Essentials for post-stroke nutrition

Considerations, barriers, interventions, recommendations, and dietary patterns

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It's complicated

What was their pre-injury lifestyle?

- Including thoughts, beliefs, and values surrounding food

What are their current physical abilities?

- Dysphagia, fatigue, cooking

What are current cognitive challenges?

- Memory, attention, initiation

Co-morbidities that affect nutrition

- Type 2 diabetes, hypertension, chronic kidney disease

Post-stroke nutrition: Dysphagia

Barriers to Adequate Nutrition and Hydration

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Dysphagia

Dysphagia is the medical term used to describe difficulty or pain when swallowing.

Can lead to drooling, coughing, choking, and aspiration of oropharyngeal contents.

Can also lead to reduced food and fluid intake due to difficulties swallowing or dislike of texture modifications.

National Dysphagia Diet (NDD) and International Dysphagia Diet (IDDSI)

In addition to strategies for a safe swallow, texture modification of food and fluids is often required.

The National Dysphagia Diet (NDD) was published in 2002 by the American Dietetic Association (now the Academy of Nutrition and Dietetics).

The NDD aimed to establish standard terminology and practice applications of dietary texture modification in dysphagia management.

National Dysphagia Diet (NDD) and International Dysphagia Diet (IDDSI)

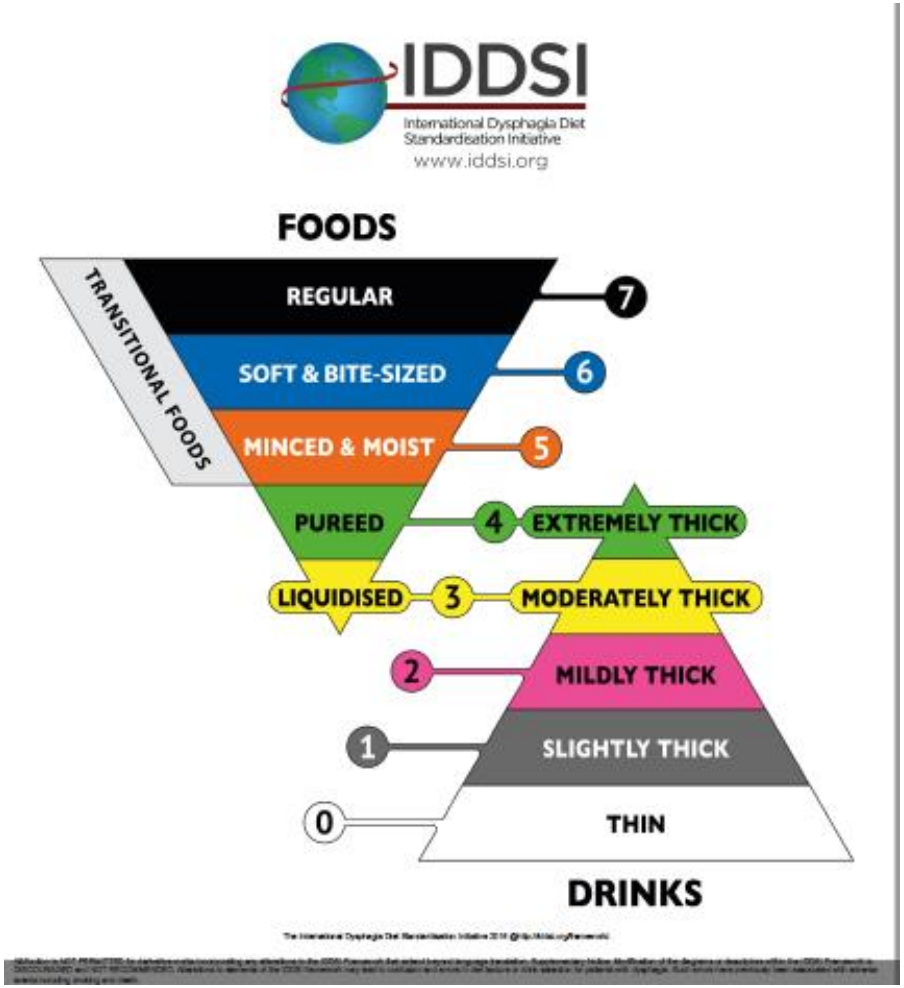
The National Dysphagia Diet made strides in standardizing terminology for texture modifications but left room for improvement.

The International Dysphagia Diet Standardization Initiative's purpose is to make standardized language more user friendly, to standardize methods of modifying food and fluids, and to have consistency across countries.

One of the largest components of IDDSI is to have standardized tests to ensure that texture modified food and fluids are safe for those that need them.

This is a quick overview of the IDDSI framework

- The definitions of each level are much more specific than NDD
- There are also specific testing methods for each level detailed on the IDDSI website
- Safety is the top priority



Post-stroke nutrition: Lack of Appetite

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Lack of Appetite - Etiology

Can be a direct result of the injury to the brain

- Including simple anorexia or a lack of appetite secondary to nausea and vomiting

Can be related to mood or depression

Can be related to food preferences

Can be related to medications

Can be related to bowel issues – both loose stools and constipation

Often related to texture modifications

Bowel Regularity- Strategies

Fiber

- Both soluble and insoluble fiber have benefits both for overall health and bowel health
- Soluble fiber forms a gel which helps to regulate both constipation and diarrhea
- Insoluble fiber is bulk forming and helpful for constipation
- It is difficult to get enough fiber, especially when intakes are compromised
- Psyllium husk is the most effective supplement as it address both constipation and loose stools

Lack of Appetite – Strategies Texture Modifications

Presentation

- Make sure that texture modified food is a close to the original as possible
  - This includes condiments, sauces, and garnish where possible
- Make sure texture modified food is at the proper temperature
- If possible, modify ingredients prior to preparing the recipes

Sight and smell are important factors in appetite. We eat with our eyes and our nose!

