

# Healthy Choices, Healthy YOU!

## Bath County Schools Food Service Department





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**Bath County Schools Include:**

Bath County Middle School

Bath County High School

Owingsville Elementary

Crossroads Elementary



# Table of Contents

<b>Introduction to health and nutrition</b>	4
<b>Calculating Body Mass Index</b>	5-6
<b>Recommended daily allowance of nutrients</b>	7-8
<b>Food Safety</b>	9
<b>Nutrition and Physical Activity</b>	11-19
Portions	10-11
Healthy Snacks	12-13
Physical Activity	14-15
How to make a healthy plate/meal	16-18
Cooking foods to proper temperatures	19
Make it healthier!	20-21
<b>Main Points</b>	22
<b>Summer Feeding Program</b>	23

# Why is Physical Activity and Good Nutrition Important

Did you know??

- In 1985 10% of Kentucky residents were overweight or obese, and in 2010, 30% of Kentucky residents were overweight or obese. That's a 20% increase!!!
- An estimated 1 in 3 children are overweight and about 1 in 6 (ages 6-17) are obese.
- This generation of children have a lower life expectancy than their parents!

-----These statistics are alarming! The obesity epidemic is at an all time high, make the right choices to live a long healthy life!-----



## **Breakfast is the MOST important meal of the day!**

- At night you go at least 6 hours without eating while you are sleeping, so eating breakfast helps break the fast and kick-start your energy level
- Eat less throughout the day
- Eating breakfast increases the calorie burning rate, so you have more energy and weight control is easier
- Avoid high sugar pastries, pop-tarts, cereals, and donuts in the morning because your energy will be really high then drop really fast

<http://amerymedicalcenter.org/amery2.nsf/View/breakfast>

# Body Mass Index (BMI)

**Brief History** – The Body Mass index (BMI) formula was developed by Belgium statistician Adolphe Quetelet (1796-1874) and was known as the Quetelet Index. BMI is also referred to as ‘body mass indicator’. BMI is an internationally used measure of obesity. BMI is a number calculated from a person’s weight and height. BMI provides a reliable indicator of body fatness for most people and is used to screen for weight categories that may lead to health problems.

**Precautions when using BMI** - BMI is very accurate when defining characteristics of populations, but less accurate when applied to individuals. Calculating BMI requires a scale, a measuring rod, and the ability to do simple arithmetic or use a calculator. Potential limitations of BMI when applied to individuals are:

- BMI does not distinguish between fat and muscle. BMI tends to overestimate the degree of “fatness” among elite athletes in sports such as football, weightlifting, and bodybuilding. Since muscle weighs more than fat, many athletes who develop heavily muscled bodies are classified as overweight, even though they have a low percentage of body fat and are in top physical condition.
- BMI tends to underestimate the degree of fatness in the elderly as muscle and bone mass is lost and replaced by fat for the same reason it overestimates fatness in athletes.
- BMI makes no distinction between body types. People with large frames (big boned) are held to the same standards as people with small frames.

**How to calculate BMI** – for uses who wish to manually calculate BMI we have provided a BMI formula for both imperial & metric measurements

<http://www.diet.com/g/body-mass-index>

<http://www.cdc.gov/healthyweight/assessing/bmi/>

<http://www.whatthehealth.com/bmi/formula.html>

# Calculating BMI

## Imperial BMI Formula

The Imperial BMI Formula accepts weight measurements in pounds & height Measurements in either inches or feet.

1 foot = 12 inches

Inches<sup>2</sup> = (inches x inches)

Table: Imperial BMI Formula

$$\text{BMI} = \frac{(\text{weight in pounds} \times 703)}{(\text{height in inches})^2}$$

## Calculate BMI & Find Weight Status

Weight Status	BMI
Underweight	<18.5
Normal weight	18.5 – 24.9
Overweight	25.0 – 29.9
Obese	≥30.0



