

**What is
the
MIND Diet?**

The MIND Diet

Mediterranean-DASH Intervention for Neurodegenerative Delay

Sponsored by Atchison County FCE Council

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The MIND diet is designed to reduce the risk of dementia and loss of brain function as you age.

According to the National Institute of Health, Alzheimer's disease is currently ranked as the sixth leading cause of death in the United States. Recent estimates indicate that it may rank third, behind heart disease and cancer, as a cause of death for older people. Research supports that diets recommended for cardiovascular health have also been shown to reduce the risk of cognitive decline, including Alzheimer's disease.

The MIND diet stands for "Mediterranean-DASH Intervention for Neurodegenerative Delay." Health benefits resulting from the lifestyle behaviors and food choices practiced by people living in the Mediterranean region are often called the Mediterranean Diet. The DASH diet stands for "Dietary Approaches to Stop Hypertension. While weight loss may occur from following these eating patterns; the MIND Diet was not designed as a method to lose weight.

The MIND diet combines the Mediterranean diet and the DASH diet to create a dietary pattern that focuses specifically on brain health. While the data on exact food components are inconclusive, close adherence to the MIND dietary pattern, which emphasizes foods rich in omega-3 fatty acids and antioxidants such as Vitamin E, are strongly associated with brain health. Equally important to what the MIND dietary pattern includes is what it does not include. Foods that are higher in saturated fats and sugars such as processed/red meat, full fat dairy, butter, cheese, pastries and sweets and fried or fast foods should be limited as they have been linked to increased risk of dementia. Nutrient dense foods such as fish, fruits and vegetables, nuts and olive oil are recommended. Not all fruits and vegetables are recommended equally. For instance, berries are emphasized since they have been shown to decrease neuron loss and improve memory. Leafy greens such as spinach, romaine lettuce, kale and collard greens have been shown to be particularly protective, and are recommended at least six times a week.

Many people search for ways to prevent cognitive decline due to the reduced quality of life caused by dementia plus the burden of related care expenses. In 2015, Dr. Martha Clare Morris and colleagues at Rush University Medical Center and the Harvard Chan School of Public Health published two papers introducing the MIND diet. Both the Mediterranean and DASH diets had already been associated with preservation of cognitive function, presumably through their protective effects against cardiovascular disease, which in turn preserved brain health. The Mediterranean-DASH Diet Intervention for Neurodegenerative Delay, or MIND diet, targets preserving the health of the aging brain.

The research team had followed a group of older adults for up to 10 years from the Rush Memory and Aging Project (MAP), a study of residents free of dementia at the time of enrollment. They were recruited from more than 40 retirement communities and senior public housing units in the Chicago area. More than 1,000 participants filled out annual dietary questionnaires for nine years and had two cognitive assessments. A MIND diet score was developed to identify foods and nutrients, along with daily serving sizes, related to protection against dementia and cognitive decline. The results of the study produced fifteen dietary components that were classified as either "brain healthy" or as unhealthy. Participants with the highest MIND diet scores had a significantly slower rate of cognitive decline compared with those with the lowest scores. The effects of the MIND diet on cognition showed greater effects than either the Mediterranean or the DASH diet alone.

MIND diet researchers, led by Rush University nutritional epidemiologist Dr. Martha Clare Morris, created a small sensation when the study published its findings in 2015. Strict adherence to all three of the diets reduced Alzheimer's risk by 53% after 4.5 years. But the MIND diet was the only diet to show significantly less Alzheimer's in those who followed it less strictly. But those who only followed the MIND diet sometimes still had an Alzheimer's risk reduction of a whopping 37%. Why is this so important? In part, it's because it shows that even moderate changes to dietary choices can have a huge impact on Alzheimer's risk later.

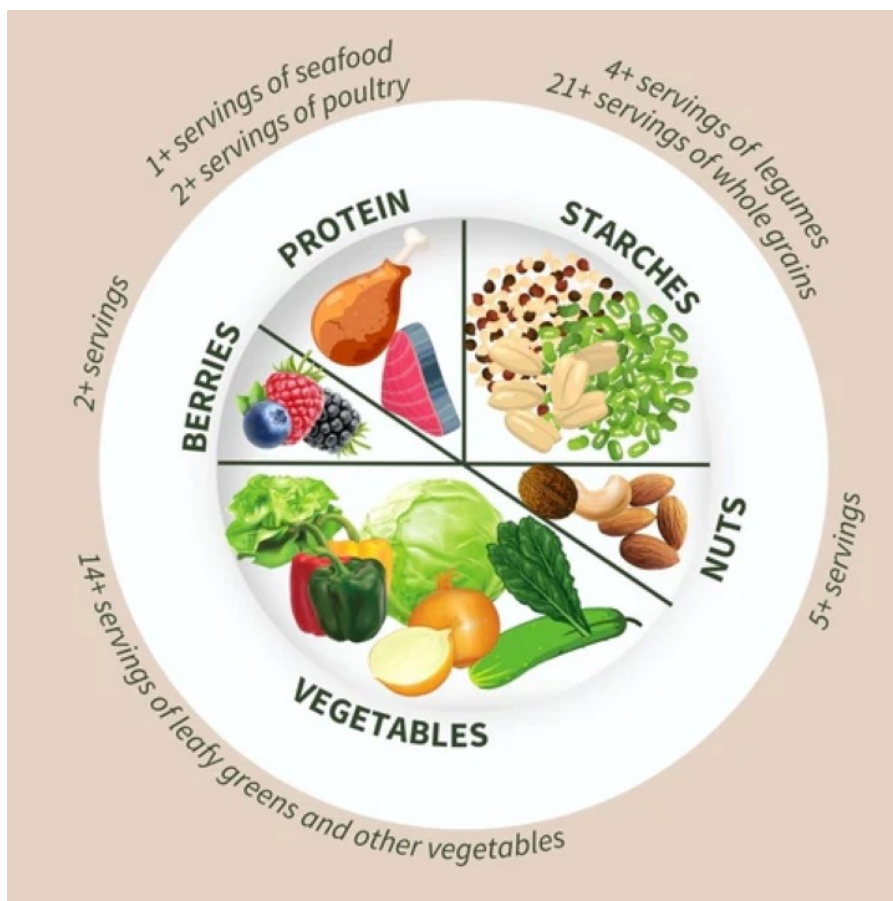
A Behind the Scenes Look at MIND Diet Development

Many experts regard the **Mediterranean** and **DASH diets** as two of the healthiest diets. Research has shown that they can lower blood pressure and reduce the risk of heart disease, diabetes, some cancers and several other diseases. But researchers wanted to create a diet specifically to help improve brain function and prevent dementia. To do this, they combined foods from the Mediterranean and DASH diets that had been shown to benefit brain health.

The Mind diet is based on years of research by Rush and Harvard Universities. A review of hundreds of previous studies was conducted to determine if there was enough evidence regarding certain foods playing a role in dementia delay or prevention. The trail MIND diet aimed to reduce dementia and the decline in brain health that often occurs as people get older.

It combines aspects of two very popular diets, the **Mediterranean diet** and the **Dietary Approaches to Stop Hypertension (DASH)** diet. MIND" stands for **Mediterranean-DASH Intervention for Neurodegenerative Delay** to recognize the brain health benefits of these two diets.

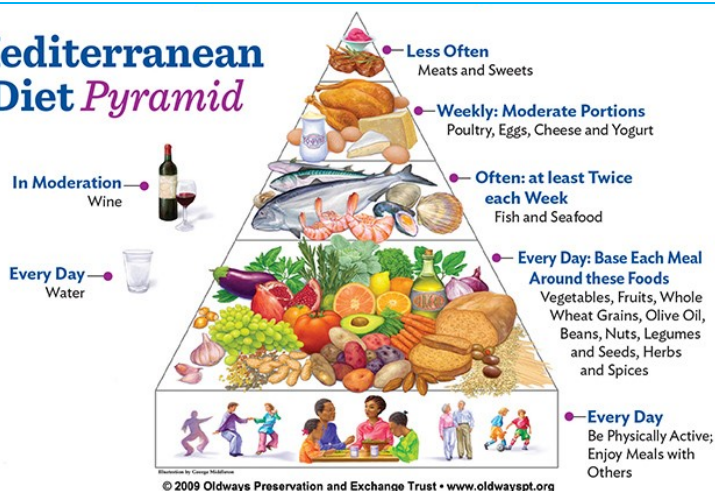
Lead researcher Morris developed a scoring system to evaluate daily foods consumed to determine how closely food choices followed the DASH and Mediterranean diet recommendations. It was used to capture the dietary decisions of the study participants, Examples of her scoring quizzes appear later in this publication.



View the plate on the right and ask yourself, does my plate of food resemble this MIND diet plate. If the answer is no, consider making small changes in your food choices to reduce the risks of dementia in later life. The MIND diet has not been shown to reduce or reverse brain damage related to the onset of dementia.

Excessive Salt Intake Too much salt in the diet can lead to cardiovascular disease and especially high blood pressure. High blood pressure or hypertension is a known risk factor for Alzheimer's disease. A recent study showed those who maintained a healthy blood pressure at mid-life (systolic blood pressure < 130) have a reduced risk of Alzheimer's disease later in life. Ridding the diet of excessive sodium, found in fried, packaged, processed and fast foods, is an important tool for reducing Alzheimer's risk. DASH stands for "Dietary Approaches to Stop Hypertension". As the name suggests, the DASH diet is an effective strategy for helping lower blood pressure. It has other health benefits too-such as losing weigh if needed and protecting your heart from disease. The DASH diet focuses on eating a specific number of servings from different food groups. The diet is generally rich in fruits, vegetables, whole grains, low-fat or nonfat dairy, beans, nuts, seeds and lean proteins like fish and chicken. It limits intakes of red and processed meats, soda, sweets and salt.

