



PREFACE

Consumers across the country are changing their eating styles and demanding fresher, more wholesome and more nutritious foods. As a result, markets now offer a greater variety of fresh produce than ever before, everything from kiwifruit to kumquats, bok choy to kohlrabi. No longer is it unusual for a supermarket to offer seventy or even a hundred distinctly different kinds of fresh produce simultaneously, and each season new vegetables and fruits are introduced to shoppers. Gardeners, following the same trend, are planting more kinds of fruits and vegetables than they did in years past.

This book is designed to help North Dakotans grow a wide variety of fresh produce in the garden, select it from the supermarket, and prepare it in the kitchen. To make eating adventures more interesting, the chapters – originally published as THE PRODUCE BASKET column in North Dakota newspapers – provide historical and botanical information about each food. Chapters are arranged alphabetically in two sections, first vegetables and then fruits. Preparation suggestions and recipes are highlighted for easy access, and a recipe index is provided at the end of the book.

Carbohydrates for energy are a major nutritive component of fruits and vegetables. Fresh produce also contains vitamins and minerals, a small amount of protein, and very little fat. Dried legumes have the highest protein content and are often used as alternates for meat in meal planning.

Ron C. Smith Rose Anne Millette

TABLE OF CONTENTS

rruit and vegetable Gardening Tips
Typical Fruits and Vegetables Grown in North Dakota
Forty-three Million Gardeners Can't Be Wrong 3
Vegetable Planning Chart4
Vegetable Production Chart
Vegetables
Artichokes - A Delectable Edible Thistle8
Asparagus – The Vegetable Fern
North Dakotans, Buy Your Own Beans
The Beguiling Beet
Broccoli – A Healthful Gift to America from
Italian Immigrants
Cabbage Family 13
Cabbage Family
Vegetable14
Cauliflower is Cabbage with a College
Education
Dependable Celery
Corn – How Sweet It Is
Cucumbers Now are Bushy and Burpless
The Elegant Eggplant – Temptress of
the Vegetable Kingdom
Garlic – For All Reasons
Lettuce - More Than a Salad Green
Modern World
Nuts – A Pantry of Nutrition
Super Roots Produce Super Soups
Snap Peas
Snap Peas
Potatoes – World's Most Famous Tuber
Makes a Four-Way Slam
Rapid Radishes Zap the Palate
Spinach and Swiss Chard - Pot Greens
in Profusion
Sprouts - For Greens Unlimited
Winter Squash and Pumpkins
Sweet Potatoes - The Saga of an
Farly American
Early American
Vanilla – A Touch of Flavor
Herbs - Bring a World of Flavor and
a Touch of Elegance to Your Table
Oriental Vegetables - An Addition
to Tradition
The Vegetable Misfits – Kohlrabi, Leeks,
Celeriac and Salsify
World – Square40
** Olia - Oqualc

Autumn's Apples	
Accept on Apricots	4
Accent on Apricots	- 4
Avocado is a Custard Apple -	
or Butter Pear?	. 4
The Banana - An Inexpensive and Tasty	
Fruit that's not for Monkeys only	. 4
Cherries - A Summer Jubilee	. 4
Cranberries - An American Tradition	
Typical Holiday Fruits - Dates and Figs	. 4
Year-Round Grapefruit and Seasonal	
Tangerines	. 4
Grapes – One of Nature's Finest Fast	
Foods	. 51
Kiwifruit is New and Nutritious	. 5
Small Fruit with Big Taste - Lemon,	
Lime, Kumquat	. 5.
Melons, Summer Fresh and Sumptuous	. 5
Orange Lovers, Did You Know That	. 5
Papaya and Mango	. 5.
It's Time to Reach for a Peach	. 5
Good Things Come in Pears	. 5
Pineapple - The Cone-Shaped Fruit with	
a Romantic Heritage	. 5
Plums Grow in North Dakota	. 5!
Pomegranate - The Apple with Many Seeds	. 6
Raspberries - The Berries with Panache	. 6
Razzle-Dazzle Rhubarb - The Best and	
First of the Season	. 6.
Voluptuous North Dakota Strawberries	. 6.
Exotic Edibles - A Revolution in the	,
Produce Industry	. 64
Holiday Feasting - Make It a Fresh	_
Produce Bonanza	. 6.
Appendices	
A. Nutrition Value of the Edible Part of Fruits and	_
Vegetables	. 00
B. Guide to Herb and Vegetable Cookery	. Di
C. Fruit and Vegetable Availability	
ndex of Fruits and Vegetables	. 7
General Recipe Index by Food Category	. 7
Recipe Title Index	
Recipe Title index	٠ (

•

"

* '

FRUIT AND VEGETABLE GARDENING TIPS_____

Successfully growing fruits and vegetables in North Dakota requires an independent water supply for irrigation since depending for moisture on the whims of mother nature will lead to disappointment. It also requires a minimum of six hours of direct sunlight for adequate plant growth and development. If a building, large shade trees or shrubs block the sunlight for any significant part of the day, production will be reduced. Finally, it requires a well-drained soil that does not retain standing water even after long periods of rain.

If space is limited, select vegetable cultivars or fruits which do not require room to grow and bear fruit. Intensive gardening, succession cropping, square foot gardening and intercropping are all methods of gardening in a limited area, and all will produce high yields at harvest

Be aware also, of what a limited planting can produce. A few black seeded simpson lettuce plants will provide an abundance of leaves for most small families; zucchini squash plants are such prolific producers that only two or three are plenty for the typical family of four who like this vegetable.

Cultivar selection of the proper fruit or vegetables species is important. For example, not all tomato cultivars will produce well under normal North Dakota conditions. At the same time, you need not be afraid to experiment, on a small scale, with untried varieties. You may be pleasantly surprised.

Fertilizer application to fruits and vegetables should be done sparingly with a complete, balanced material. Excessively high nitrogen analysis in a fertilizer will result in lush growth, disease and insect susceptibility and poor quality at harvest.

Control of insects, diseases and weeds should be by prevention rather than cure. Use only those pesticides cleared for the crop, being sure to follow all label directions. Remember, these pests all compete for water, nutrients and sunlight in any garden.

In harvesting, pick crops like beans, peas, cucumbers and summer squash early and continuously. Allowing them to mature on the plant will stop production and reduce the flavor or taste potential of the crop. Crops like tomatoes and sweet corn are best when harvested right at maturity peak, just before you eat them.

Like most good things in life, greater success can be realized if fruits and vegetables are planted according to a plan. Consider your family's size, likes and dislikes, and the nutritional qualities of the crop.

TYPICAL FRUITS AND VEGETABLES GROWN IN NORTH DAKOTA

Vegetables	Fruits
Asparagus	Apples
Beans	Apricots
Beets	Cherries
Broccoli	Currants
Brussels Sprouts	Gooseberries
Cabbage	Grapes
Cauliflower	Pears
Chard, Swiss	Raspberries
Corn, Sweet	Strawberries
Cucumber	
Kohlrabi	
Lettuce	
Muskmelon	
Onions	
Parsnips	
Peas	
Peppers	
Potatoes	
Pumpkin	
Radishes	
Rhubarb	
Spinach	
Squash	
Tomatoes	
Watermelon	

FORTY-THREE MILLION GARDENERS CAN'T BE WRONG

Nothing matches the variety, flavor, quality and nutrition of vine-ripened vegetables. People from all walks of life can benefit from the planning, planting, care, harvesting and consumption of them. Even during winter months the home-canned, dried, fresh, frozen and stored garden produce from that garden can give high quality, low cost, nutritious foods. Gardening is great outdoor exercise and brings beauty to backyard spaces. How great to watch the mysteries of nature unfold as the plants grow!

If you're wondering where to start, ask your county extension office for "Everybody's Garden Guide." It contains all you ever wanted to know about how to be a successful gardener – where to start, what to grow, how to plant and then how to help it grow. Also ask for a copy of "Garden Varieties," for suggested vegetable varieties for North Dakota.

Think small and easy if you are a new gardener. Start with easy to grow vegetables such as radishes, lettuce, beans and tomatoes. The first two can now be planted as soon as the soil can be worked, while the latter should be held back until all danger of frost has passed. It's not too late even if early June is the fastest you can get started. The requirements for a garden site are important – full sunlight, near the house for easy access to the produce, good soil and a handy water supply.

Many people get overzealous in their gardening attempts and experience failure. Refer to Table 1 as a guideline, to keep from plunging in over your ability or beyond your interest to follow through.

As your garden produces you may have more than you can eat or share with your friends, so spring is also the best time to plan your home canning or freezing strategies. Choose carefully the varieties that are best for home

processing, what quantities of processed foods your family will require and the amount and condition of your canning supplies. Be sure you have the latest in food processing directions. Your county extension office and national canning equipment companies all have new and up-to-date guides to home canning and freezing.

Another important factor to consider in vegetable gardening is the potential production. Table 2, a vegetable production chart, can provide some guidelines for both beginning and experienced gardeners, to avoid over- or underplanting.

If space and resources are scarce, mini-gardens can be the answer. Vegetables can be grown on the patio, balcony, in window boxes or hanging baskets and in all kinds of containers such as tubs, boxes, flower pots and plastic bags. You don't need a whole backyard to be a successful gardener and to enjoy a bountiful harvest.

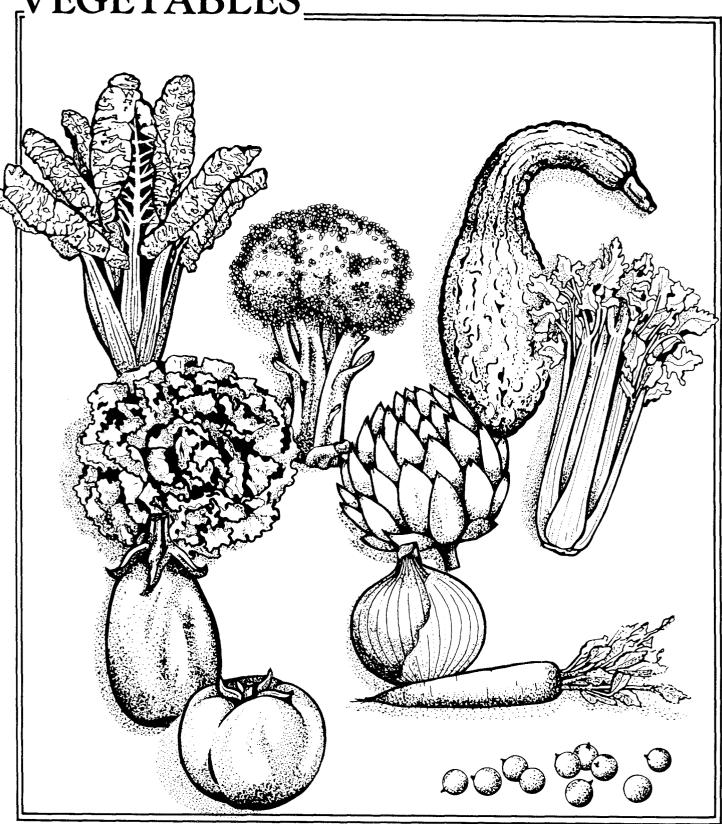
Vegetable Planning Chart

	Beginning or Patio Gardener	Small Gardener (add)	General Garden (add)	Serious Gardener (add)	Confirmed Gardene (add)	
Cool Season Crops	(leaf & bibb) Peas Onions Radishes		Beets Broccoli Brussels Sprouts Cabbage Cauliflower Parsnips Spinach Swiss Chard Turnip	Celeriac Chinese Cabbage Chives Collards Dill Kale Kohlrabi Lettuce (head) Parsley Potato Rutabaga	Asparagus (perennial) Celery Garlic Horseradish Mustard Rhubarb (perennial) Salsify	
Warm Season Crops	Cucumber (bush) Squash (summer) Tomato	Beans, snap Cucumber (vine) Peppers Tomatoes (cherry, paste)	Beans, lima Eggplant Muskmelons Pumpkins (bush) Squash, winter Sweet Corn	Pumpkins Watermelons Tomatoes (yellow)	Sweet Potato Soybeans	

Vegetable Production Chart

Vegetable	Amount Needed for One Adult (Fresh Use)		Amount Needed for a Family of Four (Fresh Use)		Amount Needed for One Adult (Processed/ Storage)		Amount Needed for a Family of Four (Processed/ Storage)	
	Pounds	Feet of Row	Pounds	Feet of Row	Pounds	Feet of Row	Pounds	Feet of Row
Asparagus Beans, Lima Beans, Snap Beets Broccoli	1.5 3 15 3.5 8	10 40 25 4 20	5 10 50 10 25	35 125 85 10 60	5 3 18 7.5	35 40 30 8 30	15 10 55 25 35	100 125 90 25 90
Brussels Sprouts Cabbage Carrots Cauliflower Celery	6 15 10 9 4	20 13 8 10 1	20 45 30 25 12	65 40 25 30 3	8 15 10 12	25 13 8 15	25 45 30 35 —	85 40 25 40 —
Chinese Cabbage Collards Cucumbers Eggplant Endive	2 2 8 4 4	1 3 4 3 7	6 5 25 10	2 7 12 9 18	- 4 10 - -	 5 5 	10 30 - -	15 15 —
Kale Kohlrabi Leeks Lettuce Muskmelon	1 1.5 1 6 10	1 2 3 12 9	3 5 3 20 30	3 7 7 40 27	2 - 1 - 2	$\frac{2}{3}$	6 - 3 - 6	6 -7 -6
Mustard Onions (dry)	1 8	2 12	3 25	6 30		 24	<u></u>	- 72
(green) Parsley Parsnips Peas, Shelled	.25 3 4.5	1 6 15	1 10 15	4 20 50	.5 3 7.5	2 6 25	2 10 25	7 20 85
Peas, Snap Peppers Potatoes, Irish Potatoes, Sweet Pumpkins	1 3 25 3 10	3 3 21 18 4	3 10 75 10 30	8 8 50 25 10	1 3.5 75 4 8	3 3 50 10 3	3 10 225 10 25	8 8 150 25 8
Radishes Rhubarb Rutabaga Spinach Squash, Summer	4 4 1.5 3 10	40 4 2 6 5	10 10 5 10 30	100 10 5 20 12		- 4 2 3 2		
Squash, Winter Sweet Corn Swiss Chard Tomatoes Turnips Watermelons	6 25 ears 3 24 5	3 25 4 15 5	20 80 ears 10 70 15 35	9 80 12 40 15 35	3 50 ears 4.5 36 7	2 50 6 23 7	10 160 ears 15 110 20	4 160 20 65 20

VEGETABLES____



ARTICHOKES

- A DELECTABLE EDIBLE THISTLE.

The artichoke is the bud of a beautiful perennial thistle that grows to a height of 4 feet with a 6-foot spread. The growth is somewhat fountain-like with a silvery-green foliage bearing tightly closed buds which will flower, if not cut, into a purple 6-inch flower. This bud is a gourmet's delight and is grown for commercial production on the central coast of California where climate is just right. It derives its name from the Italian "pine cone" which describes its shape.

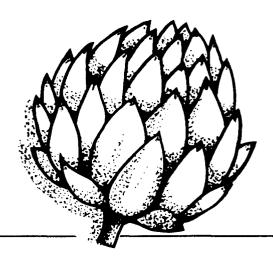
Artichokes are available in most markets year round with peak season running from November through May. Artichokes come in sizes from baby to jumbo and all are mature. Size is determined by the bud's position on the plant. The largest grow on the top of the plant, the smaller near the base. Choose those that are heavy for their size, firm and compact. Any size may be boiled or steamed. The smaller ones are often processed and sold as frozen or canned hearts of artichoke. The "heart" is composed of small immature leaves. The delicious bottom is sometimes also called the heart. Store artichokes in sealed plastic bags in the refrigerator.

Eating an artichoke, whether simply served or elaborately adorned, is indeed an experience. The preparation to begin with is very simple. Wash thoroughly and then slice off about one-third of its pointed top and trim off the stem even with the base. You can trim off the thorny tips of the remaining leaves, too. Stand the artichoke upright in a large saucepan. Add water to cover and cook until a leaf can easily be pulled out, about 30 to 45 minutes. Drain upside down. The choke can be removed easiest after cooking. It can also be removed before cooking. Set the artichoke upright and simply spread the leaves apart carefully and pull out the light green and purple tinged cone. The hairy choke is then exposed. Use a spoon to scrape it out. There revealed is the prized bottom.

Now for the eating. Serve the artichoke upright on a serving plate. Pull off the leaves one by one and dip its base into a fitting sauce such as melted butter, Hollandaise or a spicy vinaigrette. Then draw the leaf between your front teeth to remove the tender portion at the base of the leaf. Then disgard the leaf. When all the leaves are eaten only the bottom remains. Cut the succulent artichoke bottom into bite sized pieces, dip in sauce and enjoy. An artichoke is a good source of potassium, fiber, vitamin C, folic acid, and traces of other vitamins and minerals. A 12-ounce artichoke contains only 25 calories.

Whole artichokes, due to the manner in which they are eaten, are often served as a separate course or as an appetizer during a meal. But like other vegetables, may be eaten in many ways. Consult any good cookbook for preparing them stuffed, in omelets, salads and casseroles.

Growing artichokes in these northern climates can be a fun experience. Do not confuse this globe or cone shaped artichoke with the Jerusalem artichoke which is a tuber.



ASPARAGUS - THE VEGETABLE FERN

Those of you so fortunate as to have an asparagus bed will see young tender shoots around the middle of May. Deep green asparagus in gardens and markets heralds, like no other vegetable, the arrival of spring. While asparagus is raised mainly as food, some species are grown in greenhouses and flower gardens as ornamental plants. If left uncut they grow into tall, lacy bushes equal in beauty to the most delicate ferns.

Known to have been cultivated for over 2,000 years, this perennial, dioecious member of the lily family is grown throughout most of the temperate regions of the world. In warm, frost-free regions, asparagus plants go through a brief dormancy period or are allowed to grow for three to four months to restore carbohydrates to the crowns for spear production. In our northern region, asparagus spears can be harvested from first appearance in the spring until July 4. From that point on, plants are allowed to grow to their maturity and produce attractive fern-like foliage. With the first frosts of autumn, the foliage turns brown and should be removed.

In North Dakota, the Mary Washington variety is the one to plant. It can be started from seed, or crowns can be purchased and planted directly. Plants sown from seed must grow three years before any harvesting can take place. Spring crown plantings may be harvested the following spring. Since asparagus is a perennial crop, it should be grown where it will not be in the way of other cultivation or traffic. If you have thought about starting a bed, ask your county extension office for circular H61, "Asparagus and Rhubarb." It contains all the facts you will need to get started.

But you don't need to wait till May to enjoy fresh asparagus; grocery stores start to receive a good supply in March and April. Choose stalks that look crisp and fresh with only a couple inches of light-colored base. The tips should be well formed and tightly closed. Wilted, very thin or very thick stalks are likely to be tough and woody. Open, seedy tips are too mature. Asparagus is usually sold by the pound or bunch. One pound makes three to four servings or yields two cups when cut. Store fresh asparagus in a tightly sealed container or plastic bag. Fresh asparagus is delicate and highly perishable. Use it soon after purchase.

To prepare asparagus, break each spear as far down as it snaps easily. Wash thoroughly to remove sand. Scrape off scales if they are tough. Asparagus spears can be left whole or cut up. Cook in a small amount of water until tender crisp. The discarded ends of the stalk can be chopped fine, cooked and added to soups.

Asparagus has always been considered a luxury vegetable and is a favorite for gourmet dinners. Chefs have used it to create some of their most famous dishes. It contains about 20 calories per half cup and is a good source of vitamin A and C with smaller amounts of calcium, potassium and iron. Cooked or raw, it is versatile. It makes an excellent salad when served cooked or raw, either by itself or in combination with other vegetables, or with seafood, cheese, chopped meats or eggs. To savor its unique flavor, serve cooked asparagus with melted butter, lemon juice, Hollandaise or cheese sauce. Garnish with grated hard cooked eggs, chopped parsley, chives or browned bread crumbs.

Here's how to put together **Asparagus Royal** that will serve six. You'll need:

- 2 pounds (4 cups) fresh asparagus, cut in 2-inch pieces
- 4 hard cooked eggs, sliced
- ½ cup cracker crumbs
- 1 tablespoon butter or margarine, melted
- 2 cups white sauce (2 tablespoons each of butter and flour and 2 cups milk)
- ½ cup grated cheese
- 1. Cook asparagus in small amount of water until just tender. Drain.
- 2. Make white sauce. Add grated cheese.
- 3. Arrange half the asparagus and all the egg slices in bottom of an 8-inch square baking dish.
- 4. Add half the sauce; top with remaining asparagus and sauce.
- 5. Toss crumbs in melted butter. Sprinkle on top of sauce.
- 6. Bake at 350 degrees for 30 minutes or until bubbly and heated through.

NORTH DAKOTANS, BUY YOUR OWN **BEANS**

Everyone knows beans come in cans, but from an economic, nutrition and taste standpoint, dry beans are the best buy. And there is every reason for North Dakota consumers to enjoy these readily available legumes straight from the field, for North Dakota leads the nation in pinto bean production, accounting for 12 percent of the total U.S. acreage.

Taste in beans varies. The English like the white navy variety. The French prefer the great northerns and the Chinese eat mostly mung and soybeans. In the northern U.S. people prefer white beans, while southerners go for blackeye beans. Southwesterners prefer pinto and red beans.

Per capita consumption of beans also varies greatly. Brazilians eat over 56 pounds per capita, Mexicans more than 39 pounds, while United States consumers eat only 6 or 7 pounds per person. For health and economy, many of us could increase our consumption.

Dry beans and lentils are delicious, nutritious and low cost, and are known for their protein punch. They provide more protein for your money than most other foods, consistently ranking lowest in cost per ounce of protein of all foods. Beans combined with protein from meats, eggs, dairy products or other cereal grains make an unbeatable protein team for building and repairing vital organs and tissues.

Beans are an important source of B vitamins, rich in calcium, phosphorus and potassium. The carbohydrate content of beans makes them an excellent energy food. They are also a source of the fiber which is so important in maintaining a healthy digestive tract. One cup of cooked beans has about 212 calories.

Soaking is not essential in bean preparation, but most dry beans are best when presoaked. Also, soaking will reduce cooking time. Beans can be soaked overnight or for just five to six hours. Use 3 cups of water for 1 cup of beans. After soaking them, drain and rinse them and then cover with fresh water for cooking. For a quick soak, boil your beans for two to three minutes, then cover them and let them stand for one hour. Drain and cover with fresh water to cook. Either way you do it, you'll soak out the indigestible sugars and discard them in the soak water, and this will improve both the flavor and digestibility of the beans.

For an unusual, tasty and nutritious change, use your beans in dips for corn chips, raw vegetables, tiny meatballs or hot dog chunks.

To make a **bean dip**, puree a cup of cooked beans, then add a minced small onion and dill pickle, 2 tablespoons of prepared mustard and 2 tablespoons of catsup. Add a dash of Tabasco sauce to "hot" it up.

Some beans, such as soy and garbanzo beans, can be oven-toasted and spiced up with onion, garlic or chili seasoning and used as a snack.

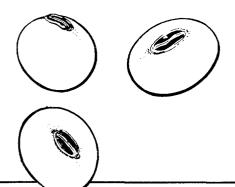
Baked beans make a delicious sandwich when simply piled on slices of bread. Add a slice of cheese or bacon strips and slices of onion and tomato. You'll have to use a fork to eat this meal!

To fancy up a **hot dog**, spoon chili with lots of beans over the top and add shredded lettuce and chopped tomatoes.

Or stuff cooked beans into pocket bread with ham and cheese strips and bean sprouts.

You'll be able to create endless flavors and textures by adding beans to soups and stews, or by combining them in casseroles with meats and vegetables.

Here's something else to try: add pureed beans to home-baked bread to improve the flavor, texture and nutritional content.



THE BEGUILING **BEET**

Mother Nature has provided us with a rainbow of colors in the fruits and vegetables we grow and eat, but she has hidden one of her brightest and most colorful vegetables, the beet, below ground. Beets are really the enlarged crimson edible roots of a member of the chard and spinach family. The color is so vivid that it is used as dye by artisans, food technologists and everyday cooks. A cake icing, dip or cream cheese filling takes on a lovely hue when colored with beet juice.

You may not suspect that as a nation we eat a lot of this red vegetable – over 250,000 tons. The fresh market takes about 5 percent of this tonnage and the rest of the crop is canned or pickled. Beets are a low calorie vegetable and contain about 54 calories per cup cooked. They are a source of vitamin C, calcium and potassium.

Beets are one of life's finer pleasures, and most of us have strong feelings about how they should be prepared. Many of us grew up with a typical German version of a popular recipe – pickled beets with hard cooked eggs sliced with them. The white of the egg took on the crimson color from the beet juice. Most families have had at least one salad treat of the young beet leaves from the garden in early summer. Some varieties of beets are grown for just this purpose.

