NUTRITION GUIDELINES

Kids In Nutrition Presents:
An In-Depth Resource for
the Community on the
Content We Teach

KIDS IN NUTRITION™

www.kidsinnutrition.org

The Guide

KIN's nutrition lesson plans are meant as a general guideline; the data we reference is intended to give our students a general sense of what is healthy and recommended. Given that nutrition varies per individual, our approach is flexible in that we do not expect anyone to strictly adhere to the data we cite. That being said, the information we use is all backed by published data from reputable sources.

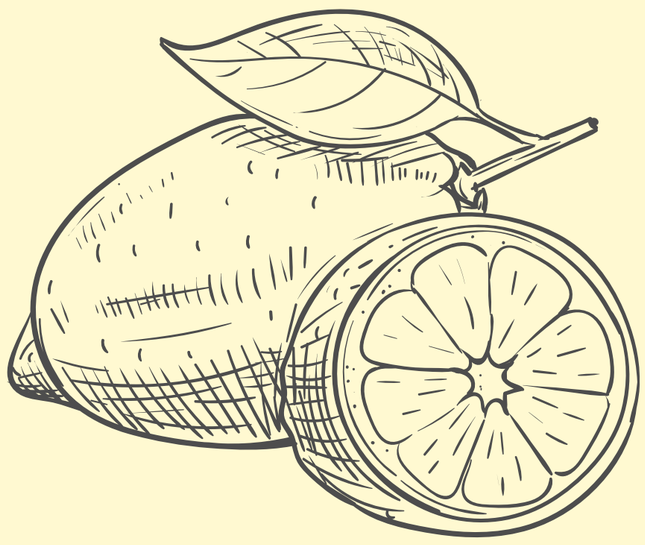
KIN's focus is to instill the ideas of MODERATION and BALANCE and to promote a diet that is beneficial to both human HEALTH and the ENVIRONMENT.

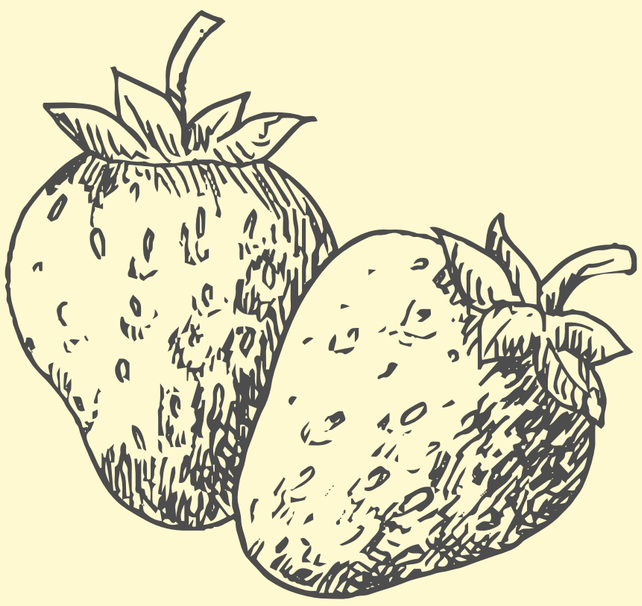
KIN does not promote any specific diet (vegetarian, vegan, paleo, low-carb, low-fat, intermittent fasting); instead we encourage a largely plant-based diet, designed to be flexible to accommodate local and individual situations, cultural contexts, and dietary preferences.

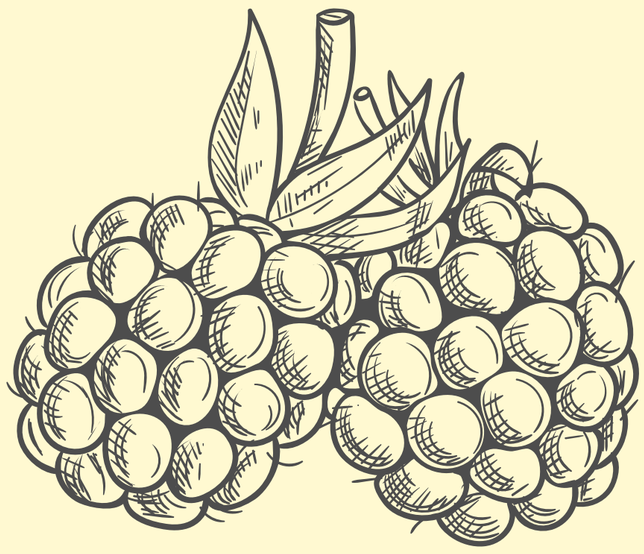
KIDS IN NUTRITION

Nutrition Curriculum

1. WATER & SODIUM
2. FRUITS & VEGGIES
3. GRAINS & PROTEIN
4. FATS & COOKING METHODS
5. SUGAR
6. HEALTHY EATING PLATE, LABELS, MODERATION
7. NUTRITION WRAP







