Post-Stroke Nutrition

Module 6



SCHOOL OF MEDICINE





Schedule

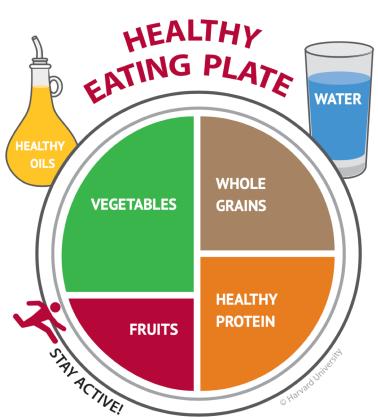
- Composing a balanced plate
- Estimating serving sizes & nutrition labels
- Post-stroke nutrition
- Healthy swaps
- Recipe ideas
- Review

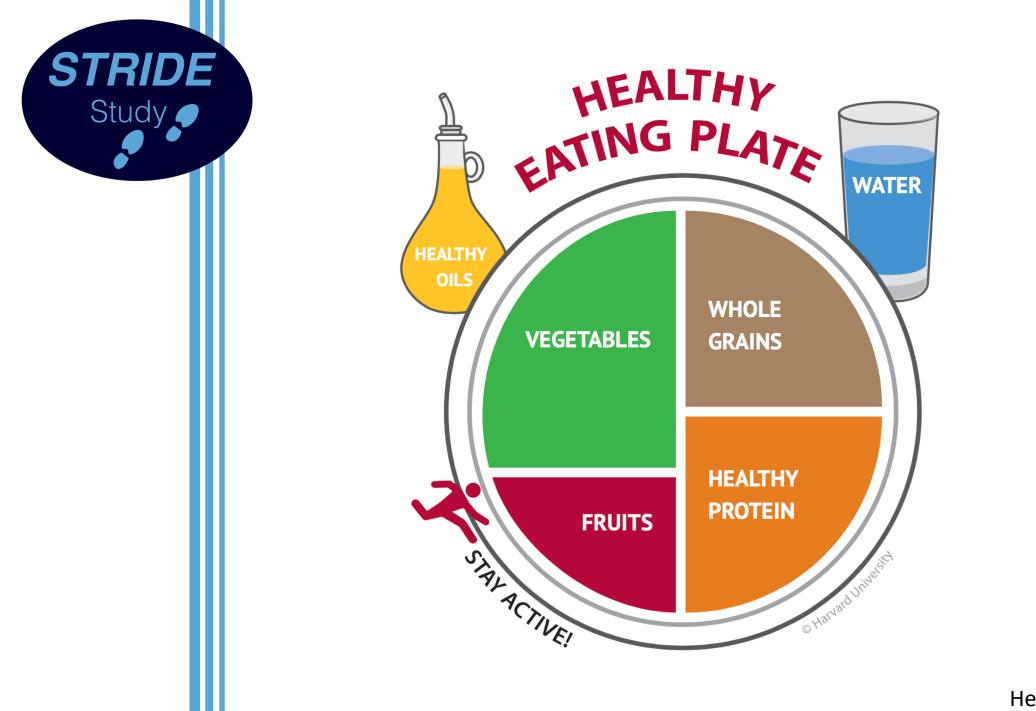


- When composing your meals, we want different colors and food groups!
- Using the Harvard Healthy Eating
 Plate, aim for roughly:
 - ¹/₂ of your plate being fruits and vegetables (mostly vegetables)
 - 1/3 whole grains

Study -

2/3 lean protein





Healthy Eating Plate, 2021



Composing a Balanced Plate

- Try to have a fruit or vegetable and a source of protein with every meal or snack
- If you are vegetarian or vegan:
 - Complete protein = plant-based protein + whole grains

How to Estimate a Serving of Protein

• Try to eat a serving of protein at every meal

Study

- 1 serving of red meat or beans is ~ the size of your palm
- 1 serving of eggs, poultry, or fish is ~ the size of your outstretched hand