Mediterranean Diet Pyramid



The purpose of the research was to see if the MIND diet, partially based on the Mediterranean and DASH diets, could directly prevent the onset or slow the progression of dementia. All 3 diets highlight plant-based foods and limit the intake of animal and high saturated fat foods. The MIND diet recommends specific "brain healthy" foods to include and five unhealthy foods to limit.

DASH Eating Plan

The Benefits: Lowers blood pressure & LDL "bad" cholesterol.

Eat This	Limit This
Vegetables	Fatty meats
Fruits	Full-fat dairy
Whole grains	Sugar sweetened beverages
Fat-free or low-fat dairy	Sweets
Fish	Sodium intake
Poultry	
Beans	
Nuts & seeds	
Vegetable oils	

www.nhlbi.nih.gov/DASH

MIND DIET GUIDELINES*

The healthy items the MIND diet guidelines include:

- 3+ servings a day of whole grains
- 6+ serving a week of leafy green vegetables
- 5+ servings a week of nuts
- 1+ servings a day of vegetables (other than leafy green)
- 4+ meals a week of beans
- 2+ servings a week of berries
- 2+ meals a week of poultry
- 1+ meals a week of fish

Mainly olive oil if added fat is used

Red wine*, in moderation and doctor recommended

The unhealthy items, which are higher in saturated and trans fat, include:

- Less than 5 servings a week of pastries and sweets
- Less than 4 servings a week of red meat (including beef, pork, lamb and products made from these meats)
- Less than 1 tablespoon a day of butter/ stick margarine
- Less than one serving of cheese and fried foods

***Note:** Modest variations in the amounts of these foods have been used in subsequent studies.

Mind Diet Score Card

The score card below offers a quick method to evaluate your weekly eating pattern related to reducing your risks. Original research studies which resulted in the development of the Mind Diet revealed a variety of foods offered protective factors or reduce health risks. Thus, 1 point is allowed for each healthy brain food goal.

It is important to note that it can be difficult to adapt new eating behaviors. Modifying eating behaviors from consuming from 1 cup of raw greens to the recommended 6 cups per week can be challenging. At week's end strict scoring could result in a score of zero on the 15 point scale. Further more, the resulting score can even discourage new behavior changes.

It is important to remember that making small changes over time can produce big results. To encourage these steps to change; consider modifying the above score card to reward positive changes

MIND Diet Quiz

Adapted by Devon Peart

Give yourself 1 point if you meet the serving requirements each week, and 0 if you don't.

Maximize Brain Healthy Foods	Do I Eat This Much Each Week?	Maximum Score	My Score
Green Leafy Vegetables	6 cups uncooked or 3 cups cooked	1	
Other Vegetables	7 cups uncooked or 3.5 cups cooked	1	
Berries	2 cups	1	
Fish	3/4 cup (or 3.5 ounces)	1	
Poultry	1 cup (or 5 ounces)	1	
Legumes (such as kidney beans, chickpeas and lentils)	3 cups	1	
Nuts	10 tablespoons of nut butter, or 1 & 1/4 cups	1	
100% Whole Grains	21 slices of bread or 3.5 cups cooked pasta	1	
Olive Oil	Used as my primary oil	1	
Wine	5 ounces (no more)	1	
Minimize Unhealthy Foods	Do I Eat Less than This Much Each Week?		
Deep fried or fast food	1/2 cup (or 2.5 ounces)	1	
Pastries or sweets	3.5 cups	1	
Butter	7 tablespoons	1	
Red meat (beef, lamb, pork, ham, etc.)	2 cups (or 10 ounces)	1	
Cheese	1 cup	1	
TOTAL SCORE		15	

	Score	Health Outcomes
Top Performer	9-13	Reduced risk of developing Alzheimer's disease by 53% Slower rate of cognitive decline equal to 7.5 years of younger age
Middle Performer	7-8	Reduced risk of developing Alzheimer's disease by 35%
Many Options to Improve	2-6	

Source: <https://www.circleofcare.com/healthy-aging-101-boosting-brain-health-through-diet/mind-diet-quiz/>

When the Mediterranean DASH Intervention for Neurodegenerative Delay (MIND) researchers set out to determine the most neuroprotective foods, they also looked at data on the foods thought to be harmful to the brain. We've known for years that eating certain foods will increase your risk for heart disease and diabetes, both of which will increase your risk for Alzheimer's. **Now studies also show that a steady diet of brain-unhealthy foods is an independent risk factor for Alzheimer's.**

Eating more saturated and trans fats ups your odds of getting Alzheimer's. In one of the most comprehensive studies to date, those who consumed more than 25 grams of fat a day tripled their risk of developing Alzheimer's over a four-year period. That's the amount of saturated fat in a typical fast-food hamburger and fries. If the diet was high in trans fats (more than two grams a day), the risk was three to five times greater. This doesn't mean all fats are bad for the brain. But the brain-healthy diet favors healthy fats, such as the mono- and polyunsaturated fats found in olive oil, avocados, nuts and oily fish (salmon, mackerel, anchovies, sardines).

Consider adding a 1/2 point to your weekly score if you:

FOOD	Amount	Serving Size/Notes
Leafy greens	2-5 servings/week	1/2 cup cooked/1 cup raw
Other Vegetables	5-6 servings/week	1/2 cup cooked, juice or raw cut/1 cup raw
Berries	1 serving/week	1/2 cup fresh, frozen or canned/1/4 cup dried
Nuts	1 serving/month 4 servings/week	
Fish (not fried)	1-3 servings/month	3 –4oz. portion
Poultry (not fried)	1 serving/week	3 –4oz. portion
Legumes/Beans	1-2 servings/week	1/2 cup serving Includes lentils/chickpeas
Whole Grains	1-2 servings a day	1/2 cup cooked pasta, oatmeal, brown rice
Olive Oil	1 serving/day	1 teaspoon
Wine*	*Current recommendations no more than 1 (5oz.) glass/day for women, 2 (5oz.) glasses/day for men. If you don't drink wine, you should not start simply for health benefits. Visit with your doctor regarding the health benefits based on your personal health history.	

Consider adding a 1/2 point to your weekly score if you minimize:

Fast Food/Fried Foods	Limit to 1-3 times/week.	Earn 1 point if 1 or less times/week
Pastries/Sweets	Limit to 5-6 times/week	Earn 1 point if 4 or less times/week
Butter/Margarine	Limit to 1-2 Tablespoons/day	Earn 1 point if 1 Tablespoon of less/day
Red Meat	4-6 servings/week	Earn 1 point if 4 or less servings/week. Serving 3 to 4 oz. of lean cuts. Limit processed meats such as deli meats /bacon to occasional rather than daily.
Cheese	1-6 servings/week	Earn 1 point if 1 or less servings per week. Serving size 1.5 oz natural cheese such as cheddar and 2 oz. for processed cheese.

Focus on small changes in food choices to move your score to 13-15.

1. Leafy Greens

At least 6 servings a week

Among all the different types of vegetables, the leafy green variety has shown to among the most important for our protecting cognitive abilities as we age. Leafy greens are rich in multiple nutrients that are implicated as healthy for the brain-folate, lutein, vitamin E and beta carotene to name a few. **The Rush University study revealed that 1 serving per day slowed the rate of cognitive decline to that of someone eleven years younger.** This versatile vegetable group can be the star in many recipes.

Autumn Harvest Salad *Prep Time 15 minutes Cook Time 20 minutes Serves 6*

Ingredients

1 cup raw **pecans**
 1 Tablespoon extra virgin **olive oil**
 1 Tablespoons **maple syrup**
 ½ teaspoon **cinnamon**
 Pinch **salt**
 2 bunches Tuscan **kale**, stemmed and shredded
 3 Honeycrisp **apples** or Fugu **persimmons**, thinly sliced
 Seeds from 1 **pomegranate**
 3-4 slices thick-cut **bacon**, chopped
 ½ cup crumbled or cubed **blue cheese**,
goat cheese or feta

