Gardening With Children

June 2017
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Benefits of Gardening for Children

Gardening provides different forms of engagement for children, including designing, planting, and maintaining gardens; harvesting, preparing, and sharing food; working cooperatively in groups; learning about science and nutrition; and creating art and stories inspired by gardens. The studies summarized below have been selected because they include control groups, pre- and post-measures, well controlled correlations, or in-depth qualitative analyses. For more studies and an analysis of this research, see reviews by Blair (2009) and Robinson-O'Brien, Story and Hein (2009).

Key Studies

Lifelong Benefits

In a nationwide telephone survey of 2,004 respondents, people who reported picking flowers, fruits or vegetables, planting trees, taking care of plants, or living next to a garden in childhood were more likely to show an interest in gardening as they aged and to form lasting positive relationships with gardens and trees (Lohr & Pearson-Mims, 2005). In two interview studies with adult gardeners (sample sizes of 18 and more than 100), most respondents recalled vivid positive memories of play and exploration in childhood gardens, which inspired garden ideas and a desire to garden later in life (Francis, 1995; Gross & Lane, 2007).

Positive Social and Interpersonal Skills

When third to fifth grade students who participated in a one-year gardening program filled out a survey of life skills, they showed a significant increase in self-understanding and the ability to work in groups compared to nonparticipating students (Robinson & Zajicek, 2005). Youth interns in community gardens reported increases in maturity, responsibility and interpersonal skills (Hung, 2004). In a community garden program in San Antonio, qualitative interviews of teachers, parents, a principal and 52 second and third grade students revealed that children were likely to have positive bonding experiences with their parents and other adults (Alexander, North, & Hendren, 1995). These findings are consistent with research that indicates that community gardening projects "grow" community (Glover, 2004).

Healthy Eating and Nutrition

Children who grow their own food are more likely to eat fresh fruits and vegetables (Canaris, 1995; Hermann et al., 2006; Libman, 2007; McAleese & Rankin, 2007; Pothukuchi, 2004) or express a preference for these foods (Lineberger & Zajicek, 2000; Morris & Zidenberg-Cherr, 2002). Garden programs often include lessons on nutrition, resulting in greater knowledge about healthy eating (Koch, Waliczek & Zajicek, 2006; Morris & Zidenberg-Cherr, 2002;

Science Achievement and Attitudes Towards Learning

Fifth grade students who participated in school gardening activities scored significantly higher on science achievement tests than students who had a curriculum without garden experiences (Klemmer, Waliczek, & Zajicek, 2005). Evaluations of the Junior Master Gardener program in Indiana (Dirks & Orvis, 2005) and Louisiana (Smith & Motsenbocker, 2005) also found greater science achievement gains among gardening students compared to control groups. Gardening activities can be integrated into all areas of the school curriculum, making learning more meaningful (Canaris, 1995). Parent involvement, shown to enhance student achievement (Henderson & Mapp, 2002), increases at schools with garden programs (Alexander, North, & Hendren, 1995).

Design Skills and Environmental Stewardship

Even young children can contribute to designs that make gardens enjoyable places (Whiren, 1995) and older children can competently design and create gardens and garden

programs with a range of elements and themes (Canaris, 1995; Heffernan, 1994; Lekies et al., 2006). Second and fourth grade students in a school gardening program in Texas showed significantly more gains in proenvironmental attitudes than students in a control group, and the more outdoor experiences they had, the more positive their attitudes (Skelly & Zajicek, 1998). In a qualitative assessment of an intergenerational gardening project, students expressed an increased understanding of ecology, interconnections in nature, and responsibility to care for the environment (Mayer-Smith, Bartosh & Peterat, 2007).

Special Populations

According to observations, interviews and journals, a multicultural school gardens programs for recent immigrants provided a space where children could share their cultural heritages, feel a sense of belonging, and form connections to the local environment (Cutter-Mackenzie, 2009). When juvenile offenders assessed their participation in a horticultural training program, most believed that it sparked their interest in further education, gave them ideas for green careers and improved their job skills (Flagler, 1995). Pre- and post-tests of juvenile offenders in a Green Brigades program that involved learning horticultural techniques and working on community landscaping found that participants increased their levels of self-esteem (Cammack, Waliczek & Zajicek, 2002a), horticultural knowledge and proenvironmental attitudes (Cammack, Waliczek & Zajicek, 2002b). Gardening has long been recognized as a therapeutic healing activity which can positively impact mental health and well-being (Ulrich, 1999).

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Ten Steps to a Successful Vegetable Garden

Gardening with vegetables can be fun and provide delicious and highly nutritious fresh food. Watching and working with plants can add a new dimension of enjoyment to life and bring an awareness of the wonderful world of nature in the backyard. The marvels of nature will have special personal meaning when nurturing a small seed into a colorful productive plant with your own hands. These accomplishments can be obtained regardless of the size of garden. A few plants or a large plot will give rewarding experiences for both young and old.The path to a successful vegetable garden is not difficult or long. Ten carefully taken steps will produce many enjoyable moments and an abundant harvest of fresh vegetables during much of the year.

Step 1 Select a good location

Choose an area with plenty of morning sunlight and some afternoon shade. Most vegetables, especially fruiting types, do best with six to eight hours of full sun exposure. Leafy and root vegetables will tolerate partial shade. Don't plant gardens under or near trees or large shrubs—their roots will rob fertility and water from vegetables. Don't plant vegetables in the narrow shaded space between houses and walls.

A loose, fertile, level, well-drained soil is best. If possible, avoid heavy clays and very sandy soils. If caliche is present it must be dug out and removed. Avoid areas that are crusted with alkali salts or infested with Bermudagrass, nutgrass or Johnson grass.

A synthetic soil, self prepared or purchased, can be used in raised beds or containters (pots, tubs, boxes) if good soil is not available. Where the space is limited, container gardening can be practiced. A convenient water supply for irrigating is necessary.

Step 2 Plan your garden layout

Planning ahead will help avoid problems and make your garden a complement to your landscape. First, sketch a plan of the intended planting area for vegetables. Write down the size of the area or location of containers. This is the beginning of a gardening notebook or journal.

- Decide on the vegetable species wanted. Select those that your household likes, that are adapted to your climate and practical for the location. If space is a problem, plant those that utilize space efficiently like bush varieties or bush beans, beets, broccoli, cabbage, carrots, leaf lettuce, onions, radishes, Swiss chard, tomatoes, and turnips.
- Mark on the plan where the vegetables will be planted, making sure to leave room for growing space between plants. Also, list the planting date for each vegetable. Arrange plantings according to harvest periods and growth characteristics. Plant vegetables adjacent to each other which will be harvested about the same time. Avoid having taller plants shade younger and smaller vegetables. Use vertical space by trellising climbing crops.

Step 3 Grow recommended varieties

Gardening success can be greatly influenced by the varieties you use. Select from recommended lists and from those know to do well locally. It is a good idea to try one or two new varieties each year. Plant them next to old favorites for comparison. Keep a notebook or journal from year to year to note what varieties perform best. For mini-gardens, try bush or dwarf varieties and the more colorful ones. Seed catalogues will be a big help in finding these. Look for All-American Selection Award winners. (www.all-americaselections.org/)

Step 4 Obtain good seed, plants, equipment and supplies

Before planting, find a reputable source for seed and other garden supplies. Seed catalogs can be a big help, but be sure the varieties are locally adapted. Buy new seed since some seeds over a year old will not germinate (sprout) well. Some seeds can be saved and are best placed in jars or in plastic bags and stored in a freezer.