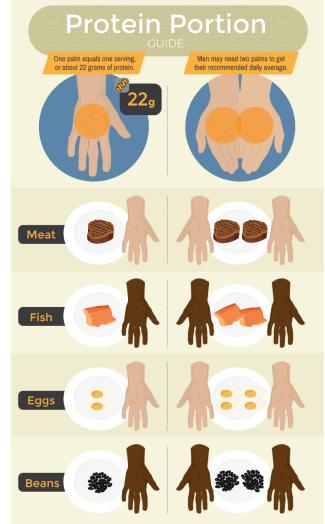
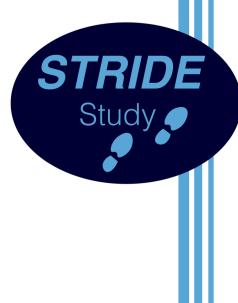


Image from: https://lifeasmama.com/so-how-much-protein-should-i-be-eating

United States Department of Agriculture, 2021



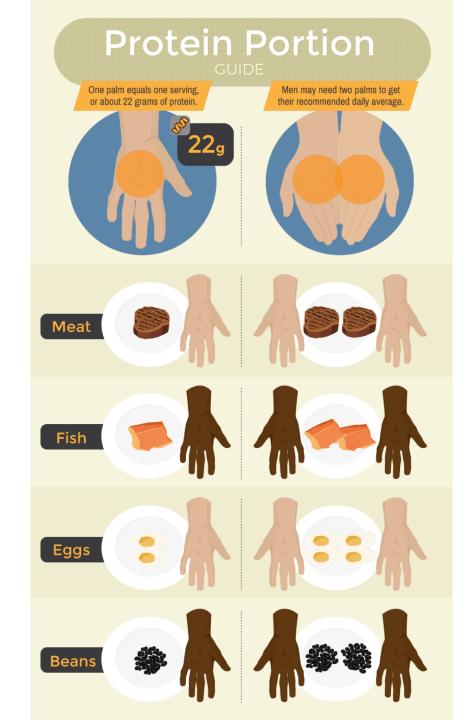
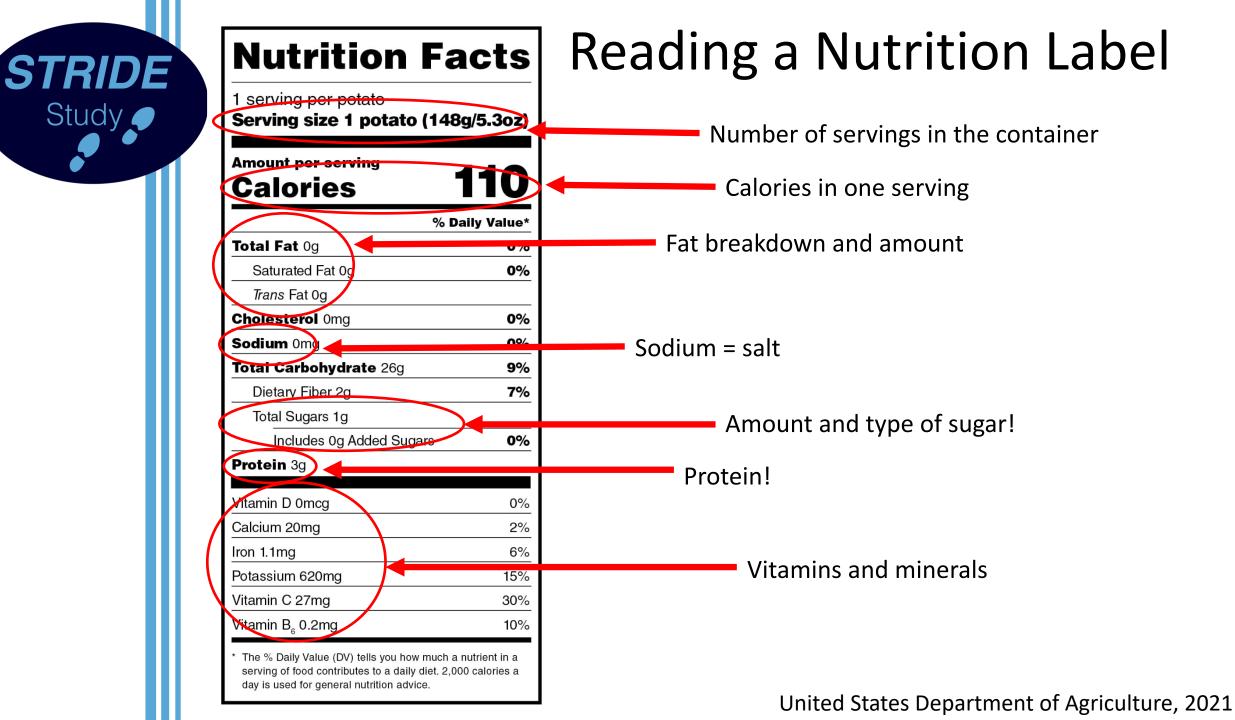