Caramelized Shallots and Cider Vinaigrette

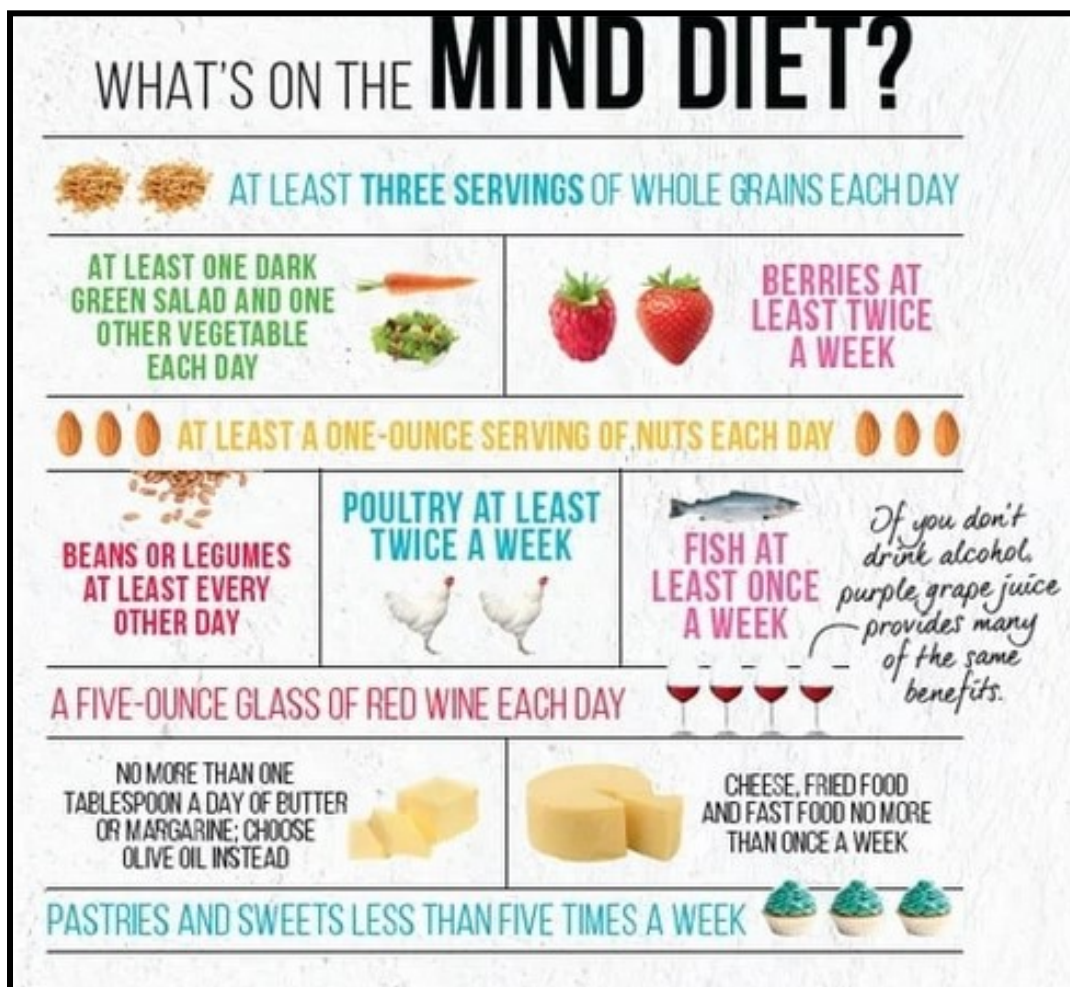
1/3 cup extra virgin **olive oil**
 1 small **shallot**, thinly sliced
 2 Tablespoons **apple cider vinegar**
 1 Tablespoon **apple butter**
 1 Tablespoon fresh **thyme leaves** or 1 tsp. dry
 Crushed **red pepper flakes**
Salt
 Freshly ground **black pepper**

Directions

1. Wash hands with soap and water.
2. Preheat oven to 350 degrees F. Line a baking sheet with parchment paper.
3. On prepared baked sheet, toss together pecans, olive oil, maple syrup, cinnamon and salt. Arrange in single layer. Bake until pecans are toasted.
4. Meanwhile, in large salad bowl, toss together kale, apples and pomegranate seeds.
5. In a large skillet over medium heat cook bacon until crisp, about 5 minutes. Transfer to a paper towel lined plate to drain. Wipe skillet clean.
6. In same skillet over medium high heat, heat olive oil. When oil shimmers, add shallots and cook until fragrant, 2 to 3 minutes. Remove pan from heat and allow shallots to cool slightly. Add vinegar, apple butter, thyme, red pepper flakes, salt and pepper. Stir to combine.
7. Pour vinaigrette over salad, tossing to combine. Top with bacon, toasted pecans and cheese, gently toss to combine.
8. Serve immediately .

Consider adding Spinach, Swiss Chard or Turnip Greens to a recipe. Many of the nutrients in leafy greens are fat soluble and are best absorbed when eaten with a healthy fat such as virgin olive oil, nuts, avocado or fatty fish. Aim for 1 cup raw or 1/2 cup cooked greens each day. But if you want to eat more, all the better.

Not sure what leafy green to try besides spinach, consider trying Arugula, Collard Greens, Kale, Romaine Lettuce or Mustard. The darker the green color, the better. Think Romaine rather than Iceberg lettuce. Tip: Mix up your greens to get started; aim for variety and add more deeper green choices over time.



Citrus Season Salad Prep Time 10 minutes Serves 4

This is the salad to make when citrus fruits are in season. The crunchy cacao nib, nuts, and hemp seed topping takes it to the next level.

Ingredients

3 small **mixed citrus fruits** or 2 large ones

¼ cup extra virgin **olive oil**

2 tablespoons **balsamic vinegar**

¼ teaspoon **salt**

Pinch **red pepper flakes**, optional

5 cups **mixed baby greens**

1 small **head radicchio**, core removed and thinly sliced

2 tablespoons **raw cacao nibs**

2 tablespoons **hemp seeds**

2 tablespoons **unsalted pistachios** roughly chopped

Coarse **salt**, optional

Directions

1. Slice off the ends of the fruit and cut away the peel and pith. Slice into thin rounds and remove any visible seeds. Squeeze juice from the pieces of peel (up to 2 tablespoons) into a small bowl or glass jar with a tight-fitting lid. Another option is to grate peel to add citrus flavor to dressing.
2. Add the oil, vinegar, salt, and pepper flakes (if using), cover, and whisk or shake vigorously until combined. Set aside. Store extra dressing in the refrigerator for up to 7 days
3. Place the greens and radicchio in a serving bowl and pour about half the dressing, or just enough to lightly coat the greens. Toss well, then scatter the citrus overtop and drizzle with more dressing, if you like. Sprinkle with coarse flaky salt (if using) and the nut and seed toppings.

2. Other Vegetables

At least 1 a day

While vegetables are bursting with cognitive enhancing nutrients, cruciferous vegetables seem to offer special protection to the brain. These include broccoli, Bok choy, brussels sprouts, cabbage and cauliflower. In the Nurses Study of 13,388 participants, those who ate cruciferous vegetables in their middle-aged years experienced a slower decline in memory beginning at age seventy. The Chicago Health and Aging Project study reveals those who eat cruciferous vegetables one to two times a week had a slower decline in thinking abilities as compared who do not eat these veggies.

Most studies of vegetables and health do not include white potatoes as a vegetable. White potatoes are high in many important dietary components including protein and fiber plus minerals and vitamin C. The concern with potatoes is they have what is known as a “high glycemic index” due to high amounts of simple carbohydrates. The carbs can cause blood glucose and insulin levels to spike, which makes you feel hungry soon after a meal. The extra calories can cause unwanted weigh gain. Other starchy veggies many have similar traits and should be eaten in moderation. Aim for eating a variety of types and colors of veggies each week.

Be mindful how you prepare your vegetables. A common misconception is raw is better than cooked. Raw wins for some nutrients, others are actually more “bio-available” when cooked. (Stir-fried, steamed, microwaved or sauteed) Fat soluble nutrients like vitamin E and carotenoids are enhanced when cooked. Water soluble nutrients like vitamin C and folate are leached when cooked. Thus, variety is the key to health.

Eating a wide-variety of plant foods is important for good health, and eating plant foods in both raw and cooked form will provide you with the richest array of nutrients.

Tangy Roasted Cauliflower *Prep Time 15 minutes Cook Time 25 minutes Serves 4*

Ingredients

1 large head of cauliflower, cut into florets
 ¼ cup virgin olive oil
 1 teaspoon ground cumin

1 ½ teaspoons garlic powder
 ½ teaspoon sea salt
 3 Tablespoons freshly squeezed lemon juice

Directions

1. Wash hands with soap and water.
2. Preheat oven to 425 degrees F.
3. In large bowl, toss the cauliflower floret with oil. Sprinkle with spices and toss to combine.
4. Spread cauliflower evenly on baking sheet. Drizzle with 2 Tablespoons of lemon juice.
5. Roast for 10 minutes or until cauliflower is golden brown and tender.
6. Drizzle on remaining 1 tablespoon lemon juice.

A common misconception is fresh produce has a higher nutritional content than either canned or frozen. This is true only if you pick and eat.

Which Is Better For You—Raw or Cooked Veggies?

Raw spinach provides more fiber, but cooked spinach may provides more beta carotene: One study found cooked has three times as much beta carotene — an antioxidant that's a form of vitamin A — was absorbed from cooked spinach compared with raw spinach. Raw spinach contains oxalic acid which inhibits calcium and iron absorption. The good news is that oxalic acid is broken down upon heating, so there is no loss of nutrients in steamed or sautéed spinach.

Spinach is rich in lutein. It one of the best foods in the world to prevent cataracts plus age related macular degeneration-the leading cause of preventable blindness in the elderly. Foods rich in lutein are also thought to help prevent some cancers. For example, 1/2 cup of cooked spinach contains 10,177 micrograms of lutein and 131 micrograms of folate but when it is raw-1 cup of spinach contains 3,659 micrograms of lutein and 36 micrograms of folate. Folate is important in red blood cell formation and for healthy cell growth and function. This nutrient is crucial during early pregnancy to reduce the risk of birth defects of the brain and spine. used by your body to make vitamin A. Raw spinach is the better choice for folate. Eating both cooked and raw spinach and other cooked and raw veggies is your best choice.

