

Slide 1



Children's Memorial  
Research Center

Consortium to Lower Obesity  
in Chicago Children  
**clocc**

**5-4-3-2-1 go!**

**5+ Daily Servings  
of Fruits and Vegetables**

Introduce 5-4-3-2-1 concept

Explain that today we will discuss the why's and how's around eating 5 servings of fruits and vegetables every day

★ **5+ daily servings of fruits and vegetables**


- ★ 4 servings of water daily
- ★ 3 servings of low-fat dairy daily
- ★ 2 hours or less of daily screen time
- ★ 1 hour or more of physical activity



This presentation is part of the 5-4-3-2-1 message and will focus on the 5, which is 5 daily servings of fruits and vegetables.

### Benefits of Eating Fruits and Vegetables

- ◆ Provides vitamins, minerals and fiber
  - ◇ Immune system
  - ◇ Regularity
  
- ◆ Helps maintain and/or lose weight



There are many benefits to eating fruits and vegetables.

They provide many vitamins, minerals, phytochemicals, and fiber that help to support your immune system so you are less likely to get sick. They also provide a lot of fiber that helps with constipation/regularity and helps to prevent colon cancer.

Ref: [www.5aday.gov](http://www.5aday.gov) and

The Health Benefits of Fruits and Vegetables. Produce for Better Health Foundation, 2002.

## Benefits of Eating Fruits and Vegetables


- ◆ Reduces risk of diseases:
  - ◆ Heart disease
  - ◆ High blood pressure
  - ◆ Type II diabetes
  - ◆ Certain Cancers



The nutrients in fruits and vegetables help prevent many serious diseases. These nutrients help to reduce the risk of heart disease, high blood pressure, type II diabetes, and cancers, including lung, breast, colon, and stomach cancers.

**How much fruit and vegetables do we need to eat?**

For children aged 2-6:	5+ servings daily
For older children, teen girls and women:	7+ servings daily
For teen boys and men:	9+ servings daily



The logo features the numbers 5, 4, 3, 2, 1 in a stylized, colorful font, followed by the word 'go' in a red, star-shaped font with a blue outline and a small blue star to its right.

The recommendations for the amount of fruits and vegetables a person should eat are based on how big and how active the person is.



For example, young children are small, so they don't need to eat as many servings of fruits and vegetables each day as teenagers or adults. Young children should eat 5 or more servings each day.

There is no need to worry about eating too many fruits or vegetables, so long as your child eats a variety of different types.

**What is a serving of fruit or vegetables?**

Rules of Thumb

- ✦ Varies by age, body size
- ✦ Whole fruit or vegetable
  - ◇ Piece of fruit the size of your fist



So, just what is a serving?

A serving is smaller than you might think, and can vary with how big and physically active you are. For cut or cooked fruits and vegetables, a serving should fit in the palm of your hand. For whole fruits and vegetables, a serving is the size of your fist.

If you are having a whole fruit or vegetable, like an apple or tomato, then a serving would be the size of your fist. Very young children are smaller, so a serving is smaller for them.

## What is a serving?

### Specifics for adults and older children

- ★ 6 oz of 100% juice
- ★ 1 cup of raw salad greens
- ★ ½ cup cooked/chopped fruit or veg
- ★ ½ c cooked beans or peas
- ★ ¼ c dried fruit



Here are the standard measurements for servings.



Note that for juice, a serving is not a full 8 oz. cup. It is only  $\frac{3}{4}$  of a cup, or 6 oz.

Salad greens are loose, so 1 cup is a serving.


You get a serving with only  $\frac{1}{2}$  cup of cooked or chopped fruits and vegetables.

And since dried fruit is concentrated, you only need  $\frac{1}{4}$  cup, or 1 oz, to get a serving.

### Fruit: Whole vs. juiced



- ★ Whole is better than juiced
  - ◇ Retains fiber
  - ◇ Juice: more calories but less filling
- ★ 100% or reduced calorie juice only
  - ◇ Maximum of one 6 ounce cup per day



So is it okay to drink your fruits and vegetables in the form of juice? The answer is that while juice still provides the nutrients, it is not as beneficial as the fruit in its whole form.



Whole (including chopped or cooked) fruits and vegetables retain the fiber that is removed when it is juiced. Think of the skin of an apple or the pulp of an orange.

