<tr>
<td>250 lbs.</td>
<td></td>
</tr>
<tr>
<td>180 lbs.</td>
<td></td>
</tr>
<tr>
<td>133 lbs.</td>
<td></td>
</tr>
<tr>
<td>Cost for 133 lbs. edible pork product: 180 lbs @ $1.80/lb. = $324, plus about $165 or more for processing.</td>
<td></td>
</tr>
</tbody>
</table>

lamb.

<table>
<thead>
<tr>
<th>weight</th>
<th>hypothetical cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>live weight</td>
<td></td>
</tr>
<tr>
<td>hanging weight</td>
<td></td>
</tr>
<tr>
<td>edible product</td>
<td></td>
</tr>
<tr>
<td>100 lbs.</td>
<td></td>
</tr>
<tr>
<td>54 lbs.</td>
<td></td>
</tr>
<tr>
<td>38 lbs.</td>
<td></td>
</tr>
<tr>
<td>Cost for 38 lbs. edible lamb product: 54 lbs @ $4.30/lb. = $232, plus about $180 or more for processing.</td>
<td></td>
</tr>
</tbody>
</table>

Beef and pork yields in the table are based on calculations in the Beef and Pork Whole Animal Buying Guide, Iowa State University Extension, www.extension.iastate.edu/Publications/PM2076.pdf. Lamb yields are based on information in Lamb Carcass Evaluation from Purdue University, ag.ansc.purdue.edu/sheep/ansc442/Semprjos/2004/process/CarcassEval.htm. Prices are estimates based on informal survey of livestock producers in Minnesota, and do not reflect organic pricing. Local prices may vary.

definitions.

> Live weight: Weight of typical live animal.<n> Hanging weight, or carcass weight: Weight after slaughter, leaving meat, fat, and bone.<n> Edible product weight: Weight after the cutting process that trims fat and bone, leaving the product that you take home.<n>

credits.

This information in this section, “Consumer Information on Buying Meat Direct From Farmers,” was originally compiled by Jenifer Buckley during her tenure as Coordinator for the Northeast Minnesota Chapter of the Sustainable Farming Association. It has been updated by Minnesota Institute for Sustainable Agriculture staff with assistance from Minnesota Department of Agriculture Dairy and Food Inspection Division staff, to reflect changes in prices and changes in regulatory requirements.

Lake Superior Sustainable Farming Association.

p. o. box 307, 310 Chestnut Street
Carlton, MN 55718-0307
(218) 393-3276
www.lakesuperiorfarming.org

This material is based upon work supported by the Cooperative State Research, Education, and Extension Service: U.S. Department of Agriculture and the Nebraska Agricultural Experiment Station, University of Nebraska — Lincoln, under the Cooperative Agreement number 98-COOP-1-6029. Funding was also provided by the Minnesota Department of Agriculture — Energy and Sustainable Agriculture Program.

Generous help and advice was provided by Kevin Elfering and Teresa Chirhart of the Minnesota Department of Agriculture; Jane Grimsbo Jewett of Palisade, Minn.; Alan Ringer of Brimson, Minn.; Joel Rosen of Mahtowa, Minn.; Troy Salzer of the University of Minnesota Extension Service: Carlton County; Howie Schultz of the Wisconsin Department of Agriculture, Trade & Consumer Protection, and Mark Thell of Wrenshall, Minnesota.
raw vegetables.
Of course you can eat those leafy greens raw in a salad, but many other vegetables are tasty eaten raw, either plain or with a dip. Wash the vegetable, peel root vegetables if you wish, and cut into slices or chunks. Good raw vegetables: broccoli, carrots, cauliflower, cucumbers, green beans, green onions, kohlrabi, radishes, snap peas or edible pod peas, summer squash or zucchini, sweet peppers, tomatoes.

very simple spinach dip.
1 bunch fresh spinach (or one package of frozen spinach)
1/2 cup sour cream
1/2 cup of your favorite mayonnaise or similar salad dressing
1 tsp. salt
Optional seasonings (choose one or two):
1/2 tsp. onion powder
1/2 tsp. garlic powder
1/2 tsp. paprika
1/4 tsp. black pepper