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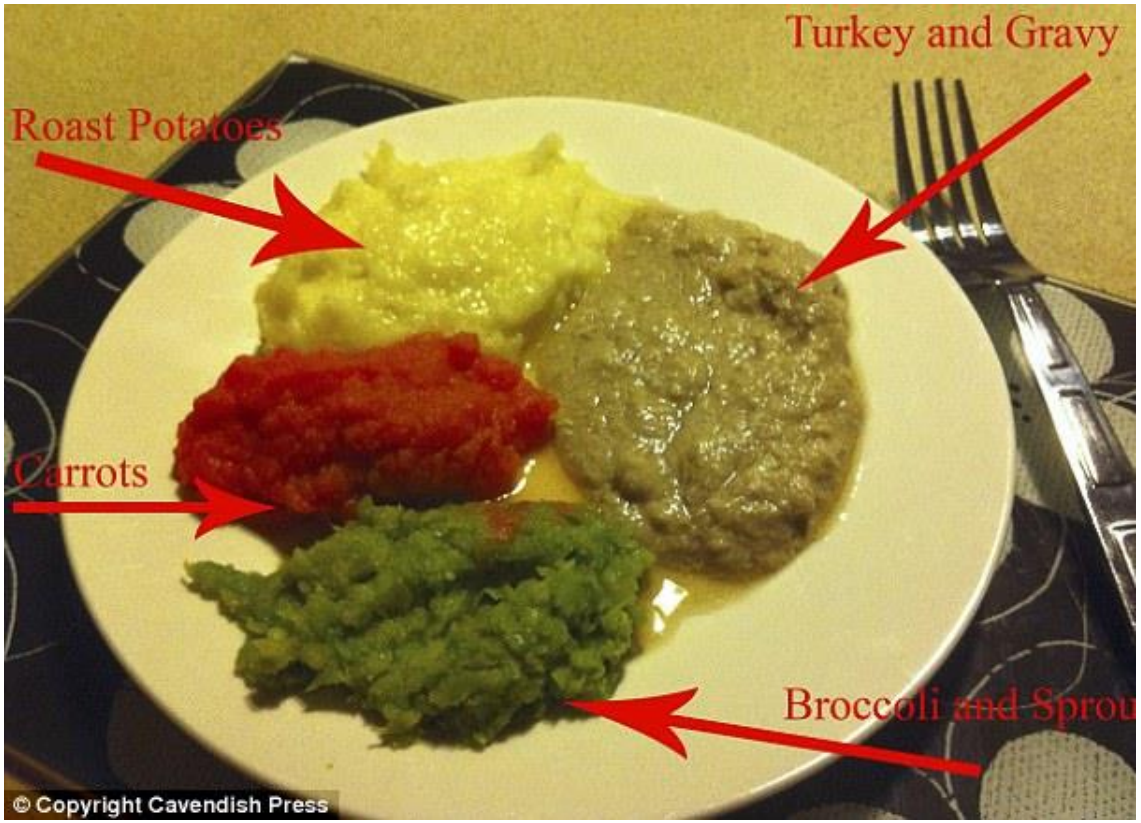

Low Intakes- Strategies

Supplements

- Drinking calories is often easier than eating calories because they take less work and don't make us as full
- Often this is the bad part about "drinking calories", but when someone is having difficulty meeting their needs, it is a benefit
- Be aware of co-morbidities, especially type 2 diabetes
- Be aware that Boost, Ensure, and Glucerna are meant to be supplements, not sole-source nutrition

Low Intakes - Strategies

Supplements and dysphagia

- Ensure that liquid supplements such as Boost, Ensure, or Glucerna are thickened per diet order
- Thrive ice cream melts to nectar-thick while Magic Cups "melt" to pudding-thick
- It is possible to make thickened fruit smoothies with added protein powder, yogurt, peanut butter, Thrive, or Magic Cup.
  - Blend and then add thickener as needed.
  - DO NOT add ice

Lack of Appetite - Strategies

Honor

- Honor preferences

Ask

- Ask person served, their family, or friends what some personal favorites are

Ask

- Ask about pre-injury lifestyle. If they typically ate a big breakfast, ensure enough time to allow this. Ask about snacking.

Avoid

- Avoid restrictive therapeutic diets if they are interfering with adequate consumption

Post-stroke nutrition: Cognition

Barriers to Adequate Nutrition and Hydration

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Attention and Memory

What can look like lack of appetite may actually be low intakes because of difficulty attending to a meal

Having someone available to re-direct a person's attention back to their meal is helpful

Have multiple small meals or snacks

Persons served may need to be reminded that they have not eaten or that it is meal time

Try to limit noise and activity

(How do we do this without isolating people?)

Attention and Memory

Poor memory and attention may also cause overeating

Not attending to a meal may affect satiety

Persons served may not remember that they have already eaten and request another meal

<u>Helpful tools:</u>

Food diary that is either written or pictures

Memory journal that is written or spoken

Person served may not be able to do the actual journaling but should be involved to assist with memory and ownership

Post-stroke nutrition: Fatigue

Barriers to Adequate Nutrition and Hydration

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Fatigue - Etiology

Persons served are frequently deconditioned and are easily fatigued as their body and brain are trying to heal

Chewing and swallowing take energy

The amount of energy it takes to eat a meal is increased when chewing and swallowing problems are present

Texture modifications may be ordered because too much chewing is fatiguing for a person served. Texture modifications may lead to even lower intakes.

Fatigue - Strategies

Supplements and liquid nutrition are helpful in this case as well. Drinking does not take as much energy as eating.

Easy to eat snacks may include finger foods and soft foods such as cottage cheese, scrambled eggs, and yogurt.

Incorporate snacks throughout the day and at bedtime. Try to make snacks nutrient-dense – make intake count.