In addition, juice tends to provide more calories per serving than whole fruit, but is not as filling. Therefore, when drinking juice it is easy to take in more calories than needed to maintain a healthy weight.

If you do serve juice, have only one 6 ounce glass a day, and make sure it is 100% juice. If you buy a reduced calorie juice, make sure it is almost 100% juice, as many juice drinks contain only 15% or less juice. When there is so little juice it doesn't count towards the 5 servings a day.

**Which fruits and vegetables should I eat?**

- ★ Different fruits and vegetables have different “strengths”
  - ◇ Darker colors are usually “stronger”
- ★ **Variety** is most important
  - ◇ Vitamins
  - ◇ Minerals
  - ◇ Fiber




Now that we’ve discussed how much you should eat, let’s talk about which fruits and vegetables you should eat. Are some fruits and vegetables better to eat than others? The answer is the different fruits and vegetables have different amounts of nutrients. For instance, oranges have a lot of vitamin C and a good amount of potassium, bananas have a lot of potassium, carrots have a lot of vitamin A and a good amount of potassium, and spinach is a good source of iron. Darker colored fruits and veggies tend to have more nutrients.

The important thing is to get a variety of different fruits and vegetables each day.

You may hear that it is possible to get sick from eating too many fruits or vegetables. That is almost never true. It may be true if you have a specific allergy. Also, if you overeat any kind of food, it can upset your stomach or give you a stomach ache; this includes fruits and vegetables.

**Fresh vs. Frozen vs.  
Canned vs. Dried**

- ◆ All are useful in meeting 5 A Day!
- ◆ Tips
  - ◇ Choose ones without added sauces
  - ◇ Canned fruit - packed in juice, not syrup
  - ◇ Watch for salt in canned vegetables
  - ◇ **Variety**





You may wonder whether there is a difference between fresh, frozen, canned, and dried fruits and vegetables. If you are eating a variety of different fruits and vegetables in different forms, then you do not need to worry about whether it is fresh or processed.

In fact, sometimes frozen vegetables have more nutrients because they are picked and frozen when they are most ripe. The fresh produce we buy in the store is often picked before it is ripe because it will spend several days traveling to our stores.

The important thing to remember here, besides variety, is to avoid items that have added sauces as seasonings as they provide extra salt and fat. Also, if you buy canned fruit, get the type that is packed in juice, not in syrup.

**Multivitamins vs.  
Fruits & Vegetables**

- ✦ Multivitamins are not a substitute
- ✦ Whole foods work better!




If you have difficulty getting in so many fruits and vegetables each day, will a multivitamin make up the difference? Definitely not.

Multivitamins, or single vitamin/mineral tablets, do not provide the combined effect that exists in food. Our bodies were designed to absorb nutrients from food, and the natural combinations that occur are more healthy for us than taking vitamin or mineral supplements.

If you want to use a multivitamin, to add to the nutrition provided by food, that is fine, so long as your doctor doesn't have any concerns.

### Preparation Counts

<p><u>Do:</u></p> <ul style="list-style-type: none"><li>✦ Fresh</li><li>✦ Steamed</li><li>✦ Sautéed/stir-fried</li><li>✦ Baked, broiled or grilled</li></ul>	<p><u>Don't:</u></p> <ul style="list-style-type: none"><li>✦ Fry in oil</li><li>✦ Add saturated fat</li><li>✦ Use fruit in syrup</li></ul> <p><u>Moderation is best:</u></p> <ul style="list-style-type: none"><li>✦ Salt</li></ul>
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When preparing fruits and vegetables to eat, remember that the way you prepare them is also important. Raw is often best, but other forms of low-fat cooking are also good. Don't overcook for the best nutrition and flavor. Fruits and vegetables that are cooked until they lose their color and become mushy also lose nutrients.

It is best to avoid frying in oil, adding a lot of sauces or salt, and to avoid fruit canned in heavy syrup.





**Eating 5 a Day**

**Variety** is Key

## How to help your child

- ★ Good nutrition starts early
  - ◇ Pregnancy
  - ◇ Breast milk
  - ◇ Solid foods in infancy
- ★ Be a good role model




So how do you get your children and family to eat more fruits and vegetables?

