**NUTRITION THROUGHOUT LIFE STUDY GUIDE**

**Name:\_\_\_KEY\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Period:\_\_\_\_\_**

**Nutritional Needs Throughout Life**

1. Nutritional needs throughout your life are based on:
	1. MyPlate recommendations
	2. Dietary Guideline recommendations
	3. Age
	4. Gender
	5. Activity Level

**Build a Healthy Plate**

1. Make half your plate fruits and vegetables.
2. Switch to skim or 1% milk.
3. Make at least half your grains whole.
4. Vary your protein food choices.
5. Keep your food safe to eat.

**Watch What You Eat**

1. Choose foods and drinks with little or no added sugars.
2. Look out for salt (sodium) in foods you buy.
3. Eat fewer foods that are high in solid fats.
4. Eat the right amount of calories for you.
5. Enjoy your food, but eat less.
6. Cook more often at home
7. Choose lower calorie menu options
8. Keep track of what you are eating by writing it down
9. If you drink alcoholic beverages, limit it to:
	1. One drink a day for women
	2. Two drinks a day for men

**Be Physically Active Your Way**

1. Pick activities that you like
2. Start by doing what you can, at least 10 minutes at a time
3. The more active you are, the healthier you will be

**Children**

1. Age range: 12 months to 11 years
2. Young children are active and growing
3. Nutrient dense foods in small amounts often
4. 1 Tbsp of food for each year of the child’s life
5. Set the example, children watch and learn from you
6. Make meals fun. Serve foods with:
	1. Bright color
	2. Different texture
	3. Different shapes
7. Introducing new foods:
	1. One at a time
	2. At the beginning of the meal, when they are most hungry
8. Don’t use food as a reward or punishment
9. Drink water instead of sugary drinks

**Adolescence**

1. Age range: 12 years to 20 years
2. This is the second most rapid growth period of life.
3. An increase need for almost all nutrients especially iron and calcium
4. During growth spurts, allow for extra amounts of nutritious foods.
5. Avoid high sugar and high fat snack foods.
6. Drink water instead of sugary, caffeine and carbonated drinks.

**Adult**

1. Age range: 21 years to 60 years
2. Need the same amount of nutrition, but fewer calories.
3. Choose a variety of healthful, low-calorie foods.
4. Make regular physical activity a priority.

**Elderly**

1. Age range: 60 years and older
2. Good nutrition plays a major role in:
	1. Wellness
	2. Disease prevention
	3. Staying active and energetic
3. Calorie needs drop and nutrition needs rise
4. Eat nutrient dense foods
5. Need more of calcium, vitamin D and B12
6. Thirst signals decline with age
	1. Drink 8 cups of water or milk each day
	2. Eat more foods like soups, smoothies and cooked cereals
7. Special diets such as low fat or low sodium
8. Malnutrition is a concern especially for elderly that live alone
9. Nutritional meals are available through social service programs in the community

**Sports Nutrition Guidelines – Training**

1. Conditioning and nutrition is the key to top athletic performance.
2. Daily food choices can make a difference between a good performance and a poor one.
3. No need for sports bars or dietary supplements if you:
	1. Eat a variety of nutrient dense foods
	2. Follow the dietary guidelines
4. Athletes need to get:
	1. 55-60% of their calories from carbohydrates
	2. 20-25% of their calories from fat
	3. 15-20% of their calories from protein

**Sports Nutrition Guidelines – Pre-Event/Exercise**

1. The last meal before a competition or intense exercise should be:
	1. Complex carbohydrate-rich meal
	2. Examples: Grains, fruit, starchy veggies, milk and yogurt
	3. 2-4 hours before training or competition
2. If you have a sensitive stomach, consume the last meal:
	1. 4 hours before the event
	2. Sip on a sport drink or easily digestible carbohydrate-filled snack in the hour prior to the event
3. The last meal before a competition or intense exercise should:
	1. Include a moderate amount of protein
	2. Low in fat
	3. Low fiber rich foods

**Sports Nutrition Guidelines – Hydration**

1. Water helps the body regulate many important functions:
	1. Temperature
	2. Blood pressure
	3. Nutrient concentration
	4. Appropriate levels of electrolytes
	5. Nutrient transportation
	6. Recovery from intense training
2. Allowing the body to become dehydrated can cause:
	1. Muscles to cramp
	2. Alter blood pressure
	3. Cause weight loss during exercise
	4. Delay recovery time
	5. Decrease performance
3. Drinking too much water can alter electrolytes and cause bodily harm.
4. Drink water before and after an event, even if you don’t feel thirsty
5. Drink water about every 15 minutes during an event.
6. Consider a sport drink for workouts over 45 minutes or workouts in the heat.
7. Replenish 150% of lost fluid after training or an event
8. Monitor urine color
	1. Pale yellow is ideal

**Sports Nutrition Guidelines – During an Event/Exercise**

1. Carbohydrates are the body’s primary energy source during exercise.
2. Dietary carbohydrates (grains, fruit, starchy veggies, milk and yogurts) are stored in the liver and in the muscles as glycogen.
3. During exercise, the body draws upon these glycogen stores (primarily muscle glycogen) to fuel working muscles.
4. Having carbohydrates in your body while exercising can help improve performance by:
	1. Reducing the risk of hypoglycemia (low blood sugar)
	2. Providing fuel for actively working muscles
	3. Prevent “hitting the wall” and being forced to slow down or stop
5. Use protein and fats sparingly
	1. You don’t want your body to start breaking down muscle for energy.

**Sports Nutrition Guidelines – Recovery**

1. The body is primed to replenish lost nutrients soon after exercise.
2. After an event or exercise, start refueling within 15-60 minutes.
3. Recovery has three stages
4. Stage 1: Snack + Fluid
	1. Within 15-60 minutes
	2. Carbohydrates and 10-15 grams of protein
5. Stage 2: Meal + Fluid
	1. Within 2 hours
	2. Balance of carbohydrates, lean protein and low fats
6. Stage 3: Snack + Fluid
	1. Within 4 hours
	2. Carbohydrates and 10-15 grams of protein