Find out when person served is most awake and take advantage with a supplement or snack

Nutrition after stroke is a piece a complicated puzzle

- **What was their pre-injury lifestyle?**
  - Including thoughts, beliefs, and values surrounding food
- **What are their current physical abilities?**
  - Dysphagia, fatigue, cooking
- **What are current cognitive challenges?**
  - Memory, attention, initiation
- **Co-morbidities that affect nutrition**
  - Type 2 diabetes, hypertension, chronic kidney disease

Post-stroke nutrition:

A new dietary pattern.

Co-morbidities

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Why is nutrition important post-stroke?

According to the National Institutes of Health, the major modifiable risk factors for stroke are:

- Diabetes
- Hypertension
- Heart disease
- Smoking

Having had a prior stroke is also a major risk factor for another stroke

Why is nutrition important post-stroke?

Other modifiable stroke risk factors are:

- Alcohol and drug use
- Lack of physical activity
- Overweight and obesity
- Stress and depression
- Unhealthy cholesterol levels
- ***Unhealthy diet***
- Use of NSAIDs

Cardiovascular Health

- Heart disease and unhealthy cholesterol levels are both risk factors for stroke
- Data from the REGARDS study used a cardiovascular health score scale ranging from 0 to 14. For every unit increase in cardiovascular health, there was an associated 8% lower risk of incident stroke

Cardiovascular Health

- The American Heart Association has developed Life's Simple 7.
- These are 7 metrics to measure heart health.
- They are meant as a quick check way for people to know the best way to take care of their heart.

Cardiovascular Health

The US Burden of Disease Collaborators showed that:

> "poor levels of each of the 7 health factors and behaviors resulted in substantial mortality and morbidity in the United States in 2010. The top risk factor related to overall disease burden was suboptimal diet, followed by tobacco smoking, high BMI, raised BP, high fasting plasma glucose, and physical inactivity."

Opportunity for Education

- Do a Life Check with persons served to determine what their heart score is.
- Use areas with lower scores as a spring board for setting goals or future education topics

Type 2 Diabetes

Characterized by glucose dysregulation

May begin as insulin resistance or pre-diabetes

Pre-diabetes can be prevented from becoming diabetes with diet and lifestyle changes

Diabetes is a major risk factor for cardiovascular disease – including coronary heart disease and stroke

Type 2 Diabetes

Of the 20.9 million new cases of diabetes mellitus predicted to occur over 10 years in the United States, 1.8 million could be attributable to consumption of sugar-sweetened beverages

Opportunity for Education

Many persons served come to us never having nutrition education about their diabetes

Some have had prior education but did not understand the importance

Aphasia and cognitive difficulties may make nutrition education difficult

Tailor education materials to individual person served

Using the facility's menus and food diaries as educational tools may make nutrition education easier

Ideal Blood Sugars = 80-150mg/dL

before you eat

↑ Blood Sugars may lead to:

- Heart and Blood Vessel Problems including recurrent stroke
- Eye/Vision Problems
- Nerve Damage
- Dental Problems/Diseases

Foods that affect your blood sugar

Regular Soda


Milk (any kind)


Fruit Juice


Bread


Potatoes


Peas and Corn


Pasta and Rice


Cookies, Cakes, Desserts

Simplified Diabetes Education

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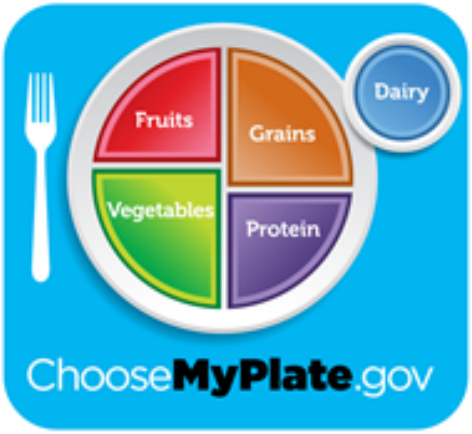
Living with Diabetes

- Increase your Physical Activity

- When you are active, it is much easier for your body's cells to use blood sugar for energy which can lead to lower blood sugar levels
- It can lower blood fat levels and lower your blood pressure
- Propelling your wheelchair and PT and OT all count as physical activity

- Reduce your intake of empty calories and simple sugars



- Be mindful of portion sizes – especially foods high in carbohydrates.
- Share a meal and add a salad when you eat out. Ask for salad dressing on the side and choose vinaigrettes if possible.
- Choose more veggies, fruits, beans, and whole grains. Limit portion sizes on desserts.
- Limit fruit juices and avoid regular soda, sports drinks and energy drinks. Choose sugar free soda or juice and most of all drink plenty of water!
- Use cooking methods such as: broiling, baking, boiling, grilling, and steaming.
- Choose lean cuts of meat (without skin) such as pork chops, chicken breast, or beef roast. Avoid pre-marinated meats and reduce cured meats such as ham and hot dogs.
- See the ChooseMyPlate.gov or the diabetes.org websites for more great information!

More detailed diabetes education

Using a facility menu as a teaching-tool about carbohydrates

MAXIMUM 70 g CHO	MAXIMUM 70 g CHO
Entrée Choice:	CHO
CHICKEN STIR FRY W/ VEGETABLES (LARGE)	18
RICE (1/2 cup)	35
Dessert: FRUIT FLUFF (SMALL)	11
Alt Desserts: Applesauce (13g), SF Pudding (12 g), Fruit Cocktail (20 g), Yogurt (25 g)	
Sides:	
Salad w/choice of dressing_____ French (10g), Italian (3g), Ranch (2g)	3
Fresh fruit cup	15
Alternate Choices:	
Salmon	0
Mashed potatoes w/gravy or butter	15
Mashed sweet potato	22
Alternate Vegetable_____	
Deli sandwich - turkey or ham - cheese (2g), tomato or onion (1g), ketchup (5g)	27
Peanut butter & jelly sandwich	47
Grilled cheese or Grilled ham and cheese	26
Hamburger - cheese (2g), tomato or onion (1g), ketchup (5g)	26
French fries	28
Chips	15
Grilled chicken breast	0
Fish sandwich	51
Yogurt	25
Cottage cheese	4
Beverages: **1 Must be water**	
Water	0
Milk - skim or 2%	12
Chocolate milk	20
Iced tea	0
Coffee	0