Good nutrition starts early. Babies get their food from their mothers during pregnancy and when breastfeeding. If a baby is not breastfed, she relies on baby formula at first. When babies start on solids, they learn what they like to eat. If they don't have sweets, then they will be more likely to fill up on fruits and vegetables.

Be a good role model. If you eat well, you influence your family to follow your example.

### How to help your child

- ✦ Keep fruits and vegetables at home
- ✦ Encourage child to pick own at store
- ✦ Avoid food as a reward




Offer fruits and pre-cut vegetables for snacks. Children enjoy carrot sticks, pepper slices, and celery sticks.


When your child goes shopping with you, let him pick his own fruit or vegetable to eat. This will give him some ownership and connection to the food.

Don't use food as a reward for good behavior or as a way to urge your child to eat. Doing this puts a higher value on the dessert. Many children will learn to like a food if exposed to it often enough. It may take 20 times, but just offering a little piece and not pressuring the child to eat can help event he pickiest eater try new foods.

### Eating the Rainbow



- ★ Make it fun
- ★ Pick different colors of fruits and vegetables for each meal
  - ◇ Blue, green, white, yellow/orange, red
- ★ Provides **variety** and different nutrients





One way to encourage eating fruits and vegetables is to make it a daily game. Each day encourage your family to eat different colors of the rainbow in fruits and vegetables.

There are a large number of fruits and vegetables that can fit into each color. For instance, blue can include plums, purple cabbage and eggplant. Green includes avocado, green apples, pears, peas, spinach and other greens, green pepper, and broccoli. White includes bananas, cauliflower, onions, and jicama. Yellow/orange includes oranges, pineapple, carrots, corn, yellow peppers, and yellow squash. And red includes red apples, red peppers, strawberries, red potatoes, red onions, cranberries, and tomatoes.

Not only is this method fun and interactive, it also helps to encourage eating a variety of fruits and vegetables each day.

**Fruits & Vegetables are Affordable**

- ★ Choose seasonal produce
  - ◇ Ripe
  - ◇ Has more nutrients/flavor
  - ◇ Less expensive
- ★ **Variety**





You may think that fruits and vegetables are expensive, especially when compared to cheese puffs and potato chips.

However, if you buy produce when it is in season, then the price can be quite low. Also, in season fruits and vegetables have the highest amount of nutrients since they are ripe when picked.

**Fruits & Vegetables are Affordable**

- ★ Use frozen, canned or dried
  - ◇ Packed in juice
  - ◇ Without added sauces
  - ◇ Season with herbs, not salt
- ★ **Variety**



Also, you can buy frozen, canned or dried fruit year round. There are often sales on these items, and they can be very economical.

Just be sure that if you buy canned fruits to get those packed in juice, not syrup. For canned vegetables, choose the low- or no-salt added varieties. And pick canned or frozen items made without sauces, which can add a lot of fat and salt.

## Fruits & Vegetables are Affordable

- ✦ Share produce cases/baskets with friends
  - ✧ Sam's/Cosco
  - ✧ Farmer's baskets/boxes
- ✦ Prepare ahead and freeze
  - ✧ Buy and cook in bulk
  - ✧ Freeze individual size portions




Another option for lower cost fresh produce is to share large purchases, such as a case of fruit from Costco, with friends or family members.

You can use this method to prepare your own seasonal produce for eating off-season. Freeze or can the fruits and vegetables in individual or family sized portions to make them easier to use.

### Fruits and Vegetables as Fast Food

- ✦ Raw
- ✦ Supermarket salad bars
- ✦ Prepackaged, pre-cut or washed
- ✦ Frozen, canned or dried – packed in juice, no added sauces or salt
- ✦ Prepare ahead and freeze
- ✦ Vegetable soups



Caring for your family and working is very time-consuming and you may be tempted to leave out vegetables when you are tired. Just remember these tips for a quick and easy way to add more vegetables and fruit to your meals.

Eat fruit whole, like apples, peaches, berries, or banana. Slice raw fruit or veg to make a side dish or snack. You can dip them in low-fat yogurt, mustard, etc. Sliced apples, carrot sticks, celery sticks, sliced bell pepper, and sliced tomatoes all make a side addition to a meal.

Supermarket salad bars provide pre-cut vegetables in the amount you want to buy. You can also use them to make a stir-fry or to sauté. Bags or containers of pre-washed, cut, or sliced fruit or veggies can be more expensive, but also make meal preparation quicker.