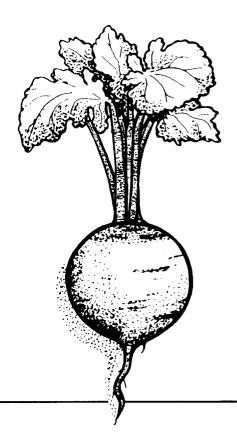
Beets have always been an important vegetable to the Polish and Russians. The earthy flavor of the beet is tasted at its best in Borscht, their traditional soup. It is served hot or cold with a dollop of sour cream. This soup has become standard American fare and can be found in most cookbooks.

Beets are often served with something acidic such as vinegar, lemon or orange juice. Beets a la orange sauce is a good example. Glazed buttered beets sautéed with chopped onion and celery is another favorite.

For a spirit of adventure, try an **aspic** made with **lemon gelatin**. As it begins to set, fold in either raw grated (they have a nutty flavor) or diced cooked beets. Serve with a dressing of sour cream and horseradish.

Choose small to medium beets either from your garden or the supermarket. Refrigerate them. Leave two inches or more of the tops on when cooking. This helps to keep them from bleeding. Cook until tender when pierced with a fork. Drain and cool. The skins slip off when rubbed with the fingers.

Both the beguiling fresh garden beet and young beet leaves can put a lot of zing into summer meals.



BROCCOLI – A HEALTHFUL GIFT TO AMERICA FROM ITALIAN IMMIGRANTS.....

Ever wonder how broccoli got its name? It was derived from the Italian "brocco" meaning arm or branch. The term "broccoli" is actually the plural form of "brocollo" and refers to the numerous shoots which a typical broccoli plant produces.

Grown in America for more than 200 years, broccoli was not commercially produced in this country until 1923 when D'Arnigo Brothers Company planted trial fields in Santa Clara Valley near San Jose, Cal., and shipped some broccoli via express to Boston. Each year U.S. demand for fresh and frozen broccoli increases. Currently, U.S. production exceeds 325 million pounds. Americans now recognize broccoli as one of the richest vegetable sources of vitamin C and vitamin A, an excellent source of fiber, and a good source of vitamins B-1, B-2, B-6, folic acid, calcium and potassium.

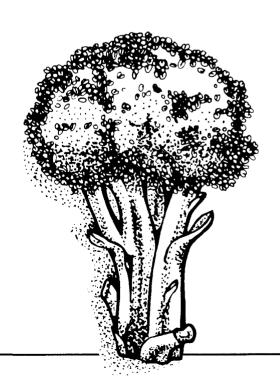
Unfortunately, broccoli is not extensively grown in North Dakota, though there are 70-, 85-, and 90-day varieties which easily fit our North Dakota climate. The mean temperature requirements, between 60 and 70 degrees Fahrenheit, are similar to those for cabbage. From a harvesting standpoint, broccoli varieties exist which lend themselves to once-over mechanical picking. Yields of 8,000 pounds an acre are common in commercial growing areas.

When shopping for broccoli, look for a firm, compact cluster of small flower buds with none opened to show the bright yellow flower. A dark green color, or a green with a purple cast, will indicate maximum freshness. Avoid broccoli which has stems that are too thick and woody, and any that has soft, slippery, water-soaked spots on bud clusters. The former is to tough to eat and the latter has begun to decay. Purchase what your family will consume in a meal or two and store it immediately in the refrigerator.

Since broccoli is generally sold in about 1.5-pound bunches, one bunch will provide four servings. One medium stalk of broccoli, or about ½ cup, will contain only 50 calories. Broccoli can be served fresh as hors d'oeuvres with a favorite dip. It can be cooked until tender and added to a cream sauce for a cream soup. Or it can be marinated in vinegar and oil and used in tossed salads or in combination with tomatoes.

The microwave is the perfect appliance for preparing this vegetable in the least amount of time with a minimum of water. Cut off the toughest part of the stem, the larger leaves, and make vertical gashes in the stem. Place in a microwave pan with about one tablespoon of water, then cover and cook for five minutes at the highest setting. This produces tender but not overcooked broccoli.

Cooked fresh or frozen, broccoli is special just coated with a lemon butter, cheese or mustard sauce; or use broccoli as a main dish casserole with meat, poultry or fish.



BRUSSELS SPROUTS, ARISTOCRAT OF THE CABBAGE FAMILY

The brussels sprout gets its name from having been grown 400 years ago in the vicinity of Brussels, Belgium. Each sprout resembles a tiny cabbage head, about the size of a walnut, made of tightly packed leaves and a core. Like huge beads on a string, these miniature cabbages twine and cling to the tall stem of the brussels sprouts plant, forming artistic patterns.

Brussels sprouts are picked from the bottom up as they mature, and the plant will continue to bear sprouts even after frost. They grow best in cool weather. The Jade Cross and Long Island Improved varieties are most popular with North Dakota gardeners, and will bear in 90-95 days. They are best set in the garden as transplants.

Americans appreciate brussels sprouts, although many people still reserve them only for holiday or celebration menus. Of the about 69 million pounds grown in the United States commercially each year – in California, Oregon and New York – about 19 million pounds are eaten fresh.

Brussels sprouts are available fresh at the market 10 months of the year and are available frozen year-round. One cup provides 160 percent of the daily recommended amount of vitamin C and 10 percent of the recommended iron and vitamin B_1 . Good sprouts are firm, compact, fresh in appearance, with a good green color. Puffy, soft or wilted yellow leaves are usually poor in quality and flavor.

Brussels sprouts should be cooked only until tender. They are eaten primarily as a vegetable dish, buttered or sautéed. But they are perfect bite-sized appetizers, excellent for salads and for casseroles. Basil, caraway seeds, dillweed, dry mustard and nutmeg are great to accent the flavor of brussels sprouts.

One of the most elegant ways to serve **brussels sprouts** is with a **sweet and sour sauce**. Cook a pound and a half of brussels sprouts till they are tender. Drain. Mix an envelope of sweet and sour sauce mix with ½ cup of tomato juice, the juice from an 8-ounce jar of pickled cocktail onions, and 1 tablespoon of lemon juice. Cook until the sauce is thick and smooth. Add both the sprouts and onions to the sauce. Heat until the vegetables are hot.

CABBAGE, A HARD-HEADED AND VERSATILE VEGETABLE

Many of us eat certain foods because they taste good, or because they are good for us. Sometimes the two reasons come together in one food source. This happy marriage takes place in the comely cabbage.

Cabbage can rightly boast about its age, its large family and its popularity. Historians tell us that its use as food goes back 4,000 years, and that it is probably the most ancient of vegetables. Romans considered cabbage a very important drug: the only medicine given for many diseases was cabbage. And the Greeks recommended the juice of cabbage as an antidote to poisonous mushrooms.

Cabbage belongs to the largest family of vegetables, the cole family, which includes broccoli, cauliflower, brussels sprouts, kale and kohlrabi. Of vegetables grown in the United States, total tonnage of cabbage produced each year is exceeded only by total tonnage of potatoes, tomatoes and sweet corn.

Home gardeners can take advantage of North Dakota's mild summer climate and grow the following varieties from transplants: Stonehead, which matures in 60 days and attains a weight of 3.5 pounds; Golden Acre, which matures in 63 days and is a little smaller; Hybrid Green Boy, a midseason variety, which takes 75 days to mature and will have a large head weighing up to 5 pounds; and Wisconsin All-Seasons, which matures in 90 days and makes an excellent kraut and winter cabbage.

North Dakotans can enjoy the benefits of cabbage all year. During winter months it is shipped in – primarily from California, Florida, Texas and Arizona. When available from local markets it usually sells for less per pound.

The market demand is primarily for fresh, green, solid round heads that weigh from three to four pounds each. But cabbage heads can also be pointed or flat in shape, red or purple or white in color, and can have leaves either curly and crinkled or smooth, depending on type of cabbagé.

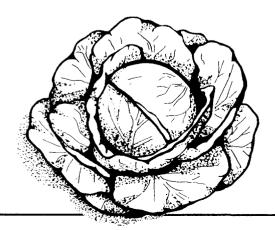
For the best quality, smooth, round green or red cabbage, look for hard heads that are heavy for their size. Avoid heads with wilted or decayed outer leaves. Wormeaten outer leaves often mean worms have penetrated the head. Cover cabbage and store it in the coolest part of the refrigerator. After cutting into a head, wrap it securely to prevent moisture loss.

Crisp tender cabbage is about 90 percent water, so it cooks quickly in very little water. Cook it uncovered for the first five minutes and then cover. This method will also conserve its considerable amount of vitamin C and good flavor. A cup of shredded raw cabbage supplies half the RDA of vitamin C and only 17 calories. It is also a source of riboflavin, potassium and calcium.

One pound of cabbage provides 7 to 8 half-cup servings of raw shredded cabbage or about 4 half-cup servings of cooked cabbage. Cabbage is a versatile vegetable that can be used in salads, main dishes or as a vegetable.

Cole slaws can be a simple combination of red and green cabbage and a sweet or tart dressing. Grated carrots, chopped chives or parsley, chopped green pepper or celery all add color, flavor and nutrients. For a zippy dressing, blend ½ cup mayonnaise, 2 tablespoons of prepared mustard and ¼ teaspoon of paprika.

For a unique, delicious dish, try substituting cabbage for pasta in making **lasagna**. Separate the **cabbage** leaves and cook in tomato juice until tender, then drain. Simply layer the cabbage leaves into your other lasagna ingredients as you normally would the pasta noodles.



CAULIFLOWER IS CABBAGE WITH A COLLEGE EDUCATION

Or so said Mark Twain. Certainly cauliflower – this loosely headed combination of stalk and flower, creamy white in color and surrounded by green leaves – is an aristocrat of the cabbage family and has held a place of honor on noble tables.

Cauliflower has been consumed in the United States for over 200 years. Although cauliflower produced in Florida and California floods the North Dakota market during the winter months, we enjoy locally produced cauliflower in summer. Classed as a half-hardy vegetable, it will tolerate light frosts after being planted. Snow Crown and Self-Blanche are two vigorously producing varieties which can be successfully grown in North Dakota.

Cauliflower is shipped poly-wrapped to preserve freshness and is obtainable fresh in grocery stores year round. If your local store is not carrying any at the time you are looking for it, check the frozen produce section for boxes or bags of frozen cauliflower. Virtually no taste or nutritional quality is lost in the freezing process.

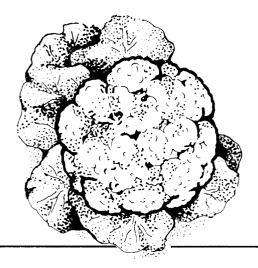
The size of the head does not affect quality, nor do the tiny leaves you occasionally find growing through the curds. The curd should not have a "ricy" appearance. It should be white or slightly creamy white, very firm and compact. Loose and open flower clusters indicate overmaturity. Spotted, speckled or bruised curds should be avoided unless they can be trimmed with little waste.

You may want to soak the cauliflower, head down, in cold water to which a teaspoon of salt and vinegar has been added. This will force out any hidden insects. Cauliflower is so compact it makes an easy place for undesirables to hide.

Once flushed, it's a super vegetable to cook in the microwave, on top of the range, or in the oven. Wherever you cook it, be careful. The crunchy texture of cauliflower is easily destroyed by overcooking. Cook either the whole head or just the flowerets in a small amount of water till the vegetable is tender to the thrust of a fork. Cauliflower is a very good source of vitamin C, and it has only 27 calories per cup, plus some potassium, iron and calcium.

Crisp crunchy raw flowerets of cauliflower along with other vegetables will make a nutritious relish tray or an excellent tossed salad. Cooked cauliflower has a distinctive flavor that is a natural go-together with cheese sauces. Another hostess special is a sauce made of cream of shrimp soup ladled over a whole cooked head, or over flowerets, and garnished with slivered toasted almonds. Also try sliced flowerets cooked quickly in a stir fry.

For six to eight servings of **cauliflower cheese soup**, cook flowerets of one medium head to tender crisp. Drain and coarsely chop. In a large saucepan make a white sauce of 4 tablespoons each of flour and butter or margarine. Add 2 cups of milk (use skim or reconstituted dry milk for lower calories) and 2 to 3 cups of chicken broth. Add 1 cup of shredded sharp cheese. Add cauliflower and season to taste. A teaspoon of Worcestershire sauce can be added. Garnish with chopped chives or parsley.



DEPENDABLE CELERY

Celery, it's always there, on every relish tray right next to the radish roses and black olives. We take for granted that it will be on produce shelves piled high right between the carrots and green peppers. No well stocked refrigerator is without its bag of celery sticks for snackers, celery leaves for flavoring soup or chunks to add to salads or stews.

This popular stalk vegetable is available every month of the year with principal supplies from California, Florida, Michigan and New York. Correctly a stalk is the same as a bunch of celery and it is made up of branches or ribs. Most celery is of the **Pascal** type, light or dark green in color with a distinct flavor and with an almost complete lack of strings. Pascal's stringless qualities have practically replaced Golden Heart, a yellow variety which is bleached white.

In early times wild celery was used for medicinal purposes. It was later domesticated, cultivated and used as a flavoring agent and a food. Its use spread across Europe and then to America where commercial growing began about 1850 in Michigan.

Celery is a low calorie food as most weight conscious persons are well aware. It has only about three calories for a small 5-inch rib. It contains some vitamin A and some of the B vitamins and is a good fiber source. Eaten raw it is an important detergent vegetable that can aid dental health.

Select crisp, solid bunches of celery that have fresh green leaves. Blemishes or decay in the outer branches indicate poor quality and can have considerable waste. Rinse the bunch well under cold running water. Store in a plastic bag in the refrigerator.

With only a little creativity every part of the bunch will be suitable for eating.

For a **Celery Ratatouille** to serve as a vegetable dish with meat, poultry or fish, saute 1 cup of chopped celery, ½ cup of chopped onion and 1 minced garlic clove. Add a 1-pound can of tomatoes, 2 cups of cubed egg plant, ½ cup of diced green pepper, 1 cup sliced zucchini, 1 bay leaf, ½ teaspoon thyme, and salt and pepper to taste. Simmer slowly until vegetables are tender crisp.



CORN - HOW SWEET IT IS!

President Thomas Jefferson put it just right. Fresh picked ears of corn "should be run from garden row to the kettle boiling for them, before the shock of being cooked has had a chance to make them nervous or revengefully tough."

Nothing, and we repeat, nothing beats the taste of fresh sweet corn straight from the garden. Get the water boiling first, visit the corn patch and pick what you want, shuck it, place it in the boiling water for seven minutes, pull it out, butter it and eat it. Could anything taste better?

Corn breeders have been growing a number of new extra-sweet sweet corn varieties. One of the best of these produced in recent years is How Sweet It Is, a variety which is said to retain its sweet taste for four to seven days. Other new varieties that stay sweeter longer than standard sweet corn are Sugar and Gold, and Butter and Sugar. All three varieties mature in less than 70 days.

The word corn has many meanings. Originally it meant any small hard particle such as grain, salt or sand. "Corned beef" earned its name because it was cured with salt. Wheat, barley, oats and rye were called corn in the Old World. Maize, the main cereal of the New World, was first known as "Indian corn," and later became just "corn."

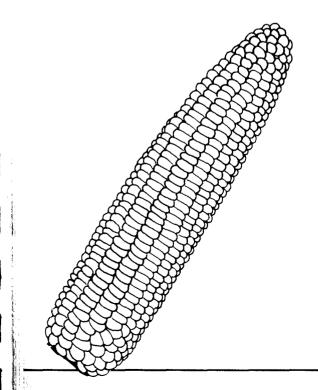
Corn has a long and exciting history. Native to this hemisphere, its origins trace to Mexico. Corn supported the early civilizations of the Americas where it has been grown for over 4,000 years. Native American Indians grew maize, a broad category for all corn types, and by the time Columbus discovered America there were hundreds of types of maize. Today there are four groups of cultivated corn varieties: sweet corn, popcorn, field or dent corn, and finally, the decorative multicolored flint corn, also called Indian corn. Also, there is midget corn. And there is brown corn, grown for the long fiberous tassel used in dried arrangements or sweeping brooms.

Sweet corn differs from other types in that it produces and retains more sugar in its kernels. This characteristic is controlled by a single recessive gene called sugary-1. Other characteristics of sweet corn include tender kernels at edible maturity, a tendency to produce suckers at the base of the plant (these do not harm productivity), and seeds that wrinkle when dried.

Sweet corn contains fiber, a variety of vitamins and minerals, and about 70 calories per medium cob or per ½ cup of whole kernels.

Perhaps one of the most significant advancements for mankind this past century was the development of hybrid corn to feed the world. Hybrid corn was planted for the first time in 1926 on an Iowa farm, and it has led to a 20 percent increase in yield. Now essentially 100 percent of U.S. corn is hybrid. Couple this advancement with other genetic improvements and greater understanding of crop fertility requirements, and it is no wonder that America has such an abundance of grains.

Fortunately, corn is easy to grow and just about anybody can grow it. Just plant it in blocks and provide it with plenty of sunlight, heat, nitrogen fertilizer, and water at the right time. It's the highlight of summer to pick fresh sweet corn or to see those hand-lettered road signs, "Sweet Corn for Sale."



CUCUMBERS

NOW ARE BUSHY AND BURPLESS!

Have you avoided growing cucumbers because the vine takes up too much space in the garden or because you belch after eating them? Fear no more: bush and burpless cucumber varieties are on the market. So buy them, plant them and enjoy them. The days of cucumber crowding and borborygmi are over.

These tender vegetables should be planted in hills or rows after all danger of frost is past. Be sure to plant enough seed to insure a good stand. Look for plants to emerge through the soil in seven to 10 days. Go for the tried and true varieties such as Spartan Dawn, Improved Long Green, Spartan Valor, Victory, Marketeer or Marketmore. And donate one hill in your garden to a new, untried variety.

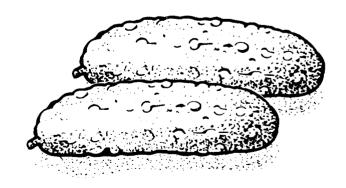
The flowers of a cucumber are unisexual – separate male and female forms. The normally good production from a typical planting of cucumber is the result of a high population of female flowers.

Almost always eaten raw and unripe, the young cucumber fruits also are suitable for pickling. Cucumbers are usually used in salad, but in some Slavic cultures they are cooked in various ways with meat. They are excellent sources of water and a smattering of nutrients. Bitter tasting cucumbers are those which have been left on the vine too long and have begun to ripen, or have been grown under stress. Discard any cucumbers which have turned yellow, as they are too bitter to be edible.

When space is limited, grow cucumbers on a trellis. Trellis grown cukes are straighter and more attractive than ground grown plants, and will not be damaged by pickers stomping through the vines.

When purchasing cucumbers look for fruit $1\frac{1}{2}$ to 2 inches in diameter and 5 to 8 inches long. Their skin should be dark green and firm.

Poor fruit set often results from overcrowding or from cool, rainy or windy weather. All of these conditions limit bee activity, and this in turn causes poor pollination and fruit set.



THE ELEGANT **EGGPLANT**, TEMPTRESS OF THE VEGETABLE KINGDOM

The eggplant's appearance is rich and refined. With its curved pear shape and seductive purple color, it could easily be called the international temptress of the vegetable kingdom. When cooked, it is daintily tasteful.

Delving into the eggplant's past, one will find it was at first suspect and unacceptable as a food in Europe and the United States. This wrong may have occurred due to "guilt by association." Being a member of the nightshade family, the eggplant has relatives that include not only tomatoes, potatoes and peppers, but also the poisonous belladonna. Both the eggplant's and the tomato's reputations were tainted with poison, and several centuries were required to clear their names. Tomatoes acquired the title of "love apples"; eggplants were dubbed "mad apples." Writers took pleasure in continuing this farce. Fortunately, some cooks never heeded these warnings and eventually, when cleared of suspicion, eggplants and recipes for preparing them were introduced to the western world. The Middle East and the Mediterranean regions are famous for their variety of eggplant recipes, and now the United States is beginning to appreciate this vegetable's versatility.

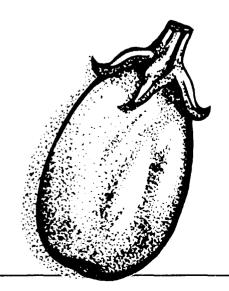
Eggplants are really a fruit used as a vegetable. We know best the large purple globe eggplant, but there are many other shapes and colors. It may have gotten its name because the first varieties were about the size of eggs. Under the skin they are all alike and can be used interchangeably in recipes. In supermarkets you may find varieties other than the globe purple ones. Eggplants should be firm and heavy for their size, with a bright green, fresh looking calyx. The purple skin should be clear, dark and glossy. Keep eggplants refrigerated in plastic bags and use within a few days. They are sensitive to temperature extremes, especially cold, and also to ethylene gas, so don't store near apples.

Eggplants can be prepared peeled or unpeeled. To keep the delicate flavor, a steam-fry method is recommended. To keep the slices from soaking up oil, sprinkle cut surfaces lightly with salt. Put into a colander to drain for 30 to 60 minutes. Then rinse well, drain and pat dry. Brown in a lightly oiled frying pan over medium heat. Then add a little water. Cover and let steam. Add water as needed. The eggplant will continue to brown as it steams to tenderness. Eggplants can also be oven-browned or grilled. Lightly brush the slices with oil. Other vegetables such as tomatoes, peppers and onions can be added as the eggplant continues to steam-fry.

For a **salad**, cool steam-fried **eggplant** and sprinkle with lemon juice. Add chopped parsley, tomato slices, chopped green onions and pepper chunks. Serve with an oil and vinegar dressing.

Check your favorite cookbook for French Ratatouille, Italian Eggplant Parmigiana, Greek Moussaka and other exciting recipes using the elegant eggplant.

North Dakotans have grown bumper crops of eggplants in their home gardens by setting out transplants after the spring frosts have passed. North Dakota summer temperatures are generally perfect for optimal eggplant growth, 72-86 degrees Fahrenheit. Given ample sunlight and good drainage, and soil pH near neutral, an abundant crop can belong to any North Dakota gardener. Select varieties which will produce mature fruit in 75-90 days from transplanting.



GARLIC - FOR ALL REASONS.

"It can cure a toothache, heal broken bones, ensure a happy marriage, improve the voice and complexion and even repel demons." The only omnipotence that can do all that has to be garlic. It's the most popular herb around the globe.

Garlic, in less scientific times, has had more magical, religious and medicinal lore associated with it than any other plant. It was held sacred by the Greeks, Hebrews and Egyptians. One old Roman declared that garlic could cure 61 ailments. Ancient laborers were made to eat garlic for strength. Soldiers ate it for courage and convicted criminals ate it for soul cleansing. Garlic also had a reputation for conferring long life on the user, and its disinfectant and digestive properties have long been praised.

Nowadays garlic is one of our most important seasonings and can be used in most non-sweet dishes. It adds something special. Garlic is most often associated with French and Italian cuisine, but is also used in Chinese, Mexican, Middle Eastern and Latin American cooking. A pungent, powerful aroma belies the fact that this hardy, bulbous plant is a member of the lily family, but then this family also includes leeks, onions, chives and shallots.

The garlic bulb is made up of smaller bulbs or cloves encased in paperlike membranes and held in bulb-shape by a common skin. Garlic is usually sold loose, in strings or packaged in boxes. You can also buy garlic powder, garlic salt, dehydrated or dried garlic, bottled garlic juice, garlic oil, or minced garlic in a jar. Base your selection on intended use, frequency of use or personal preference.

A fresh garlic bulb should be clean and dry with skin unbroken. Be sure to store all forms of garlic in airtight containers since the strong odor will permeate all it comes in contact with. An easy way to keep a bulb of fresh garlic is to put it in a sealed jar in the freezer. Break off cloves as they are needed. One clove is usually sufficient for seasoning.

The distinctive flavor of garlic is particularly good in tossed salad. For only a hint of taste, rub the salad bowl with a cut clove or else drop a split clove in your salad oil or vinegar and then remove it after a day or two and use the garlic-flavored vinegar or oil as part of the salad dressing. Garlic can flavor poultry, meats, vegetables, stews, marinades, breads, soups, dressings, tomato dishes and spaghetti sauces. It is also used in preparation of pickles and sausages. Thick slices of French bread spread with a mixture of butter or margarine and minced garlic are a must with spaghetti. Another idea: flavor stir-fry oil with a chopped clove of garlic, and remove the clove before adding your stir-fry ingredients.

The pungency of garlic is determined by how fine it is cut and how long it is cooked. Smaller pieces give off more flavor. Longer cooking time makes the flavor milder.

The smell of garlic can be removed from hands by sprinkling them with salt or lemon juice and then rinsing in cold water. Also, eating fresh parsley can effectively neutralize garlic on the breath.

Garlic is easy to grow outdoors. In the early spring plant individual cloves of garlic two inches deep and six inches apart. Harvest the garlic when the leaves are completely dry. Garlic makes a good border herb.

The Santa Clara Valley in California produces about 150 million pounds of garlic, about 90 percent of the nation's production and most of our needed supply. Imports from Mexico, Italy, Spain and Peru help keep a fairly constant supply on produce shelves.