Vegetable transplants can be purchased at garden stores, nurseries and greenhouses. Insist on recommended varieties. Select plants that are healthy, stocky, medium-sized, with vigorous roots and that are pest free. Avoid plants that are wilted, yellow, spindly, too large or have spots on the leaves, brown lesions on the stems or knots/galls on the roots. Obtain plants in containers (pots, 6 or 8 packs, bands or boxes) when possible so that the root systems are intact. Transplants should not be disturbed any more than necessary and should be "hardened-off." Transplants can be started at home if desired.

Have all equipment and tools clean and in good condition before working the soil. A hoe, spade, garden rake, trowel, measuring stick and planting line are essential. A hand cultivator and seed drill reduce work in larger gardens. Hoses and sprinklers convenient for watering are also needed. Other needed supplies are fertilizers and mulching materials.

Study pest control recommendations to determine what may be needed after positively identifying the pest. It is important to have a quick source of materials for pest control if needed. A good sprayer or duster to control garden pests should be available for use. Care should be taken in handling, applying and storing all chemicals. **Always follow the pesticide label instructions; it is a legal document!**

Step 5 Prepare and care for the soil properly

Soil provides nutrients and water for plants. If these materials are limited or if the soil is compact or hard and crusty when dry, and water-soaked and sticky when wet, plants will not grow and develop properly. To maintain and improve soil conditions, mix organic matter and fertilizers into the soil before planting, and prepare and cultivate the soil when dry or slightly moist (never when wet).

Organic matter makes the soil loose (friable) and easy to work. It improves nutrient and water-holding capacity, drainage and aeration. Well rotted manure, compost, and leaf mulch are commonly used organic materials. Composted manure is easy to use and is relatively free of weed seeds. Apply a layer of organic matter 2 to 3 inches thick on the garden area about 1 to 2 months before planting. Work it into the top 10-12 inches of soil. A thorough watering of soil at this time helps leach harmful salts from the root zone. If poultry manures are used, apply them at half rate.

A fertilizer should be added containing both nitrogen and phosphorus and be applied before planting. These nutrients will benefit most garden crops. Although soils vary in fertility, a typical fertilizer application would be 1 to 2 lbs. (1 to 2 cups) of 16-20-0 (ammonium phosphate) per 100 $ft.^2$ spread evenly over the soil. Also, 3 to 5 lb. of soil sulfur/100 $ft.^2$ may be added if water drainage is poor. All these materials should be plowed, roto-tilled or spaded into the top 10 to 12 inches of soil shortly before planting.

In preparing the seedbed, do not work the soil when it is too wet. Wait for it to dry sufficiently so it crumbles in your hands. Level the area by raking. Then make raised beds if using furrow irrigation (*See Figure A*). Top dress planted area with a three inch layer of organic mulch after seedlings emerge or after transplanting (*See Step 8*).

When growing vegetables in close quarters or where good soil is not available, an artificial soil can be used. If the soil doesn't drain well consider using raised beds filled with ½ garden soil and ½ artificial soil mix, coarse sand, perlite or vermiculite. (*see Figure B*).

During the growing season fertilizers may be needed. Applying bands of fertilizer, usually only nitrogen, is called "side-dressing." Apply ½ lb./100 feet of row of 21-0-0 or equivalent fertilizer, three inches deep and about four inches to the side of the plants. Alternatively, spread nitrogen fertilizer on the soil surface about 4 inches from the plant and water it in. However, too much fertilizer too close to the plant may injure plant roots. Examples of side-dressing timing are: tomatoes—after the first clusters of tomatoes form; sweet corn—when plants are "knee high" and again when they tassel; cucumbers, melons and squash when they begin to produce runners.

Step 6 Plant your vegetables properly

Most vegetables are started from seed or transplants. Seed can be sown directly into the garden soil, while transplants are started elsewhere and later planted into the garden. Harvest can be obtained sooner with transplants; however, it is more expensive and certain plants do not transplant well. Generally, beans, beets, carrots, cucumbers, lettuce, muskmelons, onions, peas, pumpkin, radish, spinach, squash, sweet corn and watermelon are started in

Step 6

the garden from seed. Vegetables like asparagus, broccoli, cabbage, cauliflower, eggplant, peppers, sweet potatoes and tomatoes are generally transplanted, but care needs to be taken to minimize root drying and injury.

A few simple rules need to be followed in seeding:

- Mark out straight rows to make the garden attractive and to make cultivation, insect control and harvesting easier. To mark a row, drive two stakes into the ground at each end of the garden and draw a string tightly between them. Shallow furrows, suitable for small seed, can be made by drawing a hoe handle along the line indicated by the string. For deeper furrows, use the corner of the hoe blade. Use correct spacing between rows.
- Space seeds properly in the row. The number of seeds to sow per foot or hill (more than one seed/hole) is suggested on seed packages or in reference materials. Space the seeds uniformly. Sometimes small seeds can be handled better if they are mixed with dry, pulverized soil or sand and then spread. To aid in spacing seed, spread on one layer of toilet paper placed on the soil. The contrast of the white toilet paper will aid in seeing seed spacing.
- Plant at the proper depth. A general rule to follow is to place the seed at a depth about four times the diameter of the seed. Cover small seeds such as carrots and lettuce with no more than ¼ to ½ inch of soil. Place large seeds such as corn, beans and peas 1 to 2 inches deep. In sandy soils plant seed somewhat deeper.
- Cover seeds and firm the soil over them by gently tamping the soil by hand or the flat back of a hoe. This prevents rain or sprinkler water from washing away the seeds.
- Irrigate by sprinkling the soil surface lightly. When using furrow irrigation, hold water until moisture moves across seed row. Seeds need moisture to germinate. Water often enough to prevent crusting and drying around the seed. After plants emerge, water less often but deeper.
- Thin plants to the desired number as soon as possible. Remove weaker plants. Scissors can aid in thinning by cutting out young plants. Do not wait too long before thinning or injury will result from crowding and disturbing the remaining plants.

When transplanting follow these directions:

- Transplant on a cloudy day or in the evening.
- Handle plants with care. About an hour before transplanting thoroughly water plants and soil in the containers (pots, bands, flats). Carefully remove plants from their containers, disturbing the roots as little as possible. Try to keep the "soil ball" around the roots. Keep roots moist at all times when they are out of the soil. If roots are "pot bound" tease them out before planting.
- Dig a hole large enough so that the transplanted plant sits slightly deeper than it grew in the container.
- Use a starter solution to get plants off to a faster start. Starter fertilizer is a soluble fertilizer high in phosphorous like 10-52-17 or 10-50-10 mixture. Mix fertilizer with water following the label directions (about 2 tablespoons per gallon of water). After plants are set in the soil, pour about 1 cup of solution around the roots of each plant. When peat or fiber pots are set in the soil add enough water to soften pot. Also, break off any excessive pot material so it is below the garden soil level to prevent water wicking. Remove any plastic or wooden bands from around roots.
- Cover the roots with soil and firm the soil around the plant.
- Protect plants for a few days from sun, wind or cold if necessary.