If you are using fresh spinach, wash the spinach and chop it coarsely. Put a medium-sized cooking pot on the stove over medium heat. Put the chopped spinach and about 1/4 cup of water in the pan. Stir the spinach occasionally while it is cooking, and cook it until it is tender. Drain off excess water, and let the cooked spinach cool. Chop the cooked spinach more finely if you wish—either with a knife or in a food processor. Mix the sour cream, mayonnaise, salt, and seasonings in a large bowl. Add the spinach and mix thoroughly. Chill the dip in the refrigerator. Serve spinach dip with raw vegetables.

winter squash slaw.
2 tart red apples, cored and grated with skins
1/3 cup dried cranberries
3 tbs. cider vinegar plus 2 tbs. honey
1/2 small butternut squash, peeled, seeded and grated (about 3 cups)
1 cup shredded green cabbage salt & black pepper

In a small bowl, toss the apples and dried cranberries with the vinegar. Set aside. Spread the grated squash on a flat pan and sprinkle with 1/2 tsp. salt. This draws out a bitter substance in the squash. After 5 minutes, put the squash dry and transfer it to a large bowl. Add the shredded cabbage. Add the apple-cranberry mixture to the squash and cabbage. Mix thoroughly. Season with salt and pepper.

fried parsnips.
Parsnips
Vegetable oil
Cut parsnips into slices that are about 1/4 inch thick. Put a large cooking pot on the stove over medium-high heat, and add two teaspoons of vegetable oil for every cup of sliced parsnips. As soon as the oil is hot, add the sliced parsnips. Stir the parsnips often while they are cooking. When the parsnip slices are tender and a little bit browned, they are ready to eat. Season with kosher salt and pepper if desired.

buttered beets.
Beets
Butter
Salt

Use any amount of beets that you choose. Cut large beets into quarters. Small beets can be left whole. Put the beets in a cooking pot and cover them with water. Bring to a boil, then turn down the heat and let them simmer until they are tender enough that a fork goes into them easily. Drain off the cooking water, and fill the pot with cold water. Let the beets cool. When they are cool enough to touch, you can easily slip off the beet peelings with your fingers. Cut the cooked beets into bite-sized pieces. In a cooking pot or pan, melt one teaspoon of butter for each cup of cut-up beets. Add the beets and stir often until they are heated. Add salt to your taste.

roasted root vegetables.
3 lbs root vegetables cut into 1 inch pieces
2-3 tablespoons extra-virgin olive oil
3-5 fresh sprigs of rosemary or thyme
kosher salt and freshly ground black pepper

For this recipe you can use almost any combination of root vegetables you have on hand. Winter squashes, sweet potatoes, pealed garlic cloves, small yellow onions, potatoes, fennel bulbs, parsnips, turnips and of course, the star of any roasted root vegetable dish — beets! Preheat the oven to 400°F. Peel the vegetables and cube. Be sure to keep the pieces approximately the same size so they cook evenly. Toss in olive oil and arrange in a large, heavy and shallow roasting pan. (beets can stain the other veggies, it's best to cook them off to one side of the roasting dish and then mix all the veggies together right before serving) You can throw in a few sprigs of rosemary or thyme if you desire. Rearrange the vegetables every 15 minutes to cook evenly, begin checking to see if the beets are tender at around 35 minutes. Take the vegetables out of the oven when tender then season to taste and serve.

mashed potatoes and rutabagas.
4 medium potatoes
1/2 of a rutabaga
1/4 cup butter
1/2 cup milk
1/2 tsp. salt
1/4 tsp. black pepper