Black Pepper Buffalo Cauliflower *Prep Time 20 minutes Cook Time 35 minutes Serves 6*

Ingredients

2 Tablespoons extra-virgin **olive oil**
 ½ cup extra virgin **olive oil**
 ½ cup of **hot sauce**, such as Frank' s red hot
 1-2 Tablespoons **smoked paprika**
 1-2 teaspoons, freshly **ground pepper**, to taste
 1 teaspoon **garlic powder**
Salt, to taste
 1 **head cauliflower**, broken into florets (about 2 cups)

1 ½ cups **panko bread crumbs**
 ½ cup grated **Parmesan cheese**
 1/4-1/3 cup **cheddar cheese**

Quick Fix Ranch Dip

½ cup **plain Greek yogurt, drained**
 ¼ cup **buttermilk**
 1 Tablespoon **chives**
 1 Tablespoon **dill**
Salt and Pepper, to taste

Directions

1. Wash hands with soap and water.
2. Preheat oven to 425 degrees F.
3. Line rimmed baking sheet with parchment paper.
4. In medium bowl, combine oil, hot pepper sauce, paprika, pepper, garlic powder and pinch of salt.
5. In large bowl, place cauliflower and half the sauce, reserving the remaining sauce for another use. Toss to coat.
6. In shallow bowl, combine bread crumbs and Parmesan.
7. Dredge cauliflower in bread crumbs, pressing to adhere. Place on preparing baking sheet. Repeat with remaining cauliflower.
8. Roast until tender and golden, about 20 minutes. Remove the cauliflower from oven and sprinkle with cheddar on top. Return the baking sheet to oven and continue roasting until cheese begins to crisp, about 10 to 15 minutes.
9. Meanwhile, make ranch dressing. In medium bowl, stir together yogurt, buttermilk, chives and dill and season with salt. Add 1 to 2 Tablespoons buttermilk to thin as needed. Taste and add more salt and pepper as needed. Serve. **Note:** You prefer the flavor more if dip is prepared ahead and allowed to chill.

Cooking School Lesson Make and compare both cauliflower recipes. Do you enjoy the flavors of one recipe more? After tasting, are there changes you would suggest making? **Take away tip:** The Mind Diet does not require following a rigid list of foods nor are some food groups forbidden. Choose recipes that you enjoy eating and follow MIND diet guidelines. Recipes provided were selected to sample new flavors and foods plus to inspire you in your kitchen. Do you enjoy Mexican or Asian inspired dishes; know that both cuisines with a few quick adaptations-such as adding more veggies and less cheese-can be brain healthy choices.

Herbed Tomato Lentil Soup (*Lentils +Veggies=Healthy Brain Food*) Prep 30 minutes Cook 55 minutes Serves 12

Deglazing a pan involves adding liquid, such as stock or wine, to a pan to loosen and dissolve food particles that are stuck to the bottom after cooking or searing. The cooked food particles, known as fond, are the source of immense flavor. The flavorful mixture produced by deglazing can be used to make a sauce.

Ingredients

2 Tablespoons extra-virgin olive oil	2 15-ounce no added salt cans diced tomatoes , undrained
1 medium yellow onion , diced	1 cup green lentils , rinsed
2 Tablespoons fresh rosemary , chopped	32 oz low-sodium vegetable broth
1 Tablespoons fresh thyme , chopped	1/2 teaspoon ground black pepper
4 Tablespoons tomato paste	1/4 cup fresh parsley , chopped
1/4 cup dry white wine , optional or broth	

Directions

1. Wash hands with soap and water.
2. Heat the oil in a large pot over medium heat.
3. Add the onion, rosemary, and thyme and sauté for 2 minutes, or until the onion is translucent
4. Add the tomato paste and sauté for 1 1/2 minutes.
5. Deglaze the pan with the wine or broth.
6. Add the diced tomatoes with their juice, lentils and broth. Allow to simmer until lentils are tender.

Pumpkin Sage Lasagna Prep 30 minutes Cook 55 minutes Serves 12

A crowd pleasing tasty new twist on menu pleasing Lasagna dishes. Pepperoni is using sparingly to add flavor. Consider trying to garnish the dish with a sprinkling of sausage instead.

Ingredients

2 Tablespoons **extra-virgin olive oil**, plus more for greasing pan
 1 14 ounce can **pumpkin puree**
 2 cups **whole milk**
 2 teaspoons **dried oregano**
 2 teaspoons **dried basil**
 1/4 teaspoon **nutmeg**
 1/4 teaspoon **crushed red pepper flakes**

Salt

Ground pepper

16 ounces **ricotta cheese**
 2 **garlic cloves**, grated
 1 Tablespoon **fresh chopped sage**, plus 8 whole leaves
 2 Tablespoons **chopped fresh parsley**
 1 (12 ounce) box of **no-boil lasagna noodles**
 3 cups **shredded fontina cheese**
 1 cup grated **Parmesan cheese**
 12-16 pieces of thinly **sliced pepperoni**, optional

Directions

1. Wash hands with soap and water.
2. Preheat oven to 375 degree F. Grease a 9x13 baking dish.
3. In medium bowl, whisk together pumpkin, milk, dry spices and pinch of salt and pepper. In separate bowl, combine ricotta, garlic, chopped sage and parsley and season with salt and pepper.
4. Separate about one-quarter of pumpkin sauce (about 1 cup) to add to bottom of prepared pan. Add 3 or 4 sheets of lasagna, breaking as needed to fit. It is okay if sheets do not fully cover sauce.
5. Layer on half of ricotta mixture, half the pumpkin mixture, followed by 1 cup of fontina. Add layer of ricotta. And top with 3-4 noodles. Repeat. Sprinkle noodles with remaining 1 cup of fontina, then Parmesan chesses. Top with pepperoni, if using.
6. In small bowl, toss whole sage leaves in 2 teaspoons olive oil. Arrange on top of lasagna.
7. Cover the lasagna with foil and bake 45 minutes. Remove foil and bake until cheese is bubbling, about 10 minutes more. Let lasagna stand 10 minutes. Serve.
8. Store any leftovers refrigerated in airtight container up to 3 days.

Brussel Sprout Cranberry Salad **Prep Time** 20 minutes **Serves** 6-8

Recipe taste tested by kids and adults with frequent requests for seconds and the recipe.

Ingredients

⅓ cup dried **bulgur**
 1 cup boiling **water**
 ½ pound **Brussels sprouts** (2 cups)
 ½ cup **dried cranberries**
 ¼ cup chopped **nuts** (any type)

Dressing Ingredients

¼ cup **orange juice**
 2 Tablespoons **olive oil**
 2 Tablespoons **vinegar**
 ¼ teaspoon **salt**

Directions

1. Wash hands with soap and water.
2. Cover bulgur with boiling water and let stand until soft, about 30 minutes. Pour off any excess water.
3. Rinse and trim Brussels sprouts. Cut in half lengthwise then slice crosswise into thin strips.
4. In a large bowl combine bulgur, Brussels sprouts, cranberries and nuts.
5. In a small bowl or jar with a lid, combine orange juice, oil, vinegar, salt and pepper. Mix or shake well. Pour dressing over salad and serve.

Zoodles with Almond Butter Sesame Sauce **Prep Time** 25 minutes **Serves** 4

A healthy alternative to peanut noodles, it is made more brain healthy (and more delicious) by subbing in almond butter, olive oil, ginger, turmeric, and noodles made from zucchini, carrots and cucumber. You'll want to double the creamy almond butter sauce for tossing on all your cold noodle dishes, coleslaw, and salads. Dire

Ingredients

1 tablespoon **toasted sesame oil**
 ¼ cup **low sodium soy sauce** or tamari
 ¼ cup **rice vinegar**
 1-2 tablespoons **sambal oelek, chili paste** or other hot sauce
 1 tablespoon **honey**
 1 teaspoon **minced garlic**
 1 teaspoon **grated or minced ginger**
 1 teaspoon **grated fresh turmeric**
 or 1/2 teaspoon dried

2 medium **zucchini**
 1/2 teaspoon **sea salt**
 2 medium **carrots**
 1 cucumber
 1/2 cup smooth **almond butter**, natural and unsweetened
 1/4 cup extra virgin **olive oil**
 Black **sesame seeds** or toasted sesame seeds optional
 finely chopped **scallion**, optional
 finely chopped **red bell pepper** optional

Directions

1. Spiralize the zucchini using the “spaghetti” blade. Place in a colander and toss with 1 teaspoon kosher or sea salt. Trim with scissors. Place the colander in the sink to drain while you make the rest of the recipe. (The salt will help draw out the water so the zucchini won't be soggy.)
2. Spiralize the carrots and the cucumber. Place in a large serving bowl.
3. To make the sauce, place the almond butter, extra virgin olive oil, sesame oil, soy sauce, rice vinegar, sambal oelek, honey, garlic, ginger, and turmeric in a blender or food processor and blend until smooth. Thin with small amounts of water, if necessary, to create a pourable sauce. Taste. Adjust for sweet, salty and spicy by adding more honey, soy sauce or sambal oelek. If it needs to taste brighter, add a touch more vinegar.
4. Prep any additional toppings, if using: diced red pepper, scallions, sesame seeds. Just before serving, rinse the zoodles under cold water and shake dry in the colander. Transfer to a clean kitchen towel in a single layer and roll up to blot dry. Or, spin dry in a salad spinner. Place the zoodles in the serving bowl with the cucumber and carrot noodles. Toss the noodles with the almond butter sesame sauce. Sprinkle with toppings, if using, and serve immediately.

3. Nuts & Seeds

5 servings a week

Nuts are an excellent source of nutrients for the brain including vitamin E, B vitamins and healthy fats—each nut has its own unique levels of goodness. For example, 1 ounce of almonds provides about half of the recommended daily allowance of alpha tocopherol (vitamin E). Meanwhile, walnuts, pistachios and pecans are excellent sources of gamma tocopherol which has anti-inflammatory and antioxidant properties and may be important for dementia prevention.

Peanuts (which are botanically legumes but nutritionally considered a nut) are the most consumed nuts in the US. They are a good source of protein and folate. Nuts have a higher ratio of polyunsaturated and monosaturated fats to saturated fats compared to other foods.