Irrigate with care

Step 7

Irrigation is necessary for all garden crops in Arizona because of limited and uncertain rainfall. Water enough to keep the soil moist (not wet) in the root zone of the plant throughout the growing season. Excessive fluctuations of soil moisture adversely affect plant growth and quality. Regular applications of water need to be made to prevent the soil from becoming too dry (*see Figure C*).

Proper watering can be accomplished by observing the plant and soil. Do not allow the plant to become stressed, wilted or slow-growing. On the other hand, too much water, especially on heavy soils, will exclude air from the root zone, resulting in poor growth. When the soil becomes crumbly upon squeezing, it's time to irrigate. Moisture is needed around the seed for sprouting. Frequent watering will be needed to keep the soil adequately moist and prevent crusting of the surface. A three inch layer of organic mulch will help prevent evaporation. Do not place mulch on top of seedlings or transplants, but around them.

As the plant grows, the watering period should be longer, allowing deeper penetration through the root zone. Determine the moisture depth with a spade or by probing with a stick, trowel or iron rod. Most vegetables are shallow-rooted and use water from the upper 12 to 24 inches of soil.

Frequency of watering depends on many things. A large plant needs more water than a small plant. A shallow-rooted vegetable (cabbage, onion, lettuce, corn)

Step 7

needs to be irrigated more often than a deep-rooted vegetable (asparagus, tomato, watermelon). Coarse textured soils (sandy loams) need to be irrigated more often than fine-textured (clay or silt loams). Plants need to be watered more often during hot periods than cool periods. In an average situation during warm weather, a good soaking of the soil every 5 to 7 days should give satisfactory results with established plants.

The following irrigation methods are commonly used: furrow, sprinkler, soaker hoses and drip (trickle). The furrow method delivers water alongside the plant row. Water should be kept in the furrow long enough for moisture to completely infiltrate the soil of the root zone. Garden sprinklers apply water on both plants and soil and should not be used if the water is salty. Drip or trickle emitter systems and soaker hoses apply water through a hose which lies beside the crop row. All four methods have a place in Arizona gardens. Traditionally, a raised bed with two rows is used with furrow irrigation, while a flat bed with no furrows is normally used with the other methods. If a watering method moistens the plant foliage, irrigate in the morning so plants have time to dry during the day. This will lessen disease problems. Night time watering encourages disease growth.

Plants growing in containers should be watched more closely for water needs because the roots are more crowded and temperatures of root media are more extreme. Keep soil moist but do not over-water. Make holes on the side and/or the bottom of the container for drainage and air.

Mulch & cultivate to control weeds

Step 8

Weeds compete with vegetables for water, nutrients and light. Weeds often harbor insects and diseases. Two important ways to keep down the weeds in and around your garden are mulching and cultivation. If proper attention is given to this problem early much time and effort can be saved. Small weeds are easier to control than large ones. When weeds get started they can cause many headaches and backaches, and retard plant growth.

Mulching is covering the soil around your vegetables with a protective material. Besides controlling weeds, the mulch will conserve moisture, regulate the soil temperature and keep the vegetables cleaner. With mulch very little cultivation is needed. Mulch materials include leaves, straw, sawdust, wood chips, cardboard, newspaper, shredded paper, old carpet, and paper and plastic sheeting. On established plantings, materials are spread around the plants. With paper or plastic sheeting the material is rolled out on the prepared seedbed and anchored on the edges with soil. Seeds and transplants are planted through holes at the desired spacings. Water can be applied from the side through furrow irrigation or by a trickle/drip tube or soaker hose under the mulch.

Cultivate with a sharp hoe or cultivator just as the weeds begin to sprout. Scrape and loosen the total soil surface around the plants without going too deep, which would cut or damage shallow roots of the vegetable plants. Cultivation will also help aerate the soil and can be used to mix a side-dressing of nitrogen fertilizer into the soil.

Chemical herbicides for weed control are not generally recommended for use in home gardens.

Be prepared for pests and problems

Step 9

Problems of the garden can be minimized by being prepared for them. Learn about the insects and diseases that commonly occur in the area and learn control methods. Whenever possible select disease resistant varieties. Soil problems can be reduced if the steps mentioned earlier are followed; however, crop injury from salt can appear if proper management has not been followed. High temperature and shallow watering often cause problems especially when plantings are made too late in the spring or too early in the fall. Also, as temperatures increase more pest problems will occur; be prepared for them. Learn as much as possible from books, bulletins and professionals. Experience is the best teacher on how to handle these problems. Recording treatments in a gardening notebook will be helpful in the future when they occur again.

Harvest at peak quality

Step 10

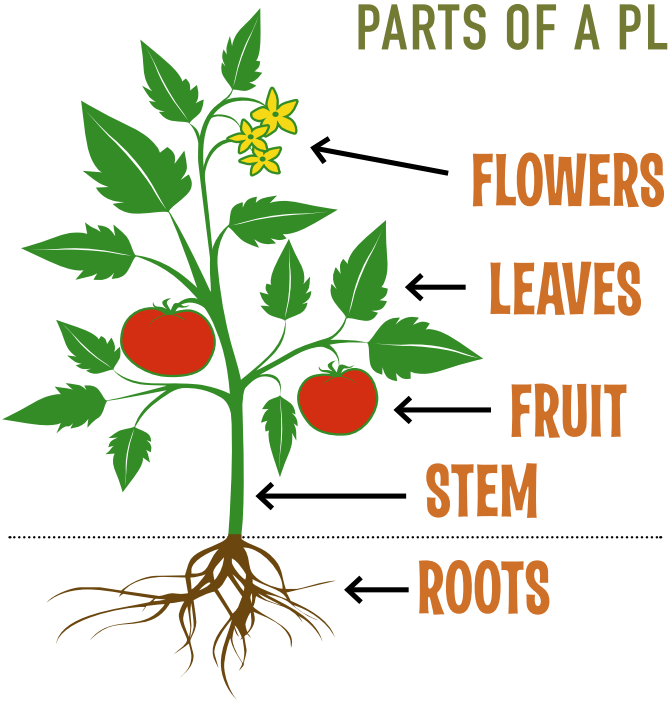
The job is not done until top quality vegetables are harvested from the garden. When the "fruits" of your labor are tasted, then it will be worth all the effort.

Most vegetables are at peak quality for only a short period of time and should be harvested. Learn to tell the proper time to harvest each crop. Immature vegetables will not improve after harvest and over-mature vegetables will be tough and lack the desired taste and texture.

To maintain quality after harvest, handle vegetables carefully. Cool and store vegetables like asparagus, broccoli, leafy crops, peas and sweet corn below 40° F.; tomatoes, peppers, cucumbers and eggplant around 55° F. Remove "field heat" as soon as possible by placing them in the shade or a refridgerator, unless they are eaten immediately.

Garden vegetables offer you a variety of experiences and flavors throughout the year. Enjoy them both.

PARTS OF A PLANT



FUN ACTIVITY!

