

Sometimes I think I am Losing my MIND



Brittany Smith MS, RDN, LDN
Nutrition Specialist,
ECU Family Medicine
(252)744-0217
smithbrit21@ecu.edu

Kathryn M Kolasa PhD, RDN, LDN
Professor Emerita,
Brody School of Medicine,
East Carolina University

MARCH 2022

Presenters
have no
conflict of
interests

What We Will Do

- Discuss how the foods we eat may hurt or help our memory — including a discussion on dietary supplements
- Describe the MIND eating approach
- Share why we think following the MIND approach to eating might help if you are concerned about memory loss or heart disease
- Help you know how to change your diet to follow the MIND
- Give you examples of the kinds of foods you might need to eat more or less of to follow a MIND eating approach
- Help you set a SMART goal
- Answer your questions

Outpatient Nutrition Services



- At **ECU Family Medicine**, Registered Dietitians are available to help you understand how to make diet and lifestyle choices that will support your health goals
- Some of the services offered include:
 - One-on-one nutrition counseling*
 - Measure REE and set individualized calorie goal
 - Personalized meal plan
 - Free weight management classes with cooking demonstrations and food bag **
 - Diabetes Prevention Program***
- Ask your provider for a referral, or call ECU Family Medicine to self-refer, (252)744-4611

*Referral from provider may be required. Check your insurance to see what is covered for you.

**Available to all ECU Physicians patients.

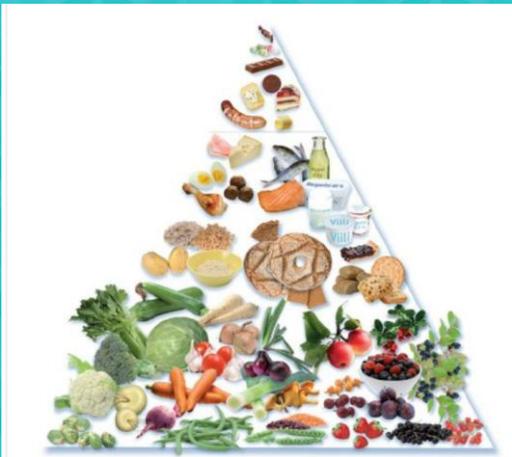
***Must have an A1c between 5.7 and 6.4%, without a diagnosis of Type 2 Diabetes to be eligible.

The World Health Organization says **nutrition and weight management** may help reduce cognitive decline (2019)

- Pretty good evidence that eating a Mediterranean-like diet may slow memory loss
- All adults should eat a balanced diet
- Pretty sure that taking Vitamins B and E, or other supplements do not work
- Achieving a healthy weight while in midlife would help reduce the risk of dementia

and...

We know
other things
that are also
important



- Avoid Food Insecurity/Malnutrition
- Avoid Deficiencies of Vitamins B12 and D
- It's not just the Mediterranean diet, but also the DASH and **MIND** approaches to eating may be *as good or better*
 - Avoid bad fats (trans and saturated)
 - Eat foods with beta-carotene, flavanols, and omega-3 fatty acids
 - Supplement vitamins B12 and D if you do not get enough in food/beverages

Low B12 intake
over time
increases risks
for pernicious
anemia

at risk if you:

EAT LITTLE
MEAT, FISH, &
ANIMAL
FOODS

LEADING TO:

- Confusion
- Depression
- Memory Loss and Dementia
- Hematologic abnormalities
- Early symptoms: fatigue, tingling and numbness in hands and feet, muscle weakness, loss of reflexes, tongue soreness, unintentional weight loss

PREVENTION: requires *only 2.4 ug/day*

- Easy to get in a daily multivitamin or monthly shot
- No Upper Tolerable Limit (UL)



Curcumin and Turmeric



Photo: Pexels/PixaBay

- A lot of interest in both using it as a spice and as a dietary supplement, especially to reduce inflammation
- Lab and animal studies suggests it also may be associated with other health benefits like lessening risk and progression of Alzheimer's disease
- Caution:
 - Can interact with blood thinners as well as blood pressure and diabetes medications
 - May increase some individual's risks for calcium oxalate kidney stones
- Consuming 8-12 grams/day appears well tolerated
 - Excess can cause headache, nausea, diarrhea, and yellow stools
- Effective dose in research:
 - 1,000-1,500 mg/day in supplement form
 - ¼ - ½ teaspoon as ground spice
- Until recently, its poor bioavailability from both food and supplements limited its potential effectiveness
 - Improved with black pepper extract with "piperine"