## Recommended Daily Allowance (RDA) for Nutrients

<b>Group</b>	<b>A (mcg)</b>	<b>C (mg)</b>	<b>D (mcg)</b>	<b>E (mg)</b>	<b>K (mcg)</b>	<b>B6 (mg)</b>	<b>B12 (mcg)</b>
<b>Infants*</b>							
<b>0-6 mo</b>	400	40	5	4	2.0	0.1	0.4
<b>7-12 mo</b>	500	50	5	5	2.5	0.3	0.5
<b>Children</b>							
<b>1-3 y</b>	300	15	5	6	30	0.5	0.9
<b>4-8 y</b>	400	25	5	7	55	0.6	1.2
<b>Males</b>							
<b>9-13 y</b>	600	45	5	11	60	1.0	1.8
<b>14-18 y</b>	900	65	5	15	75	1.3	2.4
<b>19-30 y</b>	900	75	5	15	120	1.3	2.4
<b>31-50 y</b>	900	75	5	15	120	1.3	2.4
<b>51-70 y</b>	900	75	10	15	120	1.7	2.4
<b>70+ y</b>	900	75	15	15	120	1.7	2.4
<b>Females</b>							
<b>9-13 y</b>	600	45	5	11	60	1.0	1.8
<b>14-18 y</b>	700	65	5	15	75	1.2	2.4
<b>19-30 y</b>	700	75	5	15	90	1.3	2.4
<b>31-50 y</b>	700	75	5	15	90	1.3	2.4
<b>51-70 y</b>	700	75	10	15	90	1.5	2.4
<b>70+ y</b>	700	75	15	15	90	1.5	2.4
<b>Pregnancy</b>							
<b>14-18 y</b>	750	80	5	15	75	1.9	2.6
<b>19-30 y</b>	770	85	5	15	90	1.9	2.6
<b>31-50 y</b>	770	85	5	15	90	1.9	2.6
<b>Lactation</b>							
<b>14-18 y</b>	1,200	115	5	19	75	2.0	2.8
<b>19-30 y</b>	1,300	120	5	19	90	2.0	2.8
<b>31-50 y</b>	1,300	120	5	19	90	2.0	2.8

RDA: The quantities of nutrients in the diet that are required to maintain good health in people. RDA's are established by the Food and Nutrition Board of the National Academy. The actual amount of each nutrient required to maintain good health in specific individuals varies from person to person.

[www.medical-dictionary.thefreedictionary.com/RDA](http://www.medical-dictionary.thefreedictionary.com/RDA)

<http://www.puristat.com/standardamericandiet/rda.aspx>

# Recommended Daily Intake

Group	Calcium (mg/d)	CHO (g/d)	Protein (g/kg/d)
<b>Infants*</b>			
0-6 mo			
7-12 mo			1.0
<b>Children</b>			
1-3 y	500	100	0.87
4-8 y	800	100	0.76
<b>Males</b>			
9-13 y	1,100	100	0.73
14-18 y	1,100	100	0.73
19-30 y	800	100	0.66
31-50 y	800	100	0.66
51-70 y	800	100	0.66
70+ y	1,100	100	0.66
<b>Females</b>			
9-13 y	1,100	100	0.76
14-18 y	1,100	100	0.71
19-30 y	800	100	0.66
31-50 y	800	100	0.66
51-70 y	1,100	100	0.66
70+ y	1,100	100	0.66
<b>Pregnancy</b>			
14-18 y	1,000	135	0.88
19-30 y	800	135	0.88
31-50 y	800	135	0.88
<b>Lactation</b>			
14-18 y	1,000	160	1.05
19-30 y	800	160	1.05
31-50 y	800	160	1.05

This is a good guide of the recommended intake values for the various age groups to be considered sufficient to meet the requirements of 97-98% of healthy individuals in the U.S.

\*CHO = Carbohydrates

[http://www.iom.edu/Activities/Nutrition/SummaryDRIs/~//media/Files/Activity%20files/Nutrition/DRIs/5\\_Summary%20Tables%201-4.pdf](http://www.iom.edu/Activities/Nutrition/SummaryDRIs/~//media/Files/Activity%20files/Nutrition/DRIs/5_Summary%20Tables%201-4.pdf)

# Food Safety & Sanitation

## Clean: Wash Hands and Surfaces Often



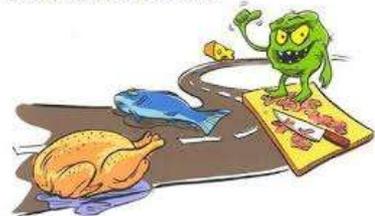
Bacteria can be spread throughout the kitchen and get onto hands, cutting boards, utensils, counter tops, and food.