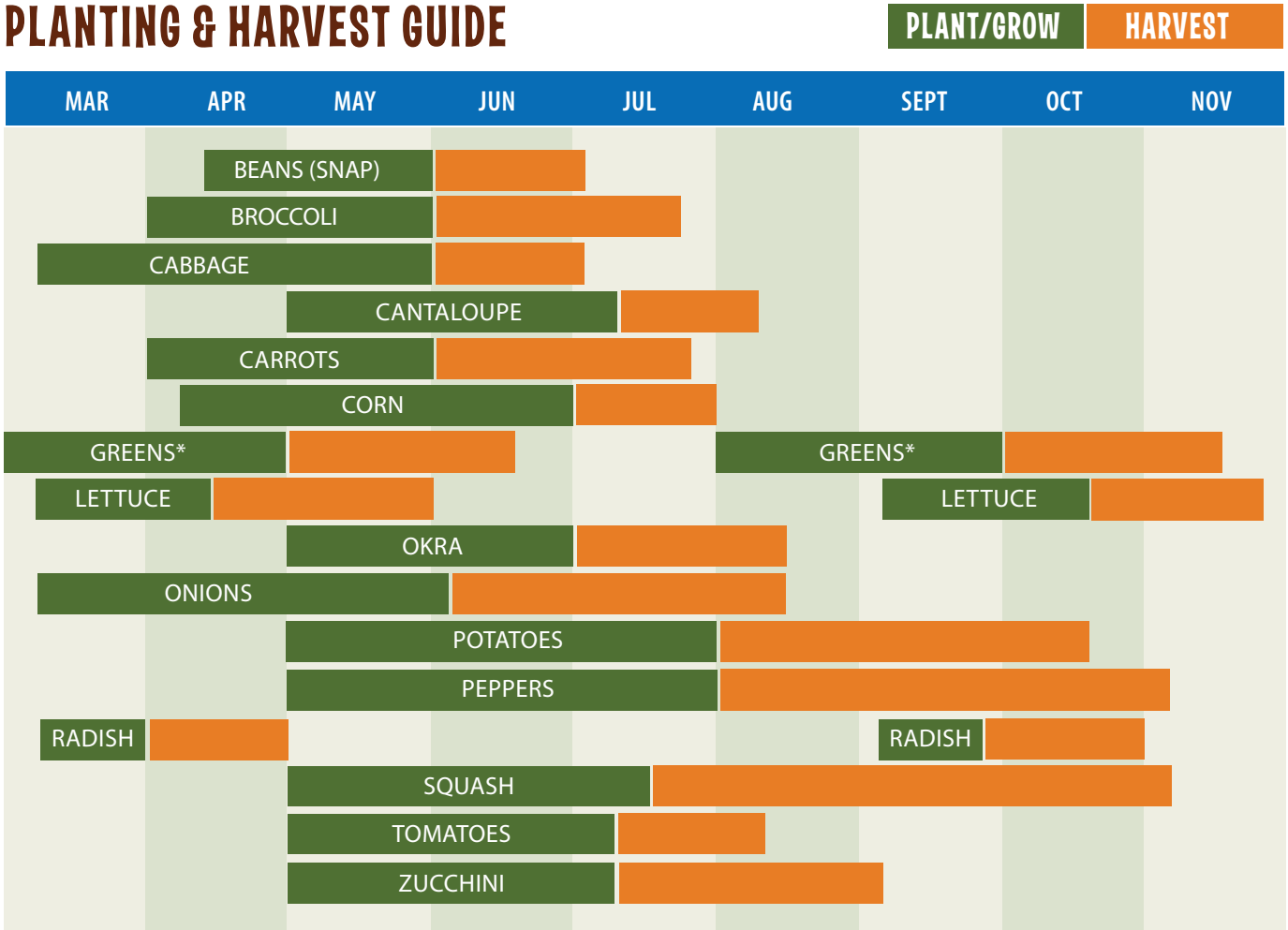
Make a seed starter.
For instructions go to page 17.

The Rest of the Garden:

All vegetables in the garden grow in much the same way, starting out as seeds or bulbs, and ending as healthy vegetables.

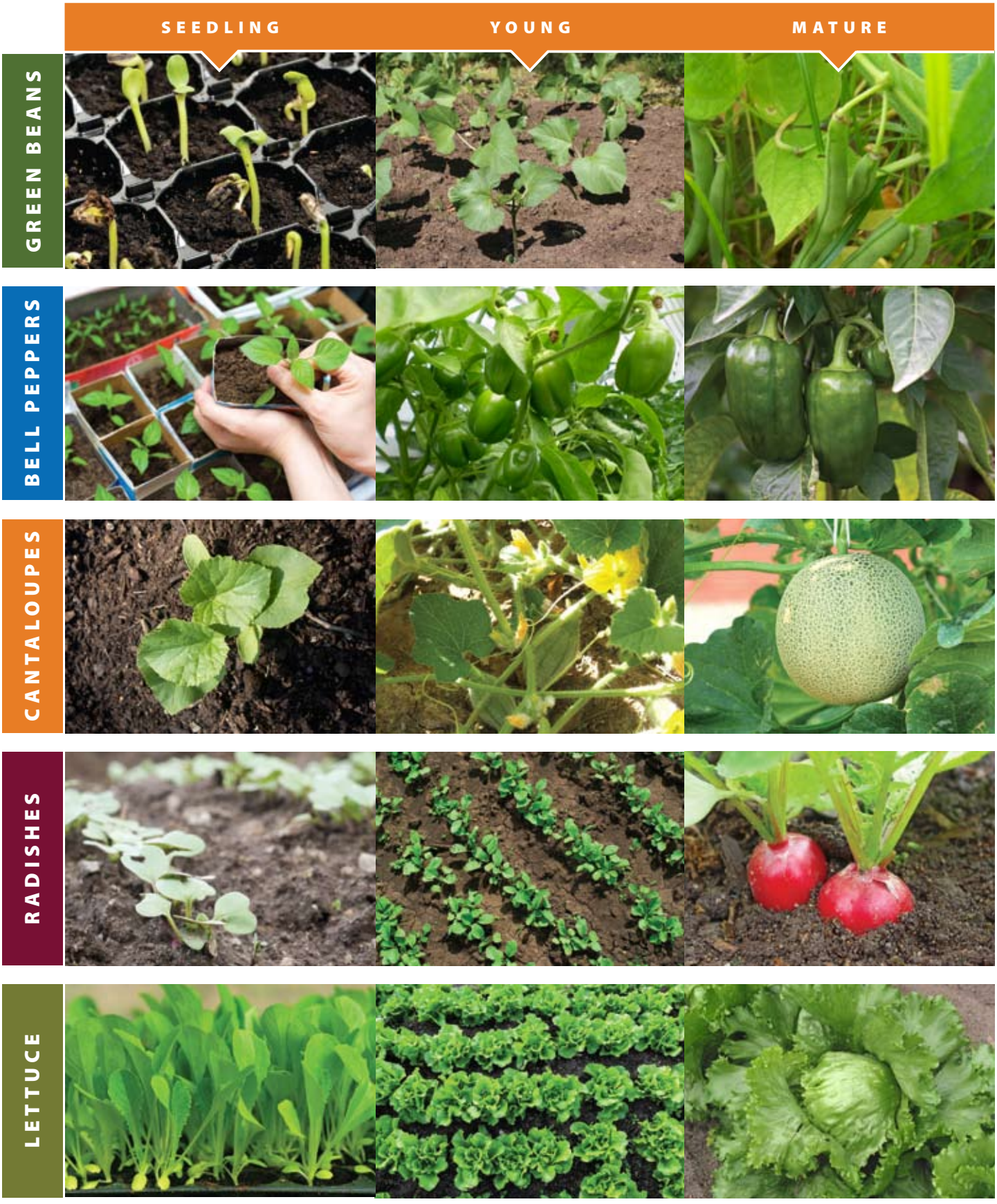
From planting to the dinner table, a tomato takes 60 - 90 days. The growing season for other popular garden foods are shown in the chart below:

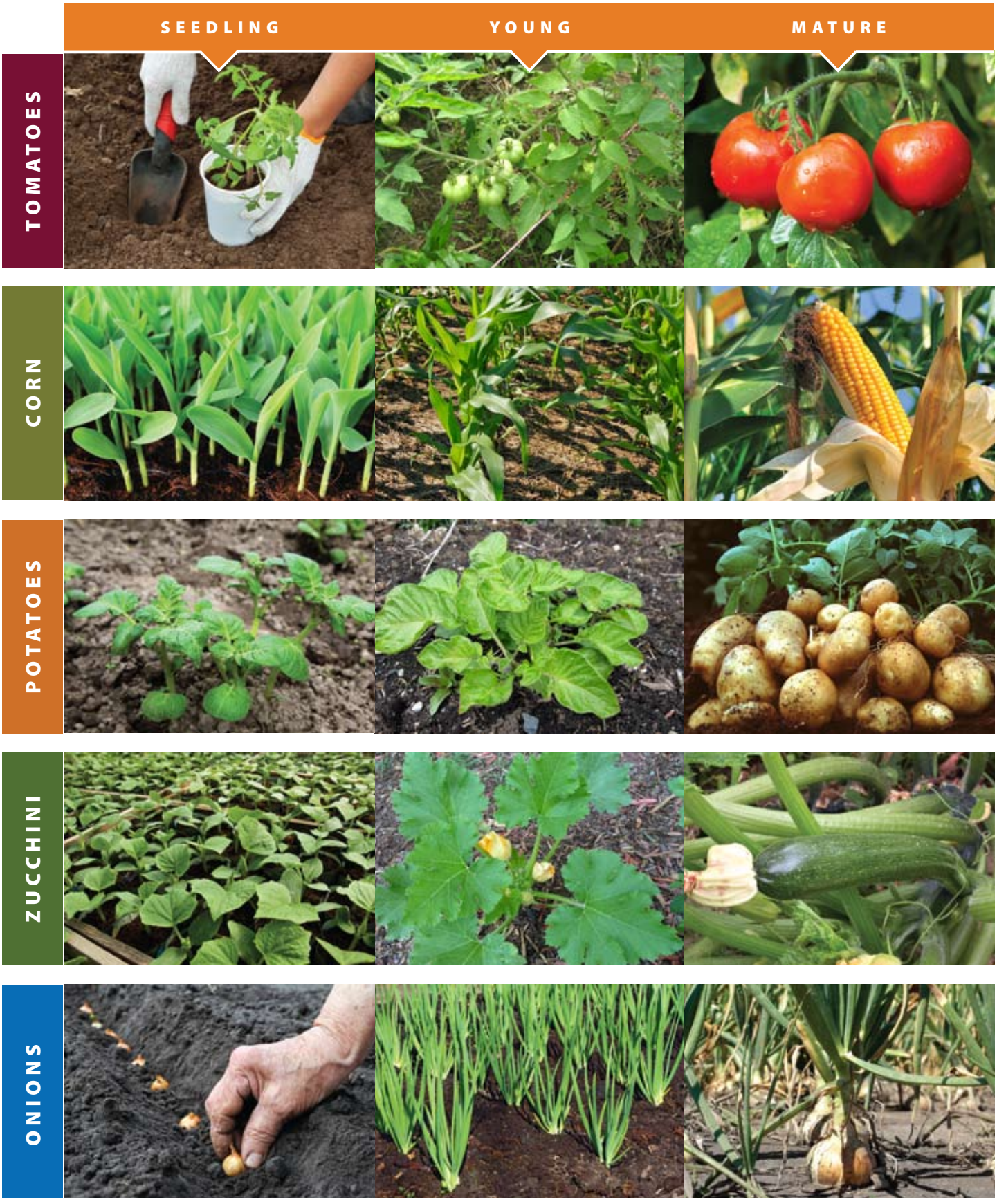
PLANTING & HARVEST GUIDE



* Greens refer to any number of different plants including the traditional spinach, mustard, collard, turnip, etc., as well as newer Asian varieties and Swiss chard.

FROM SEED TO MATURE PLANT




SEEDLING
YOUNG
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TOMATOES
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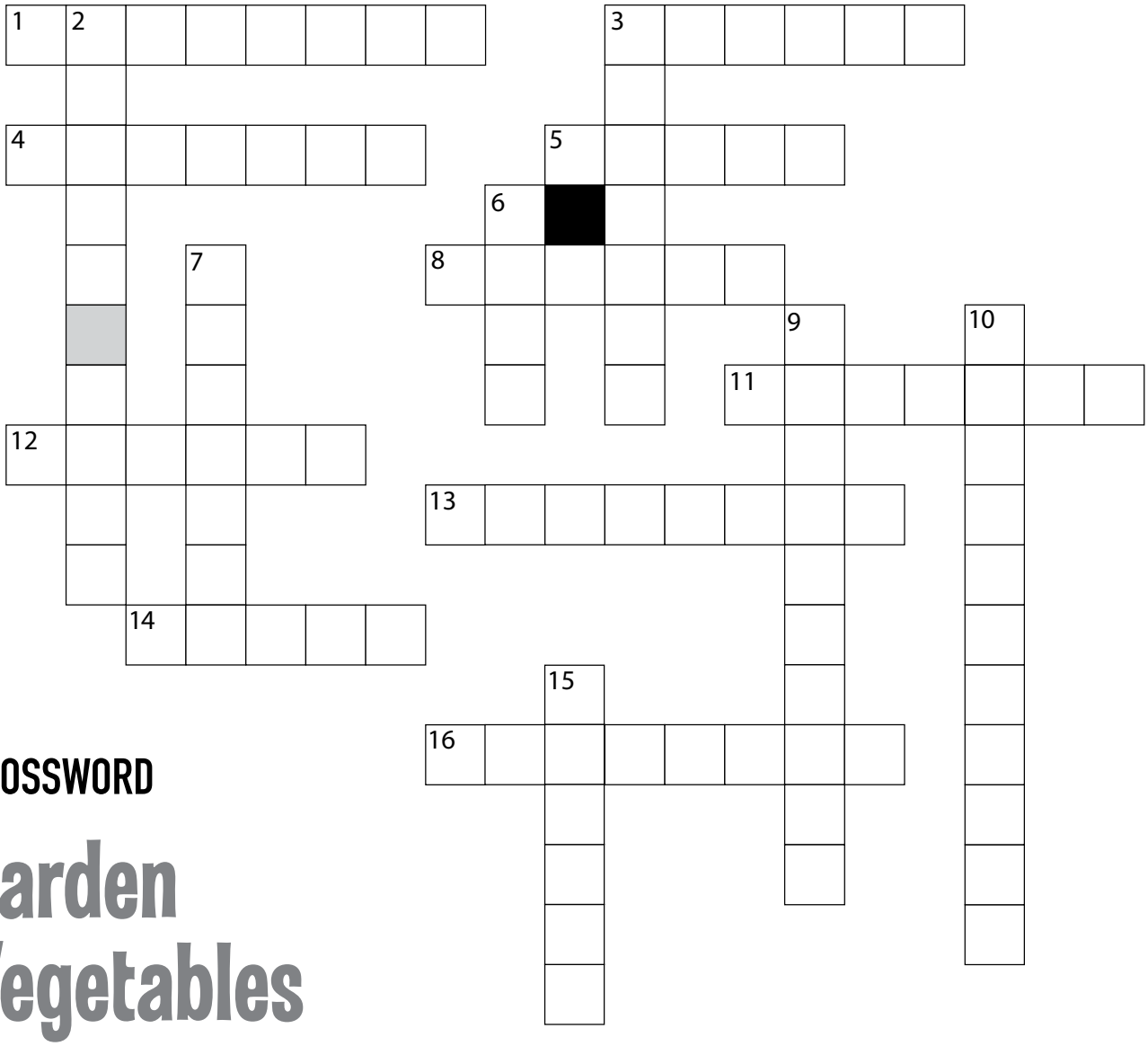