"An apple a day keeps the doctor away – Garlic, anyway, keeps everyone away." Above all, don't take this reworded jingle to heart. Garlic's therapeutic uses are under scientific study and we may someday find it has many more than we thought.

LETTUCE, MORE THAN A SALAD GREEN

Lettuce is green and glorious and one of the most versatile vegetables we buy or plant. But the United States, like other countries, imposes its own culinary culture on basic ingredients, and we have imposed on lettuce the sole role of salad green. Most of us haven't explored the many ways that other countries use lettuce, and sometimes even our salads are flavorless and ragged and not the delightful dishes they might be.

Everywhere you look someone is tossing a salad, and since we do it so often, why not make it a masterpiece? Lettuce salads don't require slavish devotion to written instructions but there are secrets to making a really perfect one.

The more spontaneous your assemblage of ingredients the better. Wash the lettuce quickly in lots of water to eliminate all sand, dirt and insects. Completely dry the leaves by using a spin dry salad basket or paper toweling. Any water left on salad ingredients keeps dressing from clinging and dilutes its flavor. Store greens in a plastic bag in the refrigerator to be well chilled. Then tear the greens into bite-size pieces. Just before serving, add dressing – just enough to coat the leaves.

Make a classic **vinaigrette dressing** of three parts oil to one part vinegar. Corn, safflower, soybean and sunflower oils are milder flavored. For a fairly rich tasting oil, try olive or walnut. Vinegar or lemon juice gives dressings acidity and interest. Vinegars come in many flavors and some of the wine vinegars are best and taste of the wines from which they are made. Season your oil and vinegar with salt and pepper. Some salads may warrant pressed garlic, Dijon mustard or herbs such as basil, chives, dill, chervil, rosemary, thyme or tarragon. Herbs contribute their own gentle qualities. Don't drown the flavor of the greens by using too much dressing. Add part of the dressing, toss gently, and add more if needed.

For a culinary adventure with lettuce and a foreign flavor, combine chopped lettuce with garden peas and green onions in a pan, and cover with water. Cook covered until vegetables are tender crisp. Add a small amount of butter and season to taste.

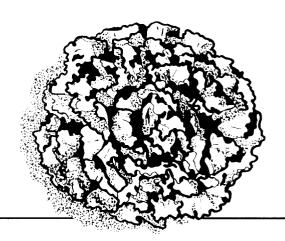
Or add shredded lettuce to a medium white sauce and serve over cooked asparagus.

Or stir shredded lettuce into a thin white sauce for **cream of lettuce soup**. This soup can be blended in a blender, reheated and seasoned with curry and garnished with hard cooked eggs.

Also, lettuce can be stir-fried with other vegetables, or can be substituted for cabbage leaves in cabbage rolls.

Lettuce originated from a common weed of the roadsides and wastelands of Southern Europe and Western Asia. There are several hundred varieties, many developed by Arabs. Lettuce came to American via the West Indies and each year Americans eat, on average, over 25 pounds per capita.

Eat the very green leaves to obtain the small amounts of vitamins A, C and other minerals lettuce contains. And when buying or planting lettuce, don't always settle for the familiar head lettuce. Get acquainted with Butterhead, a sweet, buttery, looseleafed head lettuce. Also try Romaine, a lettuce that is long and cylindrical with stiff dark green leaves. Or put some of the clumpy leaf lettuces into your cart.



MUSHROOMS – AN ANCIENT DELICACY IN A MODERN WORLD

Mushrooms have been a food delicacy for thousands of years. They've been synonymous with magic since the beginning of time because they could miraculously spring up overnight.

Today the real magic is the way mushrooms have jetted into popularity in the United States. Over 570 million pounds of commercially cultivated mushrooms are now produced annually by Americans, a figure more than double that of 10 years ago. No other vegetable has shown a consumption rise equal to that of mushrooms.

Today, only one of the over 38,000 varieties of mushrooms is grown commercially – the agaricus bisporus. Pennsylvania accounts for 50 percent of all mushroom production in the United States followed by California, Michigan and twenty-five other states. America's production can be said to be mushrooming. Mushrooms are fast becoming one of our staple vegetables. We are eating over three pounds per person per year. Mushrooms are available year round with peak season in November and December and low point in August.

The process of growing mushrooms is perhaps the most difficult in all agriculture, demanding constant, careful attention. It is drastically different from other production because mushrooms grow indoors – in the dark, in natural caves or carefully designed windowless buildings. They are particularly finicky about temperature and humidity. They are very susceptible to disease and must be grown in sterilized organic compost. Each stage of growth needs a different temperature ranging from a steamy 170°F to a chilling 35°F. The right temperature at the right time is essential or the entire crop could be ruined.

The spores or seeds of a mushroom are so tiny that they are cultivated in test tubes. Laboratory personnel innoculate cereal grains with the spores and incubate them until a viable product is developed. These grains are then sown like seed. From this point it takes about a month to produce mushrooms for harvest.

For all their new popularity, mushrooms still retain their old magic that can turn a simple dish into something special. Look for a firm, smooth mushroom that is an off white or creamy color. The membrane between the cap and the stem or "veil" may still be attached to the mushroom cap. If it is detached and the gills show, the mushroom is just as good but will not store as long. Mushrooms with veils intact normally keep in the refrigerator about a week. Store mushrooms in the container they came in. It has holes in it so the mushrooms can breath. Or, store in a paper bag, which is porous, in the crisper of your refrigerator.

Mushrooms, whether large or small, have the same flavor and texture and are equally mature. Big mushrooms are good for stuffing; medium and smaller ones are good for slicing or serving whole. Simply brush off mushrooms with a damp cloth or quickly rinse and blot dry. Do not peel.

Mushrooms go a long way. A pound of fresh yields six cups of sliced mushrooms or two cups of cooked ones. A pound of fresh mushrooms is about four servings. One cup of sliced mushrooms contains 20 calories. They are a source of B vitamin, potassium, iron, chromium and other trace minerals, as well as dietary fiber.

Mushrooms add inexpensive luxury, variety and flavor to all foods. They make ordinary soups, sauces and gravies exciting; make meat, poultry and fish dishes into gourmet delights; and make salad, dips or dunks special.

For mushroom shrimp oriental stir fry stir fry until tender-crisp 1 pound of sliced mushrooms, 1 cup of sliced pepper, 2 cups of sliced onions, 2 cups of sliced celery and an 8-ounce can of drained sliced water chestnuts. Add a pound of peeled deveined shrimp and 1 cup of beef broth and simmer for 5 minutes. Add 2 tablespoons of cornstarch moistened in 1/4 cup water and 1 tablespoon of soy sauce. Cook and stir until thickened. Serve with steamed rice. Makes six servings.

Many markets now stock fresh or dried shita or enokidake mushrooms. The stems are long and thin with a small cap. They are pale ivory color and very delicate, but with an intense flavor.

NUTS – A PANTRY OF NUTRITION

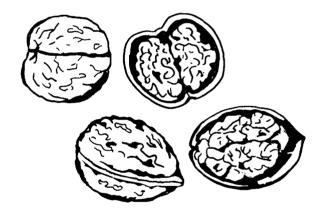
Nuts come in all shapes and ways, from the pecan that matures on majestic trees in Georgia and Texas, to the coconut that sways on tropic palms, to the low-down peanut, or groundnut, that grows from 40 degrees north to 40 degrees south of the equator. All of these and many more play a major nutritional role in human diet.

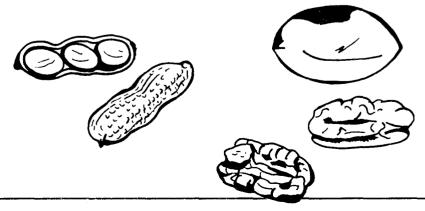
The coconut is by far the most important nut crop in the world, grown for its copra and coconut oil. Although thought of as strictly tropical, it has proven to be able to withstand some small degree of cold and has been successfully established in southern Florida. The part of the coconut most familiar to Americans is the edible white endosperm, usually used as a filler in cakes and pies. The liquid endosperm, or "milk" of the coconut, is sought after by health food addicts and is available in only limited areas. Much more important is the dried endosperm, known in the trade as copra, which is the principle source of coconut oil, an oil second only to soybean oil in worldwide use. Coconut oil has a high degree of fat saturation and good stability. It is used in preparation of margarines, shortenings for cooking, frying oils and imitation dairy products. Coconut oil is also used in the manufacture of liquid and solid soaps and detergents, cosmetics, hair oil and various lubricants.

Almonds and walnuts are two favorite nuts because of their high protein and carbohydrate content, and they are something children will eat in addition to peanut butter. Almonds are native to the hot and arid regions of Western Asia and are commercially produced in California and Texas. The walnut, especially the black walnut, can be grown fairly easily in North Dakota for both timber and nut production, but takes a quarter of a century to become productive. In the meantime it will make a durable and attractive shade tree. The type of walnut most of us consume is the English walnut, *Juglans regia*, which is grown commercially only in California and Oregon. Use English walnuts and almonds to make granola cereals.

The all-time champion nut for fresh taste and for pies is the pecan. After harvesting their crop in the fall of the year, growers in Georgia and Texas ship fresh-picked, inshell pecans all over the country to supermarket chains and homeowners alike. The pecan, like the walnut and almond, is an excellent energy source.

The common peanut or groundnut is famous in Georgia. It is a source of good nutrition, providing about 25 percent protein for growth of muscle and bone tissue, as well as carbohydrates for energy.





SUPER ROOTS PRODUCE SUPER SOUPS

What do onions, carrots, rutabagas, parsnips and turnips have in common? For starters, they all make a good basis for developing one of your favorite soups. Let's face it – North Dakota winters invite the invention of soups. . . What warms the body and provides it with an easily digestible meal faster than a soup made with one or all of these super root vegetables?

Each of these root vegetables adds its own distinctive flavor and nutrients to soup, including carbohydrates for energy and fiber for digestibility. An average sized carrot will give a day's supply of vitamin A and only 21 calories. Carrots contain carotene, which is converted to vitamin A in the body. Rutabagas, because of their carotene content, also supply vitamin A. All five vegetables supply vitamin C, calcium, iron, potassium, phosphorus and few calories.

Historically, the origins of these root vegetables have some similarities as well. All are native to the Eastern Mediterranean regions. Carrots and rutabagas are grown extensively in Northern Europe and the subarctic regions of Sweden. In fact, rutabagas are known as Swedish turnips and are called "Swedes." These two crops along with turnips provided northern Europe with a staple diet during times of food shortage, especially during World War II. Onions and parsnips, also both originating in the Eastern Mediterranean, spread into Northern Europe by the start of the Middle Ages. Parsnips are cultured in a manner similar to carrots but can tolerate cold soils better. The roots of parsnips actually become sweeter when exposed to cold soil temperatures. Onions have perhaps the most colorful history: highly regarded since antiquity, they fed the sweating builders of the pyramids and the conquering troops of Alexander the Great. Even Civil War General U.S. Grant declared in a dispatch to the War Department that he would not move his armies without onions!

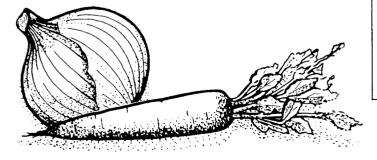
Another feature that these five vegetables have in common is that they are at their best of flavor and texture if chosen of medium size, well shaped, firm and free of blemishes. Larger coarse ones or wilted flabby ones may be woody, pithy, tough and strong flavored. If tops are attached, cut them off before storing. Turnips, parsnips and rutabagas may be waxed to help retain mositure. The wax is simply peeled off with the skins. They all store well in the vegetable crisper of the refrigerator in poly bags.

To prepare these vegetables for soups, the following steps are suggested:

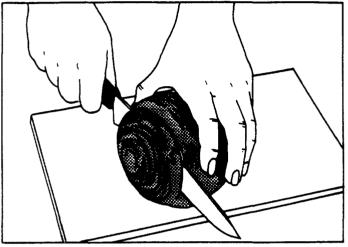
- 1. Onions can be peeled dry or under running water. Slice, cut in quarters or leave small ones whole. To remove the odor from hands rub hands with salt, lemon juice or vinegar.
- 2. Carrots and parsnips should be washed, peeled or scraped. Cut crosswise or lengthwise or slice.
- 3. Turnips and rutabagas should be washed, peeled thinly and then sliced or cubed. To cut them up is a simple task with sharp knife and cutting board. Follow the simple illustration.
 - Slice off the tops.
 - Put flat surface on the board and cut two slices from the side.
 - Lay second flat surface on the board and slice the rest. Peel the slices and then cut as needed into sticks, cubes or slices.

To make your soups as nutritious as possible, use a variety of vegetables and herbs to develop the flavor you will like. Cook them enough to be tender, but overcooking will dissipate their distinct flavors.

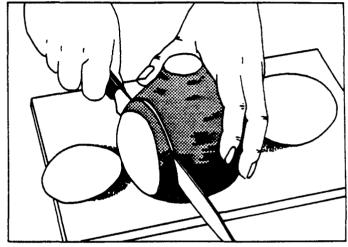
Just vegetable soup incorporating any of these five root crops in water or broth or a combination is a delicious treat. For a meat base in a vegetable soup, first sauté the meat, then add the prepared vegetables and water and cook slowly. When ready to eat, lift out the meat and cut it up into serving portions and place on a platter. Spoon out some of the vegetables and arrange around the meat. Spoon the soup loaded with colorful vegetables into soup bowls and serve your favorite bread...from a single pot, a two-course meal is created!



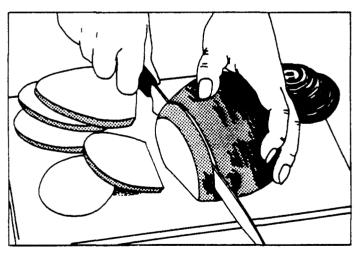
Cutting a Rutabaga or Turnip is Easy



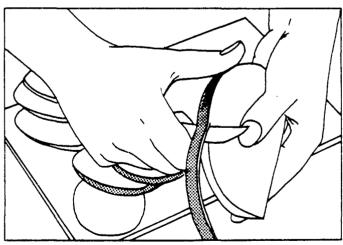
1. With a sharp knife, slice off the rutabaga or turnip top. This provides a flat surface for further cutting.



2. With flat surface down on cutting board, cut several slices from side as shown. Now you have two flat surfaces.



3. Put this second flat surface down and complete cutting of rutabaga slices.



4. Peel the waxed skin. Then cut into fresh sticks, dice for cooking or shave for salads.

SNAP PEAS

You've heard of snap beans, but have you heard of snap peas? Snap peas are known as sugar peas, sugar snap peas or edible pod peas. They are bred by crossing a regular snow pea (or Chinese pea pod) and a mutant shell pea. The result is a pea that is fatter and sweeter than a regular snow pea and that yields two or three times the crop of the old fashioned pea. Snap peas prefer cool weather and are ready to eat when pods are 2½ to 3 inches long and plump with peas. Some of these new snap peas are stringless, others need to have the string removed. Start at the blossom end, and string up to the stem, pinch off stem partly and then go down the bottom seam and you'll have both the string and the stem.

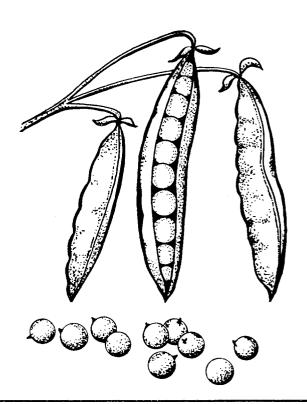
You don't have to pick the pods when very young and more mature pods don't have to be shelled. Snap peas have thicker wall pods and a unique flavor and texture. They are delicious eaten fresh. Place the pods along with other vegetables on a relish tray with dips. Open the pod gently and fill as you would stuffed celery. Cut them in chunks or into slices as you would a snap bean and add them to tossed salads, or stir-fry them. Snap peas can be cooked best by steaming or by the microwave. They are easily overcooked and the pod will fall apart. For this reason canning is not recommended.

Snap peas will freeze well. Blanch for 2½ to 3 minutes. Chill for the same amount of time in ice water. Drain. Lay pods on a tray to freeze and then put them into plastic freezer bags and return to freezer.

Store garden fresh snap peas in a plastic bag and refrigerate. Wash them just before using.

The delicate tasting snow pea or Chinese pea pod is a bright green with flattened pod and is valued more for its pod than for the edible peas inside. In fact, snow peas are best if the outline of the peas inside is barely visible. Snow peas are considered the vegetable jewel of Chinese cuisine. To be properly cooked their crispness must be retained, so gentle steaming or stir-frying are the best methods to use. Snow peas may have the string removed. Blanching will bring out their vivid green color and heighten their crispness for fresh salads. Stir-fried snow peas can be combined in many dishes, but for a simple one combine them with fresh mushrooms or water chestnuts.

We haven't forgotten the very old garden pea. It's still a staple and the first vegetable planted in many gardens. Many of us are unfamiliar with the deliciously sweet flavor of the garden pea. It lives only in youthful memory of filling our pockets with them from the garden and leaving a trail of empty pods as we went about the summer chores. We are most fortunate to be able to buy low cost frozen peas processed at their best and almost as good as right from the pod. If you buy them at the market in pods, one pound will yield about one cup of shelled peas. Choose bright, light green and shiny pods that are amply filled. You will have to sample one to truly judge their tenderness and sweetness. Use them up as soon as possible. Peas, like corn, lose their sweetness very quickly.



PEPPERS

DELIGHT THE EYES AND TASTE BUDS

Pepper plants need uniformly warm growing conditions, balanced fertility, ample water and light, and no setbacks, either before or after the plants are set in the garden. The biggest reasons for pepper failure in the garden are too low a soil temperature during germination and too low an air temperature at flower set time. To germinate, pepper seeds need a minimum temperature of 60 degrees Fahrenheit: 85 degrees is optimum. Since this kind of consistency is never achieved in the typical North Dakota garden, it becomes necessary to establish transplants indoors for 4 to 6 weeks before setting out. Starting the seeds indoors around April 20-25 should have them ready for the outdoors by the time warm weather has made a dependable appearance.

Not to be confused with the *Piper nigrum* spice peppers, the edible red and green and chili peppers belong to the genus *Capiscum* that Columbus found growing in the Indian gardens in the Caribbean. Knowing that this is the source of peppers should tell us a little of the temperature requirements to get decent production. The fact that we even consider growing them in North Dakota, and can do so quite easily with a little management expertise, is amazing.

Selecting the correct varieties for our area helps quite a bit. Early Prolific will bear in 62 days, while Bell Boy and Lady Bell, both hybrids, will produce large, thick-fleshed green and sweet vegetables in about 70 days. For a yellow-skinned variety, try the 65-day Gypsy.

Most gardeners will harvest bell peppers when green. Others will leave them on the plant until they turn red, which imparts an even sweeter and more mellow flavor.

The green peppers available in the supermarket are most likely California imports, which, if not allowed to dry out during shipment, will have flavor and quality second only to the garden fresh ones available later from our summer gardens.

Select peppers with smooth firm skin, free of wrinkles and blemishes. One pound, or three to six peppers, will provide four cups of pepper strips. Store peppers in the crisper of your refrigerator and use them as soon as possible. Peppers add a distinctive and delicious flavor and adapt to all sorts of fine dishes. They add color and nutrients to vegetable relish and dip platters, to soups, salads, casseroles and stews. A medium sized pepper contains only 36 calories, yet it contains more than the recommended daily allowance of vitamin C. Peppers also contain some vitamin A, other vitamins and minerals, and have fiber for good digestion.

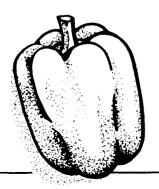
For a **crisp cracker** or **sandwich spread**, chop one small pepper very fine. Add a half pound of extra sharp cheddar cheese. Then add just enough mayonnaise to make the mixture spreadable.

Many cuisines use halved peppers to hold a variety of fillings. Here is one dish with only 167 calories, and a variation of it with only about 220 calories per serving:

Mexican stuffed peppers. For 4 servings, cut 2 peppers in half lengthwise, remove seeds, and precook for 5 minutes in boiling water. Drain. Then soften 2 ounces of low calorie cream cheese, or Neufchafel cheese, in a mixing bowl. Add 2 tablespoons skim milk. Stir until smooth. Add 2 cups cooked brown rice, 1 chopped green chili from a can of chilies, 1 tablespoon of snipped parsley, and a dash of pepper. Spoon into pepper halves. Sprinkle with paprika. Place halves in baking dish and bake uncovered at 350 degrees for about 20 minutes.

For a **creole** variation, add ½ pound of browned and drained ground beef to the 2 cups of brown rice. Fill pepper halves and place them in a baking dish. Pour the sauce, described below, over the stuffed peppers. Cover. Bake at 350 degrees for 45 minutes.

For the sauce, mix the following in a saucepan and simmer 15 minutes: 1 8-ounce can tomato sauce, 1 envelope dehydrated spaghetti sauce, 2 cups water, ½ cup chopped onion and ½ cup chopped celery.



POTATOES: WORLD'S MOST FAMOUS TUBER MAKES A FOUR-WAY SLAM____

The potato is a four-way bargain – low in calories and price, big in nutrients and taste.

The popular feeling that potatoes are fattening food is false. They aren't. Though what folks add to them can make them seem so. Glopping on butter and sour cream can add 200 to 300 calories to a potato, so to keep your potato at a slim 120 to 150 calories, try low-calorie toppings. A couple of our favorites are low-fat cottage cheese, and chives; or, try low-fat Parmesan cheese, or cheddar cheese, with broccoli.

Not only are potatoes low in calories, they fill you fast because they contain a lot of fiber and water. This means the diet-conscious can comfortably keep total calorie intake down by filling up on potatoes instead of on fatter foods. And not only is eating potatoes a good way to stint on calories, it is a good way to get a wide range of nutrients.

In fact, in the days before refrigeration and year-round supplies of fruits and vegetables, potatoes helped folks get through the winter without suffering malnutrition. An average six-ounce potato supplies 35 percent of the recommended daily amount of vitamin C, 10 percent of the iron, 20 percent of the vitamin B-6, 8 percent of the folic acid, and 10 percent of the recommended daily adult allowance of niacin. Additionally, it supplies a bank of minerals such as copper, phosphorus, magnesium, iodine and potassium. Especially when eaten with skins, potatoes provide a healthy helping of dietary fiber. They are a high quality protein source and contain very little sodium.

And they are cheap. Potatoes cost only 3.5 cents to 10 cents a pound, depending on quantity and variety purchased.

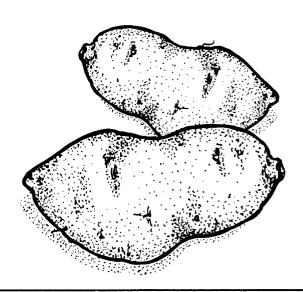
For centuries the potato has been a favorite food for gastronomist and food junkly alike, but a food usually relegated to the side of the plate. Now the world's most famous tuber is moving to new prominence as the main feature in many meals. An example of a tasty centerpiece?

Potato Reuben. To prepare it, spread open a hot baked potato and shape it gently to form a flat surface. Then layer low-fat sour cream, sauerkraut, corned beef and Swiss cheese on top of it. Place it in a microwave or under a broiler to melt the cheese.

And there's a meal.

The microwave is also an excellent way to prepare baked or steamed potatoes in minutes. Remember to leave skins on whenever you can to conserve nutrients. Fried potatoes, for example, are great with the skins on – so why labor to peel off the good taste?

The potato originated in the region which includes Peru, Bolivia and Mexico. It was introduced to England in the latter half of the 15th century by Sir Francis Drake. Since then it has come a long way. In fact, it has become standard fare on nearly every menu in the Western world. Today it is available to the consumer in white-skinned, redskinned and russet-skinned varieties. In our area, the russet types such as the Norgold and NorKing are excellent for baking and may also very satisfactorily be boiled, mashed or converted to fries. Red-skinned varieties such as Red Norland, and white-skinned varieties like Kennebec, are often boiled, but also can be baked or converted to fries.



RAPID RADISHES ZAP THE PALATE

Give a youngster a packet of radish seeds and say "go plant" and you'll have radishes. But as every seasoned gardener knows, to get crisp, mild, high-quality radishes, the fundamentals of watering, fertilizing and controlling insects must be followed. Quick to germinate, radish seedlings require thinning, a high phosphorus fertilizer, and constant supply of water. They may also require a timely application of a formulation of diazinon to control flea beetles and cabbage maggots that can plague some radish crops.

Just 28 days after sowing, radishes may be enjoyed in salads or as garnishes for a meal. And because they are a hardy vegetable, they can be one of the earliest crops seeded directly into the garden. Radishes germinate vigorously and will push through crusty soil, easing the way for less vigorous carrots, which are often sown as a companion crop for later harvesting.

Radishes come in many shapes, colors and tastes: round, long or oblong. White, pink, red, yellow, purple or black. Mild-tasting, medium or peppery. Some varieties are an inch long, some are two feet or more and weigh up to several pounds. Most common in gardens and supermarkets are the small, round red type and the long, white icicle variety.