MAXIMUM 70 g CHO	MAXIMUM 70 g CHO
Entrée Choice:	CHO (g):
APPLE CRUSTED PORK CHOP	10
WHITE CHEDDAR MACARONI & CHEESE	27
GREEN BEANS	9
Dessert: Fresh fruit	15
Alt Desserts: Applesauce (13g), SF Pudding (12 g), Fruit Cocktail (20 g), Yogurt (25 g)	
Sides:	
Salad w/choice of dressing_____ French (10g), Italian (3g), Ranch (2g)	3
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Deli sandwich - turkey or ham - toppings	27
Peanut butter & jelly sandwich	47
Grilled cheese or Grilled ham and cheese	26
Hamburger - cheese, tomato, onion, lettuce	26
French fries	28
Chips	15
Grilled chicken breast	0
Fish sandwich	51
Yogurt	25
Cottage cheese	4
Beverages: **1 Must be water**	
Water	0
Milk - skim or 2%	12
Chocolate milk	20
Iced tea	0
Coffee	0

Hypertension

Lowering blood pressure seems to be most beneficial for reduction in risk of stroke and several studies have shown lower rates of recurrent stroke with lower blood pressures

Sodium reduction is key dietary component to reducing hypertension

Many observational studies demonstrate an association between higher estimated sodium intakes and a higher risk of cardiovascular events, in particular stroke	One study named Trials of Hypertension Prevention found that participants randomized to sodium reduction had a 25% decrease in cardiovascular disease risk

Opportunity for Education

Many persons served come to us never having received education about diet and stroke or heart health.

Some have had prior education but did not understand the importance

Make healthy eating the default or the easy choice

There are many good external sources from the American Heart Association and the National Kidney Foundation among others

The sodium in our diet comes from many places

- Adding salt at the table
- Adding salt when cooking
- Prepackaged foods such as soup, broth, frozen meals and entrees, breads and pastries
- Eating out

Of these, eating out and prepackaged foods contribute the most sodium.

According to the American Heart Association, more than 70 percent of the sodium we eat comes from packaged and restaurant foods

Opportunity for Education

Reducing Sodium Education - Cooking

Spice It Up! Skip The Salt!

All- Purpose Spice Blend Recipe (Makes about 1/3 cup)

- 5 teaspoons onion powder
- 2 ½ teaspoons garlic powder
- 2 ½ teaspoons paprika
- 2 ½ teaspoons dry mustard
- 1 ½ teaspoons crushed thyme leaves
- ½ teaspoon white pepper
- ¼ teaspoon celery seed

avorings	Beef	Chicken	Fish
	Basil	Basil	Basil
	Bay leaf	Curry	Curry
	Dill	Mushrooms	Dill
	Garlic	Oregano	Dry mustard
	Green pepper	Paprika	Lemon juice
	Mushrooms	Parsley	Marjoram
	Onion	Pineapple	Pepper

Spicy Mexican Seasoning

- 2 tablespoons chili powder
- 4 teaspoons ground cumin
- ¼ teaspoon black pepper
- 1 teaspoon paprika
- ½ teaspoon dried oregano (optional)
- ½ teaspoon onion powder
- 1/8 teaspoon cayenne pepper

Not-So-Spicy Mexican Seasoning

- 2 tablespoons chili powder
- 2 tablespoons ground cumin
- 1 ¼ tablespoons garlic powder
- 1 ¼ tablespoons paprika
- 1 tablespoon onion powder
- pinch cayenne pepper (optional)

Italian Seasoning

- 2 tablespoons basil
- 2 tablespoons marjoram
- 2 ½ tablespoons oregano
- 2 tablespoons rosemary

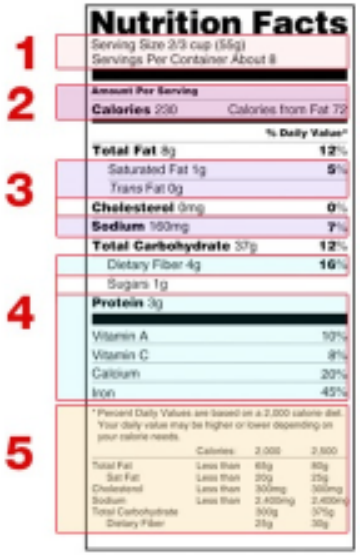
Opportunity for Education – Label Reading

Many people have not been education on nutrition labels

Reading nutrition labels is critical for managing carbohydrates and sodium

Opportunity for Education – Label Reading

Label Reading 101



1. Start with the serving information at the top of the label.
   - This will tell you the size of a single serving and the total number of servings per container (package).
2. Check total calories per serving.
   - Pay attention to the calories per serving and how many servings you're really consuming if you eat the whole package. If you double the servings you eat, you double the calories and nutrients.
3. Limit these nutrients
   - Limit the amounts of saturated fat and sodium you eat and avoid trans-fat. Choose foods with less of these nutrients when possible.
4. Get enough of these nutrients
   - Make sure you get enough of beneficial nutrients such as: dietary fiber, protein, calcium, iron, vitamins and other nutrients you need every day.
5. Quick guide to % daily value
   - The % Daily Value (DV) tells you the percentage of each nutrient in a single serving, in terms of the daily recommended amount. As a guide, if you want to consume less of a nutrient (such as saturated fat or sodium), choose foods with a lower % DV — 5 percent or less. If you want to consume more of a nutrient (such as fiber), seek foods with a higher % DV — 20 percent or more.

