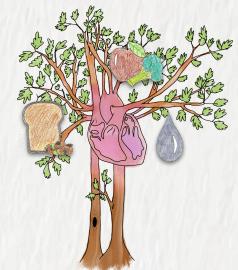


Week 3: Grains & Proteins

Grains are a type of complex carbohydrate that provides energy as well as vitamins, minerals, and fiber. They can be subcategorized into whole grains and refined grains. Whole grains keep you full for longer as they are digested more slowly due to their high fiber content. Consuming whole grains has been linked to lowering the risk of heart disease and type 2 diabetes. Choose whole grains in their whole form over refined grains in your diet!

Protein enables our brain and muscles to function properly and can be found in both animal and plant products, However, not all protein sources are created equally. Consuming red meat and processed meats like cold cuts in excess can increase the risk of heart disease and premature death while consuming healthier proteins, such as lean meat (poultry), fish, tofu, and beans, can reduce these risks.



KIN's Healthy Heart Tree

Lesson Objectives:

- Distinguish between whole and refined grains.
- Describe different sources of whole grains.
- Explain the importance of fiber.
- Know sources of healthy and unhealthy protein.

Sources of Whole Grains:

- Whole-wheat bread, pasta, tortillas, and crackers
- Oats
- Brown rice
- Buckwheat
- Corn



Whole or Refined?

Whole grains have all their nutrients intact and consist of the *entire* grain seed, called the kernel. The kernel is made up of three components:

 1) <u>Bran</u> – this outermost layer protects the kernel from damage and gives whole grains their generally brown color.

 2) Endosperm – this middle layer is the largest component of the whole grain as it contains starchy carbohydrates, protein, vitamins, and minerals.

3) <u>Germ</u> – this innermost layer contains vitamins, minerals, and healthy fat. The bran and germ components are high in dietary fiber.

Refined grains are processed in a mill to clear away the bran and germ, leaving just the endosperm. All the important fiber and nutrients have been removed. This processing gives refined grains their generally white color and smoother texture. Despite their longer shelf life, refined grains are the nutrient-poor option.

Fiber is a complex carbohydrate that comes from plants and cannot be absorbed by the digestive system. There are two main types: **soluble** and **insoluble**.

- Soluble fiber dissolves in water and turns into a gel-like substance, helping to slow digestion and lower blood sugar and cholesterol levels. Found in oatmeal, nuts, and beans.
- Insoluble fiber does not dissolve in water but remains intact in the digestive tract. It helps food move through your digestive system, prevents constipation, and supports regular bowel movements. Found in whole wheat bread, brown rice, and the skins of fruits.

Did you know? Plants can have protein!

- Beans like edamame, chickpeas, and kidney beans
- Lentils

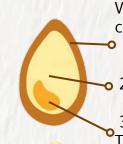
Nuts

Tempeh

- *
 - ❖ Tofu

Weekly Challenge!

Whenever you eat grains, eat only whole grains, and make meals with mostly lean proteins like fish, chicken, lentils! As a bonus, try out a grain you have never had before!



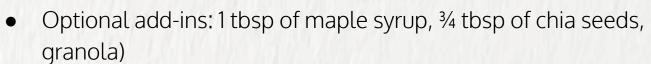


Prep Time: 5 minutes (wait time: 7

hours/overnight)

Servings: 1 Ingredients:

- ½ cup unsweetened almond milk (or dairy alternative)
- 2 tbsp natural peanut butter or almond butter
- ½ cup rolled oats
- Fresh or frozen fruits of choice (recommended: berries, apples, sliced bananas)



Instructions:

- 1. To a mason jar or a small bowl, add almond milk or dairy alternative of your choice, peanut butter and maple syrup/chia seeds if you choose. Stir to combine.
- 2. Add oats and stir again, pressing down to make sure the oats absorb as much liquid as possible.
- 3. Cover securely with a lid and leave in the refrigerator overnight. Enjoy the next morning with your toppings of choice!
- 4. For thicker oats, add less almond milk. For thinner oats, add more almond milk/dairy alternative of choice.