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United States Department of Agriculture, 2021





Nutritional goals post-stroke?

- 1. Prevent risk of a second stroke
- 2. Consume enough protein
- 3. Consume enough vitamins and minerals



Macronutrients vs Micronutrients

- Macronutrients give us calories, and we need to consume them in larger amounts.
 - Protein
 - Carbohydrates
 - Fats
- Micronutrients are vitamins and minerals we get from our food, and we need to consume them in smaller amounts.

Important Macronutrients Post-Stroke

Study

- Deficiencies in **calories and protein** negatively impact post-stroke recovery.
 - Your body is recovering from a traumatic event, having enough energy and protein to heal is important!



Important Micronutrients Post-Stroke

B Vitamins

- Whole grains, meat, eggs, dark leafy greens
- Calcium
 - Nuts and seeds, dairy, dark leafy greens
- Zinc
 - Lean meat, poultry, and fish



Important Micronutrients Post-Stroke

- Antioxidants (Vitamins A, C, & E)
 - Citrus fruits, bell peppers, broccoli, dark leafy greens, strawberries
- Vitamin D
 - Sunflower seeds, almonds, peanuts, dark leafy greens, pumpkin, and bell peppers

STRIDE Study

Healthy Swaps

- Baking versus frying
- Natural sweeteners versus white table sugar
- Plant based oil (unsaturated fat) instead of animal fats (saturated)
- Eat fruit, yogurt, or dark chocolate for dessert
- Water versus soda
- Cooking at home versus eating out

STRIDE Study

How do I implement this is my life?

- Make it **fun**!
- Make it tasty!
- Make it affordable!
- Make it easy!

Cooking is a great way to take control of your health.



Breakfast: Overnight Oats

- Cook Time: overnight
- Prep Time: 5 minutes
- Ingredients:
 - ¹/₂ cup milk (any type)
 - ½ cup old-fashioned rolled oats (or quick oats)
 - ¹/₂ cup vanilla yogurt
 - 1 Tbsp ground flaxseed and/or chia seeds
 - 1 pinch Salt
 - 2 Tbsp maple syrup or honey
 - Any toppings you want!
 - I'd recommend any berries, nuts (or nut butters)

Directions:

 In a mason jar or small container, combine milk, oats, yogurt, flaxseed, salt, and maple syrup. Stir until desired consistency (add milk or water if needed)
 Place container in refrigerator overnight covered.

4. In the morning, take out of the fridge, uncover and stir.

5. top with desired toppings!

Nutrition: This recipe is high in fiber and protein. If topped with berries and nuts, then also is rich in antioxidants!



Lunch: Summer Salad with Chicken

Prep Time: 15 minutes

Ingredients:

- 1 serving (3-4oz) chicken (I would recommend pre-cooked chicken, but you can prepare however you desire)
- 1½ cups spinach
- ¹/₂ cup Quinoa cooked
- 6 strawberries sliced
- ¹/₂ cup sliced bell peppers
- 2 Tbsp sunflower seeds
- A sprinkle of goat cheese (or whatever cheese you prefer)
- Oil & vinegar and salt & pepper to taste or ~2 Tbsp strawberry vinaigrette dressing

Directions:

 Rinse spinach and add to a bowl.
 Add all other ingredients on top and mix in dressing.