For North Dakota gardens, look for the Cherry Belle, Champion and White Icicle varieties. The Cherry Belle and Champion, both red globe varieties, will contribute a distinct taste to salads; the white icicle produces roots up to 5 inches and will have a milder taste.

Radishes contain vitamin C with minor amounts of other vitamins and minerals, and only about two calories per radish.

Mostly they are enjoyed on vegetable plates or sliced in salads, but why not try a radish sandwich?

Radish Sandwich. Spread a piece of your favorite bread with mayonnaise, butter or margarine. Then slice crisp fresh radishes onto it as a filling. Then put on the lid.

Radishes also can be served cooked. Slice them into a saucepan, cover them with water, and boil six to eight minutes until tender. Drain. Season and combine with melted butter or margarine; or with lemon juice or vinegar; or stir them in a white sauce.

For an **elegant appetizer**, hollow out radishes and stuff with cream cheese filling.



SPINACH AND SWISS CHARD

- POT GREENS IN PROFUSION -

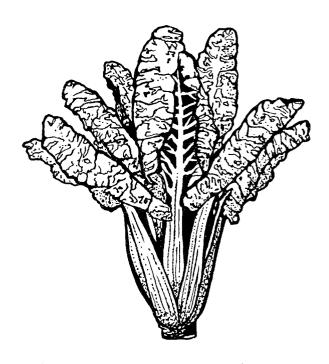
The natural profusion of height-of-the-season vegetables requires only the subtlest of blandishments. Let the garden flavors of spinach and Swiss chard triumph with just gentle cooking or a light dressing and a complement of herbs. Because these two salad greens can be cooked they are often referred to as "pot greens."

Spinach was cultivated by the Greeks and Romans even before the Christian era, and has always been popular. Today it is one of our most commonly used vegetables – fresh, canned or frozen – and one of the important crops grown for greens. Over 17 states produce spinach commercially for the fresh market, keeping it on the market all year round. Spinach grows easily in the home garden, producing two crops a season. The varieties America and Longstanding Bloomsdale grow well in North Dakota gardens, producing crops in 50 days or less. Both are slow to bolt during hot weather. New Zealand, though not a true spinach, produces a husky plant that thrives in hot weather and yields all season. Its delightful flavor is similar to spinach when cooked.

Swiss chard was considered the beet of the ancients. Its popularity in the United States was gained slowly only in the last century. Swiss chard has a whole host of names – white beet, strawberry spinach, chard. It is also called seakale beet since it is a variety of beet, though one that does not develop an enlarged fleshy root. It has been a vegetable widely cultivated and appreciated in France. We see it at the supermarket mostly during the summer and fall. Those especially fond of chard can grow it easily in a home garden. North Dakotans can select Fordhook Giant, Lucullus and the red-stemmed rhubarb chard, a very ornamental yet nutritious variety. Chard can tolerate high temperatures of summer without bolting to seed and when cut back to ground level for harvest will produce another set of edible leaves.

Swiss chard has a large leaf with thickened mid-rib and stems. Although the whole leaf is palatable it is two vegetables in one, since the leaves can be eaten as salad or cooked greens and the stems cooked like celery. The fiber in this vegetable is delicate, similar to asparagus. Leaves are most palatable if they can be harvested young and tender.

These green leafy vegetables are similar in nutritive value and in how they are selected and prepared. Both are excellent sources of vitamin A and good sources of vitamin C, potassium, iron, phosphorus, calcium and magnesium. A half cup serving of cooked greens has about 22 calories. Choose crisp fresh leaves with good green color. Dunk in cool water. Drain and discard the water. Repeat several times until water is clear and there is no sand or dirt in the bottom of the pan.



The flavor of both spinach and chard is best retained when leaves are cooked only in the water that clings to the washed leaves. Reduce the heat when steam begins to form. Cover and cook for three to five minutes. Turn leaves often with a fork.

The fresh leaves of either vegetable can be used in a salad for color and flavor or as a substitute for lettuce. Spinach and chard, cooked or fresh, combine well with a whole host of foods, including eggs, fish, beef, pork and cheese, or they may constitute a separate vegetable dish. Herbs such as allspice, basil, dill, cinnamon, marjoram, oregano, rosemary and sesame seeds can be combined in the cooking liquid, in salads or the salad dressing. The chard stems can be treated as asparagus, cut or bundled and then cooked in water. Serve with melted butter or various other sauces.

Any dish "a la Florentine" is sure to contain spinach. For four servings of chicken Florentine, halve and toast 4 English muffins. Place them in a baking dish. Top each muffin half with a layer of cooked, drained spinach and diced cooked chicken. Spoon over them 1 cup of medium white sauce or cheese sauce and bake at 350 degrees Fahrenheit for 10 minutes or until heated thoroughly. Swiss chard may be substituted for the spinach.

SPROUTS, FOR GREENS UNLIMITED

Can you imagine growing a vegetable that's ready to eat in three to six days, needs no soil, no sunlight, little attention, can be grown indoors by anyone, requires little energy to grow or to prepare and is nutritious? Sounds too good to be true? Well, you can harvest a nutritious garden of crunchy sprouts that can be grown in a jar on your kitchen counter in just days!

The process is easy. Children as well as adults can enjoy sprout growing. Almost all common garden vegetable seeds are suitable for sprouting except tomato, potato, pepper or eggplant seeds. These sprouts are poisonous and should not be eaten. Sprouts from each seed variety have a different taste. Rye and clover sprouts taste like salad greens, radish and mustard sprouts are a bit peppery, wheat and rice sprouts are sweet and nutlike and sprouts of members of the cabbage family taste like the vegetables themselves. Since most of us have encountered bean sprouts at salad bars or in Chinese cookery, and because they are easy to sprout, use beans to start with – mung, soy, kidney, garbanzo and the like, or lentils. Alfalfa seeds are also easy to grow. If you like these you'll experiment with other seeds.

You have chosen the seeds, now for the equipment. You can buy a sprouter, but a wide mouth one-quart clear glass jar works just as well. You'll need cheese cloth, gauze or a circle of non-toxic screening, and a jar ring or rubber band.

Place two or three tablespoons of fresh clean seeds into the jar. Do not use seeds that are chemically treated with insecticides or fungicides. Add three cups of water. Cover jar mouth with cheese cloth, gauze or screen. Secure with jar ring or rubber band. Soak the seeds overnight. Then drain off the water the next morning. Rinse seeds twice a day by running water through the covering on the jar mouth. Be sure all water is drained off. Store jar on its side in a dark place at 65 to 75 F. When seeds begin to sprout, in about three days, place jar in the light. This will color them green.

Sprouts are ready to harvest when they are 1/2 to 2 inches long. They generally taste best and have the most nutrients if used up soon after harvest. Rinse off the loose seed hulls or use hulls and all. If necessary to store sprouts, refrigerate in an air-tight container and use up in three to five days. Use them as you do lettuce or other greens in salads or sandwiches, as garnishes, in dips or added to breads, soups, stir-fries, vegetable and meat dishes and omelettes. Children love them as finger treats.

The nutrient content of sprouts varies with the variety and the length at which they are harvested. They also vary in calorie content; alfalfa sprouts have 41 calories per cup and mung sprouts 53 per cup.

SUMMER SQUASH:AMERICAN ORIGINALS.

Have you ever seen a solitary zucchino (that's the singular of zucchini)? Probably not. In late summer zucchini tend to come in heaps, hordes, throngs and multitudes. No other vegetable is so prolific. Frenzied gardeners wrestling with an ever increasing crop that is overrunning the garden have only to look at newspaper food columns and food magazines to find zucchini recipes for every day of the year. Bookstores have cookbooks devoted only to zucchini. So next year, gardeners please note: two little seedlings will produce a year's supply of zucchini for a family of four.

Like tomatoes and kidney beans, squash are native to the western hemisphere. The Indians have cultivated some of our native species for centuries. When the European explorers took squash seeds to Europe they became very popular. It was in Italy that zucchini was developed from our American originals.

Squash are usually classified into summer and winter types, according to how fast the squash grows and at what stage it is harvested. Within these two groups are numerous varieties of size, shape, color and texture.

Long ago the Massachuset Indians called squash "askutasquash" – that which can be eaten raw or uncooked. The term aptly describes summer squash because they are fast growing and can be picked a few days after they develop. The rind is thin and soft and the pulp tender so they can be eaten unpeeled, raw or lightly cooked. Winter type squash stay on the vines until fully mature. They have a hard rind, firm pulp, hard seeds and must be cooked.

Squash are easy to identify because each variety is distinctive in shape, size and color. Crookneck has a curved or straight neck, bulging base, yellow rind that is bumpy and yellow pulp that is grainy. Scallop, Pattypan or Cymling develops into a green, rough-skinned, scallopedged dish with green pulp. Zucchini, also called vegetable marrow or Italian marrow, is a straight dark green cylinder with a slightly large blossom end. The rind is speckled with pale yellow and stripe-like markings. The pulp is greenish and very fine.

The squash are members of the cucurbits, which include watermelons, muskmelons and cucumbers. Although some squash species will cross pollinate, they will not breed with their cucurbit family members. Also, home gardeners need not concern themselves with the loss of identity of one of their favorite summer squashes if they have a mixed variety planting, as the quality of either variety is not affected the year of the cross pollination. But the seeds saved from these fruits and planted the following year will produce various off-type fruits.

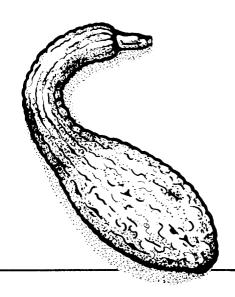
The home gardener should allow ample room to grow summer squash, which produce both male and female flowers on the same plant. The beginning gardener is often bewildered to witness the first flowers withering without setting any fruit. This is because the first flowers to open are females which, if no males can open in time for pollination to occur, will simply die.

Choose fresh young summer squash with tender rinds, free from blemishes and fairly heavy for size. Buy in small quantities and refrigerate. Wash squash, but do not peel. Cut off stem and blossom end.

Summer squash are low in calories – 15 per half cup – and provide fair amounts of vitamins A and C and niacin and fiber. The different summer squash can be substituted for one another in recipes. Summer squash can be used for very simple dishes of squash slices with salad dressing, or for complicated casseroles. Whole and halved summer squash can be filled with a savory stuffing or combined with typical vegetable combinations such as tomatoes, onions and green peppers.

For an extra special treat, cook small whole **Pattypan squash** until tender. Then scoop out a little pulp from the center and fill with new buttered peas. Or, stir-fry thinly sliced summer squash until tender, then add ¼ cup of French or Italian salad dressing and sprinkle with coarse ground pepper.

And you home gardeners, don't forget your friends and neighbors who may be glad to accept any gift of gardeneresh bounty you care to share, especially summer squash.



WINTER SQUASH AND PUMPKIN

In this space age of rapid transworld transportation, "seasonal vegetables" is almost passe terminology. But we still have to wait for fall for winter squash and pumpkins to make their appearance. To limit these glorious fruits to their traditional roles in pie, bread and Thanksgiving celebrations is to miss exciting ways to use them in soups, stews, casseroles, vegetable side dishes, ice creams, puddings and conserves.

The pulp or meat of squash and pumpkin has been a food source for many cultures. The early settlers learned from the Indians how to bake, boil, fry and dry the pulp. Both fruits are excellent sources of vitamin A and C and potassium. Squash has 63 calories per half cup serving, pumpkin about 40 calories per half cup. The microwave oven is a quick way to cook these fruits. Simply cut in half, seed, place cut side down in container and microwave until tender. The pulp can be scooped out or the hollow filled with creamed ham or chicken, cooked ground beef and rice, tomatoes creole, cranberry sauce or relish, chunk or crushed pineapple, applesauce, or green peppers and corn.

To make soup, add 1 cup of mashed squash or pumpkin to 2 cups of medium white sauce. Season with nutmeg and garnish with parsley.

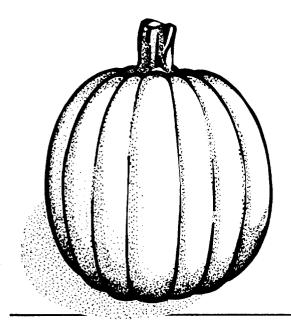
For an excellent topping for spice cake or gingerbread, fold a cup of mashed squash or pumpkin pulp and ½ teaspoon pumpkin pie spices into 2 cups of whipped topping.

While the exterior shapes and shell colors of pumpkins and squashes vary, all have yellow-orange flesh inside and can generally be interchanged in recipes. One pound of uncooked squash yields 1 cup cooked.

Acorn, Buttercup, Butternut, Hubbard, Gold Nugget and Emerald are all hard-shelled squash varieties that can be grown in North Dakota. Pumpkin varieties are Spirit, Cheyenne Bush, Sugar Pie and Howden's Field.

If you have storage space, winter squash and pumpkins can be stored for some time. A cool dry location at about 55 degrees Fahrenheit is necessary for satisfactory storage. Make sure the squash or pumpkins are harvested when they are mature and before they have been damaged by frost. Squash should be full size, should have taken on a dull green or yellow color, and will have a whitish green or rich orange color where they have rested on the soil. Handle the fruits carefully. Avoid dropping or bruising. Leave the stems on. Use a pruning shears to separate the squash or pumpkin from the vine.

Cure them in a warm room for one or two weeks. This will hasten maturity of immature fruit and will harden the outer shells.



SWEET POTATOES – THE SAGA OF AN EARLY AMERICAN

Columbus found the sweet potato here and carried it back to Spain as proof of the wonders of the New World. But the sweet potato dates back many years before Columbus ever went to sea. It was cultivated by the Indians in South America before the birth of Christ and spread north to Mexico and the West Indies. Apparently sweet potatoes weren't grown in what is now the United States until the 1600s when southern settlers made it their favorite and a basic staple food.

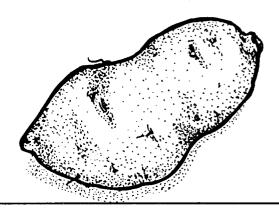
Sweet potatoes are related to the morning glory and are true roots. They are not relatives of the white potatoes, which are tubers or stems. The term "yam" is thought to have been coined by the early Black slaves from a Senegalese word meaning "to eat." It is a synonym for sweet potato and is used in the sweet potato trade. Actually all yams grown in the United States are sweet potatoes and USDA requires they be labeled as such. In general usage the terms are used interchangeably. A true yam is not related to the sweet potato. It grows in tropical areas and can produce a root of over 100 pounds and is several feet in length. Its flesh is similar to that of a white potato.

Two types of sweet potato are available – a light colored, rather dry, mealy one, and another which has a dark orange, moist, sugary flesh. The latter is the most popular one in this country and often labeled yam in the supermarket. If you have children who are finicky eaters, you might want to try them on this type of sweet potato. Simply bake the potato until soft, remove from skin, and mash with a generous pad of butter or margarine. Most children will love the sweet rich taste and you will feel good knowing they are getting some good nutrition. Sweet potatoes contain 100 percent of the recommended daily allowance of vitamin A, 36 percent of vitamin C and 5 percent of iron, with smaller quantities of other nutrients. A medium sized sweet potato contains about 148 calories.

Sweet potatoes are always on the market, but October through December is peak season. The commercial crop is grown in North Carolina, Louisiana, Virginia, Mississippi and California. Choose firm, smooth, blemish-free sweet potatoes. Handle them carefully to prevent bruising. Store in a dry cool place (55-65 F). Do not refrigerate.

Don't confine sweet potatoes to vegetable side dishes. Their flavor blends with herbs, spices and flavorings to produce delicious dishes of all types – breads, salads, stuffings, pies, custards, cakes and cookies. They can be baked, broiled, fried, boiled, microwaved and grilled. Use raw sweet potato curls to toss into fresh salads or raw sweet potato sticks on a relish tray or with a dip.

Sweet potatoes are started from slips or rooted vine cuttings. To do some experimenting yourself in sweet potato culture, grow a bush vine by suspending a sweet potato in a bowl or jar of water. Plant a shoot or cutting of this vine in a box or tub 12 inches deep and 25 inches wide. Use a light porous soil mix. A whole or chunk of sweet potato may also be planted.



TOMATOES - "POMMES D'AMOUR"

Pommes d'amour translated to "apples of love" sounds pretty grand for the down home tomato. The Germans were even more romantic, calling tomatoes "apples of paradise." If you follow the ancestry of the tomato you'll find it is a native American that was brought in seed form from Mexico and Central America to Europe by the conquistadores. It quickly found favor in Europe and Great Britain, and from there the colonists brought it back to America. But it wasn't until 1812 that the Creoles of New Orleans put tomatoes into their rightful place by using them in gumbos and jambalayas. The people in Maine quickly copied by combining fresh tomatoes and seafood.

Without a doubt, the tomato is the most popular vegetable grown in home gardens – 31 million gardeners grow some variety each year in the United States – and tomatoes rank second only to potatoes in amount consumed. Per capita consumption of the U.S. is about 67 pounds annually. The rise in the popularity of ethnic foods, such as Mexican and Italian, accounts for a large part of the processed tomato market.

Tomatoes are also in style for today's good health trends, for a medium-size tomato has only 27 calories and 4 milligrams of sodium, yet offers half the day's supply of vitamin C and 25 percent of the recommended daily allowance of vitamin A. Tomatoes are also a good source of potassium, and contribute some B vitamins, iron and phosphorus.

California leads the country in shipping tomatoes throughout the United States, holding on to more than half the market. It is often asked, "Why do the store tomatoes look appealing yet seem tasteless when compared with local garden varieties?" Well, given their circumstances, commercial growers and shippers do a good job. The commercial tomato must be bred to withstand long distance shipping and to ripen somewhat enroute. Placing these tomatoes in a fruit bowl or on the kitchen counter to ripen will improve their flavor. Like bananas, they shouldn't be refrigerated until they are fully ripe. Then eat them up in a few days. Wait any longer and the flavor will deteriorate. You won't need to peel them unless they are to be cooked.

Reasons for the homegrown tomato's popularity is fairly obvious to anyone who has tasted one of these vine-ripened vegetables. It possesses full flavor, is supple to the touch and has a juicy texture.

Being a tender, warm season crop, North Dakota tomatoes can be expected to mature in late July or August. It is best to start them indoors four to six weeks before transplanting outside, keeping them under fluorescent light in a sterile media of vermiculite or perlite. Many people get

anxious and start their seeds too early. As a result the plants become stretched and fail to transplant satisfactorily. Seeds should be started on or about the 15th of April, if you accept the premise that May 25 is the average date of the last frost in your area.

Varieties for North Dakota range from the 52-day Burpee's Pixie Hybrid to the 75-day Floramerica Hybrid, which may be too late for our northern counties. For more garden varieties to plant, ask your county extension office for circular H-1, "Vegetable Varieties," and H-618, "Everybody's Garden Guide."

Be prepared also to preserve the expected crop by asking your county extension office for "Canning and Freezing Tomatoes."

Tomato recipes abound. You'll find everything from tomato-flavored breads to green tomato pies. Here are two ideas to stimulate your appetite.

Garden Vegetable Sauce for Pasta, 3 cups, for 6 servings of ½ cup each

1 pound tomatoes (3 cups chopped)

½ cup chopped onion

1 clove garlic, minced

²/₃ cup chopped sweet red or green pepper

²/₃ cup broccoli flowerets

²/₃ cup sliced carrots

²/₃ cup sliced celery

3/4 teaspoon Italian seasoning

2 cups water

seasoning to taste

Sauté onion and garlic in 1 tablespoon oil until transparent. Add all other ingredients and water. Simmer covered until vegetables are tender. Serve over cooked pasta, rice or vegetables.

A one-half cup portion of this sauce contains 69 calories, 2 grams of protein, 11 grams of carbohydrates and 3 grams of fat.

Tomato Au Gratin, 4 servings

In a one-quart baking dish place 4 cups of chopped tomatoes, ¾ teaspoon oregano, dash of black pepper and salt to taste. Mix well. Cover and bake about 20 minutes. Combine 1 tablespoon melted butter or margarine, 2 tablespoons grated Parmesan cheese and 1 cup soft bread crumbs. Sprinkle over tomatoes. Bake uncovered until crumbs are browned, about 10 minutes.

This dish contains 95 calories, 4 grams protein, 12 grams carbohydrates and 4 grams fat per serving.

VANILLA - A TOUCH OF FLAVOR .

That bottle of vanilla extract that sits next to your spices had its beginning as a beautiful orchid – one of the two species of orchids that provide the fragrant vanilla bean. Vanilla extract is made by percolating a brew of alcohol and water over chopped beans, and the resulting flavoring gives off a robust scent resembling honey and spice. Alone, the bean and its extract are mellow tasting, and they have the ability to enhance other flavors. Vanilla in cocoa strengthens the chocolate essence, and it draws out the sweetness of fruits. It blends with other flavors too, which is why it is an important flavoring in puddings, custards, pies and cakes.

Most of the vanilla beans we consume come from the East Africa coast and nearby islands. The production of the bean is very difficult. The grower must wait three years before hand-pollinating the beautiful yellow orchid during the one day a year that it blooms. Each pollinated blossom develops a bean.

The mature bean is green and odorless and must be cured and dried for months till the pod is aromatic and a rich brown. Many pods are used in making vanilla extract. The rest are sold as beans.

Vanilla extract is used in numerous recipes and can be easily added to many dishes such as pineapple chunks and other fruit compotes, sauces and quick fruit breads. The whole bean can be purchased at specialty shops and here is where some experimenting can be done.

Steep the bean in coffee or cocoa. Just blot the bean dry to use again. It can be grated into custards, puddings and compotes. Some cooks prefer to open the pod and use the tiny seeds to ensure uniform flavors and textures. Baking enthusiasts prize vanilla sugar, which is made by blending a cup of sugar and a vanilla bean that has been steeped twice for flavoring. Blend until bean is pulverized. Sift through a fine strainer. Store in covered glass jar. Add vanilla sugar to cinnamon toast, fresh fruit and whipped toppings.

HERBS – BRING A WORLD OF FLAVOR AND A TOUCH OF ELEGANCE TO YOUR TABLE

It was not so long ago that it was a rare American recipe that called for herbs, a rare cook who experimented with them, and a rare gardener who bothered to grow them. But today herbs have become so popular that even the short-order Sunday cook sprinkles dill on breakfast eggs, mixes sage into hamburger and lavishes basil on fresh tomato slices. Cooks and gardeners alike have discovered how much better fresh herbs taste and how easy they are to grow. You'll find herbs planted among the vegetables and flowers, or flourishing in their own special corner, in many North Dakota gardens.

Our now trustworthy kitchen herbs were long ago used chiefly for medicine, and are steeped in folklore and mythology. Mint was named for the nymph Menthe and is said to enhance the fragrance of all the plants it grows near. Basil will keep flies away and chives will discourage all other insects. Sage was held high in ancient herbal medicine as a healing herb, and savory as a tonic for the eyes. Parsley was a fitting crown for victorious Roman athletes, while rosemary was the emblem of fidelity for lovers. Dill was used during the Middle Ages by magicians to cast out spells of witches.

Herbs can be planted in any full light area, either as transplants or as seeds. Deciding on which herbs to plant is difficult even for experienced herb gardeners and cooks. There are multitudes of exotic flavors to choose among. Frequent favorites are the herbs that traditionally comprise bouquets garnis and fines herbs. Bouquets garnis are herbs that go together for steeping in marinades, stews, soups and sauces – herbs such as parsley, thyme, basil, savory, marjoram and chervil. Fines herbs traditionally are some combination of parsley, chervil, tarragon and chives. These are used fresh and finely chopped, and are added to a dish at last moments of preparation.

Rosemary and sage appear on practically every herb grower's list. So does mint, which gives a refreshing flavor to teas and jellies. Dill and fennel also are basics, but because they belong to the same family they need to be planted away from each other so they won't crossbreed.

If you are already an herb gardener, preserve the bounty you have grown. Parsley, sage and winter savory will stay fresh under the snow. Some, such as chives, mint, tarragon and parsley, can be transplanted to pots and brought in for winter growing. Herbs can be dried in the oven, open air or microwave oven. Store the dried herbs in tightly closed containers. They will be flavorful up to six months. Herbs can be frozen in individual plastic bags and used as needed.

Before you know it, you will have come full circle to spring again and will be greeted by the perennial herbs in your garden, and will also need to plan what herbs you'll plant.

There are no real rules about using herbs. Some are associated with particular foods or dishes – dill goes with cucumbers, basil with tomatoes, tarragon with salads and vinegar, fennel with fish dishes, and savory with bean dishes. Chop fresh herbs finely to release as much of the aromatic oils as possible before you add them to dishes. Then add them near the end of the preparation process. For herbs on fresh vegetables, draw out the flavor by heating the herbs with butter or margarine. When mixing herbs in salad dressings use tepid oil. Keep the herb flavor subtle. An eighth to a fourth teaspoon of fresh herbs is usually sufficient for a recipe serving four. Dried herbs have a stronger flavor, so use a half to a third less when substituting dried herbs for fresh in a recipe.