Other Tips:

- Remember that the information shown in these panels is based on 2,000 calories a day. You may need to consume less or more than 2,000 calories depending upon your age, gender, activity level, and whether you're trying to lose, gain or maintain your weight.
- When the Nutrition Facts label says a food contains "0 g" of trans fat but includes "partially hydrogenated oil" in the ingredient list, it means the food contains trans-fat, but less than 0.5 grams of trans fat per serving. So, if you eat more than one serving, you could quickly reach your daily limit of trans fat

Opportunity for Education – Label Reading

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Post-stroke nutrition:

A new dietary pattern.

General Diet

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The Healthy Lifestyle Puzzle

Dietary Guidelines for Americans

- General healthy lifestyle guidelines for everyone
- Considers healthy eating patterns, food groups and other dietary components
- Five guidelines along with key recommendations that include concrete numbers for sodium, added sugars, and saturated fat
- Also includes a Mediterranean diet section

01

Follow a healthy eating pattern across the lifespan.

02

Focus on variety, nutrient density, and amount.

03

Limit calories from added sugars and saturated fats and reduce sodium intake.

04

Shift to healthier food and beverage choices.

05

Support healthy eating patterns for all.

The Five Guidelines

Key Recommendations – Healthy Eating Pattern

Consume a healthy eating pattern that accounts for all foods and beverages within an appropriate calorie level.

A healthy eating pattern includes:

A variety of vegetables from all of the subgroups—dark green, red and orange, legumes (beans and peas), starchy, and other

Fruits, especially whole fruits

Grains, at least half of which are whole grains

Fat-free or low-fat dairy, including milk, yogurt, cheese, and/or fortified soy beverages

A variety of protein foods, including seafood, lean meats and poultry, eggs, legumes (beans and peas), and nuts, seeds, and soy products

Oils

A healthy eating pattern limits:

Saturated fats and *trans* fats, added sugars, and sodium

Additional Key Recommendations

Consume less than 10 percent of calories per day from added sugars

Consume less than 10 percent of calories per day from saturated fats

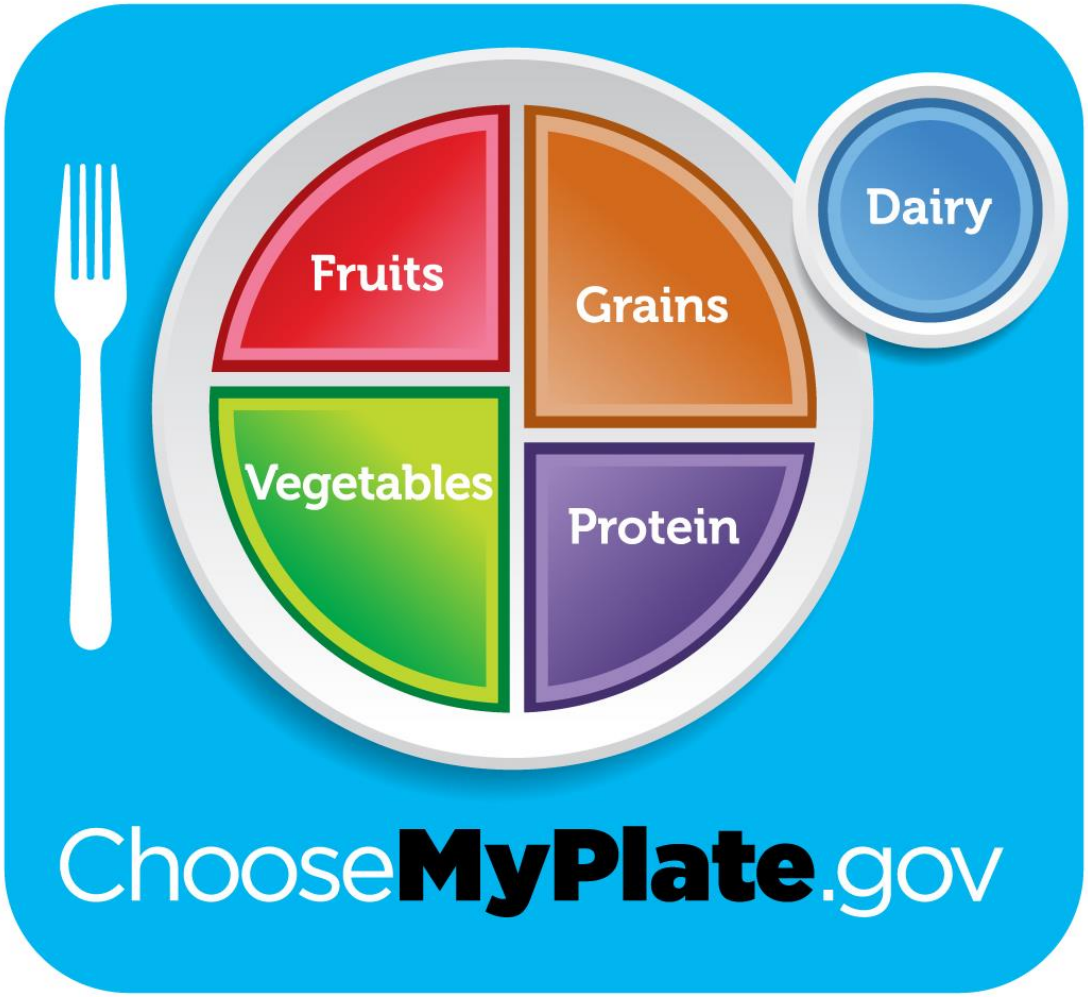
Consume less than 2,300 milligrams (mg) per day of sodium

If alcohol is consumed, it should be consumed in moderation—up to one drink per day for women and up to two drinks per day for men—and only by adults of legal drinking age.

My Plate

- Uses the ideas put forth in Dietary Guidelines for Americans
- Emphasizes "per meal" strategy and uses pictures and graphics
- My Plate Strategies: make half your plate whole fruits and vegetables, make half your grains whole, move to low-fat dairy, vary your protein routine

My Plate



National Stroke Association

"Eating a healthy diet can reduce your risk of having another stroke. Eating a diet low in fat and salt and high in fruits and vegetables reduces the risk factors for another stroke like high cholesterol, high blood pressure, being overweight and diabetes."