If you had to pick a winner for brain enhancing nuts, walnuts would take the prize. Walnuts contain one of the highest amounts of gamma tocopherol of any nut. They have a high composition of polyunsaturated fatty acids including alpha linolenic acid. In fact, walnuts have the highest content of this essential omega-3 fatty acid of all edible plants.

Nuts influence brain health and are considered heart healthy, too. Two to 5 servings per week of this food has been associated with 37 percent fewer deaths from coronary heart disease.

It is suggested to consume 1 ounce or about a handful of a variety of nuts several times during the week. But be careful to not overdo nuts as they are high in calories and may be salted. As sodium increases blood pressure and hypertension—primary risk factors for stroke—select unsalted nuts. Use nuts to garnish a salad. Seeds share some of the same health benefits as nuts.



Sautéed Broccoli with Lemony Brazil Nuts **Prep Time** 5 minutes **Cook Time** 12 minutes **Makes** 4
Broccoli is similar to broccoli but with smaller florets and a longer and thinner stem. It is slightly sweeter than broccoli and the entire vegetable is edible, including the leaves. This dish is simple and loaded with flavor. It can be eaten on its own as a snack or an accompaniment to any meat or vegetarian meal. Brazil nuts add a buttery flavor to this dish but almost any nut could be used.

Ingredients

1/4 cup **Brazil nuts**, finely chopped
 2 tablespoons **lemon zest**
 1/4 teaspoon **sea salt**
 1 1/2 tablespoons extra virgin **olive oil**

1 lb **broccoli** about 3 bunches
 1/4 cup **water**

Directions

- Using a large pan over medium heat, add chopped Brazil nut pieces. Lightly toast for 2-4 minutes or until just light golden brown and fragrant. Remove to a shallow bowl and gently mix in lemon zest (it is ok if nuts are still warm, it will help open up the lemon flavor).
- Using the same pan bring to medium high heat. Add oil and heat for 60 seconds. Add broccoli and sauté for 3-4 minutes. Add water and soy sauce and cover. Cook for 4-6 minutes or until fork tender and bright green. Transfer to plate and top with Brazil nuts.

4. Berries

2 or more servings per week

Nutrient dense berries include acai berries, blackberries, blue berries, cranberries, raspberries and strawberries. Nurses who consumed one or more weekly servings of blueberries compared to those who consumed less a serving than once a month had lower rates of cognitive decline. Similar studies were observed when nurses consumed 2 or more servings of strawberries. There were 16,010 women participating in the study. Berries appear to delay cognitive aging by 2.5 years if consumed regularly. Two or more servings a week appear to increase the odds of aging healthfully by 24 percent. Other fruits offer health benefits but do not show a connection to dementia prevention.

Raspberry Fruit Dip **Prep time:** 15 minutes **Makes:** 1 1/2 cups

Ingredients

½ cup **raspberries** (fresh or frozen and thawed)
1 1/2 teaspoons **sugar**

1 cup nonfat **plain yogurt**
3 **pears** or **apples**, sliced for serving

Directions

1. Wash hands with soap and water.
2. In a small bowl, mash the raspberries with sugar. Stir in the yogurt.
3. Serve with cut fruit.
4. Refrigerate leftovers within two hours

Blueberry Bling **Prep time:** 5 minutes **Cook time:** 20-30 minutes **Makes:** 2 cups

Ingredients

3 cups **blueberries**, fresh or frozen
2 teaspoons **butter**, softened
1 Tablespoon **whole wheat flour**

1 Tablespoon **brown sugar**
½ cup **rolled oats**
½ teaspoon **cinnamon**

Directions

1. Wash hands with soap and water.
2. Preheat oven to 375 degrees F.
3. Place blueberries in a 9-inch pie plate or baking dish.
4. In a small bowl, use a fork to mix butter, flour, sugar, oats and cinnamon.
5. Sprinkle oat mixture over the blueberries.
6. Bake for 25-30 minutes. Enjoy warm! Refrigerate leftovers within 2 hours.

Added Sugars Many berry recipes list simple sugars as a key ingredient. Berries are naturally sweet. When baking consider recipes that use reduced amounts of sugars. Sugar and other simple carbohydrates in foods can cause spikes in blood sugar that lead to inflammation of blood vessels and brain structures. Over time, consuming excess sugar can lead to weight gain as the excess calories are stored as fat. Insulin is the hormone required to move glucose from the bloodstream into the body's cells and metabolize it for energy. Eating sweets throughout the day causes the pancreas to work continuously to produce enough insulin. Insulin is a building hormone. However, without rest the body is unable to breakdown the sugar. Continual high insulin levels cause the body to become resistant and overtime insulin becomes ineffective. Extra sugary foods can lead to an unhealthy metabolic state; the body becomes resistant to insulin. For years, data has shown people with diabetes have a two- to four-fold increased risk of Alzheimer's disease. Now, new data shows that even those with pre-diabetes (a borderline level on the fasting blood sugar test) are twice as likely to get Alzheimer's. In fact, some experts refer to Alzheimer's as Diabetes Type 3. The theory is the brains of Alzheimer's victims are so resistant to insulin that they are no longer able to metabolize simple sugar and preferentially use fats for fueling the brain.

5. Beans

At least 3 servings a week

The MIND diet includes **three or more servings of beans each week**. The Mediterranean diet is also big on beans — they make up the broadest base of the Mediterranean diet pyramid. Diets high in beans have been shown to slow cognitive decline.

For centuries, bean and legumes were the main source of protein in our diets instead of meat. Beans are an excellent low fat source of protein and B vitamins. Unlike meat, they also are one of the highest food sources of fiber. Fiber lowers the risk of cardiovascular conditions that are shown to contribute to increased risks for dementia.

Black beans, chickpeas, kidney beans, pinto beans, white beans, edamame (soybeans), lentils, lima beans and tofu promise lots of variety.

Three Sisters Soup Prep time: 15 minutes Cook time: 30 minutes Makes: 8 1 Cup Servings

Try This: Change the vegetables and beans based on what you have on hand. Instead of cumin, try 2 to 3 teaspoons of Italian seasoning or 1 Tablespoon of curry powder. Thanks to the Food Hero Indigenous Peoples Workgroup for this recipe. Check out Oregon State University's Food Hero website for more healthy recipes. <https://foodhero.org/>

Ingredients

1 1/2 Tablespoons olive oil	1 1/2 cups cooked beans (any type) or a 15-oz can (drained and rinsed)
3/4 cup diced carrot	1 can (15 ounces) diced tomatoes or 2 cups diced fresh
1 cup chopped onion	3 1/2 cups low-sodium broth (any type)
4 cloves garlic , minced or 1 teaspoon garlic powder	1 teaspoon cumin
2 cups diced summer or winter squash (fresh or frozen)	1/4 teaspoon pepper
1 1/2 cups corn (fresh or frozen) or a 15-oz can (drained and rinsed)	

Directions

1. Wash hands with soap and water.
2. Heat oil in a large pot on medium heat. Add carrot and onion and cook until onions begin to turn a little brown, about 8 to 10 minutes.
3. Add garlic, squash and corn and continue to stir for another 3 to 4 minutes.
4. Add beans, tomatoes, broth, cumin and pepper.
5. Allow soup to come to a boil, then turn heat down to a simmer until all vegetables are tender to taste (15 to 30 minutes, depending on the vegetables used).
6. Refrigerate leftovers within 2 hours

Quinoa Chickpea Patties

Prep Time 45 minutes Cook Time 20 minutes Serves 4

These veggie patties are hearty and chock full of protein and fiber. They reheat well and even the biggest meat eater will be satisfied after eating. You can serve with whole wheat buns or in a whole wheat tortilla. They are also delicious over a bed of greens or just on their own. If looking for some condiments a dollop of tzatziki or ketchup goes great.

Ingredients

1 cup cooked quinoa	1/4 cup chopped fresh parsley
1 15-ounce can chickpeas liquid included	1/2 teaspoon salt
2/3 cup grated carrot	1 egg , beaten
2 cloves garlic mashed	1/3 cup whole wheat bread crumbs
1 Tablespoon ground cumin	1/4 cup chickpea flour or all purpose flour
1/2 teaspoon smoked paprika	1/4 cup extra virgin olive oil for cooking

Directions

1. Wash hands with soap and water.
2. In a large bowl combine quinoa and chickpeas. Using a potato masher, break up chickpeas until mostly mashed, a little chunky is okay.
3. Add carrot, garlic, cumin, paprika, parsley, salt, pepper, egg, breadcrumbs and flour. Mix until combined. Add a little water if dry. Should be slightly sticky.
4. Using a 1/3 measuring cup, scoop out mixture and form into patties. Place on a plate and refrigerate covered for up to 2 hours or put in the freezer for 30 minutes. The colder the patties, the better the shape will hold when cooking.
5. Bring a large pan to medium high heat. Add enough oil to thinly coat the bottom of the pan, heat for 60 seconds. Carefully add patties one at a time. Cook 3-5 minutes per side or until a light golden crust appears. Add more oil if pan gets dry.
6. To serve: Place patties on bun. Top with 1-2 slices of avocado and 2 slices of tomato.

Try Cooking Dried Beans Instead of Using Canned Beans

There are several reasons to cook your own dried beans instead of using canned beans, primarily for control over ingredients. The best thing about making your own beans from scratch is that it is an easy way to have more control your diet.

Canned beans that are purchased at the grocery store are convenient, but they are also full of sodium. Making your own is especially helpful for people who need to limit their salt intake.

Dried beans are also cheaper than canned beans. A one pound of dry beans will usually cost under \$2 and yields 12 -1/2 cup servings. One 15-ounce can of beans will cost you the same yet yields only 3 1/2 servings.

Finally, another reason to cook dried beans over using canned is the sheer variety of bean types you can buy. You can find so many more types of fun dried beans than canned.