CROSSWORD

Garden Vegetables

ACROSS

1. This grows to be purple
3. This sounds like it has been smashed
4. This is green and is used in most salads
5. These beans grow in a pod
8. You have to have one of these on a BLT sandwich
11. This grows into a big green head
12. You can make hot sauce out of this
13. You can make pickles out of this
14. When you slice this, it could make you cry
16. This is often cut into "florets"

DOWN

2. This can be "string" and "snap"
3. Popeye ate this to make him strong
6. This has "ears"
7. You can make this scary-looking at Halloween
9. This is great at a summer picnic
10. When this grows, it has a big white head
15. This has "eyes"

Say Yes to Healthy Snacks!

Snacks are an important part of children's daily nutrition in child care as well as at home. Be aware that a young child may eat little one day and a lot the next. In planning healthy snacks, consider food safety and known allergies as well as "snack appeal"!

Serve snacks from a variety of food groups.

Grains and carbohydrates. Young children will enjoy these snacks as part of the 3–4 cups needed each day: crackers with cheese spread, ready-to-eat cereal, mini rice cakes, and graham crackers.

Vegetables. Snacks can be a good way to work 2 cups of these foods into a child's daily diet. Try vegetable strips, such as cucumber or squash, cherry tomatoes cut into small pieces, steamed broccoli or carrots, green beans, or sugar peas. Offer a low-fat dressing or hummus for dipping.

Fruit. Sections of fruit (apples, tangerines, bananas, or pineapples), canned fruits, and juices are good choices. A child needs 1–1½ cups of fruit each day, but be careful not to overdo the juice. A serving for 4- to 6-year-olds is ¾ cup.

Milk products. Some good choices include milk shakes made with fruit, cheese slices or string cheese, and mini yogurt cups. One-half cup of milk or 1 ounce of cheese makes up 1 of the 4-5 servings young children should have each day.

Meat and protein. Children may enjoy hard-cooked eggs; peanut butter spread thinly on crackers, fruit, or vegetables; or bean dip thinly spread on crackers. Two to 3 ounces of meat, 1 egg, or 2 tablespoons of peanut butter count as 1 of the 2–3 recommended daily servings of meat or protein recommended for children ages 2 to 6.

Sweet and high-fat foods. Everyone enjoys an occasional treat, and a child's daily diet should include 2–3 teaspoons of oil or fat in his food. Try to limit the number of these foods. Eating them may keep a child from eating the foods he needs and can lead to overeating.

Take safety precautions in serving food.

Watch out for foods that may cause choking, including hot dogs, meat chunks, chips, nuts and seeds, popcorn, raisins, grapes, cherries, marshmallows, pretzels, large chunks of fruit or raw vegetables, peanut butter (when eaten by the spoonful), and round or hard candy. Some of these foods (like grapes or cherries) can be served if they are cut into small pieces. Peanut butter can be spread thinly on crackers or bread. Children love finger foods!

Know a child's allergies. Be sure that anyone who cares for a child is aware of her allergies and reports any allergic reactions to her parents. Severe reactions can be life threatening and may require emergency medical attention.

For related Web resources, see "Say Yes to Healthy Snacks!" at http://illinoisearlylearning.org/tips.htm

Illinois Early Learning Project

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Illinois State Board of Education

¡Diga que sí a los bocadillos!

Los bocadillos o meriendas son una parte importante de la nutrición infantil de cada día, tanto en la guardería como en casa. Tenga en cuenta que un niño pequeño puede comer poco algún día y mucho al día siguiente. Al planear los bocadillos saludables, hay que tomar en cuenta la seguridad de la comida, las alergias conocidas y la apariencia de los mismos.

Ofrezca bocadillos de una variedad de grupos alimenticios.

Los granos y carbohidratos. A los niños les gustarán estos bocadillos como parte de las 3 ó 4 tazas (700–950 ml) que requieren cada día: galletas con queso para untar, cereal de caja, pastelitos de arroz y galletas de trigo entero.

Las verduras. Los bocadillos pueden representar una manera buena de acomodar las 2 tazas (470 ml) de verduras en la dieta cotidiana del niño. Experimente con tiras de vegetales, como pepinos o calabazas, tomates pequeños partidos en pedacitos, o brócoli, zanahorias, ejotes (habichuelas) o arvejas al vapor. Ofrezca un aderezo de poca grasa o hummus (salsa de garbanzos molidos con ajo y jugo de limón) para untar los vegetales.

La fruta. Las tajadas de frutas (manzanas, mandarinas, bananas o piña), las frutas enlatadas y los jugos son buenas opciones. Los niños necesitan entre 1 taza y 1 taza y ½ (240–355 ml) de fruta al día, pero tenga cuidado de no darles demasiado jugo. Una porción para niños de 4 a 6 años de edad es sólo 3/4 de una taza (180 ml).

Los productos lácteos. Buenas alternativas incluyen batidos hechos con leche y fruta, tajadas de queso y tacitas de yogur. Media taza de leche (120 mL) o 1 onza (30 g) de queso representa 1 de las 4 ó 5 porciones que los niños pequeños deben comer cada día.

La carne y la proteína. Los niños pueden disfrutar de los huevos hervidos; la crema de maní/cacahuete untada ligeramente en galletas, frutas o verduras; o una salsa de frijoles untada ligeramente en galletas. Dos o 3 onzas (57–85 g) de carne, 1 huevo o 2 cucharadas (30 ml) de crema de cacahuete representan 1 de las 2 ó 3 porciones diarias de carne o proteína recomendadas para los niños de 2 a 6 años de edad.