Here is a list of herb uses to get you started in a world of flavors:

- Basil in Italian dishes, tomatoes, seafoods and breads.
- Chives for all dishes where a mild onion flavor is sought.
- Chervil with fresh fruits, meats, cheese dishes, eggs and poultry.
- Dill in soups, stews, tomato dishes, fish, most vegetable dishes and salads.
- Marjoram for interesting potato dishes, meats, poultry and salads.
- Mint improves many beverages, desserts and sauces.
- Rosemary gives a special touch to spinach and peas, meats and poultry.
- Sage especially for poultry, fish, meats, soups and sauces.
- Tarragon for vinegar, salads and poultry.
- Thyme can be used freely as a salt substitute.

ORIENTAL VEGETABLES: AN ADDITION TO TRADITION

We have the best of all worlds. A trip to the supermarket and we can discover new tastes in fruits and vegetables that once only seasoned world travelers bragged about.

Nestled between the apples and tomatoes in the store you can find a variety of unusual produce items that are easy to prepare. Once you try them, you'll like them.

As a nation we usually take the best of many cultures and include their foods on an increasingly regular basis. Bok choy, water chestnut and ginger root are an exotic trio. The first is stems and leaves, the second is the bulb of an aquatic plant, the last a root. What binds them together is that they are staples in Oriental cooking, especially Chinese cooking.

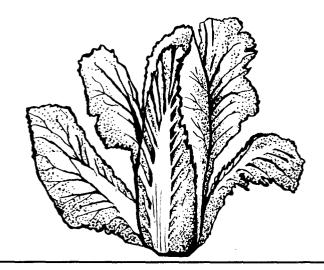
Bok choy resembles a head of Swiss chard or celery. Its thick, white, rounded stalks have broad dark green leaves. All the plant is edible. Its crisp texture and light delicate flavor add refreshing taste to salads. It can be steamed like fresh spinach, or can be shredded and added at the last minute to clear soups, or cut up and stir-fried with other vegetables and meat. Bok choy is also called white mustard cabbage. A cup of cut up bok choy has only 24 calories and is a source of vitamin A, calcium, potassium and iron.

Water chestnuts are so called because they resemble chestnuts. However, they are the bulbs of an aquatic Asian plant and are about the size of walnuts. They have a hard brown husk and a crumbly white, delicately sweet, nut-like interior. They must be peeled before using. In Chinese cooking they are an ingredient of wontons, egg rolls and soups and are used with meat, poultry and fish specialties, as well as stir-fried vegetables. In Occidental cooking the water chestnut adds both flavor and texture to appetizers, salads and casseroles, because it does retain its crispness after cooking. A water chestnut contains about 12 calories, plus calcium, iron and potassium.

The least glamorous appearing item in the specialty section is the golden brown knobby root of the ginger plant. It is from this root, when dried, that ground ginger and crystallized or candy ginger is prepared.

Choose a fresh firm root. Since a little goes a long way, the root can be frozen in an airtight container, or placed in a covered jar and covered with sherry and refrigerated. Stored in a plastic bag in the refrigerator it will keep several weeks. Whenever you want the flavor of sharp fresh ginger, shred, grate or mince a portion of the root. It will enhance the flavor of meat, vegetable and fruit dishes. A thin slice added will flavor the oils used in stir-frying. We use so little of the ginger root at a time that its nutrient content is not significant, although it does contain vitamins and minerals in trace amounts. One tablespoon of grated ginger root equals 1/8 teaspoon of ground ginger.

Here is a refreshing layered **Bok choy chicken** salad with dressing using this exotic trio. In a glass salad bowl add, in layers, 3 cups of shredded bok choy, ½ cup chopped parsley, 1 1-pound can of green beans, drained, ½ cup chopped green onions, 2 cups of cooked chicken pieces, 2 11-ounce cans of mandarin orange segments, drained, 1 cup of sliced water chestnuts (an 8-ounce can may be used) and top with 3 more cups of shredded bok choy. Pour over this a dressing made by blending 1 cup of low fat yogurt, ¼ cup lemon juice, 1 tablespoon oil, 3 slices of ginger root 1/8-inch thick and a very small clove of garlic. Season to taste. Cover and refrigerate. Toss before serving.



THE VEGETABLE MISFITS: KOHLRABI, LEEKS, CELERIAC AND SALSIFY

Some vegetables, like some people, can belong to the same family yet have such different and unusual characteristics that there is little family resemblance. One group of vegetables – kohlrabi, leeks, salsify and celeriac – could easily be called family misfits. Americans have long ignored them, but they have been popular in foreign cookery for centuries. Now interest in ethnic foods has stirred a demand for them in the U.S. Their flavor, texture and nutrients are beginning to enliven our American cuisine. More and more you'll find them in gardens and on supermarket shelves. These vegetables have much in common since they all can be eaten raw or cooked, are sources of vitamin C, potassium, calcium, iron and fiber, and are low in calories.

Kohlrabi is a typical misfit. It is a member of the cabbage family, but instead of a head of closely packed leaves it has turnip-like leaves on long slender stems that grow out of a turnip-like bulb. Both the leaves and the bulb can be eaten. The fresh green leaves can be cooked the same way as spinach. The bulb can be eaten raw, thinly sliced or as a cooked vegetable that can be served with butter or with a sauce. The young bulb with stems and peel trimmed away has a delicate flavor similar to that of turnips and cabbage, but milder and sweeter than either. The kohlrabi is often described as a turnip growing on top of a cabbage root. The Grand Duke variety will bear in North Dakota gardens in 45 days. Seeds are usually seeded directly into the garden.

Leeks are members of the onion family, with a lustier taste than green onions, a milder taste than globe onions. They resemble green onions in shape but their cylindrical stem is much heavier and thicker, measuring an inch or more in diameter. The white stem shades off into broad dark green leaves. Leeks are valued for their subtle yet irrestible flavoring in prepared dishes such as soups, stews and fish preparations. They can be used as a warm or cold cooked vegetable, or served raw as part of an appetizer tray.

The leek is a national emblem of the Welsh. On March 1, St. David's Day, the Welsh wear leeks in their hats to commemorate a victory over the Saxons in A.D. 604 when St. David advised the Welsh troop to wear leeks so they could be identified by their comrades. Although an important vegetable to the French, leeks are of British origin. They grew profusely in both France and the British Isles and were often called "the asparagus of the poor."

Leeks take a good 80 to 90 days to bear from transplants, and 140 days to produce from direct seeding. No varieties are listed for North Dakota gardens, although we bet that some onion lovers have tried them and are successfully growing them. Leeks will produce long white stems if planted 4 to 6 inches deep and the soil hilled up against the stems after the plants are fairly well grown. In milder climates than North Dakota's, leeks are seed-sown in the fall and grown throughout the winter months in as short a time as 90 days when the Giant Musselburgh variety is planted, or in 130 days when the Large American Flag variety is used.

Salsify is a member of the sunflower family that is grown for its root, which has the flavor of oysters. It is sometimes called oyster plant or vegetable oyster. The standard home garden variety, Sandwich Island Mammoth, matures in 120 days. Salsify is usually biennial, growing 2 to 3 feet high. Long-stemmed purplish flower heads appear the second year.

Like carrots and parsnips, salsify grows the best roots in a deep crumbly soil. It is not unusual for the salsify taproot to grow up to 12 inches long and 2 inches in diameter. The roots are very winter-hardy and can be harvested in the winter or spring. Because salsify discolors readily when sliced, it must be immersed in water containing vinegar or lemon juice as it is prepared.

Celeriac or celery root is a member of the celery family but is cultivated for its celery-flavored, irregularly-shaped globe root that has brown skin and lots of tiny rootlets. The tops are not eaten. It can be substituted for celery in recipes. It can be eaten raw, but because it tends to discolor when raw, and is easier to peel when cooked, cooking is recommended. Celeriac is becoming very popular in the United States and is available in markets in the fall.



A NEW SHAPE IN THE VEGETABLE WORLD – SQUARE!

A new produce concept - monogrammed vegetables grown in precise geometric shapes such as cubes - may soon be popular among haute cuisine restaurants. "Vegetable Arts" veggies, as they are called, were introduced the summer of 1986 in the Atlanta area, and customers welcomed them with enthusiasm. One supplier claimed that he "couldn't keep enough of the product."

Production techniques are shrouded in secrecy, but some are known. A northern Georgia grower has perfected a method of building molds around the blossoms of certain vegetables to create mature produce of predictable size and shape.

Zucchini and cucumbers with 1.5-inch flat sides and square corners were successfully produced, and each piece was individually embossed with the "Vegetable Arts" logo. Both the zucchini and cucumbers were priced at \$4 per piece, packed 10 per box. Obviously aimed at upmarket customers, the square vegetables will never be large volume items.

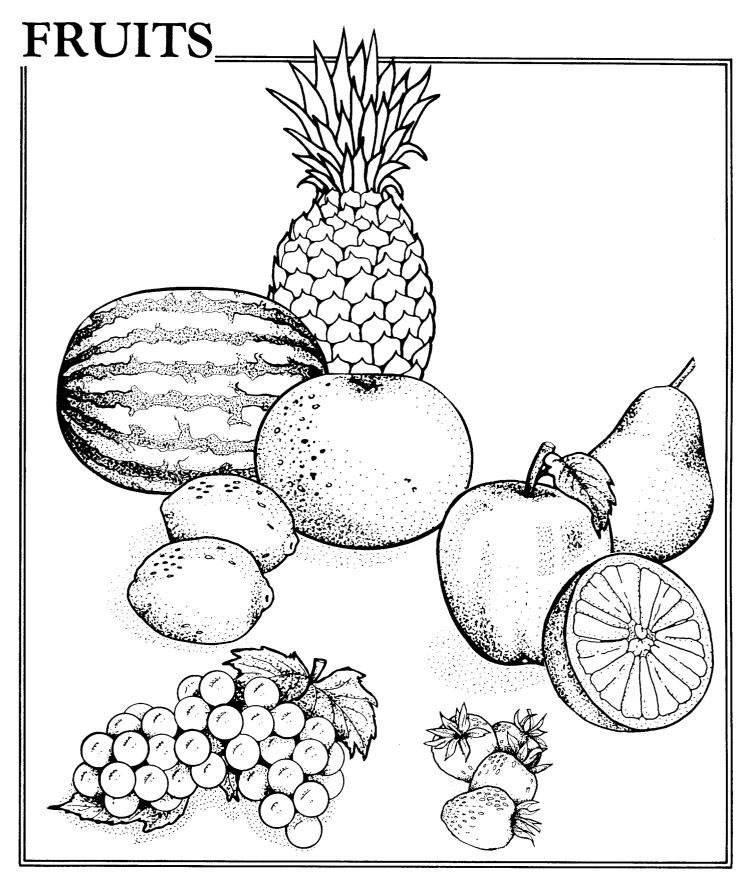
But specialty purveyors predict the squared produce will serve as an alternative to minivegetables for upscale restaurants, airlines and caterers. With a guaranteed minimum length of 6 inches for each individual vegetable, chefs will know how many slices (approximately 45) can be obtained from each, and how many plates they will cover.

Not unnoticed is the embossing technique. Chain hotels and airlines are planning to mimic the idea, creating snob appeal with monogrammed vegetables.

The square pumpkin was introduced for Halloween of 1986. Newer models include pentagonal and pyramidal squash, and possibly cubical tomatoes.

With modern extrusion processes, virtually any shape is possible. Look for molded, monogrammed vegetables to reach the North Dakota market through some of our finer restaurant or hotel chains.

Can we expect some local entrepreneur to grow geometrical North Dakota produce, and sell it through an outlet in one of the state's major population centers?



AUTUMN'S APPLES

Apples – they're part of our culture (and our pies) and a staple food we can depend on all year long. Nothing can equal the sound, or the experience, of the first crunch as you bite into a rich red (or yellow or green) apple. Once you've got that delight into your mouth, a quick lick with the tongue and you can catch that juice that's just about to course into your hand.

Our love of apples is clearly shown when we call something we prize "the apple of our eye" or win over our teacher with a gift of an apple or ask a favor by "apple polishing" or call New York the "Big Apple."

The apple is truly king. We purchase more apples than bananas, oranges or any other fruits, and Americans eat, on average, more than 18 pounds of them per person every year. Apples and America grew up together. The first American apple orchards were planted soon after the Pilgrims arrived. As our forebears moved westward they took the apple with them. The famous Johnny Appleseed, a real person, helped this westward movement of the apple by preaching apples and by planting apple seeds as he traveled.

Over the centuries more than 7,000 varieties of apples have been recorded. Today about 100 are grown commercially in the United States, and about a dozen varieties provide 90 percent of the 160 million bushels grown annually. Not all apples are eaten fresh. About 50 percent of the crop is processed into apple sauce, juice, cider, slices and other products that are frozen or dehydrated. After November 1, virtually all the fresh supply of apples comes from controlled refrigerated storage, and this supply source takes us through winter and over the spring months.

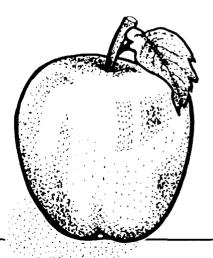
Each apple variety has a definite flavor, color and texture. Some are best for eating out of hand, others best for sauces, puddings, pies or cobblers. But there are no hard and fast rules.

The most popular eating apples are the Red and Golden Delicious. The Winesap, McIntosh and Jonathan are all-purpose apples and the Rome Beauty is best for cooking and baking. Apples contain vitamin A and C. Their acidity and fiber are aids to digestion, and a crisp raw apple helps cleanse the teeth. A medium apples has 75 calories.

Most areas of North Dakota can grow some variety of apple, for there is a wide range of ripening seasons in the state, allowing ripe apples from August through October, starting with the Hazen apple in August and ending with the Haralson cultivar. The basic requirements for good apple production are a well-drained soil, a source of water in case of extended drought, and plenty of sunlight. Plant at least two cultivars to obtain good pollination of the trees. In caring for apple trees, do not be too anxious to prune for the first few years. Excessive pruning will only delay fruit setting and impair proper establishment. From the third year on, prune with the objective in mind that you want to get at the fruit when the tree starts to bear in about the fifth or sixth year. Pruning is best done in late March. Try to create a central leader with scaffold branches growing as horizontally as possible. Try to have a branching system develop which will allow good light penetration.

Some common and easily grown varieties in North Dakota are Hazen, Mandan, Dakota and Haralson (or the new bud sport Haralred). McIntosh is a very popular apple as well, but is highly susceptible to apple scab. A homeowner wanting to grow this variety must be willing to follow stringent control measures.

Crabapples differ in size from the standard eating apple. Literally endless varieties are available for the homeowner, ranging from Red Jade which produces marble-sized fruit, to Chestnut which produces fruit larger than golf-ball size. As with the standard eating apple, be sure to select cultivars hardy for our state and resistant to apple scab.



ACCENT ON APRICOTS

During one of my trips around the northern part of the state presenting some horticultural information, I made the remark that this region is too far north to grow apricots. I was immediately challenged – and proven wrong – because a farm in Antler, North Dakota, is growing three apricot trees – two Moongold and one Sungold. As I stood there eating my words, I asked if I might be invited back to taste some of the delicious fruit. The invitation was extended.

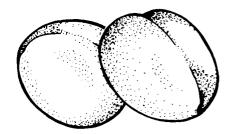
To grow in North Dakota, as my mentor in Antler pointed out, apricots need ample winter protection. Usually surviving the winter's ferocity, the buds often succumb to an early spring frost because of their early opening habit. Protect them with smudge pots, sprinkler irrigation or by wrapping some of the branches in wet burlap on the frost nights. Select only the Sungold and Moongold cutlivars for growing in our region.

Contrary to what the Latin name of apricot implies, *Prunus armeniaea* is not from Armenia. It has been traced, for at least the past 4,000 years, to regions in China. While Alexander the Great is credited with discovering this fruit, along with the peach, it is the Arab culture which is responsible for the apricot's heavy cultivation in the southern and eastern Mediterranean regions. In eastern countries, near where the apricot originated, it is given the beautiful name of "Moon of the Faithful."

The fresh apricot season is from May to August, so enjoy them fresh while you can. Only about 6 percent of the crop is eaten fresh, 70 percent is canned and the rest is frozen or dried. California leads our nation and the world in apricot production. No matter in what form you eat them, you're getting a high concentration of vitamin A, C and iron, and only 18 calories per fruit.

When selecting fresh apricots, choose the plump, well-formed ones that are deep yellow or yellowish orange. Unripe ones are firm and yellowish-green and can be ripened in a closed paper bag at room temperature, then refrigerated. One pound is about 12 medium apricots and equals 3 cups of slices or 6 half-cup servings.

Since **apricots** claim their beginning in China, it is appropriate to include them in an **Oriental Salad**. Arrange the following on a large platter in groups: fresh spinach, apricot halves, slices of chicken and beef, cut-up green onions, celery chunks and slices of fresh mushroom. Serve with two dressings. First, an oriental dressing of 2 tablespoons each of lemon juice and soy sauce, 2 teaspoons of sugar and ½ teaspoon of chopped ginger root. Plus a paprika dressing of ¼ cup each of salad oil and vinegar, 1 beaten egg, ¼ teaspoon each of dry mustard, paprika and sugar. Blend this last and cook slowly until mixture thickens.



THE **AVOCADO** IS A CUSTARD APPLE... OR BUTTER PEAR?

The avocado, unlike the rose, has been called by many other names – custard apple, butter pear, vegetable pear and alligator pear. But by any other name it's still a nutritious, buttery and abundant fruit-berry.

Originating in Central America, *Persea americana* is now grown extensively throughout the warm regions of the world. Most fruit for U.S. consumption comes from California, Florida and Hawaii. California avocados are available all year round while the larger Florida avocados are available from August through January.

The avocado is packed with 11 essential vitamins, with A and E leading in quantity though vitamin C and B vitamins are well represented. Minerals also abound: the fruit is an excellent source of potassium and iron. Although smooth in texture, the avocat, as the French call it, does provide some essential dietary fiber. Its gentle flavor and easy digestibility make it excellent for children and seniors alike. Half an average avocado contains approximately 132 calories; a tablespoon contains 19.

You don't need a recipe to enjoy the versatility of avocados. They are at full flavor when they yield gently in your hand. Slice them crosswise to make rings, or cut them lengthwise and twist gently to separate the halves. Whack a sharp knife directly into the seed and twist to lift it out. Sprinkle the halves with lemon or lime juice to prevent them from browning.

Use halves, peeled or unpeeled, as cups for all kinds of salads. And there's nothing to match a fiery dish of guacomole made of pureed avocado, spices, chili peppers or tomatoes.

Make a unique **salad dressing** with the richness of oil from blended avocado and lemon or lime juice.

Sliced thinly, avocados make delicious sandwiches and additions to salads. Literally, most dishes can be complemented with avocados in some form or another.

Within each avocado fruit is a large seed. Rather than discard it, why not grow it as a houseplant? To try this, thoroughly wet the seed and allow it to dry in a sunny window. Place the seed in a container of well-drained soil, with the basal or wider end down. Keep it moderately moist and in a warm, sunny window. In 30 to 40 days the embryonic root will emerge from a split seed. Then the cotyledons will emerge from the apical or top end of the seed. Germinating avocado seeds are fascinating to watch and can be sprouted in a glass filled with water, propped up with toothpicks; as houseplants, they typically become leggy and ungainly after only a couple of years.

A characteristic unique to cultivars of avocado trees is their flowering habit. All avocado flowers are perfect, having both male and female parts. When a flower first opens, its pistils or female parts are receptive to pollen, though no pollen from the same flower is present. Upon the second opening the next day, the stigma or male parts are shedding pollen, but the pistils are no longer receptive. This behavior is termed type "A." The type "B" cultivars of avocado have just the opposite cycle, allowing for cross pollination to take place.

Avocados keep best on their trees. They remain hard and green until picked. As ripening takes place, the fruits soften, and this occurs best at room temperatures. Like bananas, avocados can be bruised easily by rough handling. If accelerated softening is desired, wrap the fruit in aluminum foil.

To the one who said, "An avocado for every dish, its seed in every (flower pot)," goes acclaim for words well chosen.

THE **BANANA** – AN INEXPENSIVE AND TASTY FRUIT THAT'S NOT FOR MONKEYS ONLY

In spite of all the fun poked at them – monkeys snacking on them, comedians slipping on their peels – bananas are a perfect fruit for hard-working Americans. They are a neatly portable, quick energy, low calorie pick-me-up everyone can enjoy at break time in the field, at the construction site, or at school or the office.

A typical 6-inch banana contains only 85 calories, along with generous amounts of vitamin A, vitamin C and B vitamins. As citrus are known by the public to be excellent sources of vitamin C, so bananas are rightfully known for their high potasium, plus iron, calcium and phosphorous.

You may not have thought about it this way, but bananas come in three delicious flavors – green tipped, full yellow, or speckled for baking or broiling. The full yellow is best for eating fresh. And the speckled is best when you want a banana at its sweetest and most tender to mash it for baby food, baked goods or milk shakes. Unlike some other fruits or vegetables, bananas do not have a peak season. They are good, inexpensive and available all year round.

Bananas can be recommended for young children to help prevent diarrhea; their high pectin and fiber content helps to restore normal digestion in the gastrointestinal tract. For the older person, their soft texture makes them easy to eat and digest.

But some people see a problem with bananas, and ask "How do you eat one without aping the monkeys?" One suggestion is to lay a banana on a plate and slice away one panel of the peel with a knife. Then, holding the remaining fruit still safely ensconced in the rest of the peel, cut it into little sections and fork it out.

The banana, Musa species, is a perennial herbaceous plant which will grow from 7 to 30 feet high. It must be grown in a region which is continuously warm to be profitably productive. Probably it originated in East Asia and was spread throughout the tropical world by explorers. Through cultivation and genetic improvement, this once seedy and unpalatable fruit is now seedless and is reproduced through vegetative parthenocarpy.

Bananas are picked mature and green for shipping. The stems of banana reach the grower's produce facilities in the United States from four tropical countries and then are cut into "hands" which consist of a cluster of eight to 12 "fingers" of individual fruit. Even if you lived in one of the banana producing countries, you would choose to harvest mature, green bananas and allow them to ripen off the mother plant, as they would do so more uniformly, producing better flavor.

Bananas belong in all lifestyles. They suit the way we cook and eat – fast and easy. And they stay with you for that feeling of satisfaction. Start the day peeling and slicing one over cereal and then use them in sandwiches, salads, as snacks, with main dishes, desserts, baked goods and beverages.

CHERRIES - A SUMMER JUBILEE.

Our family's patio pleasures peak when we can laze in a lounge chair eating a big bowl of red sweet cherries and competing to see who can pitch pits farthest onto the lawn where birds and squirrels vie for them. We have been enjoying cherries like this for many years, and as a result now have an 8-foot cherry tree: long ago a far-thrown seed landed in the garden, took root and grew. Its fragrant blossoms are a reminder of eating pleasures to come.

We seldom freeze or can sweet cherries, but you can. We enjoy their fresh goodness while the cherry season lasts. Unfortunately, sweet cherries don't grow in North Dakota, and North Dakotans must generally settle instead for growing the sour types which can be used for jellies and preserves. In this category, select Meteor and Northstar varieties.

The Chinese probably were the first to cultivate cherry trees. We do know that cherries came to America with the European colonists and have been a summertime treat here ever since. Today the United States, Romania, Germany and Italy have the largest production of sweet cherries. First cherries on the market will come from California, starting around the end of May. Others will come from Washington, Oregon, Michigan, Utah and New York.

We grow many varieties in the United States but the two general categories are the sour with tart flavor and the dark red sweet. The Sweet Bings and Lamberts are grown on the West Coast. Sour varieties are grown east of the Mississippi River. Most of the sour cherry crop is commercially canned as pie cherries, jams, jellies and pie fillings. Sweet cherries become riper and deeper red the longer they stay on the tree, and are usually sent to market within 24 hours of picking. They don't ripen after picking. When buying them look for firm, glossy, fresh-stemmed fruits that are mahogany red or darker in color. Brown discoloration indicates decay. Handle cherries carefully. Sort and wash them before using. Store in the refrigerator in plastic bags.

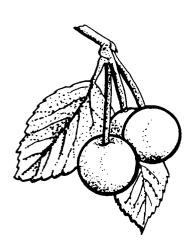
Sweet cherries are usually eaten fresh. Fifteen cherries contain about 70 calories, plus small amounts of vitamin A, C and other vitamins and minerals. They are versatile and make great additions to other fresh fruit dishes.

For instance, combine pitted cherries with melon balls and seedless green grapes and a splash of ginger ale and sprig of mint for a chilled **fruit cup**.

Cooking robs sweet cherries of their fresh taste but they can be poached as in this recipe for Cherry Ruby Red Sauce.

Cherry Ruby Red Sauce. The sauce can be spooned over ice cream, pound cake, angel food cake or custard.

Combine 2 cups of pitted cherries with ¼ cup sugar, ¼ cup corn syrup, 2 tablespoons of cornstarch blended in 2 tablespoons water and ½ cup water. Cook over low heat until thickened and then stir in 1 tablespoon of lemon juice. Chill.