Frozen or canned vegetables can be quickly heated in the microwave while you are preparing other parts of the meal. Just remember to buy those that are packaged plain, without added sauces, seasonings or syrups. Dried fruits can also make a quick snack and can be added to rice for variety.

Keep a supply of frozen, canned and dried fruits and vegetables at home for those times when you are very busy or tired. They keep well and are quick to heat up.

**My spouse/child doesn't like  
vegetables**

- ✦ Dice veggies to add to ground meat, such as onions or carrots
- ✦ Add vegetable toppings to meat dishes, such as tomatoes or peppers
- ✦ Make fajitas with both meat and sautéed vegetables



Here are some tips to add vegetables to your family's meal.


Add vegetables cut into small pieces to ground meat; onions and mushrooms work well.

Add vegetables as toppings to meat dishes, such as tomato sauce or sautéed peppers or mushrooms.

Make fajitas with both meat and sautéed vegetables.

**My spouse/child doesn't like  
vegetables**

- ◆ Use familiar types in a new way
  - ◇ Herbs and spices change the flavor
  - ◇ Low-fat dips and sauces
- ◆ Pair with meat
  - ◇ Apples or applesauce with pork
  - ◇ Whole cranberry sauce with turkey
  - ◇ Apricot with chicken



Prepare vegetables that your family likes in a new way to get them accustomed to eating more variety. Or, make a vegetable they don't like in a new way that tastes completely different.

Also, you can combine meats with fruits. For instance, applesauce tastes very good with pork chops, and turkey with cranberry sauce is a Thanksgiving staple. Just be sure to use the whole berry sauce (or make your own), to keep more fiber and nutrients. And go easy on the sugar with all fruit sauces.

## Tips for Meals

- ◆ Have fruit or veg at each meal/snack
- ◆ Ask children about favorite veggies
- ◆ Microwave vegetables for a side dish



Here are some tips for ways to include more vegetables in meals throughout the day.

## Tips for Meals

- ◆ Add frozen vegetables to your:
  - ◆ sauce, soup, pasta, pizza
- ◆ Serve tomato or vegetable soup
- ◆ Make a sauce with low-fat yogurt and herbs and spices



## Seasoning with Herbs & Spices

### Adding to sweet flavors

- ★ Herbs and spices
  - ◇ allspice, anise, cardamom, cinnamon, cloves, ginger, mace, nutmeg
- ★ Fruits
  - ◇ fruit compote, baked fruit, spiced fruit
- ★ Vegetables
  - ◇ beets, carrots, sweet potatoes, squash



There are a number of different herbs and spices you can add to fruits and vegetables to change the flavor. Here are some examples of herbs and spices that work well with sweet flavors, and may even allow you to add less sugar.

## Seasoning with Herbs & Spices

### Adding to savory flavors

#### ★ Herbs and spices

- ◇ basil, bay, celery seed, chili, cumin, curry, dill, marjoram, mustard, oregano, paprika, pepper, rosemary, sage, tarragon, thyme

#### ★ Vegetables


- ◇ beans and soups, salads, greens, tomatoes/juice



These are herbs and spices that work well with savory flavors. Try adding some to low- or no-fat yogurt to make a sauce. Or add them to a vinaigrette salad dressing for a new flavor.

### Take-Home Fruit and Vegetable Points

- ◆ Source of vitamins, minerals, fiber
- ◆ Serving – palm or fist
- ◆ **Variety** – eat the rainbow
- ◆ Fresh fruit and veg for snacks
- ◆ Keep frozen/canned varieties handy



To sum up, remember these points. Fruits and vegetables are a very important source of vitamins, minerals, and fiber that our bodies need to be healthy.

A serving is not large, only as much as will fit into your palm or the size of your fist.

Don't forget to eat a variety of different types of fruits and vegetables. Use the rainbow as your guide.

Keep fresh fruit on the table or counter for an easy snack and pre-cut vegetables in the front of the refrigerator to encourage healthy snacking.

Keep a supply of frozen, canned and dried fruits and vegetables. These keep well and can be used for a quick addition to a meal.



**5 Daily Servings  
of Fruits and Vegetables**

The Key is **Variety**