Los dulces y los alimentos con mucha grasa. Todo el mundo disfruta un antojo de vez en cuando, y la dieta diaria de un niño debe incluir 2 ó 3 cucharaditas (10–15 ml) de aceite o grasa en el alimento. Pero hay que tratar de limitar el número de estos alimentos. Si un niño los come, esto puede impedir que coma los alimentos que necesita y puede llevarlo a comer demasiado.

Tome medidas de precaución al servir la comida.

Cuidado con los alimentos que podrían atragantar a los niños, como los hot dog, pedazos de carne, papitas y tostaditas, nueces y semillas, palomitas, pasitas, uvas y cerezas, bombones, bizcochitos salados (prétzeles), trozos grandes de fruta o de verduras crudas, la crema de maní/cacahuete (si se come en cucharadas) y dulces redondeados o duros. Algunos de estos alimentos (como las uvas y cerezas) se pueden servir cortados en pedacitos. La crema de cacahuete se puede untar ligeramente en el pan o las galletas. ¡A los niños les encanta comer con los dedos!

Conozca las alergias de sus hijos. Asegúrese que cualquier persona que cuide a sus hijos sabe de sus alergias y le informe de cualquier reacción alérgica que tengan. Las reacciones graves pueden poner en riesgo la vida y pueden ocasionar la necesidad de atención médica de emergencia.

English Title: Say Yes to Healthy Snacks!

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Tips for Picky Eaters

Help! I think I have a picky eater!

Young kids often do things that seem like picky eating. They are trying to do more for themselves, and they want to do things their way. They may refuse to eat a certain food, or not eat much on some days. This is temporary, and it's a normal part of growing up.

My child doesn't like to try new foods.

- Offer one new food at a time. Offer it with foods she likes.
- Offer a small amount. Don't worry if your child doesn't eat it. Try again another time. You may need to offer it many times before she will eat it.
- Let her try all kinds of foods, even the ones you don't like!

My child doesn't always want to eat what I serve. She wants something else.

- Have at least one food she likes at each meal, along with the other foods.
- Let your child help with meals. Children like to eat foods they help prepare.
- Sometimes offer her two choices of foods and let her pick one.

My child doesn't eat much.

- Young kids are smart eaters. They eat when they are hungry and they stop when they are full.
- It's normal for kids to eat less after their first year. They are not growing as fast.

My child only wants to eat one kind of food.

- This is normal at this age. Let him eat the food he wants, if it's a healthy food.
- Offer him other foods, too. After a few days, he will probably eat other foods again.

My child sometimes doesn't want to eat anything.

- Don't worry if he skips a meal sometimes. He will make up for it later.
- Take the food away until the next meal or snack. Meals and snacks should be about every two to three hours.
- Make sure he doesn't fill up on milk, juice, or sweet drinks between meals. Offer water in a cup when he's thirsty. He should drink only from a cup now, not a bottle.

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CDPH

Consejos para los niños delicados para comer

¡Auxilio! ¡Mi hijo es delicado con la comida!

Con frecuencia, parece que los niños pequeños son selectivos para comer. Tratan de hacer más cosas solos y de hacer las cosas a su manera. Se pueden negar a comer ciertos alimentos o no comer mucho algunos días. Esto es temporal y es una parte normal del crecimiento.

Mi hijo no quiere probar alimentos nuevos.

- Ofrézcale un alimento nuevo a la vez. Ofrézcalo junto con los alimentos que le gustan.
- Ofrézcale una cantidad pequeña. No se preocupe si su hijo no se lo come. Ofrézcaselo otra vez en otro momento. Es posible que tenga que ofrecérselo varias veces antes de que se lo coma.
- Deje que pruebe toda clase de alimentos, ¡incluso los que a usted no le gustan!

Mi hijo no siempre quiere comerse lo que le sirvo. Quiere otra cosa.

- Sírvale al menos un alimento que le guste en cada comida, junto con los demás alimentos.
- Deje que su hijo le ayude a preparar las comidas. A los niños les gusta comer alimentos que ayudaron a preparar.
- A veces, ofrézcale dos alimentos y deje que elija uno.

Mi hijo come poco.

- Los niños pequeños saben cuánto necesitan comer. Comen cuando tienen hambre y dejan de comer cuando están satisfechos.
- Es normal que los niños coman menos después del primer año. Ya no crecen tan rápido.

Mi hijo sólo quiere comer un tipo de alimento.

- Esto es normal a esta edad. Déjelo que coma el alimento que quiera, si es un alimento saludable.
- Ofrézcale también otros alimentos. Es probable que después de unos días vuelva a comer otros alimentos.

Mi hijo a veces no quiere comer nada.

- No se preocupe si de vez en cuando se salta alguna comida. Después se comerá más.
- Retire los alimentos hasta la siguiente comida o bocadillo. Las comidas y los bocadillos deben ser cada dos o tres horas.
- No deje que se llene de leche, jugo o bebidas dulces entre comidas. Si tiene sed, ofrézcale agua en un vaso. Ahora sólo debe tomar de un vaso, no del biberón.

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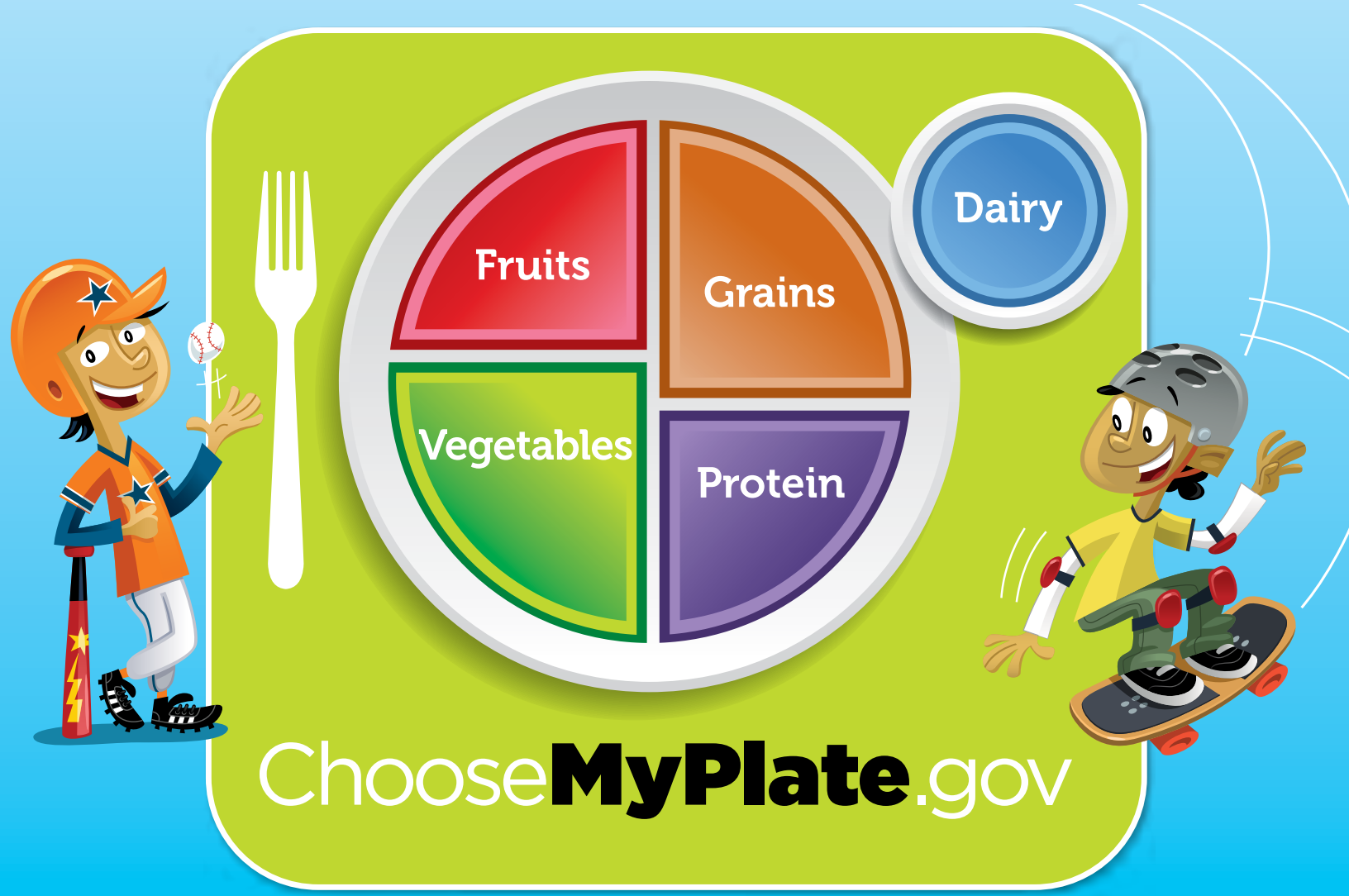
CDPH