CRANBERRIES - AN AMERICAN TRADITION

If you lived in Cranberry Country you'd know that harvest time is a six-week frenzy that begins in late September. Bogs for miles around are flooded and transformed into lakes of brilliant red berries as waterwheels churn the water and dislodge the cranberries from their vines. Then growers wearing chest-high waders step in and corral tons of floating berries, and float them to where they can be propelled by elevators into waiting trucks.

Cranberry Country extends from Newfoundland to North Carolina and as far west as Minnesota and Arkansas. Massachusetts, where commerical production began in about 1820, produces almost half the world's supply, over 800,000 barrels annually. Other important commerical cranberry bogs in the United States are in New Jersey, Wisconsin, Oregon and Washington.

Cranberries were among the first gifts the Indians brought to the Pilgrims back in 1620. The Indians ate the fresh berries, and also dried them and mixed them with dried deer meat and fat to make pemmican. They used crushed berries as a poultice, and used cranberry juice as a dye. The word cranberry was a contraction of crane berry: the pale pink blossoms of the fruit resembled the heads of cranes who frequented cranberry lowlands to feast on the ripe berries.

Although cranberry plantations are called "bogs," the fruit does not grow in water but on swampland near a water supply. The water provides frost protection and irrigation. Swamp areas are cleared of trees and brush, water is drained to a depth of 18 inches. The peat soil is spread with sand and cuttings of vines are planted deeply. The vines spread much as strawberry plants. A cranberry bog bears fruit once a year in September. The berries were once handpicked but now there are a variety of mechanical

pickers to do the job. Yields range from 65 barrels per acre to over 180 barrels in states like Massachusetts and Oregon. Before being packed for consumers the berries must go through a mechanical separator that allows each berry seven chances to bounce over wooden barriers four inches high. A good firm berry will bounce – a soft one won't and is discarded.

Eating cranberries at holiday feasts has been an American tradition since those first settlers learned to eat the berry over 300 years ago. We usually see cranberries today on a holiday dinner plate as a sauce accompanying roast turkey and sweet potatoes.

Cranberries are low calorie fruit – 1 cup contains 46 calories – but are often cooked and sweetened to contain 178 calories per half cup. Besides being a source of vitamin C and iron, the cranberry has many low calorie preparation possibilities.

Two cups of fresh ground cranberries can be combined with a cup of chopped celery and a cup of chopped apple to make a **tangy relish**.

Chopped fresh **cranberries** can be added to **coleslaw**.

To make a **quick cooked relish**, add to 2 cups of cranberries a half cup of water, a half cup of snipped dates, a fourth cup of raisins, a dash of cinnamon and ginger, and 2 tablespoons of lemon juice. Bring to a boil and cook for about 10 minutes while stirring. Chill before serving.

Or a cup of whole cranberry sauce can be added to 4 cups of baked pork and beans - the combination is a special treat.

A number of canned cranberry products are available, plus bottled, frozen or boxed cranberry juice, or cranberry juice with combinations of other fruit juices.

The supply of fresh cranberries at the supermarket diminishes after the holidays, but packages of fresh berries can be frozen for later use.

You may have missed the harvest in Cranberry Country, but don't miss enjoying the results.

TYPICAL HOLIDAY FRUITS - DATES AND FIGS _____

Holiday baskets and tables will be graced this year, as they have for many years past, with the seasonal fruits from date and fig trees. Both fruits originally came to America from eastern and southern Mediterranean regions, but are grown extensively in California.

Dates are the fruit of stately date palms that grow over 100 feet tall and first grew clustered around fresh water wells in desert oases, providing shade for caravans. They are dioecious, and could be propagated by transplanted suckers or "pups" that arose from the fruit-producing trees. One good male tree for every 30 to 50 females will provide enough pollen for good fruit set.

Today pollination is carried out artificially. When the fruits have begun to ripen, they are wrapped with paper to protect them from weather and birds. When fruit moisture is below 18 percent, the dates are harvested mechanically. The cultivars we enjoy in the stores are usually the Deglet Noor or Zahidi.

Not only does the date palm provide essential food and wine, but its leaves can be woven into roofs, walls and baskets, and its fiber can be used in ropes. The pits of the date can be roasted and brewed like coffee. The date palm was indeed a tree of life to ancient Middle Easterners.

Dates are available all year long but are most plentiful during the holiday season. The harvest season is September through February. They are sold pitted or unpitted, whole or chopped or diced. Store them tightly covered at a cool temperature. Good quality dates are a rich brown color with a whitish membrane between the flesh and pit. A pound of unpitted dates equals $1\frac{3}{4}$ cups; a pound of pitted dates $2\frac{1}{2}$ cups.

Dates are mostly used as a confection for eating out of hand or in baking. Dates stuffed with nuts or cheeses may be added to fruit plates. Because they are about 70 percent natural sugar – dextrose and levulose – they are called the "candy that grows on trees." They do contain some of the B vitamins, and calcium, iron, phosphorus and copper. Ten pitted dates contain 219 calories.

Figs grow on smaller trees and cling tenaciously to the branches. Pickers wear cotton gloves and must twist the stem to pick the fig, or must cut it from the tree with a knife. Figs, like dates, are a good source of natural sugar for quick energy. Ten dried figs contain 400 calories plus iron, calcium and phosphorus. A fresh fig has about 40 calories. Figs are especially suited for eating out of hand and for garnishing salads and fruit compotes. A fig is not a fruit in the strict botanical sense, but a hollow, fleshy receptacle with many true fruits or seeds inside it. Its seedy characteristic adds texture and interest to foods. Store fresh figs in the refrigerator and use soon after purchase. Store dried figs as you do dates.

YEAR-ROUND **GRAPEFRUIT**AND SEASONAL **TANGERINES**

A half grapefruit or a glass of its juice is the perfect way to begin the day and perk up morning appetites. Either one will supply more than half the daily need for vitamin C, plus 132 milligrams of potassium and appreciable amounts of thiamin (vitamin B₁), with only one milligram of sodium and 40 calories.

Originating in the West Indies around the beginning of the 18th century as a somatic mutation in the pomelo, or as a hybrid between pomelo and sweet orange, this lively flavored fruit is borne on a vigorously growing tree which can reach 50 feet in height. Over 3.5 million tons of grapefruit are produced worldwide each year, and 70 percent of this production comes from the United States.

Grapefruit has white, pink or ruby flesh. Generally best on the market from mid-November until the end of May, this tree-ripened fruit is definitely one which will benefit from longevity on the tree. Thirty extra days on the tree will usually result in a distinctly sweeter and less acid fruit. Red Bush and Ruby Red are pink selections. Marsh, the white selection, is highly acid and nearly seedless.

To avoid being disappointed, select grapefruit by weightfor-size. Heavier ones are the best potential selections. Grapefruit, like most citrus products, will keep for a week to 10 days at room temperature and three weeks or longer under proper refrigeration in a plastic bag.

The zipper-skinned tangerines are a delight to see in the dead of winter. The Algerian tangerine, the Clementine, is the most popular because of its nearly seedless character and sweet flesh. Dancies, Fairchild, Kara and Kinnow are other popular favorites.

The fruit is available on the market from November through January, is deep orange, seedy and easy to peel. Yields are irregular, causing wide annual fluctuations in price. When plentiful, tangerines are inexpensive. When they are in short supply, expect to pay a higher price.

Like other members of the citrus family, tangerines are an excellent source of vitamin C and can be used any number of ways:

- 1. Remove seeds from segments and puree for a delicious juice.
- 2. Substitute tangerines for oranges in cranberry relish.
- 3. Add tangerine segments to your favorite cheese cake recipe or substitute them for lemon in lemon meringue pie.

4. Tangerine Citrus Slaw

4-6 servings

1½ cups of shredded cabbage

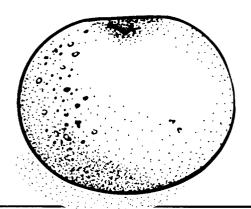
2 tangerines, peeled and sliced (save juice) 1/4 cup raisins

3 tablespoons mayonnaise

Place cabbage, tangerines and raisins in a salad bowl. Blend mayonnaise with tangerine juice from slices. Add to cabbage mixture. Toss. Chill. (Oranges may be substituted.)

5. Grapefruit Tuna Salad

Arrange salad greens on serving plate. Place ½ of a 3-ounce can of tuna chunks in the center and surround with cucumber slices. Top with grapefruit sections. Garnish with radish slices. Serve with a low-calorie dressing.



GRAPES

- ONE OF NATURE'S FINEST FAST FOODS.

Anywhere, anytime, grapes are a light, refreshing, quick-energy, no-mess, bite-sized convenient food. A cupful holds only about 100 calories.

More than 8,000 varieties of table, wine and raisin grapes are grown throughout the world on more than 75 million acres of land, making grapes the world's biggest fruit crop. California grows 14 major varieties of table grapes and produces about 97 percent of the U.S. supply. Other varieties are grown for raisins, wine, juice and canning. Some varieties of grapes are suitable for more than one use, some for all uses.

Table grapes, available year round, range in color from pale green to deep purple. At the store choose bunches that are well formed with high color for the variety and with stems that look green and fresh, not dry and brittle. Grapes are shipped vine-ripened, so will not improve in quality or ripen further. Store in refrigerator and wash just before eating.

Grapes offer a color, flavor and texture contrast in all types of recipes, and in meals from brown bag to gourmet. They go quickly on a picnic or hike, camping or fishing trip. They can be your salad with a hamburger, barbecured chicken or fresh-caught fish.

Two of the world's wonders, grapes and cheese, complement each other. The spring and summer green Perlettes and Thompson Seedless go with the mild creamy cheeses while the fall and holiday varieties such as Tokay and Ribier grapes go with the zestier cheese.

Nobody produces grapes commercially in North Dakota but home gardeners grow both hardy and tender varieties with varying degrees of success. Beta, Valiant, Fredonia, Edelweiss and Swenson's Red are most commonly grown. The Beta is a producer of small, sour fruit, good for juices and preserves; Valiant is a better table grape and comes in earlier. The rest are excellent table grapes and may require some special winter protection.

All year round, colorful grapes are an inviting edible centerpiece or garnish for molded salads, baked hams or the roasted holiday turkey.

Here is a recipe that transforms itself into an extravagance – **Grape Ambrosia**. For six servings you'll need:

1 3-ounce package of strawberry gelatin

2 cups boiling water

1 cup cultured sour cream or plain yogurt

1 11-ounce can of mandarin oranges, drained

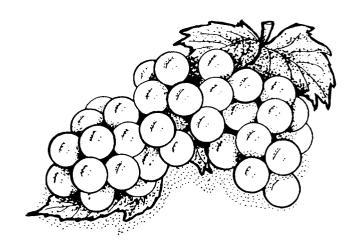
2 cups grapes, seedless or seeded halves

1/4 cup chopped walnuts

½ cup toasted coconut

1 cup miniature marshmallows

Dissolve the gelatin in water. Pour into 8-inch cake pan. Chill until firm. Mix together other ingredients, except coconut. Cut gelatin in cubes. Fold into mixture. Spoon into dessert dishes and garnish with coconut.



KIWIFRUIT IS NEW AND NUTRITIOUS

Kiwifruit, or Yang Tiao, originated in the Chang Kiang valley of China and was considered a delicacy by the court of the great Khans. In addition to being packed with more vitamin C than its weight in oranges and almost as much potassium as a six-inch banana, it contains a meat tenderizing enzyme, actinidin. Consequently, the fruit can be added to meat marinades.

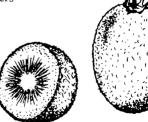
Easy to serve, the kiwi can be cut in half and its pulp scooped out with a spoon, or the brown skin can be peeled and the fruit slices, cut into wedges, cubed or pureed. Sliced or cubed, it can be very tastefully combined with other fruits, such as sliced bananas and mandarin oranges.

The kiwi berry was introduced to New Zealand, where it flourished to the point that the New Zealanders began exporting it to the United States. Here it languished for decades as a specialty crop. Gradually, California growers got into the act by providing some fruits during New Zealand's off season, and in the past few years they have done a credible job of removing kiwifruit from the specialty classification and pushing it to full-scale production. Currently 8,000 acres are planted to kiwifruit vines and if market demand meets expectations, more will come. The California kiwifruit deserves the consideration of established kiwifruit lovers and newcomers alike, and not just because we say so...nutritionally, it is hard to beat. In addition to containing vitamin C and potassium, it is high in fiber, considered sodium free, and contains vitamins A and E, the B vitamins, iron, calcium, copper and magnesium – all for only 45 calories.

Kiwifruit, which is also known as gooseberry and Chinese gooseberry, grows on a vine and is trained to a trellis, much as grapes are grown. Raising kiwifruit is labor intensive, but the income justifies the work. Some growers are reportedly grossing \$5,000 an acre.

To select a good kiwi berry, look for good sized fruit that is smooth and firm, but not rock hard. The fruit should be free of any bruises or cuts. To determine when the kiwi is at the peak of ripeness, gently squeeze the flesh, and if there is a little give to it, the kiwi is ready to eat. Generally, kiwifruit can be stored for a week to 10 days at room temperature. To ripen the fruit quickly, place it in a plastic bag overnight with an ethylene producing fruit such as an apple or ripe banana.

Kiwifruit contains an enzyme that will prevent gelatin from setting, so use kiwifruit only as a garnish for gelatin salads.



SMALL FRUIT WITH BIG TASTE: LEMON, LIME, KUMQUAT___

The piquant lemon, lime and kumquat are fruits particularly useful for bringing out flavors of vegetables, and for people on low-sodium diets.

Lemons and limes appear on trees that are among the fastest growing and least hardy of the citrus family, and both fruits are good sources of vitamin C. They can be used to make flavorful drinks, to zest up meats, seafoods or salads, and to bring out the good natural flavor of many foods. Their juice and grated rinds may be used to make jams and jellies, or in ice creams, sherbets, pie fillings, beverages, breads and sauces. They can be safely used in low salt diets to enhance the flavor of food.

Eureka is the standard market lemon, but look also for Meyer, Lisbon and Ponderosa. The latter is a giant bumpy fruit with thick skin and mild flavor. The two basic limes are the Key – also known as the Mexican or West Indian – and the Persian.

Buy lemons and limes with smooth firm skins and no blemishes. They can be kept at room temperature for a week to 10 days and for six weeks or more in the refrigerator. Before juicing them, leave at room temperature, then roll them on a flat surface until soft. Grate the peel before cutting the lemon or lime to juice it. Both juice and grated peel can be frozen.

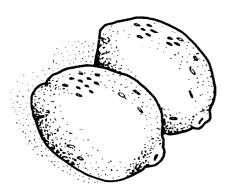
Simple citrus sauces not only bring out the flavor of vegetables, but are easy to make. For instance, here's a herbed lemon sauce for vegetables:

Melt three tablespoons of margarine or butter in a saucepan or in the microwave. Add the juice and grated peel of one lemon, one tablespoon of chopped parsley, and one-quarter teaspoon of oregano or basil. Heat the mixture, then serve it over cooked cauliflower, lima beans, peas, broccoli or spinach.

The kumquat is oval or round, orange-colored, the size of a small plum, and ripens from November through March. Choose firm kumquats that are heavy for their size, and refrigerate them to prevent their drying out. The fruit has a sweet skin and tart flesh, and can be eaten fresh, cooked or candied. Kumquats make a perfect garnish for roast fowl, especially duck.

The kumquat originated in southeast China and its name comes from a Chinese word which incorporates the meaning "gold." Preserved kumquats are a staple Chinese dessert. They are most flavorful when cooked, but can be eaten raw when they are very ripe, as in this **kumquat compote:**

Mix one-half cup of sliced kumquats, one cup of orange slices, and two apples cut into thin slices. Chill. Just before serving, sprinkle with toasted slivered almonds.



MELONS,

SUMMER FRESH AND SUMPTUOUS

If you think the only thing you can do with melons, whether cantaloupe, honeydew, crenshaw or watermelon, is to cube, ball or slice them, you need only apply a little imagination and you'll come up with a bumper crop of dishes.

For starters there are **coolers** with a cup of cut up melon, a cup of milk and a scoop of ice cream all buzzed up in a blender. You'll have a frothy drink to pour into frosty glasses.

How about a colorful combination of melon balls (cantaloupe for a special flavor), bite-size pieces of spinach, green onion finely chopped and thin slices of zucchini? Over this pour a dressing of ½ cup vegetable oil, 1 tablespoon of vinegar, ½ teaspoon each of Dijon mustard and celery salt.

Or, arrange melon balls, cubed cheddar cheese and cubed ham on a platter. Place a bowl of dip of blended 8 ounces cream cheese, 2 tablespoons milk, ¼ teaspoon ground ginger, slivered almonds and sherry flavoring. Serve with wooden toothpicks or fondue forks.

Lots of carefully planned menus are ending up with melon compotes of several kinds of melon balls served with a dollop of lime or lemon sherbet.

Melons are about 90 percent water, low in calories with about 50 calories per cup, good sources of vitamin C and excellent sources of vitamin A.

If you are confused about whether it's a muskmelon or a cantaloupe – all cantaloupe are muskmelons. Muskmelon is a proper name for the group that includes cantaloupe, Persian, honeydew, casaba and crenshaw. Cantaloupe and Persian melons are net-skinned and most familiar. The other three are smooth skinned. The honeydew is creamy yellow with pale green flesh, while the buttery yellow casaba is globe-shaped with pointed stem end and white flesh, and the crenshaw is pear-shaped with green and gold skin and salmon-colored flesh. These melons originated in Southern Asia.

On the other hand, although watermelon are of the same gourd family, they originated in Africa. They grow in round and oblong shape and the flesh is usually bright red.

Choosing a melon from your own home garden is one of the pleasures of gardening. But how do you determine when it is ripe? Muskmelons are easily picked at just the right stage. They have their own built-in ripeness indicator: when ripe they easily separate from the vine with a gentle tug. Until this full "slip stage" the melon will remain firmly attached to the vine. Most muskmelon varieties develop a yellowish or golden color as they mature, another indicator of ripeness.

Watermelon are not so easy. It takes a considerable knack to select a perfectly ripe melon every time. One indication of approaching ripeness is a dead dry tendril by the watermelon's stem. If immature it will still be green and alive. Watch the color change that will occur on the melon where it rests on the ground. It usually changes from creamy white to yellow. The melon's skin will lose its glossiness and become slightly duller and rougher at maturity.

The "thump test" is to rap your knuckle or snap your fingers against the melon and listen for a dull sound, sometimes described as being similar to thumping a rubber ball filled with water.

Since watermelons do not separate from the vine at maturity, there is still one final ripeness test if all the others do not produce a ripe melon every time. Cut a wedge-shaped plug out of the melon and sample it.

For those who must buy their melons, the cantaloupe and Persian melons will have a slightly indented scar at the stem end. If the stem is still attached, the melon is immature. The netting should cover the melon and stand in bold relief and have a yellow tinge below. There should be a delicate aroma and seeds will rattle if the melon is shaken.

When buying a watermelon, use all the same ripeness indicators given for choosing one in the garden. When you purchase a melon in halves and quarters, you can judge its interior for ripeness by looking for a bright color, minimum of white flesh and black or brown seeds as opposed to white ones.

Hold melons at room temperature a day or two to allow the meat to soften and become juicy. If they are ripe when purchased, refrigerate them in moisture-and vapor-proof wrap to prevent the aroma from penetrating other foods. Watermelon is best served chilled. Muskmelons taste best at room temperature.

ORANGE LOVERS, DID YOU KNOW THAT.

Americans consume about 30 pounds of oranges per capita per year! One orange per day or 6 ounces of orange juice will provide an average day's requirement for vitamin C. Oranges abound in supermarkets from October through June and vary in juiciness, flavor and color. Currently, two types of oranges dominate the market, the juice oranges (Valencias) from Florida and the navels (the eating oranges) from California and Arizona.

Oranges originated in southern China thousands of years ago, but did not reach Europe or the New World until the end of the 15th century. Now they are the most popular and widespread of the citrus fruits, with world production around 30 million tons per year. While most fruits which grow satisfactorily in the subtropics do even better in the tropics, the citrus fruits are a notable exception. While the marginal conditions of frost, hail, wind and soil salinity make citrus growing a risky business in the subtropics, it is in these regions that quality and quantity are the highest.

Most Americans have come to understand the importance of citrus products and the vitamin C they supply in their diets. A good supply will help to resist infections, heal wounds, strengthen blood vessels, absorb iron from food and absorb calcium. Also, vitamin C is needed to form connective tissue and helps the body use protein and carbohydrates efficiently.

For North Dakotans, growing orange plants from seed as houseplants is a relatively easy task. Simply rinse the seed extracted from the fruit pulp, plant in standard potting soil and stand back! Germination is usually immediate if the seed came from ripe fruit. The reward, besides a green plant, may be the sweet aroma emanating from the blossoms.

Juice oranges, found mostly in Florida, provide 85 percent of all juice consumed in the United States. The remains from the juicing process, the pulp and skin, find an economic use as well. The pulp is dried and used as a very high quality cattle feed; the peels contain essential oils which are used in producing aromatic products.

The change in color which occurs as the fruits ripen is due to the gradual breakdown of the chlorophyll (green pigmentation) in the skin until the remaining pigments are xanthophyll and carotene, giving the fruit its yellow or orange color. In some cases they are sprayed with yellow pigments before going to market. Neither process harms the nutritional quality of the fruit, but the longer the oranges are allowed to tree ripen, the sweeter they tend to be.

Besides eating them out of hand or converting them to juices, oranges can be used –

* in Orange Juleps:

6-8 servings

1 can frozen orange juice (6 ounce) 1 quart of apple juice orange and lime slices

Blend; pour over ice, garnish with slices

* or in Orange Floats:

4 servings

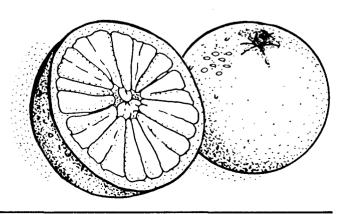
1 can frozen orange juice (6 ounce) reconstituted 2 scoops of vanilla ice milk ginger ale or club soda

Pour one half cup of orange juice into each glass. Add ice milk and remaining orange juice and fill with club soda.

* or make Spicy Orange Chicken Bake:

Brown the floured chicken pieces of 1 fryer chicken. Place in baking dish. To 1 cup of orange juice, add 2 tablespoons each of brown sugar and vinegar, 1 teaspoon each of mace and basil and 1 minced clove of garlic. Mix well. Pour over chicken. Cover and bake 25 to 30 minutes in 325 degree F oven. Garnish with orange sections or slices.

We are blessed as a nation to have this healthful fruit so abundantly available. While the vitamin C content is of importance, the white or albedo of citrus is nutritious as well. It contains nutrients, fiber for roughage and pectin which aids digestion.



PAPAYA AND MANGO

Who couldn't be sold on thinking of tropical pleasures during the winter months? It may be difficult for most of us in North Dakota to escape to some tropical paradise, but we can at least indulge in a taste of the tropics – papaya and mango.

Papaya and mango are grown in many places throughout the world, but U.S. growers in southern Florida and Hawaii are capturing increasing shares of the developing market for these fruits. Both taste best when eaten fresh, and both are an excellent source of carbohydrates. The mango provides vitamin A. The papaya provides vitamin C and contains a protein-digesting enzyme, papain, that makes it an ideal fruit dessert to aid digestion after a heavy meal of meat. In fact, papain is found in commercial meat tenderizers.

Papaya trees are grown from seed, germinate in about two weeks, and after six months are transplanted to production areas. In 10 months they begin bearing and continue to do so for the next four years, after which they are replaced with smaller seedlings.

The papaya tree is a tall, bare wood stalk, topped by abundant leaves. It was called by explorers Marco Polo, Vasco da Gama and Magellan the "Golden Tree of Life," because it provided both food and medicine. It also provides meat tenderizer: islanders soak tough meat in the juice and then wrap it in the leaves to marinate.

Papaya grows in the Far East, West Indies and South America, as well as in Hawaii and Florida. When it is ripe its skin is yellow and will yield to slight pressure, and its flesh is yellow, sweet and juicy. The center is filled with black round seeds that may be eaten. Fresh papaya is delicious eaten chilled and thinly sliced with a dash of lemon or lime juice. The hollow made by scooping out the seeds makes an excellent dish for filling with meat and poultry salads or other chopped fruits. Papayas can be baked with a meat filling and sprinkled with cheese.

For a special accompaniment to roast turkey or chicken, glaze chunks of papaya in a brown sugar and rum sauce.

A cup of cut up pieces contains 55 calories.

Many gourmets find mangoes the most desirable of all tropical fruits. Some describe their tantalizing flavor as a combination of pineapple and apricot. Some say the flavor is peach-like. Others say they have a melon flavor. There are many varieties of mango, from small oblong fruits to huge, elongated banana-shaped ones that weigh as much as seven pounds.