Peel the potatoes and the rutabaga. Cut each potato into four pieces. Cut the rutabaga into one-inch chunks. Put the potato and rutabaga pieces into a medium cooking pot and cover them with cold water. Cook the vegetables over medium heat until they come to a boil. Turn the heat down and let them simmer until a fork goes easily into both the potatoes and the rutabaga. Remove the pot from the stove and drain off the liquid. Add the butter, milk, salt and pepper. Mash the mixture vigorously with a potato masher. (You can also use an electric mixer, but do not mix too long or the potatoes may get a gummy texture.)
spaghetti sauce.
1 lb. lean ground beef or pork sausage
1 quart bag frozen tomatoes, thawed
1 6-oz. can tomato paste
1 tsp. oregano (dried leaves)
1 tsp. basil (dried leaves)
1/4 tsp. rosemary (dried leaves)
1/2 tsp. salt
1/4 tsp. ground black pepper
Optional additions: minced garlic, chopped onion, mushrooms, or green peppers.

Fry the ground beef or pork sausage over medium heat until brown, breaking chunks apart and stirring as it browns. Add optional ingredients, if desired, and fry them along with the meat for a couple of minutes until they begin to soften. Drain off excess fat. Add the thawed tomatoes, tomato paste, oregano, basil, rosemary, salt and pepper. Simmer 10 minutes. Add extra water if sauce seems too thick.

applesauce-whole wheat cake.
1/2 cup vegetable oil
3/4 cup brown sugar
1 cup applesauce
1–1/2 cups whole wheat flour
1 tsp. baking soda
1 tsp. cinnamon

Mix the vegetable oil and brown sugar together thoroughly. Mix in the applesauce and baking soda. Add flour and cinnamon and mix well. Pour into a greased 8” x 8” square pan, or a 9” round cake pan. Bake at 375° F for about 30 minutes, or until a toothpick inserted in the center of the cake comes out clean. Cool. If desired, drizzle powdered sugar glaze over the cake: put one cup of powdered sugar in a bowl and add milk, one tablespoon at a time, stirring until the glaze is runny enough to drizzle off a spoon onto the cake.

beef-barley soup.
1 lb. lean ground beef or stew meat
1 medium onion
1 quart tomato juice
1 quart water
4 medium carrots, peeled and diced
4 medium potatoes, peeled and diced
1 turnip or rutabaga, peeled and diced
2 stalks celery, washed and diced
1/2 cup dry pearl barley
1 tsp. salt
1/2 tsp. ground black pepper

Fry the ground beef or stew meat in a pot to brown it, stirring often. Use a tablespoon of vegetable oil in the pot if using stew meat, to prevent sticking. Chop the onion and add it to the browning meat. When meat is browned, drain off excess fat. Add all other ingredients. Bring to boiling and then reduce heat so the soup simmers. Simmer until the barley and vegetables are tender. Add extra water while cooking, if needed.

beef-barley soup.
1 lb. lean ground beef or pork sausage
1 quart bag frozen tomatoes, thawed
1 6-oz. can tomato paste
1 tsp. oregano (dried leaves)
1 tsp. basil (dried leaves)
1/4 tsp. rosemary (dried leaves)
1/2 tsp. salt
1/4 tsp. ground black pepper
Optional additions: minced garlic, chopped onion, mushrooms, or green peppers.

Fry the ground beef or pork sausage over medium heat until brown, breaking chunks apart and stirring as it browns. Add optional ingredients, if desired, and fry them along with the meat for a couple of minutes until they begin to soften. Drain off excess fat. Add the thawed tomatoes, tomato paste, oregano, basil, rosemary, salt and pepper. Simmer 10 minutes. Add extra water if sauce seems too thick.

applesauce-whole wheat cake.
1/2 cup vegetable oil
3/4 cup brown sugar
1 cup applesauce
1–1/2 cups whole wheat flour
1 tsp. baking soda
1 tsp. cinnamon

Mix the vegetable oil and brown sugar together thoroughly. Mix in the applesauce and baking soda. Add flour and cinnamon and mix well. Pour into a greased 8” x 8” square pan, or a 9” round cake pan. Bake at 375° F for about 30 minutes, or until a toothpick inserted in the center of the cake comes out clean. Cool. If desired, drizzle powdered sugar glaze over the cake: put one cup of powdered sugar in a bowl and add milk, one tablespoon at a time, stirring until the glaze is runny enough to drizzle off a spoon onto the cake.