- Wash your hands with warm water and soap for at least 20 seconds before and after handling food and using the bathroom
- Wash your hands after playing with pets
- Wash your cutting boards, dishes, utensils, and counter tops with hot soapy water after preparing each food item
- Consider using paper towels to clean up kitchen surfaces. If you use cloth towels wash them often in the hot cycle of your washing machine



- Rinse fresh fruits and vegetables under running tap water, including those with skins and rinds that are not eaten.
- Rub firm-skinned fruits and vegetables under running tap water or scrub with a clean vegetable brush while rinsing with running tap water.
- Keep books, backpacks, or shopping bags off the kitchen table or counters where food is prepared or served.

Bacteria are hitchhikers.



# Alert: Portion Distortion!

Food	20 Years Ago		Today	
Bagel				
	3-inch diameter	140 calories	6-inch diameter	350 calories
Cheeseburger				
	1 portion	333 calories	1 portion	590 calories
Spaghetti and Meatballs				
	1 cup spaghetti, sauce and 3 small meatballs	500 calories	2 cups spaghetti, sauce and 3 large meatballs	1,025 calories
Soda				
	6.5 ounces	85 calories	about 20 ounces	300 calories
French Fries				
	2.4 ounces	210 calories	6.9 ounces	610 calories

[http://she-fit.com/cheesecake\\_factory\\_portions/](http://she-fit.com/cheesecake_factory_portions/)

# What Are Accurate Portion Sizes?

## HANDY HELPINGS

One of the easiest ways to visually estimate portion sizes is to use an everyday item that you carry around with you all the time. You can use your hand to estimate OR by comparison with some common household items:

<p><b>1 ounce of cheese</b> is about the size of your <b>thumb</b> OR the size of <b>4 dice</b>. A <b>teaspoon of margarine</b> is about the size of your <b>thumb tip</b></p>	
<p><b>1 cup</b> of milk or yogurt is about the size of a <b>man's fist</b></p>	
<p><b>1 oz nuts</b> or <b>small candies</b> is about <b>one handful</b></p>	
<p><b>2 oz chips</b> or <b>pretzels</b> is about <b>two handfuls</b></p>	
<p>A <b>racquetball</b> is about the size of a <b>1/2 cup</b> serving of <b>Pasta, Rice and Other Grains</b></p>	
<p><b>One serving potato</b> is about the size of a regular (60 watt) <b>light bulb</b></p>	
<p><b>3 oz. meat/poultry/fish:</b> About the size of a <b>deck of cards</b></p>	
<p><b>2 TB peanut butter</b> or other spread is about the size of a <b>golf ball</b></p>	
<p><b>One bagel</b> is the size of a <b>hockey puck</b></p>	

# Sensible Snacking

Snacks are a great way to keep you from getting hungry between meals.

Good Snack choices:

- Fresh fruit (frozen fruit is good to make smoothies with)
- Carrots, celery, cauliflower, grape tomatoes, or orange peppers with light ranch dressing
- Light Yogurt
- String cheese
- Cottage cheese
- Wheat crackers and cheese
- Reduced fat peanut butter
- Fruit salad
- Popcorn (air popcorn/light popcorn)
- Pretzels
- Trail mix
- Nuts/Seeds
- Hard boiled eggs
- Cheerios
- Granola bars
- Instant oatmeal
- Animal crackers
- Graham crackers



# Snack Attack

## Tropical Smoothie

Prep time: 5 minutes

Ingredients: 1/2 cup orange juice or milk  
1/2 cup nonfat yogurt  
1 frozen banana  
1/2 cup sliced/frozen strawberries or fruit of choice  
1/4 cup blueberries  
2 TB ground flaxseed

Combine all ingredients in a blender and blend until smooth.