Electric pressure cookers such as an Instant Pot can speed the cooking process.

6. Whole Grains

3 or more servings a day

Food products with the highest whole grain content have at least 1 gram of fiber for every 10 grams of total carbohydrates on the nutrition facts label. When purchasing, look for the Whole Grain symbol on food packages.

Baked Berry Oatmeal Prep time: 15 minutes Cook time: 20 minutes

Ingredients

2 cups **old fashioned rolled oats**
1 teaspoon **baking powder**
1 teaspoon **cinnamon**
¼ teaspoon **salt**
2 **eggs**
½ cup packed **brown sugar**

1 ½ teaspoons **vanilla**
2 cups 1% or nonfat **milk**
4 teaspoons **margarine** or **butter**, melted
2 cups **cane berries**, fresh or frozen (raspberries, blackberries, marionberries)
¼ cup chopped **walnuts** (optional)

Directions

1. Wash hands with soap and water.
2. Preheat oven to 375 degrees F.
3. In a medium bowl, mix together oats, baking powder, cinnamon and salt.
4. In a separate bowl, beat the eggs until blended. Stir in brown sugar, vanilla, milk and melted butter.
5. Pour wet ingredients into the dry ingredients and stir until well combined.
6. Add the berries and stir lightly to spread them evenly. Pour mixture into a 2-quart baking dish. Sprinkle with chopped nuts if desired.
7. Bake for 20 to 30 minutes or until the top is golden brown.
8. Refrigerate leftovers within 2 hours.

Whole Wheat Blueberry Muffins Prep time 15 minutes Cook time: 20 minutes Makes: 12 muffins

Ingredients

1 ½ cups **whole-wheat flour**
½ cup **sugar**
½ teaspoon **salt**
2 teaspoons **baking powder**

1 **egg**
⅓ cup **vegetable oil** or **try olive oil**
⅓ cup nonfat or 1% **milk**
½ cup unsweetened **applesauce**
2 cups **blueberries** (fresh or frozen)

Directions

1. Wash hands with soap and water.
2. Preheat oven to 400 degrees F. Lightly grease the bottom of 12 muffin cups.
3. In a large bowl, mix the flour, sugar, salt and baking powder.
4. In a medium bowl, mix the oil, egg, milk and applesauce until smooth.
5. Stir the liquid ingredients into the flour mixture until just moistened. Lightly stir in the blueberries.
6. Fill each muffin cup about ¾ full. Bake about 20 minutes, or until the muffin tops are golden brown. A toothpick inserted into the center of the muffin should come out moist but without batter.

Whole Grains Scoop There's lots for a brain to love about "whole grains" that are minimally processed and left in their whole kernel form. Those kernels are brimming with potent antioxidants, like vitamin E. And whole grains are full of fiber, important for keeping blood sugar levels stable and preventing insulin spikes. Fiber is also what feeds the beneficial bacteria in the gut. It's the "prebiotic" needed to maintain a healthy population of "probiotics." The MIND diet study includes three servings of whole grains each day. The Mediterranean diet includes four to six servings each day. That may seem like a lot but serving sizes are small — one half cup whole grain cereal, whole grain pasta, brown rice, barley, or one slice whole grain bread.

Chocolate Power Balls *Prep Time 10 minutes Makes 10 balls*

Give this healthy sweet treat a try. Consider substituting other nut butters for variety.

Ingredients

1 cup quick oats	2 Tablespoons ground flaxseed
1/2 cup peanut butter	1 1/2 Tablespoons unsweetened cocoa powder
2- 4 Tablespoon unsweetened almond milk or low fat milk	1 teaspoon ground cinnamon
1 Tablespoon pure maple syrup	1/4 cup mini semisweet chocolate chips

Directions

1. Wash hands with soap and water. In a medium bowl, combine the oats, peanut butter, 3 teaspoon of the milk, maple syrup, flaxseed, cocoa powder and cinnamon.
2. Mix until all the ingredients are well combined, adding up to 1 Tablespoon additional milk if needed.
3. Mix in the chocolate chips.
4. Scoop the batter using a tablespoon and roll into balls.
5. Store the balls in an airtight container in the refrigerator or freezer.

Should I Follow the MIND Diet?

Whether you have family history of Alzheimer's disease or other cognitive problems, the MIND diet is a good, healthy diet that has shown promising preventive results for overall brain health.

While there needs to be more research on the overall benefits of the MIND diet, evidence so far shows it's a good diet strategy for your long-term health. It's relatively easy to follow and to build on recipes and foods even if you're eating out. This is because the diet mostly focuses on wholesome foods and you don't have to track your daily calorie intake. Many favorite recipes can be modified. Or have fun and try a new recipe and invite friends and family to enjoy the taste testing.

Before you start the MIND diet or any other diet, talk to your doctor and ask if it's the right fit for your health. If you're not sure how to get started, ask a licensed nutritionist or a dietitian for guidance. They will help you come with up a meal plan that works best for you.

MIND Diet Research Findings

Research shows that the MIND diet can improve brain health and lower your odds of developing conditions like Alzheimer's disease, dementia, and other forms of age-related cognitive decline. In fact, studies show that eating certain foods and avoiding unhealthy ones can slow brain aging by 7.5 years.

Currently, Alzheimer's is the sixth leading cause of death in the U.S., and it's estimated to affect over 5 million Americans. The number is projected to jump to more than 7 million by 2025.

One study that looked at 1,300 older adults who followed the MIND diet found that in those who followed it strictly, the diet lowered their chances of developing Alzheimer's by 53%. Those who moderately followed it still saw their odds drop by 35-37%. Even small dietary changes can reap health benefits over time.

7. Fish (Seafood)

At least 1 servings a week

Spicy Salmon Summer Salad Prep Time Cook Time 10 minutes Makes 6 servings

Serving gently cooked filets of salmon a top a pile of greens makes for an easy, one-dish meal. The flavors in this recipe, from Diet For the MIND by Dr. Martha Clare Morris and her chef daughter Laura Morris, really shine.

Ingredients

Salmon

1 1/2 teaspoon paprika
 1 1/2 teaspoon cumin
 3/4 teaspoon cayenne pepper
 3/8 teaspoon coarse sea salt
 6 4-ounce boneless skin-on salmon filet
 1 1/2 tablespoon extra virgin olive oil

1 1/2 head Bibb lettuce lightly chopped
 1 1/2 cup fresh or thawed frozen corn
 3 cup halved grape tomatoes

For the dressing:

3/8 cup extra virgin olive oil
 Juice of 1 lime
 1 1/2 tablespoon pure maple syrup

For serving:

3 avocados peeled, pitted and sliced
 3 limes quartered

For the salad:

6 cup baby greens (arugula, spinach, romaine)

Directions

1. In a small bowl, combine the paprika, cumin, cayenne, and salt. Gently rub the spice mixture onto the flesh side of the salmon filets.
2. Heat the oil in a large sauté pan over medium heat. Place the fillets skin-side up in the pan.
3. Cook for 4 minutes, then flip the fillets. Reduce the heat to low, cover, and cook for another 4 to 6 minutes, or until just cooked through.
4. In a medium bowl, combine the spinach, lettuce, corn, and tomatoes. In a small bowl, whisk together all the dressing ingredients. Pour the dressing over the salad and toss. Evenly divide the salad among four plates. Top each with a salmon filet and a few avocado slices. Serve with lime wedges on the side.

Alternate Methods Slow roasting technique. Preheat the oven to 225°F. Line a rimmed baking sheet with parchment paper and brush it with olive oil. Rub the salmon with the spice mix, and place, skin-side down, on the baking sheet. Roast in the oven for 25 minutes, or until just cooked through. (If using an instant thermometer, check the salmon after 20 minutes: 115°F to 125°F is medium-rare to medium.) Add more salad ingredients to make enough for 6.

Instead of serving the salmon on a bed of greens, serve on a bed of grains. Cook 1 cup quinoa, brown rice, farro or other whole grain in 2 1/2 cups water until done. Yielding 2 1/2 to 3 cups cooked grains. Toss the grains with the dressing while still warm. Fold in corn, tomatoes, sturdy greens such as kale or arugula, and top with the salmon and avocado.

Low-temperature slow-roasting creates a tender, evenly cooked piece of fish. It's also one of the best cooking methods to retain its brain healthy nutrients. (Steaming, braising, and cooking sous vide are others.) When fish is exposed to high heat, such as when grilled, fried, pan-seared, and broiled, it loses up to half of its vitamin D and up to 85% of its healthful omega-3s.

Cumin, cayenne and paprika give this salmon great flavor. These spices are also thought to possess anti-inflammatory properties. Use them liberally in your cooking.

Pan Fried Fish with Collard Greens And Crispy Lemons Prep Time 20 Cook Time 45 Serves 4

To turn a pile of collard greens into ribbons quickly, stack leaves on top of each other. Roll like a cigar. Cut into ¼ inch

Ingredients

1 medium red onion, sliced ½ inch slices
 1 ½ teaspoons salt
 1 large clove garlic, chopped, equals 1
 teaspoon
 2 bunches collard greens (approximately one
 pound), leaves thinly sliced and stems
 discarded
 ½ cup dry white wine or stock
 4 4-6 ounce skinless cod filets, about ½ inch

thick

1 ½ cups whole wheat panko bread crumbs
 2 teaspoons fresh thyme leaves, plus more for
 serving
 ¼ cup Almost instant Cashew Cream or mayo
 1 large lemon, thinly sliced with seeds re-
 moved
 Freshly ground black pepper
 Flaky salt, optional

slices. Untangle with hands and chop any that are too long.