Ripe mangoes range from green to yellow and red, and yield slightly to pressure. They are oblong in shape and have one large seed surrounded by yellow-orange flesh. A half of a fresh mango contains only 66 calories. Because mangoes are tropical fruits and sensitive to cold temperatures, they are best stored in a cool (50F) humid place rather than refrigerated. Mango fruit can be eaten fresh as a snack, in salads, in fruit cups and ice creams, or sliced as a dessert. In the major growing areas of Florida, Mexico and the West Indies, green mangoes are frequently canned and used in preserves, chutney sauces and pickles. Many of these are available in grocery stores.

A frozen delight can be made by freezing slices of mango on sticks to be eaten popsicle-style.

Or make an egg omelet and top with a dollop of sour cream and slices of ripe mango fruit.

IT'S TIME TO REACH FOR A **PEACH**

No other fruit has added to our language a word synonymous with sweetness, fairness and excellence. Only the peach possesses the positive qualities that make it a compliment. "You're a peach!" Tart and sweet and deliciously juicy, this versatile fruit grows on low-spreading, branching trees whose flowers are noted for their beauty and fragrance.

Peaches are second only to apples as an orchard fruit in the United States, where almost three billion pounds are produced annually, about half the world's supply. California leads U.S. production with 60 percent of the total, followed by South Carolina, Georgia and New Jersey.

Cousins to the cherry, apricot, plum and almond, peaches are native to China, cultivated there since the tenth century B.C. Their oval shape and delicate coloring have always captured the imagination of poets and artists. In China the peach is a symbol of long life and immortality, in Japan a symbol of fertility.

The peach spread westward to Persia, on to Europe, and Columbus and the Spaniards brought it to Mexico and what is now Florida in the 1500s. The Indians spread peach culture across North America.

We all want our fruit to be ripe so it can be eaten as soon as possible. Select peaches that are yellowish or creamy. The reddish blush is not an indication of ripeness, but of the variety. Peaches may soften but will not ripen further, so a green peach suggests an immature one which will wrinkle and dry up. A fresh peach should be free of blemishes and firm, not hard. Softer peaches are ready to eat out of the hand and should be refrigerated. Allow the firm peaches to soften at room temperature and then refrigerate them. Serve peaches at room temperature.

Peaches are about 90 percent water, and make a refreshing, quenching summer fruit. Each contains vitamin A and C, lesser amounts of potassium and iron, and only about 58 calories.

There is nothing nicer than fresh peach power to give mouth-watering flavor to your meals. Peaches do not need peeling as they are defuzzed before shipping. If you want to peel peaches, dip them in boiling water for 30 second, then quickly in cold water. The skin will slip off. To keep bright peaches fresh, dip slices into citrus juice or an ascorbic acid mixture.

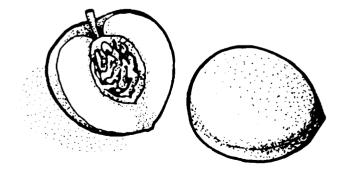
An interesting horticultural phenomenon is the nectarine. Literally a peach without the fuzzy skin, nectarines developed as sports or natural mutants from peach seeds. Peach trees may develop from nectarine seeds and nectarine trees may develop from peach seeds. With improvements in selection and breeding, this fruit represents excellent competition for the traditional peach.

Peaches offer eating opportunities in salads, compotes, shortcakes, muffins, peach pies, parfaits, milkshakes and fruit punch.

For a taste treat with grilled meat, roll peach halves in brown sugar with a shake of ginger. Thread them on skewers and grill until the sugar carmelizes.

When the produce shelves are pretty peachy, reach for a peach. If you plan to can or freeze peaches, ask your county extension office for home preserving information.

Unfortunately, North Dakota is too cold for growing peaches commercially. But North Dakota gardeners are a determined lot and some peaches are grown as yard trees.



GOOD THINGS COME IN PEARS

Canning season always took on added momentum at our nouse when the grocery ads in the daily newspaper announced that the Bartlett pears were in. A special trip to town was put into the next day's agenda, forcing into the background any other planned activity or labor. At the store the white-aproned grocer proudly opened each crate with his funny claw-end hammer. He'd stand expectantly awaiting a nod from my mother. Sometimes he'd have to open several. Then she'd nod and he'd turn the hammer around and pound the nails back down and carry the thosen crate to the counter. The thought of sweet pear auce in midwinter was not uppermost in my mind at that noment. I was thinking of the juicy sweet pears that we could eat sitting on the porch that summer evening.

The history of the pear can be traced back far beyond hose summer days, clear to the Stone Age. The ancient Chinese associated pear blossoms with longevity and well-peing, and once the Greek and Roman civilizations began pear culture, varieties increased rapidly. The Greek poet Homer called pears a "Gift of the Gods." Pears were prought to the Americas by a colonist who planted a few rees near Salem, Massachusetts. Pear trees first became established as a marketable crop in the Great Lakes region, and production eventually moved west across the Rockies.

Although there are more than 3,000 varieties of pears in he United States, less than a dozen are commercially mportant and only eleven states grow commercial juantities of pears. The greatest production comes from the ar western states of California, Oregon and Washington. Fotal U.S. annual production is between 675,000 and '00,000 tons, and California grows half this amount.

Pears are packed and shipped green, for they develop a iner flavor and smoother texture when ripened off the ree. They can maintain their quality in refrigerator storage, so are available to consumers most of the year.

Bartlett and Seckel are summer and early fall varieties. The Bartlett is bell-shaped, has smooth yellow skin with a blush, and is famous for its canning and dessert qualities. The Seckel is yellowish-brown with a buttery, spicy flavor, and is excellent for eating, canning and pickling.

Bosc, Anjou and Comice are the most popular winter varieties, harvested in late fall and winter. The Bosc, aristocrat of pears, has an elongated teardrop shape and a cinnamon, russet color. Anjou has a shorter neck, greenish yellow skin and winey flavor. Comice is almost round, is yellow and is famous as a holiday gift pear or Christmas pear.

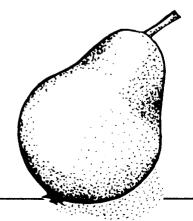
The pear is one of the most adaptable, delicious and tempting of fruits, yet has never become as widely grown in America as the apple. Fireblight, a bacterial disease promoted by rains, has limited commercial production to the western United States where summer rains are rare. The pear is an environmentally sensitive fruit. For example, the Bartletts grown in Washington state are longer and narrower than Bartletts grown in California, and seem not to flourish as well where summers are cooler.

While pears will withstand higher summer temperatures than apples, they cannot do as well on the lower end of the temperature scale. Generally, where extremes drop below -20 to -25 degrees Fahrenheit, pears will not produce. In North Dakota, a standard winter has temperatures that low, but we still are able to grow very edible pears, the hardy Parker and Luscious. Be sure to plant more than one tree and provide some protection during winter months.

Pears should be fully ripe for fresh use. Allow them to ripen at room temperature and then refrigerate. For baking or cooking, pears are best when still firm and slightly underripe. In spite of their sweet flavor, a medium size pear contains only 100 calories and a variety of vitamins and minerals including vitamin A and C, B vitamins, iron, calcium and phosphorus. Pears are an all-meals fruit, and can lend their refreshing sweet flavor to everything from appetizers to desserts.

For a dynamic and different luncheon, savor slices of fresh pears and ham between toasted slices of bread, spread with curry or mustard-flavored mayonnaise.

A quickie company dessert is fresh pears sliced into hot lemon sauce. Serve this over squares of ginger bread spread with softened cream cheese.



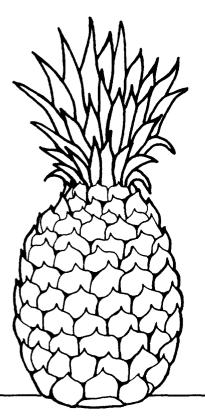
PINEAPPLE: THE CONE-SHAPED FRUIT WITH A ROMANTIC HERITAGE

March through June is the top of the season for buying fresh pineapple at the supermarket. They are picked and shipped ripe, so choose the largest one with fresh deep green leaves in its crown. Then eat it as soon as possible, because it won't continue to ripen after picking.

Most pineapples are kept chilled so fragrance gives little indication of ripeness. Neither does color. Ripe pineapples range from golden to nearly all green.

Although Hawaii is the home of the pineapple and provides 80 percent of our supply, the fruit is not native to the Islands. Way back when Columbus returned from his second new world venture, he brought with him a fruit which the Spaniards immediately dubbed pina, because it resembled the pine cone. Soon the word appeared in English as pineapple. In Europe the pineapple was used by the wealthy and soon became a symbol of social standing and hospitality. The pineapple shape became an art motif that was carried by the colonists to America and used as a sign of friendship and welcome which is retained today.

The pineapple is an unusual fruit, as it grows on a plant rather than a tree. The plant is nearly two years old before it bears just one fruit. The next year it produces one or two smaller pineapples. A third crop is sometimes



harvested, but usually an entire field will be replanted after two years. The pineapple is described as a multiple or collective fruit because a single pineapple is composed of many individual fruitlets. It is a perennial which has both male and female sex organs, which cannot fertilize itself, and which doesn't need fertilization to produce its seedless fruit. The commerical production of pineapples is via asexual means, which the home grower can easily duplicate.

Pineapple has become a multipurpose fruit because its special flavor, color and texture are inviting at all times of the day and in many types of foods. It is low in calories, having only 81 per cup of chunks, and it is a good source of vitamin C and fiber, and has lesser amounts of potassium, iron, vitamin A and calcium.

Pineapple preparation depends upon whether it will be served in or out of the shell. If rind and crown are to be discarded, twist off the crown and cut off the base. Slice off strips of rind lengthwise and remove eyes by cutting diagonal strips. Cut away the hard core as you prepare spears, slices, chunks or tidbits. Cut-up pineapple can be stored in tight containers and refrigerated.

Pineapple provides a refreshing taste in salads and in combinations of other fruits, vegetables or meats. Fresh pineapple contains an enzyme that breaks down protein. It will prevent gelatin from setting, but makes a great meat marinade and will help tenderize the meat.

For a sumptuous **patio** party **platter**, cut a fresh **pineapple** into 16 spears. Arrange the spears on a lettuce-lined serving dish with rolled up ham slices, rolled salami slices, avocado wedges, tomato slices, green onions and 1½-inch strips of Swiss cheese. Serve with a blended mustard dressing of ¾ cup salad oil, 3 tablespoons of vinegar, 2 tablespoons of Dijon mustard, 1 egg and seasoning to taste.

With a little patience you can grow your own pineapple. Twist off the crown, which is the leafy top part. Trim away any of the fruit. Strip off a few lower leaves. In a dry place turn the crown upside down for about a week to allow cut end and leaf scars to harden. This prevents rot. Plant in an 8-inch clay pot that is filled with lightweight garden soil and has about an inch of coarse gravel in the bottom. Place the crown in the soil and firmly press down the soil around the base. Water the plant about once a week. Fertilize about every three months. In a nice warm sunny location your plant will produce a new fruit in 20 to 22 months.

PLUMS GROWN IN NORTH DAKOTA

Six varieties of plums are tried, proven and recommended for North Dakota orchards. They are Tecumseh, Underwood, Redcoat, Pipestone, Toka and Waneta. Select at least two for better pollination. It will take three to five years before the trees will bear, but in the meantime you can enjoy the spring blossoms.

It is difficult to know where or when the first plum tree grew, but three main types have developed in separate localities: Japan, Europe and America. The majority of plums at the supermarket are the Japanese and European, grown commercially in California, Oregon, Washington, Idaho and Michigan.

The Japanese varieties descended from stock introduced to California in the 1870s. They are juicy, rich and tart with red or yellow skin color. European varieties came from stock introduced to America by the Pilgrims. They always have blue to purple skin color.

An assortment of wild American plums thrive in every region of the United States. We all are witness that every North Dakota farm or thicket seems to have its share of plums. Native American plums are small with yellow to reddish-yellow skin. Usually they are marketed locally and they are excellent for preserves, jams and jellies.

Although all prunes are plums, not all plums can be prunes. A plum must have a high sugar content to allow it to dry into a quality prune. Prune plums are grown primarily in California, which supplies 75 percent of the world's supply of prunes and 98 percent of the U.S. supply. Prune plums are ripened on the tree, picked at the height of their sugar content, then processed and dried to make them ready to eat. Prunes, prune juice and plums are sources of vitamin A, potassium, iron and fiber.

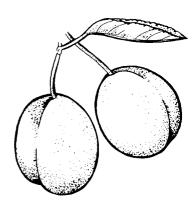
Picking and choosing fresh summer plums from the multicolored display need not be intimidating. Select firm ones that are full colored for the variety. A slightly soft tip end is a good indication of ripeness but plums will ripen at room temperature. Refrigerate when ripe and eat within three to five days.

Plums are best eaten fresh but also make a good sauce to go with grilled meats:

To two cups of sliced plums add 2 tablespoons onion, 2 whole cloves, ¼ teaspoon ground ginger, 1 cup of dry red wine or wine vinegar, ½ cup brown sugar, and 1 tablespoon of cornstarch blended in 2 tablespoons water. Cook over low heat about 20 minutes.

And here's Little Jack Horner's (Christmas) plum pie:

Into an unbaked 9-inch pastry shell, place 3 cups of sliced purple plums. Over this sprinkle a blend of ¾ cup sugar, 3 tablespoons flour and 1 teaspoon cinnamon. Spoon over 1 tablespoon lemon juice and dot with 1 tablespoon butter. Cover with top crust. Bake at 425 degrees for 35-40 minutes.



POMEGRANATE

- THE APPLE WITH MANY SEEDS.

Just in time to be included in dishes for holiday eating, the deep red pomegranate is available at produce departments from October through December. Pomegranates can be grown in the southern areas of the United States, but all commercial production is in California. The most prized asset of this refreshing luscious fruit is its jewel-like ruby seeds.

The pomegranate, about the size of a large apple, has a hard leathery rind ranging in color from yellow to purple. The most common variety available is a deep, rich red. The rind encloses a white, red or pink pulp in which is embedded shimmering scarlet clusters of seeds, each seed surrounded by a soft juicy sac. When opened, the fruit literally dazzles the beholder.

Pomegranate has long been appreciated by people in hot arid climates. In fact, King Solomon sang of an orchard of pomegranate and Moses included them in his description of the Promised Land. The Pomegranate's symbolic prominence has spanned the globe. For China, Persia, Greece and Rome it has been a fertility symbol because of its many seeds. To Christians it has been a symbol of hope. Ancient monuments and sculptures are adorned with pomegranates.

Choose pomegranates that are large and have a hard unbroken rind. They keep best refrigerated. There is no perfect or tidy way to prepare a pomegranate because the seed sac is easily ruptured and the juice spills forth. One method is to carefully peel away the rind: then, with a twist, the fruit will break apart and the seed can be separated. The seeds can be eaten out of hand, or can be sprinkled in salads of fruit, vegetable, meat, fish or poultry, or in fruit compotes, or used as a garnish for desserts. Cheese balls for cracker plates can be rolled in pomegranate seeds. A whole pomegranate contains about 63 calories and is a source of potassium.

Pomegranates are particularly noted for their distinctively tangy juice, which is the primary ingredient of grenadine syrup.

This **syrup** is well known for adding color and sweetness to beverages. To extract the juice, cut the fruit in half and use a juicer. Strain the juice. Two cups of juice combined with a cup of sugar and ¾ cup white corn syrup and cooked until slightly thickened will provide a syrup that can add special flavoring and color to beverages.

Or use this syrup for a **pomegranate chicken bake**. Combine one cup of syrup with one cup of chicken stock. Pour over browned chicken pieces and bake at 350 degrees Fahrenheit for about an hour or until done. Remove the chicken from the baking dish. Thicken the remaining sauce with a tablespoon of cornstarch and cook until thickened. Pour sauce over chicken and garnish with chopped nuts.

RASPBERRIES,

THE BERRIES WITH PANACHE

Coming from a raspberry farm in upstate New York, we sold all that could be grown. The buyer was easily seduced by the bright red color and unbeatable flavor. High school kids were hired to pick the berries. They filled the baskets and set them in the shade of the front yard maple tree. On one occasion it was noted the baskets were short-filled so the kids were told to crown them to attract a premium price. They assured us they were, when suddenly our pet duck carefully extended his neck to quickly skim off the top berries. After the duck was confined, the baskets retained their heaping berries and sale appeal.

What makes a raspberry a raspberry is the fact that it pulls free of its core when picked. Other bramble fruits take the core with them. The thimble-shaped fruit is a cluster of fruits each of which contain one seed surrounded by pulp. They grow wild as well as cultivated and can be red, black, purple or amber. North Dakotans enjoy reasonable success with raspberry cultivation. Being self-fruitful, they need no pollinators and if red-fruited varieties such as Boyne, Killarney and Latham are grown, no special winter protection is needed. A constant source of moisture is best for raspberries in well-drained, organically enriched soil. In addition to a constant water source, raspberries will require an early spring annual fertilization with a nitrogenous fertilizer or a complete fertilizer.

Pruning is one of the most important maintenance operations to be carried on for good raspberry production. Most varieties of raspberries will form fruit on side shoots along canes that grew the previous year. In the early spring, cut the canes back to 3 to 4 feet in height and thin out any spindly ones at the same time. In midsummer, after fruiting, those fruit-bearing canes should be completely removed. The canes which grew that spring but did not fruit will bear fruit next season. In essence, a raspberry plant is a perennial with a biennial bearing characteristic.

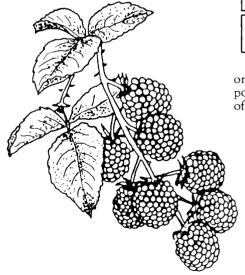
Nothing is so elegant as fresh raspberries. They are summer luxury. Because they are so very perishable, they are usually sold in areas where they are grown. If you are so fortunate as to have a raspberry patch, collect the fruit in shallow containers so berries won't be crushed by their own weight. Buyers should look for clean, bright, plump berries. Avoid dirty, mashed or wet berries, or those that still have capps – they are underripe. Raspberries are best eaten the same day as picked or purchased. Wash gently and drain. They can be refrigerated up to about three days.

The delicate incomparable flavor of raspberries is best enjoyed by eating them fresh, perhaps with fine or powdered sugar, or in a shortcake or pie.

For **Sorbet a la Bruxelles**, crush raspberries and put through a strainer to remove the seeds. Sweeten to taste and flavor with brandy or rum flavoring. Stir into slightly softened vanilla ice cream and serve in goblets.

Or heap raspberries into the hollow of a cantaloupe or peach.

What could be more nutritious? A cup of raspberries is only 85 calories, but is an excellent source of vitamin C, potassium, iron and calcium. For the most traditional treat of all, serve raspberry jelly on scones.



RAZZLE-DAZZLE RHUBARB

- THE BEST AND FIRST OF THE SEASON.

Rhubarb flavors the spirit of North Dakota with as much gusto as home baked bread. Every North Dakota pioneer garden boasted at least one rhubarb plant. Its appearance so early in the spring was then, as now, a heralding of long-awaited fresh fruits and vegetables.

No matter whose "recipe" book you looked at back then you'd surely find rhubarb recipes outnumbering the others. Rhubarb dishes still overflow everyone's recipe file. Most recipes are desserts – upside-down cakes, cobblers, crunches, crisps, tortes, sauces and lots just entitled "Rhubarb Dessert." And there are so many ways of turning rhubarb into pie that it's easy to understand why some call it "pieplant."

Rhubarb is an enigma. Botanically it is a vegetable, but legally it is a fruit. A court ruling in Buffalo, New York, on July 17, 1947, declared it a fruit because its use in the home is similar to that of other fruits. The nutritious stalk provides vitamins A and C, plus potassium and magnesium, and only 20 calories per cup. But don't eat the leaves. They're poisonous, containing large amounts of oxalic acid.

Good old rhubarb has been with us since 2700 B.C. It was used for medicinal purposes since before Christ. Dioscorides, physician to Anthony and Cleopatra, recommended rhubarb for diseases of the liver and weaknesses of the stomach. Also he used concoctions of the root in vinegar to supposedly cure ringworm.

Rhubarb must be liked by lots of people besides North Dakotans: 24-30 million pounds are grown annually in the United States. Most is eaten fresh, but some is also canned and frozen.

If, for some strange reason, your garden does not have a planting or two of perennial rhubarb, take heart, for a green thumb is not required to get your pieplant growing. Purchase roots from a reliable nursery or get a root division from a neighbor. Select the Valentine, McDonald or Canadian Red varieties. Generally, two to three plants are adequate for the average family. The crowns usually are divided in late fall or early spring, and as much root as possible should be provided with each eye or division. Place into rows five feet apart, with three feet between each plant within the row.

Rhubarb tastes tart and acidic and makes good eating on its own, but it blends well with other fruits such as strawberries, cherries, pineapple and bananas.

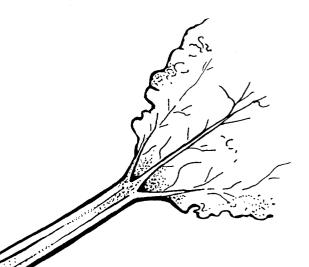
For a luscious sauce to serve on top of waffles, pancakes, biscuits or toast, combine a pound of cut up rhubarb with a 10-ounce package of frozen raspberries. Simmer over low heat until rhubarb is tender. Sweeten to your taste. This sauce also makes an excellent dessert.

Here's another tasty item: **rhubarb nut bread**. To make it you'll need 1½ cups chopped rhubarb, 2 beaten eggs, ½ cup skim milk, 2 cups whole wheat flour, ¾ cup honey, ⅓ cup melted margarine, 1½ teaspoons baking powder, ½ teaspoon soda, ½ cup chopped walnuts, and 1 teaspoon vanilla.

Mix together eggs, milk, honey, margarine and vanilla.

Next, mix flour, baking powder and soda, and combine them with the liquids, mixing only until moistened. Add rhubarb and walnuts. Pour into $9\times5\times3$ -inch greased loaf pan and bake at 350 degrees for 1 hour or until done. Cool 10 minutes before removing from pan. Cut into 16 slices. Each slice provides 180 calories.

If you really want to taste the great flavor of rhubarb, go to your rhubarb patch, gently pull up a ruby red stalk and just bite off chunks. The more timid may want to take a small bowl of sugar along to dip the stalk into before each bite. Savor the flavor just like your North Dakota ancestors did 100 years ago. But don't eat the leaves!



VOLUPTUOUS NORTH DAKOTA STRAWBERRIES

Perhaps nothing in the produce world can make the mouth water faster than North Dakota strawberries served fresh in a bowl, or sliced into strawberry shortcake or yogurt.

Early in the spring grocery stores sell large strawberries from California. Most of us will be quite satisfied to buy these imports. But when North Dakota strawberries appear, out-of-state berries will take a back seat. Imports are grown to be shipped, and in order to survive the journey they must be hard and relatively low in sugars and acids. This is why they don't taste as good – or look as good – as locally grown varieties.

Relatively new to the produce scene, strawberries were not grown in gardens until the 13th century, when the French began planting them. Today they dominate world markets. The United States leads world production with 400,000 metric tons yearly, followed by Poland and Japan with 200,000 tons each.

June-bearing varieties produce single crops each year. Everbearers produce more or less continuously and when planted in spring will bear a crop the first summer. From a home gardening standpoint, the everbearers are preferable. But North Dakota commercial growers prefer the Junebearers, primarily because they are much easier to maintain and to pick.

For North Dakota home gardeners, the Ogallala everbearing cultivar is the best choice. Commercial growers in this region prefer the June-bearing cultivar Redcoat, popular because of its proven winter hardiness, high yield and excellent customer appeal. Other cultivars gaining acceptance in North Dakota are Trumpeter and Northland.

Plant all strawberries as soon as the ground can be worked after about the 15 or 25 of April. Keep in mind that June-bearers are runner types and require 30 to 42 inches in the row when planted at these dates.

Initially, flowers need to be removed from both the everbearers and June-bearers. With everbearers, keep the flowers removed until the second week of July. Then if the plants appear to have vigor they can be allowed to continue flowering to bear a late season crop. With June-bearers, flowers should be kept removed for the entire first year to allow for good mother plant establishment, for pegging of daughter plants and for ample production the following year. Contact your county extension office for circular H-16, "Strawberries," for information on strawberry growing for your North Dakota garden.

Strawberries don't ripen after being picked, so in the market choose fully ripened, bright red berries with fresh green caps.

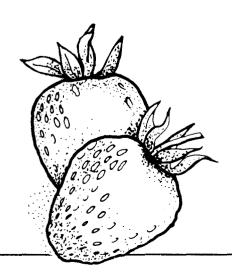
Leave the caps on when washing the berries, to keep water from soaking in. Then de-cap them. Washing removes a protective outer layer that helps preserve flavor, texture and nutrients.

A pint basket contains 3½ cups of whole berries, and one cup will give you 150 percent of the recommended daily allowance of vitamin C, 8 percent of the recommended daily allowance of iron, and only 60 calories.

Strawberries are best eaten plain or with a yogurt or custard topping. But don't forget to team them with rhubarb and other fruit compotes, salads or fruit plates.