Makes 1-2 servings

## Baked Sweet Potato Fries

**Prep Time:** 10 minutes

**Total Time:** 35 minutes

**Makes:** 6 Servings

**Serving size:** 4 or 5 wedges

Ingredients: 2 pounds sweet potatoes (about 4 small)  
2 tablespoons olive oil  
1 1/2 teaspoons chili powder  
1 1/2 teaspoons kosher salt

1. Preheat the oven to 425 °F. Cut each sweet potato in half lengthwise and place it flat side down on a cutting board. Cut the potato halves into 1-inch-wide wedges.
2. In a small bowl, combine the oil, chili powder, and 1 teaspoon of the salt. Place the potatoes on a roasting pan and brush with the oil mixture.
3. Lay the potatoes flesh side down on the pan and put the pan in the oven. Cook until potatoes, turning once, until soft, 20 to 25 minutes. Remove the pan from the oven and season with remaining 1/2 teaspoon salt. Let the wedges cool and serve warm.

## Fruit Salad

In a large bowl put 1 banana, sliced; 2 handfuls of grapes; 3 peach halves, cut up; 4 strawberries, halved; 5 pineapple chunks; 6 orange sections, halved; and 7 apple slices, halved. In a small bowl stir 8 ounces light vanilla yogurt with 1 tablespoon honey and 2 tablespoons orange juice. Pour yogurt mix over fruit and stir.

# Physical Activity Is Important!

Walking, gardening, briskly pushing a baby stroller, climbing the stairs, playing soccer, or dancing the night away are all good ways to be active. For health benefits, physical activity should be **moderate** or **vigorous** and add up to at least 30 minutes a day.

## Moderate physical activities include:

- Walking briskly (about 3 ½ miles per hour)
- Hiking
- Gardening/yard work
- Dancing
- Golf (walking and carrying clubs)
- Bicycling (less than 10 miles per hour)
- Weight training (general light workout)

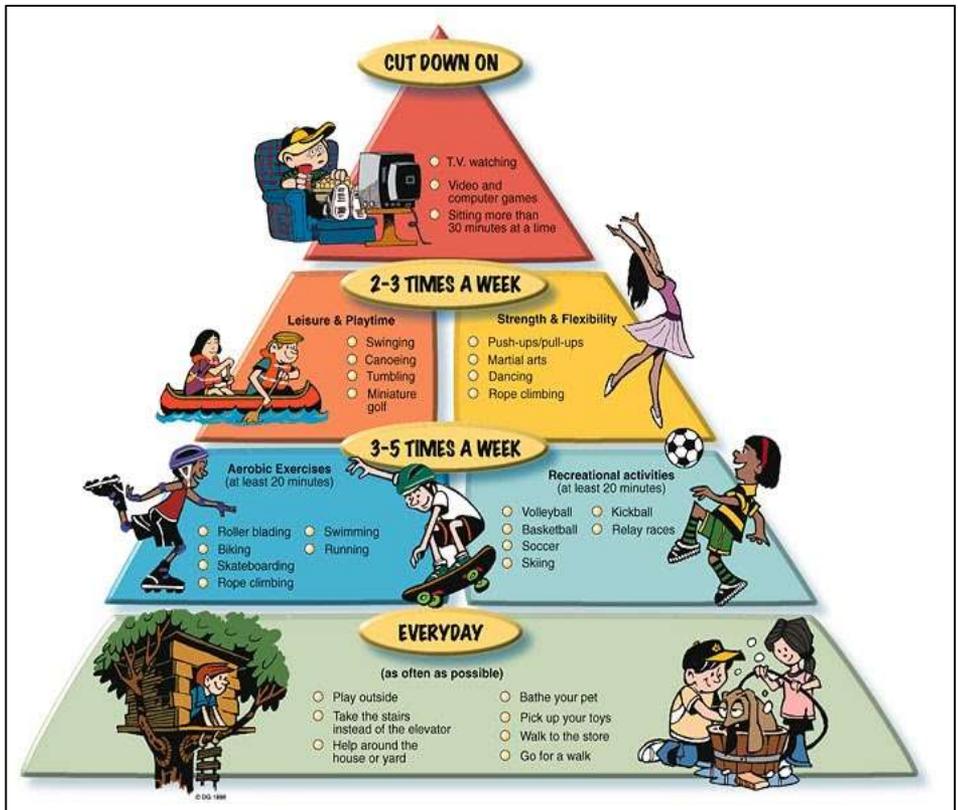
## Vigorous physical activities include:

- Running/jogging (5 miles per hour)
- Bicycling (more than 10 miles per hour)
- Swimming (freestyle laps)
- Aerobics
- Walking very fast (4 ½ miles per hour)
- Heavy yard work, such as chopping wood or pushing lawn mower
- Weightlifting (vigorous effort)
- Basketball (competitive)
- Soccer, hockey, ice skating, roller skating

## Regular physical activity prevents:

- Overweight and obesity which are influenced by physical inactivity and poor diet
- Risk for diabetes, high blood pressure, high cholesterol, asthma, arthritis, and poor health status
- Dying prematurely, dying of heart disease and developing diabetes

# Be Active!



## Benefits of Physical Activity!

- Helps build and maintain healthy bones and muscles.
- Helps reduce the risk of developing obesity and chronic diseases, such as diabetes, cardiovascular disease, and colon cancer.
- Reduce feelings of depression and anxiety and promotes psychological well-being.

<http://www.cdc.gov/healthyouth/>

# How To Make a Healthy Plate

Here is an example of what a daily meal plan should look like for a 2,000 calorie plan. Chosemyplate.gov has a few other sample meal plans and gives some great examples of what each serving is.

## Breakfast

- 1 oz whole grains
- 1/2 cup fruit
- 1/2 cup dairy

## Snack

- 1 oz whole grains
- 1 cup fruit

## Lunch

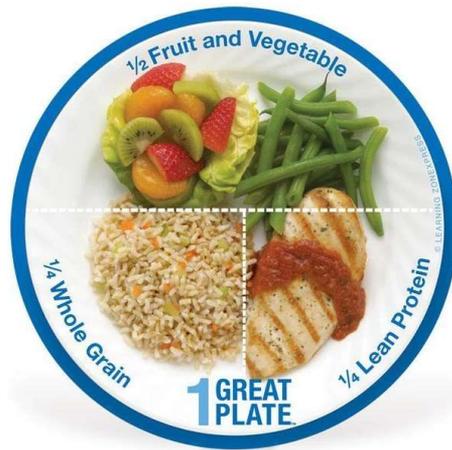
- 2 oz grains
- 1 cup vegetables
- 1/2 cup fruits
- 1 cup dairy
- 2 1/2 oz protein foods

## Snack

- 1/2 cup vegetables
- 1/2 cup dairy

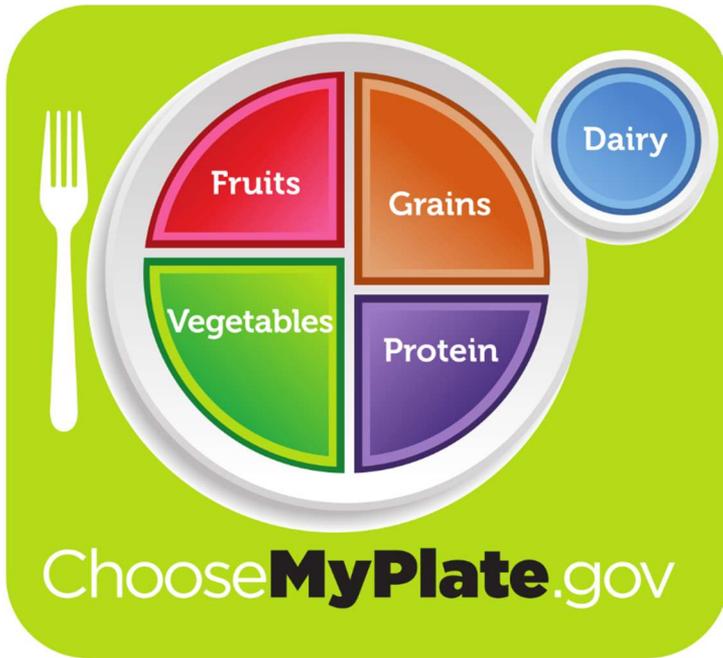
## Dinner

- 2 oz whole grains
- 1 cup vegetables
- 1 cup dairy
- 3 oz protein foods



[www.chosemyplate.gov](http://www.chosemyplate.gov)

# Color My Plate!



Visit [www.choosemyplate.gov](http://www.choosemyplate.gov) to explore different ways to make a healthy plate. Includes great recipes!