Directions

1. Heat 1 Tablespoon oil in large skillet over medium high. Add onions and ½ teaspoon salt. Cook , stirring often until golden brown, 10-12 minutes.
2. Add garlic and cook until fragrant about 1 minute. Add collard greens and wine and stir to evenly coat in the liquid. Increase heat until liquid gently simmers, then cover the skillet with lid ajar. Cook until greens are soft, 15 to 20 minutes.
3. Meantime, cook fish. Combine breadcrumbs, thyme and ½ teaspoon salt on a plate. Spread in even layer. Brush fish on both sides with cashew cream, then roll in bread crumbs mixture. Press gently to adhere. Set coated fillets on a plate.
4. Line a plate with paper towels. Heat remaining 2 tablespoons oil in large non-stick skillet over medium heat. Add lemon slices so not touching and cook, turning once until golden brown, 4- 6 minutes. Transfer to paper towel-lined plate, reserving oil in skillet.
5. Return the skillet to heat and add coated fillets. Cook turning once until crispy and golden brown on both sides. 5-7 minutes per side. Cook to internal temperature of 145 degrees F.
6. To serve divide collard greens, top with fish and a few slices of lemon. Finish with additional thyme leaves and salt and pepper to taste.

Almost Instant Cashew Cream

TIP: If you want to soak cashews rather than boiling; combine in a bowl with enough water to cover for at least 2 hours and up to 12 hours. Discard water. And proceed with recipe using fresh room temperature water.

Ingredients

1 ½ cups raw, unsalted cashews
 1 cup fresh water plus ¼ cup if needed
 ¼ teaspoon salt

Directions

1. Place cashews in small saucepan, add enough water to cover the nuts and bring to a boil. Turn off heat cover. Let sit for 15 minutes. Drain, discarding soaking water.
2. Transfer cashews to blender with 1 cup of fresh water and salt. Blend on low speed to make a thick paste.
3. With blender on medium speed, add more water 1 Tablespoon at a time until mixture is the consistency of heavy cream. Increase power to high and blend until very creamy, about 1 minute. Transfer the cream to a bowl and cover tightly.
4. To store, refrigerate in an airtight container for up to 3 days or freeze for up to 1 month.

The omega-3 fatty acids in seafood are healthy to a healthy cardiovascular system that supplies blood and nutrients to the brain. Omega-3s regulate the beating of the heart and help prevent fatal erratic rhythms. They lower blood pressure by relaxing artery walls. The American Heart Association recommends eating two 3-5 ounce serving of seafood weekly. Other studies show a significant relationship between seafood and dementia when 1 serving per week is eaten.

8. Poultry

2 or more servings a week

Grilled Chicken With Anchovy Butter & Broccoli and Tomato Bread

Prep Time 20 minutes Cook Time 30 minutes Serves 4

Ingredients

4 Tablespoons unsalted butter, room temperature
 4 anchovy filets, preferably packed in olive oil. Finely chopped to equal 1 tablespoon
 1 large clove garlic, minced (about 1 teaspoon)
 1 Tablespoon fresh lemon juice
 ½ cup flat leaf parsley, loosely packed finely chopped plus extra for serving

2 large boneless, skinless chicken breasts (1 ¼ pounds) Cut horizontally, leaving a 1 inch edge attached as a hinge
 2 Tablespoons olive oil, divided
 ¼ teaspoon salt, dived
 Black pepper
 1 bunch broccolini
 Crusty, whole grain bread
 1 large tomato

Directions

1. Wash hands with soap and water. Use separate cutting boards for poultry and vegetables. Disinfect all counters and cutting boards after use.
2. Preheat grill to medium high with a rack 4-6 inches from heat source. Alternative use a pan grill.
3. Mash together butter, finely chopped anchovies, garlic and lemon juice in a small bowl. Fold in parsley until evenly distributed.
4. Open chicken breasts like a book and butter one side of each piece with butter mixture. Reserve one-half of butter for later; chill until ready to serve. Close chicken back up; brush each side with 1 teaspoon olive oil. Sprinkle with salt and pepper.
5. Toss broccolini with 2 teaspoons oil and sprinkle with remaining salt. Place on side of grill opposite of chicken. Grill until tender crisp, 5-7 minutes. Tip if chicken is cooked in grill pan, place broccolini in steamer. Bring water to boil in pot; steam until tender crisp, 4-5 minutes. Remove steam pot lid to cool slightly.
6. Grill chicken until golden brown on one side, 5-7 minutes. Flip and grill other side 5 minutes until instant read thermometer reads 165 degrees F in thickest portion. Let chicken rest for 5 minutes; then divide each breast into 2 pieces.
7. Place bread on least hot part of the grill and watch closely to toast; about 2 minutes on each side. Drizzle with remaining tablespoon oil.
8. To serve, divide chicken between 4 plates. Top chicken with some of remaining anchovy butter and top bread with chopped tomatoes. Finish with salt if desired.

Eating Poultry For Brain Benefits

Poultry is a source of tryptophan, an essential amino acid that acts as a building block in making of proteins essential for us to live. Other sources include soybeans, egg whites, and sesame and sunflower seeds.

The B vitamin niacin is synthesized from tryptophan, too. The Chicago Health and Aging Project study revealed a connection between eating foods containing tryptophan and niacin and slower rates of cognitive decline and reducing the risk of Alzheimer's. Further research is needed in this area.

Tryptophan is key to the synthesis of neurotransmitters in the brain including serotonin and melatonin. Sleep, appetite, mood, memory learning and functions are regulated. Melatonin also has antioxidant properties.

Poultry consumption is also associated with heart health which plays a role in brain health.

9. Olive Oil

Use as in cooking and dressings

Types of Olive Oil Olive oil comes in one of three types or grades: extra virgin, virgin, and refined (light). Oils are labeled based on how much processing they go through before they're bottled and sold. Refined olive oil is the most processed of the three.

Which Is Healthiest? The olive oil that goes through the least amount of processing to make is extra virgin olive oil (EVOO). Because of this, EVOO has more nutrition than virgin or refined olive oils do. For example, it's high in healthy plant nutrients called phytochemicals that may help fight cancer and heart disease. So to get the most from your olive oil, reach for the EVOO.



Olive Oil And Mind Health Extra-virgin olive oil is rich in polyphenols, antioxidants that have been shown to protect the brain from damage and improve brain function. Polyphenols also help promote the growth of new nerve cells and synapses, which are important for learning and memory.

Boosts Heart Health Large studies have shown that when you get more extra virgin olive oil in your diet, you lower your risk of getting heart disease. Active compounds in EVOO help lower blood pressure and keep your arteries from hardening.

Lowers Stroke Risk Replacing less healthy fats with olive oil in your recipes may lower your chance of getting a stroke by more than 40%.

Fights Inflammation Inflammation in your body leads to chronic disease. Certain antioxidants in EVOO can reduce inflammation in your body in the same way that drugs such as ibuprofen do. The oleic acid in olive oil is an anti-inflammatory, too.

High in Antioxidants Free radicals are unstable atoms in your body that damage your cells. Antioxidants are compounds that can help prevent or slow down that damage. EVOO is teeming with antioxidants that can lower your risk of disease.

Swap butter and other solid fats with olive oil:

- Sauté your food in olive oil.
- Roast vegetables and other foods with olive oil.
- Sear seafood and chicken in olive oil.
- Select baking recipes that call for olive oil or other healthy fats such as canola oil. You can also use baking substitution guide to help swap butter for olive oil in recipes.

Glazed Citrus, Almond and Olive Oil Cake *Prep Time 20 minutes + 50-60 Serves 12*

For a more rustic cake use almond meal in equal parts to almond flour

Directions

1. Wash hands with soap and water.
2. Preheat oven to 350 degrees F. Brush a nonstick 9 inch springform pan with oil.
3. Place the orange and lemon in a saucepan and cover with water. Bring to boil, then reduce to a simmer. Cook until you can easily insert the tip of a knife into the peel easily, about 30 minutes. Drain and set aside until cool enough to handle.
4. Combine the almond flour, oat flour, baking powder and salt in a medium bowl. Set aside.
5. Cut lemon and orange in half through the equator. Scoop out the pulp and seeds from lemon and discard. Then scoop out the seeds from orange, keeping pulp. Place lemon rind and orange in bowl of food processor. Pulse until it resembles a thick marmalade. Scrap into measuring cup; you should have about 1 cup.

Ingredients

½ cup fruity olive oil plus more for the pan and glaze	1 Tablespoon baking powder
1 small seedless orange such as navel or Cara Cara	¼ teaspoon salt
1 small lemon such as Meyer lemon	4 eggs room temperature
1 ½ cups almond flour or meal	1 cup sugar
1 cup oat or quinoa flour	½ cup confectioners' sugar
	1 Tablespoon warm water

6. Combine eggs and sugar in food processor until frothy, about 1 minute. While machine is running pour oil through the feed tube and process another minute until smooth. Scrap mixture into flour mixture and combine by hand until evenly distributed; and no flour lumps remain.
7. Fold in marmalade until evenly distributed.
8. Pour batter into prepared pan and bake for 40 to 50 minutes, until edges pull away from the sides and tester comes out clean. Set aside to cool completely.
9. To make glaze, stir together confectioners' sugar and 2 teaspoons of warm water until no lumps remain. Add up to 2 teaspoons of oil until smooth and glossy.
10. Run flexible spatula between side of pan to remove cake. Pour glaze over the top and spread to the edges in an even layer.
11. When glaze has set, cut cake into wedges and serve with fresh berries.
12. Store covered tightly and refrigerate up to 5 days. Or wrap each wedge individually and freeze for up to 3 months.