Note: I like to have my ingredients cut/sliced/cooked and ready early and then week so then I can just combine and go later! Buying precut or precooked ingredients is another great way to make things easier later.

Nutritional note: This recipe is high in protein and features all of our micronutrients!



Snack: Energy Balls

Prep Time: 30 minutes Chill Time: 1 hour

Ingredients:

- 1 cup rolled oats
- 2/3 cup shredded coconut (you can also toast this in the over before adding)
- ¹/₂ cup creamy peanut butter
- ¹/₂ cup ground flaxseed
- 1/3 cup honey
- ¹/₂ cup dark chocolate chips
- 1 teaspoon cinnamon

Directions:

1. Combine all ingredients in a bowl.

2. Once combined, cover and place in the fridge for a few hours to help the balls stick together

3. Roll into 1" diameter balls.

3. Enjoy right away or store in a sealed container in the fridge. I like to make a batch of these on Sunday and snack on them all week!

Nutrition Note: This delicious snack is high in protein, whole grains, fiber, and antioxidants! Recipe adapted from: <u>https://www.gimmesomeoven.com/no-bake-energy-bites/</u> Study

Dinner: Crockpot White Chicken Chili

Prep Time: 15 minutes Cook Time: 5 hours

Ingredients:

- 1¼ lbs boneless and skinless chicken breasts (~2 3)
- 3 cups low sodium chicken stock
- 2 cans reduced-sodium white beans
- 2 x 4.5-ounce cans of diced green chilies
- 3 cloved garlic minced
- 1 small yellow onion
- 2 tsp ground cumin
- 1 tsp dried oregano
- ¹/₂ teaspoon kosher salt
- ¼ tsp cayenne pepper
- ¼ cup chopped fresh cilantro (optional)
- Fresh limes wedges, avocado, sour cream, shredded cheese, tortilla chips, and hot sauce recommended for serving.

Directions:

1. Place chicken breasts in a slow cooker with chicken broth, white beans, green chiles, garlic,

onion, cumin, oregano, salt and cayenne. Stir and cover. Cook on low for 4-6 hours (or on high for 2-4 hours)

2. Remove chicken breast and allow to rest and cool. Once cooled enough to handle, shred the chicken and place back in slow cooker.

3. Serve with toppings of your desire and enjoy!

Nutritional Note: This light recipe is high in protein and incredibly tasty! Easy to prep for the week and store in the fridge too!

Recipe from: https://www.wellplated.com/crockpot-white-chicken-chili/



Dessert: Yogurt Bark

Prep Time: 10 minutes Cook Time: 1 hour

Ingredients:

- 2 cups of nonfat vanilla yogurt
- ¼ cup of natural sweetener (maple syrup, agave, or honey)
- ¼ teaspoon lemon juice
- Pinch salt
- 1 cup sliced strawberries, blueberries, raspberries, and any other you want
- ½ cup chopped pecans
- ¹/₂ cup dark chocolate chips

Directions:

- 1. In a large mixing bowl, combine vanilla yogurt, natural sweetener, lemon juice, and salt.
- 2. Spread mixture out on a wax-paper lined baking sheet
- 3. Top with berries, pecans, and chocolate chips.
- 4. Place in freezer for an hour and then take out and break your bark into bitesized pieces and enjoy!

Nutritional Note: This recipe is high in protein and antioxidants. It's the perfect light and refreshing summer dessert!

Recipe adapted from: <u>https://diethood.com/frozen-yogurt-bark-berries/</u>

Review

Study

- Read **nutritional labels** to know what you're eating
 - Talk with your healthcare provider about which parts of the label are most important to you.
- Try to have a source of protein, fruits and/or veggies and whole grains with every meal
- Eat a wide variety of colors to get vitamins and minerals
- Make healthy swaps

Resources

RIDE

Study

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- Perry, L., & McLaren, S. (2004, June 11). An exploration of nutrition and eating disabilities in relation to quality of life at 6 months post-stroke. Wiley Online Library. https://onlinelibrary.wiley.com/doi/pdf/10.1111/j.1365-2524.2004.00494.x.
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