Summary

1. KIN encourages drinking more water and minimizing consumption of sugary beverages due to its impact on various chronic diseases.
2. KIN suggests consuming fruits and vegetables of all colors, whole grains, lean proteins (fish, chicken, turkey, nuts, eggs, seeds, beans, veggies), and unsaturated plant oils/fats. The less processed, the better!
    a. KIN recommends eating lean animal protein (fish, turkey, chicken, eggs) instead of red meat.
3. KIN's program does not promote vegetarian or vegan diets. However, we do believe/teach that plant proteins can be a healthy substitute for animal proteins (lowers risk of heart disease). Some plant proteins are considered complete proteins (quinoa, chia, soy, hemp, buckwheat), but not all. Therefore, it's important that we eat a variety of different proteins and foods throughout the day to make sure we get complete protein in our diets.
    a. There are some important nutrients to pay attention to if one decides to eat less meat, including vitamin B-12, Zinc, Iron, Omega-3 Fatty Acids, Vitamin D, and Calcium.
4. KIN recommends minimizing intake of refined grains, saturated fat, added sugars, sodium, red/processed meat, and other highly processed foods given their negative health impacts.
    a. We recommend avoiding trans fat completely.
5. KIN does not promote dairy products (due to inconclusive research) but recognizes that, in moderation, they may be included in a healthy diet. Plant-based alternatives may offer a similar nutritional profile as dairy products.
6. General diet recommendations follow USDA dietary guidelines, Harvard Healthy Eating Plate, and Planetary Health Diet guidelines.

WATER & SODIUM

Water: We learn about what it means to be "hydrated" and "dehydrated." We explain the benefits of staying hydrated throughout the day and the negative consequences when we don't drink enough water.

We suggest at least 5 cups of total water (drinking water, other beverages, and food) a day as recommended given the specific age bracket (1st/2nd grade) we teach to. The overall idea with our lesson plan is to emphasize drinking more water in general, but this can vary per individual and kids do not need to strictly adhere to the following guidelines.

4-8 years: 5 cups
9-13 years: 7-8 cups
14-18: 8-11 cups

Sodium: It is recommended for kids to eat less than 2300 mg/day of sodium (1 teaspoon). On average, Americans eat 3400 mg/day so we emphasize minimizing salt intake in general, which includes eating out less and buying less pre-made food.

FRUITS & VEGETABLES

We teach that fruits and veggies have nutrients, and that these substances keep us healthy and prevent disease. Given the age bracket we teach, we take a more general approach to fruit and vegetable intake through our repeated mantra, “Eat the Rainbow.” By consuming fruits and veggies of all colors, we can make sure we're getting enough nutrients. We also emphasize eating more fruits and vegetables by filling half of our plates with different types.

We discuss five important nutrients (fiber, vitamin D, potassium, calcium, and iron), based on the new nutrition labels, to introduce them to how certain nutrients play particular roles in our bodies.

1. Fiber: insoluble fiber helps us go to the bathroom, soluble fiber helps control blood sugar
2. Vitamin D: helps the body absorb calcium for healthy bones
3. Potassium: needed by all tissues in the body for fluid regulation
4. Iron: maintains healthy blood
5. Calcium: essential for healthy bones & teeth

Dairy

Research on the disease implications of dairy products, such as milk and cheese, are mixed. Dairy products can be a source of protein, calcium, vitamin D, vitamin B12, and potassium, but also contain significant amounts of saturated fats, cholesterol, hormones, and growth factors.

For some people, dairy should be avoided if they are lactose-intolerant or sensitive. Nutrients in dairy are found in other foods and therefore dairy products are not necessarily considered essential foods. Fortified plant-based milks can be an alternative but depending on which type, the nutritional profile may not completely match that of milk's. Soy milk is the most comparable to the nutrient profile of dairy milk.

Adequate calcium intake is essential during childhood development. Cow's milk is shown to be a top choice for families that experience food insecurity due to its affordability, accessibility, and high nutrient density. Given the target audience of the KIN program (underserved, marginalized communities), we state cow's milk and/or soy milk as a suitable part of a balanced diet; just watch out for the added sugars in both.