- **Fruits and Vegetables.** You should eat plenty of fruits and vegetable, between 5-7 servings per day.
- **Grains.** Whole grain breads and cereals contain fiber and vitamins. They may reduce the risk of stroke. It is recommended that 2-4 small servings of whole grain daily.
- **Lean protein**. Limiting the amount of cholesterol you eat is another important step in reducing the risk of another stroke. Choose low-fat meats or other protein sources for 2 small servings per day.
- **Limit salt.** Eating too much salt/sodium may cause you to retain water and raise your blood pressure. Cut down on sodium by: using herbs and spices for flavoring; limiting processed and snack foods; not adding extra salt at the table; and reading labels and avoiding foods with high sodium content.

DASH diet

- Dietary Approaches to Stop Hypertension
- Developed by the National Institutes of Health to prevent hypertension or reduce blood pressure in those with hypertension

Mediterranean diet

- Common dietary pattern in some parts of the world with low rates of heart disease and type 2 diabetes
- Scientific evidence to support its benefits

MIND diet

- Mediterranean-DASH Intervention for Neurodegenerative Delay
- Developed by Rush University
- Combines DASH diet and Mediterranean diet
- Fairly new. Research is still emerging.
- Considered easier to follow than other dietary patterns

Dietary Approaches to Stop Hypertension

Also known as the DASH diet

Specifically targets hypertension – both prevention and treatment

Per National Institutes of Health:

What you eat affects your chances of developing high blood pressure (hypertension). Research shows that high blood pressure can be prevented— and lowered—by following the Dietary Approaches to Stop Hypertension (DASH) eating plan, which includes eating less sodium.

DASH diet

The DASH eating plan is **rich in fruits, vegetables, fat-free or low-fat milk and milk products, whole grains, fish, poultry, beans, seeds, and nuts.**

It contains **less sodium; sweets, added sugars, and beverages containing sugar; fats; and red meats** than the typical American diet.

This heart-healthy way of eating is lower in saturated fat, trans fat, and cholesterol and rich in nutrients that are associated with lowering blood pressure—mainly potassium, magnesium, calcium, protein, and fiber.

Could you be more specific?

- The DASH eating plan suggests decreasing sodium to 2,300 mg per day. Once someone is comfortable with that, it suggests reducing sodium further to 1,500 mg per day.
- Whole grains are recommended for most grain servings.
- Three servings of low-fat dairy per day
- Number of servings of fruits and vegetables per day are dependent upon calorie needs

Could you be more specific?

DASH eating plan

Following the DASH Eating Plan

Use this chart to help you plan your menus—or take it with you when you go to the store.

Food Group	Servings Per Day			Serving Sizes	Examples and Notes	Significance of Each Food Group to the DASH Eating Plan
	1,600 Calories	2,000 Calories	2,600 Calories			
Grains*	6	6–8	10–11	1 slice bread 1 oz dry cereal† ½ cup cooked rice, pasta, or cereal	Whole wheat bread and rolls, whole wheat pasta, English muffin, pita bread, bagel, cereals, grits, oatmeal, brown rice, unsalted pretzels and popcorn	Major sources of energy and fiber
Vegetables	3–4	4–5	5–6	1 cup raw leafy vegetable ½ cup cut-up raw or cooked vegetable ½ cup vegetable juice	Broccoli, carrots, collards, green beans, green peas, kale, lima beans, potatoes, spinach, squash, sweet potatoes, tomatoes	Rich sources of potassium, magnesium, and fiber
Fruits	4	4–5	5–6	1 medium fruit ¼ cup dried fruit ½ cup fresh, frozen, or canned fruit ½ cup fruit juice	Apples, apricots, bananas, dates, grapes, oranges, grapefruit, grapefruit juice, mangoes, melons, peaches, pineapples, raisins, strawberries, tangerines	Important sources of potassium, magnesium, and fiber
Fat-free or low-fat milk and milk products	2–3	2–3	3	1 cup milk or yogurt 1½ oz cheese	Fat-free (skim) or low-fat (1%) milk or buttermilk; fat-free, low-fat, or reduced-fat cheese; fat-free or low-fat regular or frozen yogurt	Major sources of calcium and protein
Lean meats, poultry, and fish	3–6	6 or less	6	1 oz cooked meats, poultry, or fish 1 egg‡	Select only lean meats; trim away visible fat; broil, roast, or poach; remove skin from poultry	Rich sources of protein and magnesium
Nuts, seeds, and legumes	3 per week	4–5 per week	1	⅓ cup or 1½ oz nuts 2 Tbsp peanut butter 2 Tbsp or ½ oz seeds ½ cup cooked legumes (dry beans and peas)	Almonds, hazelnuts, mixed nuts, peanuts, walnuts, sunflower seeds, peanut butter, kidney beans, lentils, split peas	Rich sources of energy, magnesium, protein, and fiber
Fats and oils§	2	2–3	3	1 tsp soft margarine 1 tsp vegetable oil 1 Tbsp mayonnaise 2 Tbsp salad dressing	Soft margarine, vegetable oil (such as canola, corn, olive, or safflower), low-fat mayonnaise, light salad dressing	The DASH study had 27 percent of calories as fat, including fat in or added to foods
Sweets and added sugars	0	5 or less per week	2	1 Tbsp sugar 1 Tbsp jelly or jam ½ cup sorbet, gelatin 1 cup lemonade	Fruit-flavored gelatin, fruit punch, hard candy, jelly, maple syrup, sorbet and ices, sugar	Sweets should be low in fat

* Whole grains are recommended for most grain servings as a good source of fiber and nutrients.
† Serving sizes vary between ½ cup and 1¼ cups, depending on cereal type. Check the product's Nutrition Facts label.
‡ Because eggs are high in cholesterol, limit egg yolk intake to no more than four per week; two egg whites have the same protein content as 1 oz of meat.
§ Fat content changes serving amount for fats and oils. For example, 1 Tbsp of regular salad dressing equals one serving; 1 Tbsp of a low-fat dressing equals one-half serving; 1 Tbsp of a fat-free dressing equals zero servings.