<p><b>GRAINS</b> 6 ounces</p>	<p><b>VEGETABLES</b> 2 1/2 cups</p>	<p><b>FRUITS</b> 1 1/2 cups</p>	<p><b>DAIRY</b> 3 cups</p>	<p><b>PROTEIN FOODS</b> 5 ounces</p>
<p><b>Make half your grains whole</b> Aim for at least <b>3 ounces</b> of whole grains a day</p>	<p><b>Vary your veggies</b> Aim for these amounts <b>each week:</b> <b>Dark green veggies</b> = 1 1/2 cups <b>Red &amp; orange veggies</b> = 5 1/2 cups <b>Beans &amp; peas</b> = 1 1/2 cups <b>Starchy veggies</b> = 5 cups <b>Other veggies</b> = 4 cups</p>	<p><b>Focus on fruits</b> Eat a variety of fruit Choose whole or cut-up fruits more often than fruit juice</p>	<p><b>Get your calcium-rich foods</b> Drink fat-free or low-fat (1%) milk, for the same amount of calcium and other nutrients as whole milk, but less fat and Calories Select fat-free or low-fat yogurt and cheese, or try calcium-fortified soy products</p>	<p><b>Go lean with protein</b> Twice a week, make seafood the protein on your plate Vary your protein routine—choose beans, peas, nuts, and seeds more often Keep meat and poultry portions small and lean</p>

Pictures from <http://www.mypyramid.gov> & [choosemyplate.gov](http://www.choosemyplate.gov)

# Healthy Meal Ideas

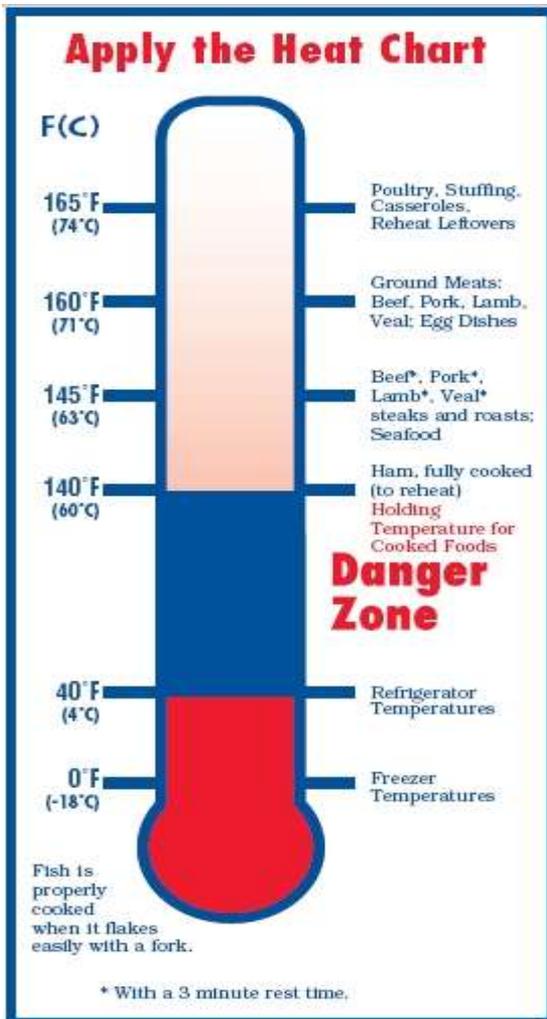
The menu below is a good example of what kinds of meals can be prepared to get all the vitamins and nutrients from all the food groups. Use this as a guide when planning and preparing meals for you or your family.