For a **quick strawberry shortcake**, bake refrigerator biscuits according to directions, then split them and fill them with sliced berries. Top off with whipped topping or yogurt.

For a **strawberry yogurt** that serves four, mash 1 cup of berries into 1 cup of plain yogurt, then fold in 2 cups of sliced berries.



EXOTIC EDIBLES, A REVOLUTION IN THE PRODUCE INDUSTRY

Ready for some unfamiliar names? Carambolas, longans, lychees, sugar apples and jackfruit.

To most of us, these are unusual fruits. But to people in many parts of the world they are favorite foods. Jackfruit, a native of Southeast Asia, is the world's largest tree fruit, and perhaps the smelliest. It can weigh 60 pounds and its yellow filling has a musky flavor unlike anything Westerners now know. But once you get past the smell, it tastes great, and many people find it positively addictive. Some growers in south Florida are cutting down citrus trees and putting in jackfruit, as the market is promising \$10 to \$15 per fruit. Jackfruit is supposed to be sensational.

Lychee is luscious and plum-size, and the Chinese consider it superior to oranges and peaches. Longan is its smaller relative. Carambola is from Southeast Asia and its yellow sides are so deeply indented that slicing one across produces an eye-catching five-pointed star. Sugar apple is knobby and peach-size with soft flesh that tastes like a marriage between a banana and pineapple.

As a nation, we are rapidly adopting the most cosmopolitan diet in the world, and as a result vast new horticultural opportunities are opening up and changing the fundamentals of the produce industry.

How about winged beans in your diet? "Everybody likes winged beans," claims Susan Baterna, a south Florida farmer and dietician at a local hospital. They are pastel green, about the length of a human hand and have four frilly edges. Being crunchy and appealing, they are used in mixed vegetables or with fish or shrimp. The winged bean is sought after by Phillippine Americans, but is quickly breaking beyond its ethnic boundaries.

Exotic fruits and vegetables from Florida are finding their way as far north as Chicago, Detroit and New York. The Florida growers claim they cannot expand their production. Both California and Florida, long the meccas of exotic food trends because of their ethnic diversity, are wasting little time in promoting any produce that show promise of interesting the great American crowd of consumers. And Americans are assimilating these new foods so quickly that the term "exotic foods" may soon become obsolete – the exotic will be commonplace.

One of the "ex exotics" which makes a wintery annual appearance in some North Dakota supermarkets is the pomelo. It is the size of the grapefruit, related to it, but twice as sweet. Nearly everyone who has tasted a sample declares how much they like the pomelo.

HOLIDAY FEASTING – MAKE IT A FRESH PRODUCE BONONZA

To many people the turkey is the undisputed headliner of holiday feasting. But it by no means is the solitary lead story. The success of any meal depends upon the side dishes that serve as complements to provide contrasting themes to the main attraction. Let the super supply of low-cost fresh produce give a full range of colors, textures and flavors to your holiday meals.

Fresh fruits and vegetables can be combined in mix and match variations that are not only visually appealing, but will give your holiday fare a nutritious low-calorie rating. It's during our feasts that we often take on more calories than we need, causing added weight that only has to come off after the holidays are over.

Tradition can be echoed in some surprising, caloriesparing ways. Pumpkin soup with herbed croutons or pumpkin raisin muffins can stand in for pumpkin pie. As a substitute for the pie, and as a refreshing dinner ending, try a fresh fruit ambrosia of layered orange and kiwi slices, grapefruit sections and purple grapes.

Sweet potatoes are usually featured candied or topped with sugary marshmallows. Serve instead mashed sweet potatoes with an equal amount of mashed rutabagas or parsnips. The only embellishment needed is seasonings to taste. Add sautéed small cubes of uncooked sweet potatoes along with the onion and celery and mix all with your bread stuffing. The unusual flavor and texture of this stuffing will be a highlight whether in the bird or baked separately.

Other side dish vegetable combinations that will feast the eye are cooked sliced carrots and celery with chopped pecans; broccoli flowerets with red pepper chunks and sliced water chestnuts; and golden brown sautéed onions in a mushroom sauce. Your spread can include a fresh spinach salad with papaya slices and pomegranate seeds topped with a citrus dressing. Or leaf lettuce, shredded red cabbage and chopped raw cranberries with a yogurt dressing.

Although the saying "keep it simple" doesn't seem to be in the vocabulary of holiday cooks, it is best to concentrate on quality, not quantity. Many meals become groaning boards of duplicates. A few eye-appealing, nutrient-packed, low-calorie dishes will satisfy as well as many.

Some other smart eating resolutions: don't put more on your plate than you can eat, and beware of tempting seconds. Making use of all the fresh produce available will yield a bonanza in nutrient-rich, colorful and flavorful holiday fare – bon appetit!

Appendix A

NUTRITIVE VALUE OF THE EDIBLE PARTS OF FRUITS*

Fruits Fresh (Raw)	Approx. Amount	Food Energy	Protein	Fat	Carbohy- drates	Calcium	Phos- phorus	Iron	Sodium	Potas- sium	VII. A Value	Thia- min	Ribo- fiavin	Nia- cln	Vit. C Ascorbic Acid
Apples	1 medium	(Cal.) 80	(g) trace	(g) 1	(g) 20	(mg) 10	(mg) 14	(mg) .4	(mg) 1	(mg) 152	(IU) 120	(mg) .04	(mg) .03	(mg) .1	(mg)
Apricots	3	55	1	trace	14	18	25	.5	1	301	2890	.03	.04	.6	11
Avocados	1	370	5	37	13	22	91	1.3	9	1303	630	.24	.43	3.5	30
Bananas	1 medium	100	1	trace	26	10	31	.8	1	440	230	.06	.07	.8	12
Carambolas	1	20	.4	.3	4.5	2	10	.9	1	109	680	.02	.01	.2	20
Cherries, Sweet	10	47	.9	.2	11.7	15	13	.3	1	129	70	.03	.04	.3	7
Cranberries	1 cup whole	44	.4	.7	10.3	13	10	.5	2	78	40	.03	.02	.1	10
Dates	10	219	1.8	.4	58.3	47	50	2.4	1	518	40	.07	.08	1.8	_
Figs	1, whole	40	.6	.2	10.2	18	11	.3	1	97	40	.03	.03	.2	1
Grapefruit	1/2	40	.5	.1	10.3	16	16	.4	1	132	80	.04	.02	.2	37
Grapes	10	34	.3	.2	8.7	6	10	.2	2	87		.03	.02	.2	2
Kiwi	1	46	.75	.34	11	20	.31	31	4	252	133	_	_	.4	74
Kumquats	1	12	.2	trace	3.2	12	4	.1	1	44	110	.01	.02	_	7
Lemons	1 c juice	61	1.2	.5	19.5	17	24	.5	2	344	50	.07	.02	.2	112
Limes	3 T juice	12	.1	trace	4.1	4	5	.1	trace	47	trace	.01	trace	trace	15
Lychees	10	58	.8	.3	14.8	7	38	.4	3	153			.05		38
Mangos	1 c diced	109	1.2	.7	27.7	17	21	.7	12	312	7920	.08	.08	1.8	58
Melons: Cantaloupe	1 c (20 pieces)	48	1,1	.2	12	22	26	.6	19	402	5440	.06	.05	1	53
Nectarines	1	88	.8	trace	23.6	6	33	.7	8	406	2280		_	_	18
Oranges	1 medium	64	1.3	.3	16	54	26	.5	1	263	260	.13	.05	.5	66
Papayas	1 c cubed	55	.8	.1	14	28	22	.4	4	328	2450	.06	.06	.4	78
Peaches	1	58	.9	.2	14.8	14	29	8.	2	308	2030	.03	.08	1.5	11
Pears	1	100	1.1	.7	25.1	13	18	.5	3	213	30	.03	.07	.2	7
Pineapple	1 c diced	81	.6	.3	21.2	26	12	.8	2	226	110	.14	.05	.3	26
Plums	1	32	.3	.1	8.1	8	12	.3	1	112	160	.02	.02	.3	4
Pomegranates	1	97	.8	.5	25.3	5	12	.5	5	399	.05	trace	.05	.5	6
Raspberries	1 c	85	1.7	.2	21.4	36	36	1.5	2	277	220	.02	.1	1.2	22
Rhubarb	1 c diced	20	.7	.1	4.5	117	22	1	2	306	120	.04	.09	.4	11
Strawberries	1 c whole	55	1	.7	12.5	31	31	1.5	1	244	90	.04	.1	.9	88
Tangerines	1	46	.8	.2	11.7	40	18	.4	2	127	420	.06	.02	.1	31
Watermelons	1 wedge	111	2.1	.9	27.3	30	43	2.1	4	426	2510	.13	.13	.9	30

^{*}Adams, Catherine F. Nutritive Value of American Foods in Common Units. USDA Agricultural Research Service. Agricultural Handbook 456.

NUTRITIVE VALUE OF THE EDIBLE PARTS OF VEGETABLES*

Vegetables	Approx.	Food	De-4-1-	F	Carbohy-	Dat-2:	Phos-	100-	Cedi-	Potas-	VIt. A	This-	Ribo-	Nia	Vit. C Ascorbic
Fresh (Raw)	Amount	(Cal.)	Protein (g)	Fat (g)	drates (g)	Calcium (mg)	phorus (mg)	(mg)	Sodium (mg)	slum (mg)	(IU)	(mg)	flavin (mg)	(mg)	(mg)
Artichokes	1 bud	10-53	3.4	.2	11.9	61	83	1.3	36	361	180	.08	.05	.8	10
Asparagus	1 c	35	3.4	.3	6.8	30	84	1.4	3	375	1220	.24	.27	2	45
Beans, Dry	1 c uncooked	612	14	1.1	38.2	90	266	4.9	13	749	_	.25	.13	1.3	-
Beans, Green	1 c	35	2.1	.2	7.8	62	48	.9	8	267	660	.09	.12	.6	21
Beets	1 c	58	2.2	,1	13.4	22	45	.9	8	452	30	.04	.07	.5	14
Broccoli	3 med stalks	145	16.3	1.4	26.8	467	354	5	68	1733	11340	.45	1.04	4.1	513
Brussels Sprouts	6 sprouts	51	5	.4	9.1	41	90	1.4	16	442	622	.11	.18	1	116
Cabbage	1 c shredded	17	.9	.1	3.8	34	20	.3	14	163	90	.04	.04	.2	33
Carrots	1 (7" long)	30	.8	.1	7	27	26	.5	34	246	7930	.04	.04	.4	6
Cauliflower	1 c (whole flowerets)	27	2.7	.2	5.2	25	56	1.1	13	295	60	.11	.1	.7	78
Celery	1 rib (8" long)	7	.4	trace	1.6	16	11	.1	50	136	110	.01	.01	.1	4
Corn, Sweet	1 ear (5" long cooked)	70	2.5	.8	16.2	2	69	.5	trace	151	310	.09	.08	1.1	7
Cucumbers	6-8 slices	4	.3	trace	1	7	8	.3	2	45	70	.01	.01	.1	3
Eggplants	1 c (diced cooked)	38	2	.4	8.2	22	42	1.2	2	300	20	.1	.08	1	6
Garlic	1 clove	4	.2	trace	.9	1	6	trace	1	16	trace	.01	trace	trace	trace
Kohlrabi	1 c diced	41	2.8	.1	9.2	57	71	.1	11	521	30	.08	.06	.4	92
Lentils	1 c uncooked	646	46.9	2.1	114.2	150	716	12.9	57	1501	110	.7	.42	3.8	-
Lettuce	1 c shredded	7	.5	.1	1.6	11	12	.3	5	96	180	.03	.03	.2	3
Mushrooms	1 c diced	20	1.9	.2	3.1	4	81	.6	11	290	trace	.07	.32	2.9	2
Onions	1 c chopped	65	2.6	.2	14.8	46	61	.9	17	267	70	.05	.07	.3	17
Parsnips	1 c diced, cooked	102	2.3	.8	23.1	70	96	.9	12	587	50	.11	.12	.2	16
Peas	1 c	122	9	.6	20.9	38	168	2.8	3	458	930	.5	.2	4.2	39
Peppers, green	1	36	2	.3	8	15	36	1	21	349	690	.13	.13	.8	210
Potatoes	1 baked	145	4	.2	32.8	14	101	1	6	782	trace	.15	.07	2.7	31
Pumpkin	1 c (cooked, mashed)	81	2.5	.7	19.4	61	64	1	5	588	15680	.07	.12	1.5	12
Radishes	10	8	.5	trace	1.6	14	14	.5	8	145	trace	.01	.01	.1	12
Rutabagas	1 c cubed	64	1.5	.1	15.4	92	55	.6	7	335	810	.1	.1	1.5	60
Salsify	1 c (cooked, mashed)	16	3.5	.8	20.4	57	72	1.8	_	359	10	.04	.05	.3	.9
Spinach	1 c cooked	14	1.8	.2	2.4	51	28	1.7	39	259	4460	.06	.11	.3	28
Sprouts	1 c	37	4	.2	7	20	67	1.4	5	234	20	.14	.14	.8	20
Squash, Summer	1 c diced	25	1.4	.1	5.5	36	38	.5	1	263	530	.07	.12	1.3	29
Squash, Winter	1 c (cooked, mashed)	129	3.7	.8	31,6	57	98	1.6	2	945	8610	.1	.27	1.4	27
Sweet Potatoes	1-5" long	148	2.2	.5	34	41	61	.9	13	315	11400	.13	.08	.8	27
Swiss Chard	1 c cooked	26	2.6	.3	4.8	106	35	2.6	125	465	7830	.06	.16	.6	23
Tomatoes	1	27	1.4	.2	5.8	16	33	.6	4	300	1110	.07	.05	.9	28
Turnips	1 c diced	39	1.3	.3	8.6	51	39	.7	64	348	trace	.05	.09	.8	47
Water Chestnuts	10 croms	135	2.4	.3	33.2	7	113	1	35	873		.25	.35	1.7	7

^{*}Adams, Catherine F. Nutritive Value of American Foods in Common Units. USDA Agricultural Research Service. Agriculture Handbook 456.

67

Appendix B

GUIDE TO HERB-VEGETABLE COOKERY*

Vegetable	Appropriate Spice or Herb
Asparagus	Mustard seed, sesame seed, or tarragon.
Lima beans	Marjoram, oregano, sage, savory, tarragon, or thyme.
Snap beans	Basil, dill, marjoram, mint, mustard seed, oregano, savory, tarragon, or thyme.
Beets	Allspice, bay leaves, caraway seed, cloves, dill, ginger, mustard seed, savory, or thyme.
Broccoli	Caraway seed, dill, mustard seed, or tarragon.
Brussels sprouts	Basil, caraway seed, dill, mustard seed, sage, or thyme.
Cabbage	Caraway seed, celery seed, dill, mint, mustard seed, nutmeg, savory, or tarragon.
Carrots	Allspice, bay leaves, caraway seed, dill, fennel, ginger, mace, marjoram, mint, nutmeg, or thyme.
Cauliflower	Caraway seed, celery salt, dill, mace, or tarragon.
Cucumbers	Basil, dill, mint, or tarragon.
Eggplant	Marjoram or oregano.
Onions	Caraway seed, mustard seed, nutmeg, oregano, sage, or thyme.
Peas	Basil, dill, marjoram, mint, oregano, poppy seed, rosemary, sage, or savory.
Potatoes	Basil, bay leaves, caraway seed, celery seed, dill, chives, mustard seed, oregano, poppy seed, or thyme.
Spinach	Basil, mace, marjoram, nutmeg, or oregano.
Squash	Allspice, basil, cinnamon, cloves, fennel, ginger, mustard seed, nutmeg, or rosemary.
Sweet potatoes	Allspice, cardamom, cinnamon, cloves, or nutmeg.
Tomatoes	Basil, bay leaves, celery seed, oregano, sage, sesame seed, tarragon, or thyme.
Green salads	Basil, chives, dill, or tarragon.

NOTE: Pepper and parsley may be used with any of the above vegetables. Curry powder adds piquancy to creamed vegetables. *Based on Spices and Herbs, Vegetables in Family Meals, Home and Garden Bulletin No. 105, U.S. Department of Agriculture.

Appendix C

FRUIT AND VEGETABLE AVAILABILITY

This chart shows when common fruits and vegetables are in supply.

supplies are scarce or nonexist	tant.		suppl are m	ies oderate	supplies are plentiful.					supplies are exceptionally abundant.				
Commodity	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec		
Apples		****			XXXX	V ////			XXXX	XXX		XXX		
Apricots														
Artichokes			XXXX											
Asparagus					XXXX									
Avocados			XXXX		XXX	XXX	****	XXXX	XXX	XXXX	XXX			
Bananas			XXX	XXXX			⋘	⋘						
Beans, Snap					XXX			XXXX						
Beets									XXXX					
Berries, Misc.*														
Blueberries								XXX						
Broccoli	***	XXXX	XXXX									XXXX		
Brussels Sprouts	****									XXXX	XXX	XXXX		
Cabbage		XXX	$\otimes\!\!\!\otimes\!\!\!\otimes$	XXX	XXX	XXXX					XXX			
Cantaloupes														
Carrots	****				XXX	XXX	XXXX	XXX		XXX				
Cauliflower										XXXX		{		
Celery											XXX			
Cherries														
Chinese Cabbage														
Corn, Sweet						XXX		****				1		
Cranberries														
Cucumbers							XXXX			XXX	XXXX			
Eggplant										XXX				
Escarole-Endive	***	****								XXX		****		
Endive, Belgian														
Grapefruit		****				\ ///			X////			XXXX		
Granes	1				1///	X///					8888			

^{*}Mostly blackberries, dewberries, raspberries.

Commodity	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Greens		\bowtie	XXX									
Honeydews						XXX	XXX			XXX		
Lemons		XXX	XXXX		XXX		XXX	XXX	XXXX	XXXX	XXX	
Lettuce		XXX	XXX	XXX		XXX	XXX	XXX		XXX	XXX	XXX
Limes						XXX	XXX	XXX				
Mushrooms												
Nectarines												
Okra												
Onions, Dry				XXX				XXX	XXX			XXXX
Onions, Green			XXX	XXX	XXXX	XXXX	XXX	XXX	XXXX			
Oranges	****	XXX	XXX	XXX	XXXX							
Parsley & Herbs**											\ggg	
Parsnips												
Peaches												
Pears								$\otimes\!\!\!\otimes\!\!\!\otimes$	XXXX			
Peppers, Sweet			XXXX							XXX	XXXX	
Pineapples			888		XXXX	XXX						
Plums-Prunes												
Potatoes			XXXX	x x x x x x x x x x x x x x x x x x x			XXXX	XXXX	XXXX			XXXX
Radishes	****	XXX	XXX			XXX	XXX	888		XXX	XXX	
Rhubarb												
Spinach	****	XXX			****							
Squash		XXX	XXX			XXX						$\times\!\!\!\times\!\!\!\times$
Strawberries							XXX					
Sweet Potatoes	****			x x x x x x x x x x x x x x x x x x x								XXX
Tangerines												
Tomatoes						****		****	****	****		
Turnips-Rutabagas												
Watermelons								$\times\!\!\!\times\!\!\!\times$			1	

^{**}Includes also parsley root, anise, basil, chives, dill, horseradish, others.

INDEX OF FRUITS AND VEGETABLES

Apples	Lychees
Apricots	Mangos55
Artichokes8	Melons
Asparagus9	Mushrooms
Avocados44	Nectarines
Bananas	Nuts
Beans	Onions
Beets	Oranges
Bok Choy38	Papayas
Broccoli	Parsnips
Brussels sprouts	Peach
Cabbage	Pears
Carambolas	Peas
Carrots24	Peppers, green
Cauliflower	Pineapple
Celeriac	Plums and prunes
Celery	Pomegranates60
Cherries	Pomelos
Corn, Sweet	Potatoes
Crabapples42	Pumpkins
Cranberries	Radishes
Cucumbers	Raspberries
Dates48	Rhubarb
Eggplants	Rutabagas24
Figs	Salsify
Garlic	Spinach
Ginger Root38	Sprouts
Grapefruit	Squash, summer
Grapes50	Squash, winter
Herbs	Strawberries
Jackfruit	Sweet Potatoes
Kiwi51	Swiss chard
Kohlrabi39	Tangerines
Kumquats52	Tomatoes
Leeks39	Turnips24
Lemons	Vanilla beans
Lentils	Water chestnuts38
Lettuce	Watermelons
Limes	
Longans 64	

GENERAL RECIPE INDEX BY FOOD CATEGORY

Appetizers	Salads	
• Radish appetizers	Apricot oriental salad	43
• Raspberries with cantaloupe61	Beet lemon aspic	
	Bok choy chicken salad with dressing	38
Beverages	• Cabbage slaw with dressing	14
• Melon cooler53	Cranberry coleslaw	
• Orange float	• Eggplant salad	19
• Orange julep54	• Grape ambrosia salad	50
	Grapefruit tuna salad	
Breads	 Melon spinach salad with mustard dressing 	53
• English muffins a la Florentine	Tangerine citrus slaw	49
• Rhubarb nut bread		
D	Sandwiches	
Desserts	Baked bean sandwiches	10
• Frozen mango sticks	• Pear ham sandwiches	57
• Little Jack Horner's plum pie	• Radish sandwiches	29
• Sorbet a la Bruxelles	g	
• Strawberry Shortcake	Sauces	1/
• Strawberry yogurt	• Cherry ruby red sauce	40
• Tangerine cheesecake	Garden vegetable sauce Herbed lemon sauce	
• Tangerine meringue pie49		
	• Lettuce sauce	
Directoral Summer de	Papaya poultry sauce Pear and lemon sauce	
Dips and Spreads • Bean dip	Plum barbecue sauce	
• Green pepper cracker spread		
• Green pepper cracker spread	Pomegranate syrup Pumpkin topping	00
Dressings	• rumpkin topping	
Avocado salad dressing44	Soups	
Vinaigrette dressing	• Cauliflower cheese soup	1 5
Vittalgrette dressing	• Lettuce soup	21
Fruits	Pumpkin soups	33
• Cherry fruit cups	Root vegetable soup	74
• Cranberry date raisin relish	• Winter squash soup	33
• Cranberry tangy relish	witter squasir soup	
• Dates, stuffed	Vegetables	
• Kumquat compote52	Asparagus royal	
• Melon compote	• Asparagus with sauce	9
• Peach halves grilled	Baked beans in cranberry sauce	47
• Raspberries with cantaloupe	Broccoli in the microwave	
• Rhubarb sauce	Brussels sprouts in sweet and sour sauce	13
	• Celery ratatouille	16
Main Dishes	Green pepper creole style	27
• Beans and hot dogs	Mexican stuffed green peppers	27
• Beans in pocket bread	• Lettuce with peas and onions	21
Bok choy chicken salad with dressing	Pattypan squash with buttered peas	32
• Cabbage lasagna	• Radishes cooked	29
• English muffins a la Florentine30	• Tomatoes au gratin	35
• Grapefruit tuna salad49		
• Green pepper creole style27		
• Mexican stuffed green peppers		
• Mango topped omelet55		
• Melon ham platter with dip53		
• Mushroom oriental stir fry22		
• Orange spicy chicken bake		
• Pineapple patio platter		
• Pomegranate chicken bake		
• Potato reuben		

RECIPE TITLE INDEX

• Apricot oriental salad	• Mango topped omelet
Asparagus royal	
• Asparagus with sauce	.9 • Melon compote
Avocado salad dressing	• Melon cooler
Baked beans in cranberry sauce	• Melon spinach salad with mustard dressing5
Baked bean sandwiches	
• Bean dip	
• Beans and hot dogs	10 • Orange julep54
Beans in pocket bread	
• Beet lemon aspic	• Pattypan squash with buttered peas
Bok choy chicken salad with dressing	• Papaya poultry sauce
Broccoli in the microwave	12 • Peach halves grilled
• Brussels sprouts in sweet and sour sauce	13 • Pear and lemon sauce
• Cabbage slaw with dressing	14 • Pear ham sandwich
• Cabbage lasagna	14 • Pineapple patio platter
• Cauliflower cheese soup	
• Celery ratatouille	• Plum pie, Little Jack Horner's59
• Cherry fruit cup	• Pomegranate syrup
• Cherry ruby red sauce	
• Cranberry date raisin relish	• Potato reuben
• Cranberry coleslaw	
• Cranberry tangy relish	• Pumpkin topping
• Dates, stuffed	• Radish appetizers
• Eggplant salad	9 • Radish sandwich
• English muffins a la Florentine	
Garden vegetable sauce	
• Grape ambrosia salad	60 • Rhubarb nut bread
Grapefruit tuna salad	• Rhubarb sauce
• Green pepper cracker spread	• Root vegetable soup
Green pepper creole style	• Sorbet a la bruxelles (ice cream with raspberries)62
• Green peppers, mexican stuffed	
Herbed lemon sauce	52 • Strawberry yogurt
• Kumquat compote	• Tangerine cheese cake49
• Lettuce sauce	
• Lettuce soup	
• Lettuce with peas and onions	
• Frozen mango sticks	• Vinaigrette dressing
	• Winter squash soup