Abbreviations: oz = ounce; Tbsp = tablespoon; tsp = teaspoon

Mediterranean Diet

Research has shown that the Mediterranean diet reduces the risk of heart disease among other things

The Mediterranean diet plan is less specific than the DASH diet since it was found by scientists to be effective, not developed by scientists

One of the more researched diets along with the DASH diet. A Mediterranean diet pattern is included in the Dietary Guidelines for Americans

More Details Please

The Mediterranean diet emphasizes:

Eating primarily plant-based foods, such as fruits and vegetables, whole grains, legumes and nuts

Replacing butter with healthy fats such as olive oil and canola oil

Using herbs and spices instead of salt to flavor foods

Limiting red meat to no more than a few times a month

Eating fish and poultry at least twice a week

Enjoying meals with family and friends

Drinking red wine in moderation (optional)

Getting plenty of exercise

rediscover goodness
OLDWAYS
CULTURAL FOOD TRADITIONS

Mediterranean Diet Pyramid

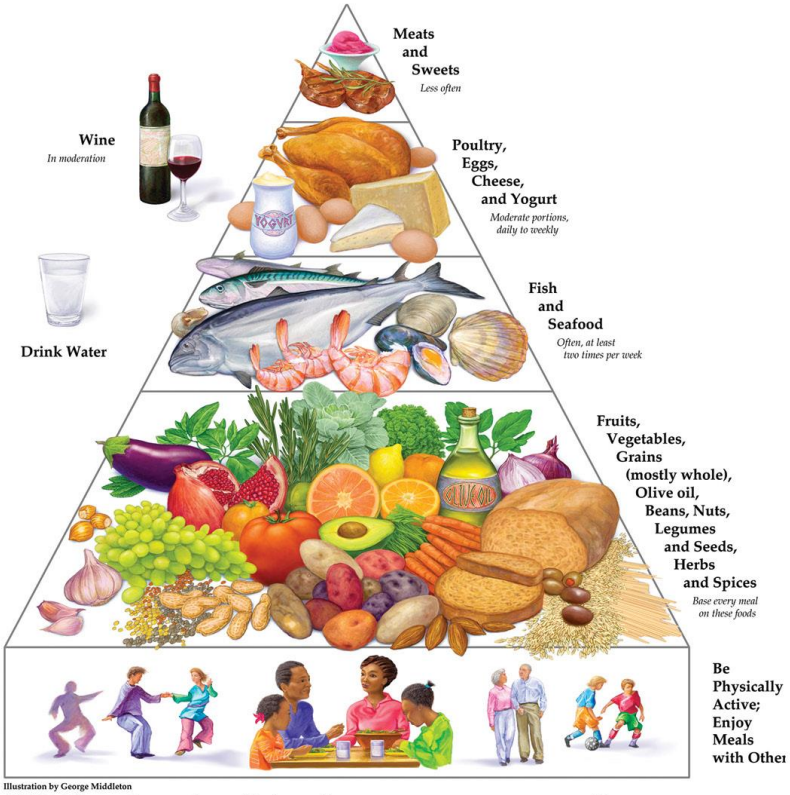


Illustration by George Middleton

www.oldwayspt.org

Mediterranean Diet Pyramid

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MEDITERRANEAN-DASH Intervention for Neurodegenerative Delay (MIND)

The Mediterranean dietary pattern includes mainly whole, minimally processed plant foods including cereal grains, legumes, vegetables, fruit, nuts, and fish with small amounts of red meat, milk, and dairy products.

The DASH diet emphasizes fruit, vegetables, and low-fat dairy products and includes whole grains, poultry, fish, and nuts, and is reduced in fats, red meat, sweets, and sugar-containing beverages.

Combining the two diets, the MIND diet emphasizes natural, plant-based foods, specifically promoting an increase in the consumption of berries and green leafy vegetables, with limited intakes of animal-based and high saturated fat foods.