The environmental impacts of dairy products are significantly greater and for climate impact consideration alone, plant-based options are recommended. Since our program supports consumption of foods that simultaneously improve human health and the environment, we do not significantly promote dairy products in our lesson plans. However, as the scientific argument for the health impacts of dairy is still up for debate, we recognize that both dairy and non-dairy alternative foods in moderation can be included in a healthy diet.

PROTEIN & GRAINS

Grains: The kids learn about whole, "unrefined" grains, and how to differentiate these from "refined" grains. Whole grains contain fiber, B vitamins, and various other essential minerals. We demonstrate that refined grains have been stripped of the brown, fibrous part of a grain, resulting in much lower nutritional quality. An example used in class is that whole grain bread is dark brown, while refined bread is white or yellow. We encourage the kids to eat a variety of whole grains, and try new ones too.

Proteins: We teach about the importance of protein in our diet. Protein is a building block for muscles, and is good for our brain and heart. We can find protein in lean meats (fish/seafood or chicken breast), nuts, eggs, seeds, beans, and veggies! Lean meats also tend to be less resource intensive than red meats. KIN also recommends eating lean animal proteins (fish/seafood, turkey, chicken, eggs) in moderation in order to diversify protein intake with plant-based options.

We recommend reducing consumption of red meat (beef, pork, lamb) and processed meat due to higher amounts of saturated fat, cholesterol, and additives; existing research has found links with processed meat and increased risk of disease.

FATS & COOKING METHODS

Fats: Recent evidence suggests that to reduce intake of total saturated fat without consideration of specific fatty acids and food sources is not based on evidence and may distract from more effective food-based recommendations. Given the specific food matrix, saturated fat can be included in a healthy diet. However, saturated fats are also found in highly processed foods, red/processed meat, and baked goods. We recommend fulfilling our dietary fat intake with more polyunsaturated and monounsaturated fats.

Some examples of healthy unsaturated fats are nuts, seeds, avocado, fish, and olive oil. Artificial trans fat is highly discouraged to be a part of any diet and banned in the USA.

Cooking Methods: The kids compare various cooking methods to decide which ones are healthier options. Steaming, boiling, grilling, baking, and pan-frying are examples of healthy options, while deep-frying is an unhealthy option.

Sugar

We teach the difference between processed (refined) sugars and natural sugars. Research has shown that the positive effects from the nutrients, including fiber, and antioxidants may mitigate the negative effects from the sugar in fruit. Fiber plays a critical role in slowing the release of sugar in the bloodstream.

Processed or added sugars have been linked with increased chronic disease, obesity, and type 2 diabetes in children. Packaged foods like sodas, fruit juices, and candy bars often contain large amounts of processed sugar. It is recommended that kids aged 4-8 years consume less than 21 grams (6% of 1400 cal/day diet) of added sugars or from natural sugars in honey, syrups, and fruit juice. The daily average for children in the U.S. is around 69.5 grams (19.9% of 1400 cal/day diet).