Olive Oil-An Original Superfood

Both the MIND diet and the Mediterranean diet recommend using olive oil as a primary cooking oil. What's so special about olive oil? First, it's packed with the right kinds of fats — mostly monounsaturated — that keep blood vessels healthy. Second, olive oil is a complex elixir of at least 230 polyphenols. One in particular, oleocanthal, has been found to be particularly brain healthy due to its anti-inflammatory and antioxidant properties. Third, there seems to be some synergy going on when plant-based, whole foods and olive oil are eaten in the same meal. Olive oil is the perfect conduit to transport the fat soluble vitamins D, E, A and K into the body. Finally, and most importantly, there are hundreds of studies of the highest caliber in support of olive oil's health benefits.

Foods are considered to be harmful to the brain if they are high in saturated and trans fats

Eating more saturated and trans fats ups your odds of getting Alzheimer's. In one of the most comprehensive studies to date, those who consumed more than 25 grams of fat a day tripled their risk of developing Alzheimer's over a four-year period. That's the amount of saturated fat in a typical fast-food hamburger and fries. If the diet was high in trans fats (more than two grams a day), the risk was three to five times greater. This doesn't mean all fats are bad for the brain. But the brain-healthy diet favors healthy fats, such as the mono- and polyunsaturated fats found in olive oil, avocados, nuts and oily fish (salmon, mackerel, anchovies and sardines).

It is good news that the use of trans fats have been banned. But most restaurants still fry foods in expensive inflammatory oils. A common theme of the five food groups, that the MIND diet suggests to limit, is the fat content is often high in saturated fats. Saturated fats are linked to heart disease and some cancers. Studies also show a connection to increased risks for dementia,

10. Wine, especially red

1 glass a day

Researchers found that those who more strongly adhered to the MIND diet, which includes drinking a glass of red wine every day, could expect their risk of developing Alzheimer's disease to decrease with cognitive brain function shown to have slowed by up to 7.5 years. Modest red wine consumption is common in the Mediterranean region and Blue Zone Communities. Both have lower rates of dementia than the US population. However, it should be noted that Harvard researchers have relooked at this recommendation and have since have removed red wine as a MIND diet encouraged food.

Red Wine Vinaigrette

Prep Time 5 minutes Makes: 1/2 cup Serving Size: 2 Tablespoon/150 calories

Use as a dressing or marinade. Try making with different oils, vinegars, mustards and herbs. Add a little sweetness with a teaspoon of honey or agave. (Honey is not recommended for children under 2 years old.)

Ingredients

1/4 cup olive oil	1 teaspoon fresh oregano or 1/4 teaspoon dried
1/4 cup red wine vinegar	1 teaspoon fresh thyme or 1/4 teaspoon dried
2 cloves garlic, minced or 1/2 teaspoon garlic powder	1/4 teaspoon salt
1 teaspoon Dijon mustard	1/4 teaspoon pepper

Directions

1. Wash hands with soap and water.
2. In a small bowl or jar with a tight-fitting lid, mix or shake together all the ingredients.

Digging Deeper According to a study published in the *Journal of the Alzheimer's Association*, red wine could play a significant role in slowing down the brain's ageing process and help battle the onset of Alzheimer's. The study, carried out by researchers at Rush University Medical Center in Chicago and funded by The National Institute of Aging, evaluated cognitive change over a period of 4.7 years among 960 dementia-free older adults. Averaging 81.4 years in age, the participants were tested on their ability in five areas: episodic memory, working memory, semantic memory, visuospatial ability, and perceptual speed, with their diet recorded and analyzed. Researchers found that those who more strongly adhered to the MIND diet, which includes drinking a glass of red wine every day, could expect their risk of developing Alzheimer's disease to decrease with cognitive brain function shown to have slowed by up to 7.5 years. Martha Clare Morris, a nutritional epidemiologist, helped developed the diet, known as the Mediterranean-DASH Diet Intervention for Neurodegenerative Delay (MIND). "Everyone experiences decline with aging; and Alzheimer's disease is now the sixth leading cause of death in the US, which accounts for 60 to 80% of dementia cases", Morris observed. "Therefore, prevention of cognitive decline, the defining feature of dementia, is now more important than ever. Delaying dementia's onset by just five years can reduce the cost and prevalence by nearly half."

Drinking alcohol should always be in moderation. Consumption of alcohol may not be advised for some individuals due to their personal health risks or/and their personal values or beliefs. Red grapes may have similar health benefits.

WHAT'S ON THE MIND DIET?



AT LEAST THREE SERVINGS OF WHOLE GRAINS EACH DAY

AT LEAST ONE DARK GREEN SALAD AND ONE OTHER VEGETABLE EACH DAY



BERRIES AT LEAST TWICE A WEEK



AT LEAST A ONE-OUNCE SERVING OF NUTS EACH DAY

BEANS OR LEGUMES AT LEAST EVERY OTHER DAY



POULTRY AT LEAST TWICE A WEEK



FISH AT LEAST ONCE A WEEK

If you don't drink alcohol, purple grape juice provides many of the same benefits.



A FIVE-OUNCE GLASS OF RED WINE EACH DAY

NO MORE THAN ONE TABLESPOON A DAY OF BUTTER OR MARGARINE; CHOOSE OLIVE OIL INSTEAD



CHEESE, FRIED FOOD AND FAST FOOD NO MORE THAN ONCE A WEEK

PASTRIES AND SWEETS LESS THAN FIVE TIMES A WEEK



8. Poultry

2 servings a week

MIND Diet Plan For The Week

- All other vegetables (2 or more servings per day)
- Green leafy vegetables like kale, spinach, and collard greens (at least one serving daily)
- All other vegetables (2 or more servings per day)
- Berries (2 or more servings per week)
- Nuts (5 or more servings per week)
- Olive oil (daily)
- Whole grains (3 or more servings per day)
- Fish/seafood (1 or more servings per week). Chose fatty fish such as salmon, mackerel, herring, and sardines.
- Beans (4 or more servings per week)
- Poultry (2 or more servings per week)
- Wine (one glass per day, but you can skip it)

Foods to avoid or limit include:

- Butter/margarine
- Cheese
- Red meat
- Fried foods
- Sweets and pastries

You are not alone if you are confused by the endless list of diet plans and promises of weight loss. New diets are shared annually; each offering miraculous results by their promoters. Finding yourself confused by the seemingly endless promotion of weight-loss strategies and diet plans? So is the MIND diet truly different than other popular diets plans? Join us we explore the details of the MIND diet—and review its potential health benefits while exploring the research behind them.

What Is It?

Dementia is the sixth leading cause of death in the United States, causing many people to search for ways to prevent cognitive decline. Thus, the MIND diet was developed to protect brain health. The diet design was based on a review of research which linked dietary choices with brain health.

The Mediterranean-DASH Diet Intervention for Neurodegenerative Delay (MIND diet) aims to prevent cognitive decline in the aging brain. The diet, which has been linked to cognitive function preservation through cardiovascular disease prevention, was introduced in 2015 by Dr. Martha Clare Morris and colleagues at Rush University Medical Center and the Harvard Chan School of Public Health. The 10 year study had followed over 1,000 older adults from the Rush Memory and Aging Project. Based on annual dietary questionnaires for nine years and 2 cognitive assessments identifying 15 dietary components related to dementia and cognitive decline. Participants with the highest MIND diet scores had a slower rate of cognitive decline. The diet combines components the [Mediterranean](#) and [DASH](#) diets which had already been associated with preservation of cognitive function, presumably through their protective effects against cardiovascular disease, which in turn preserved brain health.

The research team followed a group of older adults for up to 10 years from the Rush Memory and Aging Project (MAP), a study of residents free of dementia at the time of enrollment. They were recruited from more than 40 retirement communities and senior public housing units in the Chicago area. More than 1,000 participants filled out annual dietary questionnaires for nine years and had two cognitive assessments. A MIND diet score was developed to identify foods and nutrients, along with daily serving sizes, related to protection against dementia and cognitive decline. The results of the study produced fifteen dietary components that were classified as either “brain healthy” or as unhealthy. Participants with the highest MIND diet scores had a significantly slower rate of cognitive decline compared with those with the lowest scores. [1] The effects of the MIND diet on cognition showed greater effects than either the Mediterranean or the DASH diet alone.

on The study followed older adults from the Rush Memory and Aging Project, identifying 15 dietary components related to dementia and cognitive decline. Participants with the highest MIND diet scores had a slower rate of cognitive decline.

The Mediterranean-DASH Diet Intervention for Neurodegenerative Delay, or MIND diet, targets the health of the aging brain. Dementia is the sixth leading cause of death in the United States, driving many people to search for ways to prevent cognitive decline. In 2015, Dr. Martha Clare Morris and colleagues at Rush University Medical Center and the Harvard Chan School of Public Health published two papers introducing the MIND diet. [1,2] Both the [Mediterranean](#) and [DASH](#) diets had already been associated with preservation of cognitive function, presumably through their protective effects against cardiovascular disease, which in turn preserved brain health.

How It Works

The purpose of the research was to see if the MIND diet, partially based on the [Mediterranean](#) and [DASH](#) diets, could directly prevent the onset or slow the progression of dementia. All three diets highlight plant-based foods and limit the intake of animal and high saturated fat foods. The MIND diet recommends specific “brain healthy” foods to include, and five unhealthy food items to limit. [1]

The healthy items the MIND diet guidelines* suggest include:

3+ servings a day of [whole grains](#)

1+ servings a day of [vegetables](#) (other than green leafy)

6+ servings a week of [green leafy vegetables](#)

5+ servings a week of [nuts](#)

4+ meals a week of [beans](#)