Eat Smart To Play Hard

Use ***MyPlate*** to help you fuel up with foods from each food group.



Keep on Moving!

You need at least 60 minutes of physical activity each day. Whether that's skateboarding, tossing a ball, or playing tag, every little bit counts!

USDA Serving Up *MyPlate*
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http://teamnutrition.usda.gov

FRUITS Fuel Up With Fruits at Meals or Snacks

Oranges, pears, berries, watermelon, peaches, raisins, and applesauce (without extra sugar) are just a few of the great choices. Make sure your juice is 100% fruit juice.

VEGETABLES Color Your Plate With Great-Tasting Veggies

Try to eat more dark-green, red, and orange vegetables, and beans and peas.

GRAINS Make at Least Half Your Grains Whole Grains

Choose whole-grain foods, such as whole-wheat bread, oatmeal, whole-wheat tortillas, brown rice, and light popcorn, more often.

PROTEIN Vary Your Protein Foods

Try fish, shellfish, beans, and peas more often. Some tasty ways include a bean burrito, hummus, veggie chili, fish taco, shrimp or tofu stir-fry, or grilled salmon.

DAIRY Get Your Calcium-Rich Foods

Choose fat-free or low-fat milk, yogurt, and cheese at meals or snacks. Dairy foods contain calcium for strong bones and healthy teeth.

Know Your "Sometimes" Foods Look out for foods with added sugars or solid fats. They fill you up so that you don't have room for the foods that help you eat smart and play hard.

"You'd never expect peppers to be sweet, but they are. My daughter loves the crunch, so I keep sliced bell peppers in the fridge. I serve them with a little ranch dressing...so good and so easy!"

Recipe

Colorful Quesadillas

Preparation time: 10 minutes
Cooking time: 15 minutes
Serves: 8
Serving size: 4 wedges or 1 quesadilla

Ingredients:

- 8 oz fat-free cream cheese
- ¼ tsp garlic powder
- 8 small whole-wheat tortillas
- 1 cup sweet red or green bell pepper, chopped
- 1 cup shredded low-fat cheese
- 2 cups fresh spinach leaves
  or 10 oz frozen spinach, thawed and squeezed dry

Directions:

1. In a small bowl, mix the cream cheese and garlic powder.
2. Spread about 2 Tbsp of the cheese mixture on each tortilla.
3. Sprinkle about 2 Tbsp bell pepper and 2 Tbsp shredded cheese on one half of each tortilla.
4. Add spinach: ¼ cup if using fresh leaves or 2 Tbsp if using frozen. Fold tortillas in half.
5. Heat a large skillet over medium heat until hot. Put 2 folded tortillas in skillet and heat for 1-2 minutes on each side or until golden brown.
6. Remove quesadillas from skillet, place on platter, and cover with foil to keep warm while cooking the remainder.
7. Cut each quesadilla into 4 wedges. Serve warm.

Time Saver

Cooking together is not only a great bonding experience, but it gives kids skills that they'll need for life. Even better, it helps get dinner on the table faster.

Ask About

- What are some ways we can use fruits and vegetables to add color to our meals at home?
- What are some examples of dark-green, red, and orange vegetables?

Make an assembly line and put the family to work. One child can spread the cheese mixture, another can sprinkle the veggies. Make sure an adult does the cooking, though!

"Uno nunca espera que los pimientos sean dulces, pero lo son. A mi hija le encanta lo crujiente, así que tengo pimientos dulces rebanados en el refrigerador. Los sirvo con un poco de aderezo ranch... ¡son tan buenos y fáciles de preparar!"

Receta

Quesadillas de colores

Tiempo de preparación: 10 minutos
Tiempo de cocción: 15 minutos
Porciones: 8
Tamaño de la porción: 4 rebanadas o 1 quesadilla

Ingredientes:

- 8 oz de queso crema sin grasa
- ¼ de cucharadita de ajo en polvo
- 8 tortillas pequeñas de harina de trigo integral
- 1 taza de pimientos rojos o verdes, picados
- 1 taza de queso rallado bajo en grasa
- 2 tazas de hojas de espinaca fresca o 10 oz de espinaca congelada, descongelada y seca exprimida

Instrucciones:

1. En un tazón pequeño, mezcle el queso crema y el ajo en polvo.
2. Unte alrededor de 2 cucharadas de la mezcla de queso en cada tortilla.
3. Esparza alrededor de 2 cucharadas de los pimientos y 2 cucharadas del queso rallado en una mitad de cada tortilla.
4. Añada la espinaca: ¼ de taza si usa hojas frescas o 2 cucharadas si usa congelada. Doble las tortillas a la mitad.
5. Caliente una sartén grande a fuego medio hasta que se caliente. Coloque 2 tortillas dobladas en la sartén y caliente de 1 a 2 minutos en cada lado o hasta que se doren.
6. Retire las quesadillas de la sartén, coloque en el plato y cubra con papel aluminio para mantenerlas calientes mientras cocina el resto.
7. Corte cada quesadilla en 4 rebanadas. Sirva caliente.

Ahorre tiempo

Cocinar juntos no sólo es una gran experiencia de unidad, sino también les brinda a los niños habilidades que necesitarán para su vida. Aún mejor, ayuda a tener la cena en la mesa con más rapidez.

Pregunte

- ¿Cuáles son algunas maneras en las que podemos usar frutas y vegetales para darle color a nuestras comidas en casa?
- ¿Cuáles son algunos ejemplos de vegetales color verde oscuro, rojo y anaranjado?

Establezca una línea de producción y ponga a la familia a trabajar. Un hijo puede untar la mezcla de queso, otro puede esparcir los vegetales. ¡Asegúrese de que un adulto sea el que cocine!