pumpkin-blueberry muffins.
2–1/2 cups all-purpose flour
2 cups sugar
1 tablespoon pumpkin pie spice
(1 tsp. cinnamon and heaping half-teaspoons of cloves, ginger, and nutmeg)
1 tsp. baking soda
1/2 tsp. salt
2 eggs
1–1/2 cups cooked pumpkin
(thawed, if frozen pumpkin)
1/4 cup vegetable oil
1/2 cup milk or apple juice
1 cup fresh, frozen, or well-drained canned blueberries

streusel topping.
1/4 cup sugar
2 tablespoons flour
1/2 tsp. cinnamon
2 tablespoons butter or margarine

Heat oven to 350° F. Grease or paper-line 18 muffin cups.
To make streusel topping: combine sugar, flour, and cinnamon; cut in the butter with a pastry cutter or fork until the mixture is crumbly. To make muffin batter: combine flour,
minnesota institute for sustainable agriculture

This publication is part of a series developed by MISA, through its Information Exchange Program, a clearinghouse of sustainable agriculture information and materials in Minnesota. All of these informational materials are online and accessible to the public via the MISA website: www.misa.umn.edu/Publications/index.htm. Some materials are available in print and may be ordered by phone (toll-free), fax, or e-mail (misamail@umn.edu).

The Information Exchange works to deliver timely, useful information about sustainable agriculture; to identify gaps in research and education and direct funding and support to address them; and to promote education and discussion of issues relevant to the sustainability of agriculture.

To ensure that all of the Information Exchange’s publications are applicable and user-friendly, they are developed by teams and reviewed by individuals who will use the material, including farmers, researchers, extension educators, and other agricultural community members.

Other publications in this series include:

Available through the University of Minnesota Extension Service Distribution Center:
- Minnesota Soil Management Series (PC-7398-S)
- Minnesota Guide to Organic Certification (08497)
- Marketing Local Food (08642)

Available in print directly from MISA (as well as online):
- Sustainable Farming Systems
- Collaborative Marketing: A Roadmap & Resource Guide for Farmers
- Dairy Your Way
- Discovering Profits in Unlikely Places: Agroforestry Opportunities for Added Income
- Goal Setting Handbook
- Hogs Your Way: Choosing a Hog Production System in the Upper Midwest
- Knee Deep in Grain
- Lean Organic CSA Technical Case Study
- Poultry Your Way
- Sustainable Farming Systems
- Urban Gardens and Soil Contaminants
- Time, Soil, and Children: Conversations with the Second Generation of Sustainable Farm Families in Minnesota
- Whole Farm Planning: Combining Family, Profit, and Environment

For more information on this series, the Information Exchange, MISA, or to request individualized information on questions related to sustainable agriculture, please contact:

Minnesota Institute for Sustainable Agriculture
411 Borlaug Hall, 1991 Buford Circle, St. Paul, MN 55108-1013
(612) 625-8255, or (800) 909-MISA (6472)
E. misamail@umn.edu - www.misa.umn.edu

renewing the countryside

Renewing the Countryside is dedicated to championing the strengths of rural America. Working with partners from across the country, we collectively share the stories of people who are redefining what it means to live, work, and learn in rural America.

And by connecting people who are enhancing their cultural and natural resources, and spurring sustainable local economic development, Renewing the Countryside endeavors to inspire and give hope to others in building their own vibrant rural communities.

To read great stories of people revitalizing their rural communities, visit the Renewing the Countryside website at: www.renewingthecountryside.org.

To learn about the Green Routes sustainable tourism initiative, visit www.greenroutes.org.

Renewing the Countryside
2637 27th Avenue South, Suite 229, Minneapolis, Minnesota 55406
T. 1-866-378-0587 F. 1-866-597-1325
E. info@rtcinfo.org - www.renewingthecountryside.org