Synopsis

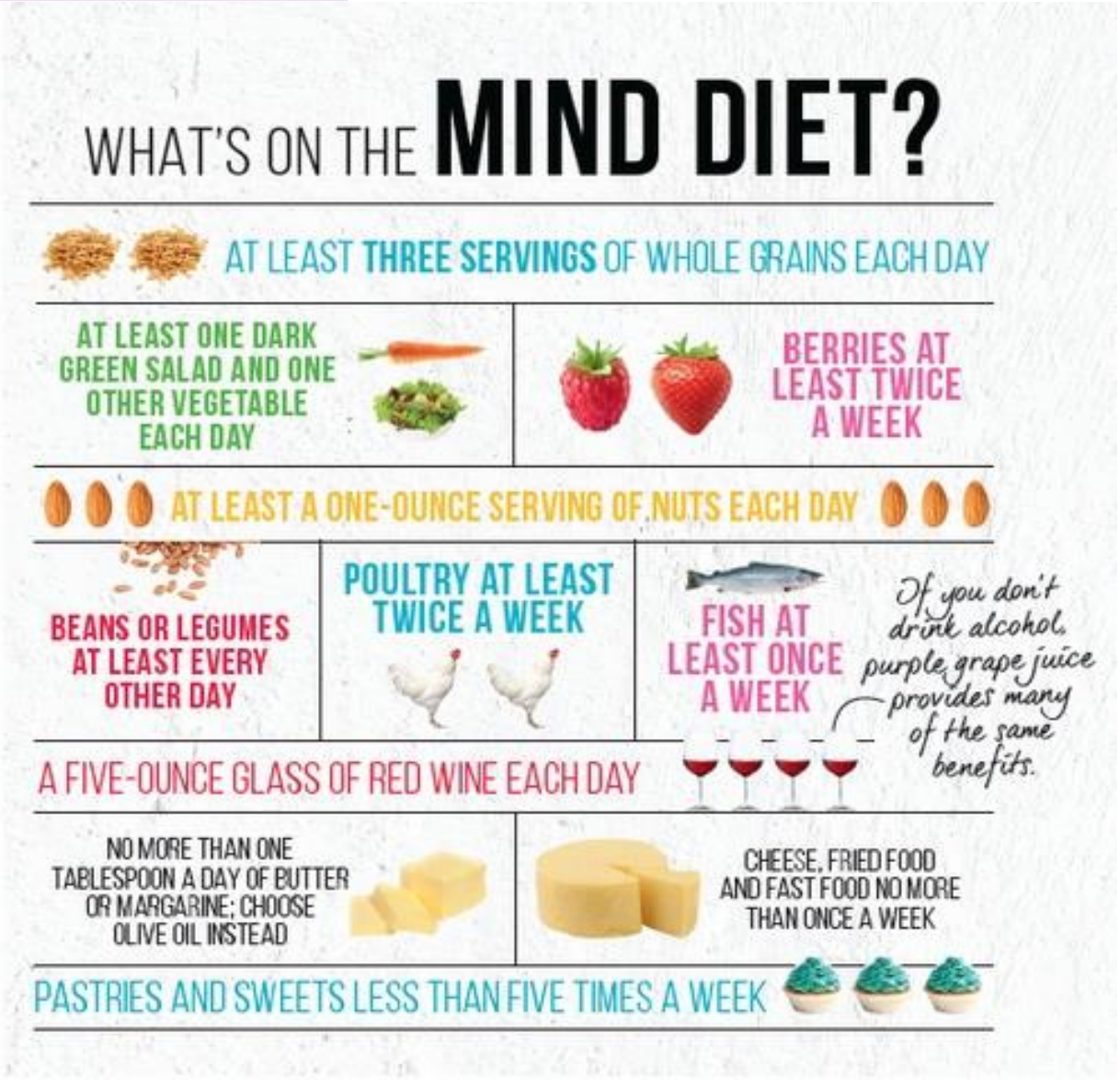
- The Mediterranean diet is best when it comes to heart health
- The DASH diet is best for hypertension
- The MIND diet combines these, and its main aim is to slow cognitive decline and prevent dementia
  - This is important for stroke survivors as they suffer much higher rates of dementia than others
  - Early research shows that this diet may help shield stroke survivors from developing dementia within 10 years of their stroke

MIND 10 Brain-Healthy Food Groups

- Green, leafy vegetables
- Other vegetables
- Nuts
- Berries
- Beans
- Whole grains
- Fish
- Poultry
- Olive oil
- Wine

MIND 5 Unhealthy Food Groups

- Red meat
- Butter and margarine
- Cheese
- Pastries and sweets
- Fried or fast food



Simplify It

Dietary Patterns Post-Stroke

What works for you

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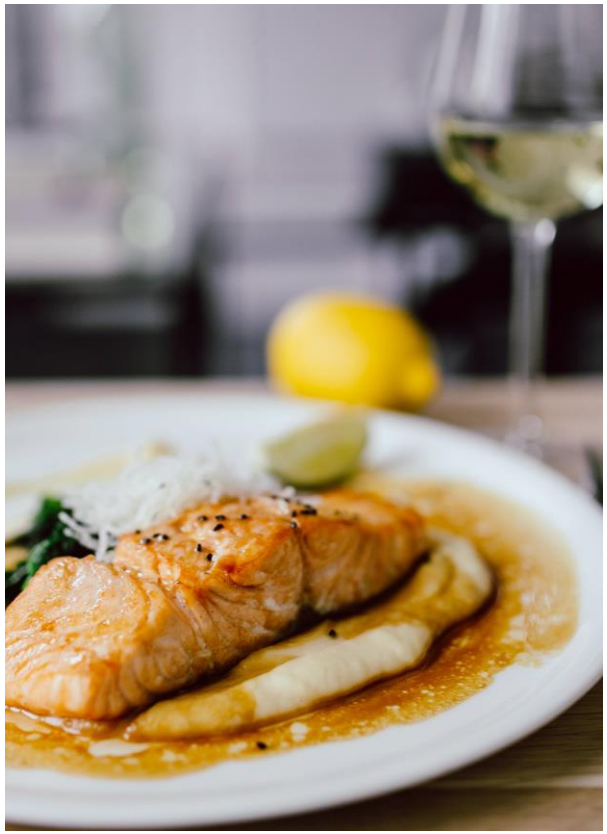
Commonalities

- Sodium intake of 2,300 mg or less per day
- Fewer processed and fried foods. Fewer pastries and sweets
- More whole foods including whole fruits and vegetables
- Lean proteins and plant-based proteins such as beans, legumes, and nuts
- More whole grains and complex carbohydrates
- Less simple and added sugars

Using an additive approach rather than telling people what they "shouldn't" eat

- Add more fruits and vegetables to every meal
- Add fish twice a week
- Add nuts, fruits and veggies as snacks as well as dessert



Lean Beef

Fish

Chicken

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Beans

Nuts and Seeds

Legumes

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Whole Grains

Starchy Vegetables

Whole Fruits

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Unsaturated Fats

Saturated Fats

Trans-Fats

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Love it
Poly- and Mono-unsaturated

Limit it
Saturated

Lose it
Trans

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The Gist - KISS

Reduce sodium to 2,300 mg per day or less

Avoid trans-fats and decrease saturated fats. Focus on unsaturated fats when choosing fats.

Choose lean proteins including fish and plant-based protein. Avoid processed meats.

The Gist - KISS

Eat food. Mostly plants.
Not too much.

Make half your grains
whole grains

Reduce processed foods.
Increase whole fruits and
vegetables

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Thank you

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