	<b>Breakfast</b>	<b>Lunch</b>	<b>Snack</b>	<b>Dinner</b>
<b>Monday</b>	Oatmeal with peaches and milk	Homemade Chicken Nuggets	Celery Stop lights	Marinated Chicken with red potato salad
<b>Tuesday</b>	Breakfast Pizza Pancakes	English muffin pizzas with shredded carrots	Homemade Goldfish	Slow cooked BBQ chicken on whole wheat rolls and cabbage salad
<b>Wednesday</b>	Scrambled Eggs and Grapefruit	Burrito (whole wheat tortilla with mashed pinto beans and shredded lettuce	String Cheese and Carrots	Veggie burgers and homemade fries
<b>Thursday</b>	Cereal (Cheerios) with Strawberries and milk	Peanut butter and banana sandwich with carrots and grapes	Cottage cheese and Berries	Taco Soup
<b>Friday</b>	Whole Wheat English muffins with bananas	Leftover Taco Soup with tortilla chips	Pretzels and Hummus	Chicken salad with celery and onion, over lettuce. Whole

This menu is one of many on the /super Healthy Kids website. It has new menu plans every week that are posted along with the recipes attached.

<http://blog.superhealthykids.com/healthy-meal-plans/>

# Proper Temperatures for Cooking



These are the internal temperatures that certain food items need to be cooked to

# Make it Healthier! Recipe Substitutions

Simple recipe substitutions can cut down on calories and fat grams. Be sure to read the label **BEFORE** you buy an item.

- Olive oil for butter
- Turnip mash or Mashed cauliflower for mashed potatoes or added to macaroni
- Rolled oats or Crushed flax or fiber cereal for breadcrumbs
- Turkey bacon for bacon
- Whole wheat pasta for regular pasta
- White meat skinless poultry for dark meat poultry
- Olive oil spray for olive oil from the bottle
- Ground Turkey or chicken for ground beef
- Nuts for croutons
- Greek yogurt for sour cream or for mayo (in tuna/chicken salad)
- Arugula, romaine, spinach, and/or kale for iceberg lettuce



# Adding Nutrients to Recipes

## Breakfast

- Fruit Smoothie (add flaxseed to get extra Omega 3 fatty acids—which help reduce the risk of chronic disease)
- Egg & ham sandwich (use whole wheat bread instead of white and add tomato and avocado or spinach)
- Cereal (add fresh fruit and flaxseed for extra nutrients)
  - Fruit parfait (use Greek yogurt instead of regular yogurt to get extra protein)



## Lunch

- Tuna Salad (use light mayo or plain Greek yogurt instead of regular mayo)
- Chicken Salad (add walnuts/pecans/almonds and grapes for an extra nutrient boost)
- Black bean wraps (add mushrooms and avocado for added vitamins and minerals)



## Dinner

- Chicken Quesadillas (add spinach, tomato, and/or squash for added nutrients and use whole wheat wrap)
- Chicken/pork stir fry (add extra stir fry vegetables and use a low sodium sauce)
- Lasagna or Pizza (add spinach, use whole wheat pasta/crust, use reduced fat cheese)
- Chili (add kidney beans for added fiber and use ground turkey instead of beef to save calories and fat grams)

# Main Points

- Breakfast is the MOST important meal of the day
  - A healthy range for BMI is 18.5-24.9
- Simple recipe substitutions can cut down on calories and fat
- Daily physical activity for at least 30 minutes is recommended for best health



- Read the label BEFORE you BUY
- Check your portion and serving sizes
- Frequent snacks or small meals are recommended to keep you feeling full throughout the day
- Check internal temperatures of certain dishes to make sure they reached the proper temperature
- Practice safe food handling and proper sanitation



# Summer Feeding Program

The Summer Feeding Program is a way for children to receive nutritious meals through the summer months when school is not in session.



Dates: June – July

For more information contact:

Vickie Wells, School Food Service Director

674-6314 ext. 6640

April Reed, Food Service Assistant



**Food That's In When  
School Is Out**

**BATH COUNTY**



**BATH  
COUNTY  
SCHOOLS**



**Where Every Adult Leads  
and Every Child Succeeds**