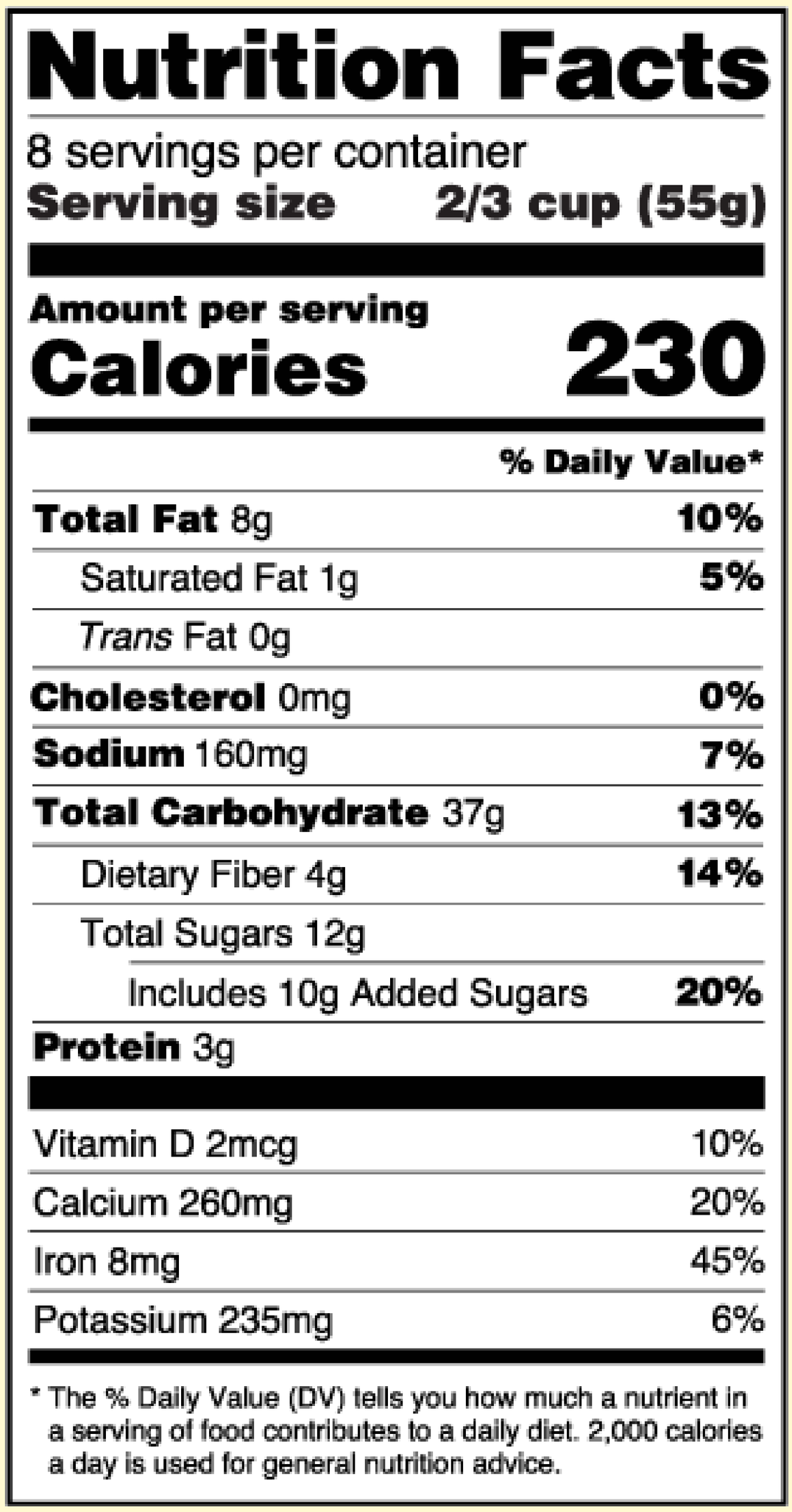
We encourage choosing fruit over 100% fruit juices for its beneficial fiber and nutrients. Research has shown high consumption of 100% fruit juice is associated with an increased risk of type 2 diabetes and all-cause mortality. However, moderate amounts can be included in a healthy diet. American Academy of Pediatrics and the Dietary Guidelines for Americans recommends for children aged 1 to 6 years to limit fruit juice consumption to a maximum of 4 to 6 oz per day, and for children 7 years and older, adolescents, and adults to limit fruit juice consumption to 8 oz per day.

We teach Harvard Kid's Healthy Eating Plate as a guideline for what a healthy meal looks like. At least half of your plate should be filled with fruits and veggies while the other half should consist of whole grains and lean proteins. It's important to also include healthy fats (avocado, fish, nuts, seeds, healthy oils). Dairy foods are needed in smaller amounts, with water being the best choice for drink.

Moderation: We teach eating all foods in moderation so that we can increase diversity and ensure all the necessary nutrients are consumed. This means that we can still consume unhealthy foods every once in a while, but we shouldn't have them every day or with every meal. We point out that the Healthy Eating Plate doesn't include processed foods. These often consist of added sugars, saturated fats, and large amounts of sodium, and should therefore be eaten in moderation.

Nutrition Labels: We explain how to read food labels on different packaged foods, what to look for, and how to make healthy choices based on that information.

2020 Nutrition Label



Nutrition Facts

8 servings per container

Serving size **2/3 cup (55g)**

Amount per serving

Calories **230**

	% Daily Value*
Total Fat 8g	**10%**
Saturated Fat 1g	**5%**
Trans Fat 0g	
Cholesterol 0mg	**0%**
Sodium 160mg	**7%**
Total Carbohydrate 37g	**13%**
Dietary Fiber 4g	**14%**
Total Sugars 12g	
Includes 10g Added Sugars	**20%**
Protein 3g	
Vitamin D 2mcg	10%
Calcium 260mg	20%
Iron 8mg	45%
Potassium 235mg	6%

* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

1. The serving size now appears in larger, bold font and some serving sizes have been updated.
2. Calories are now displayed in larger, bolder font.
3. Daily Values have been updated.
4. Added sugars, vitamin D, and potassium are now listed. Manufacturers must declare the amount in addition to percent Daily Value for vitamins and minerals.