Supplement Facts

Serving Size 1 Gelcap
Servings Per Container 100

	Amount Per Serving	% Daily Value
Vitamin A (as retinyl acetate and 50% as beta-carotene)	900 mcg	100%
Vitamin C (as ascorbic acid)	90 mg	100%
Vitamin D (as cholecalciferol)	20 mcg (800 IU)	100%
Vitamin E (as dl-alpha tocopheryl acetate)	15 mg	100%
Thiamin (as thiamin mononitrate)	1.2 mg	100%
Riboflavin	1.3 mg	100%
Niacin (as niacinamide)	16 mg	100%
Vitamin B ₆ (as pyridoxine hydrochloride)	1.7 mg	100%
Folate (240 mcg folic acid)	400 mcg DFE	100%
Vitamin B ₁₂ (as cyanocobalamin)	2.4 mcg	100%
Biotin	3 mcg	10%
Pantothenic Acid (as calcium pantothenate)	5 mg	100%

Other ingredients: Gelatin, lactose, magnesium stearate, microcrystalline cellulose, FD&C Yellow No. 6, propylene glycol, preservatives (propylparaben and sodium benzoate).



Recommendations for Dietary Supplements:

- If eating *fewer than 1,200 calories per day*, you may need a **MULTIVITAMIN/MINERAL SUPPLEMENT**
- If eating *little meat*, you may need a **B12 SUPPLEMENT**
- If eating *little dairy and/or getting little sunshine*, you may need **VITAMIN D WITH CALCIUM**
- Other supplements for memory: ginkgo.....

21ST CENTURY[®]



DIETARY SUPPLEMENT

DOUBLE STRENGTH

Glucosamine 500 mg
Chondroitin 400 mg

3 Capsules Daily

**The Natural Choice To Promote Cartilage
Regeneration And Support Healthy Joints ***

60 (Easy Swallow) Capsules

Directions: As a dietary supplement, take up to three (3) capsules daily after any meal, or as directed by a health care provider.

WARNING: IF YOU ARE DIABETIC, CONSULT YOUR PHYSICIAN BEFORE USING THIS PRODUCT. If you have a shellfish allergy please consult your medical practitioner before using this product. Do not exceed recommended dosage.

Keep out of reach of children. Do not use if product appears to be tampered with or seal is broken. Store at room temperature.

Unconditionally guaranteed for purity, freshness and label potency. No Sugar, Preservatives or Artificial Flavors.



Supplement Facts
Serving Size: 3 Capsules
Servings Per Container: 20

Amount Per Serving	% DV
Sodium	90 mg 4%
Glucosamine Sulfate •2KCl	1500 mg **
Chondroitin Sulfate	1200 mg **

** Daily Value (DV) not established.

Other Ingredients: Gelatin, Magnesium Silicate, Magnesium Stearate, Stearic Acid. Contains glucosamine sulfate derived from shrimp and crab shells.

* This statement has not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

21ST Century HealthCare, Inc.
2119 S. Wilson Street, Tempe, AZ 85282 USA
www.21stcenturyvitamins.com

Directions: Adults: Take one (1) softgel daily as a dietary supplement or as directed by your healthcare professional.

Supplement Facts

Serving Size: 1 Softgel

	Amount Per Serving	New % Daily Value
Vitamin D3 (as cholecalciferol)	50 mcg (2000 IU)	250%

21ST CENTURY[®]



21ST Century[®] ... for a healthier future.

Glucosamine & Chondroitin

Many recent scientific studies have shown the effectiveness of taking supplements with the proper combination of glucosamine sulfate and chondroitin sulfate. These compounds found in the soft cartilage, tendons, and synovial fluid, are essential to the healthy functioning of tendons and joints, especially with advancing age.* 21st Century's[®] Glucosamine & Chondroitin, combines these two nutritional elements in the proper amounts for your effective use.*

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HEALTH THRU NUTRITION[®]
Naturally



Vitamin D3
(cholecalciferol)
50 mcg (2000 IU)

100% **Natural** Cholecalciferol
Promotes Optimal **Mineral Absorption**[†]

100 Softgels | Dietary Supplement  | 50 mcg (2000 IU)

I want to
make sure
we tell you

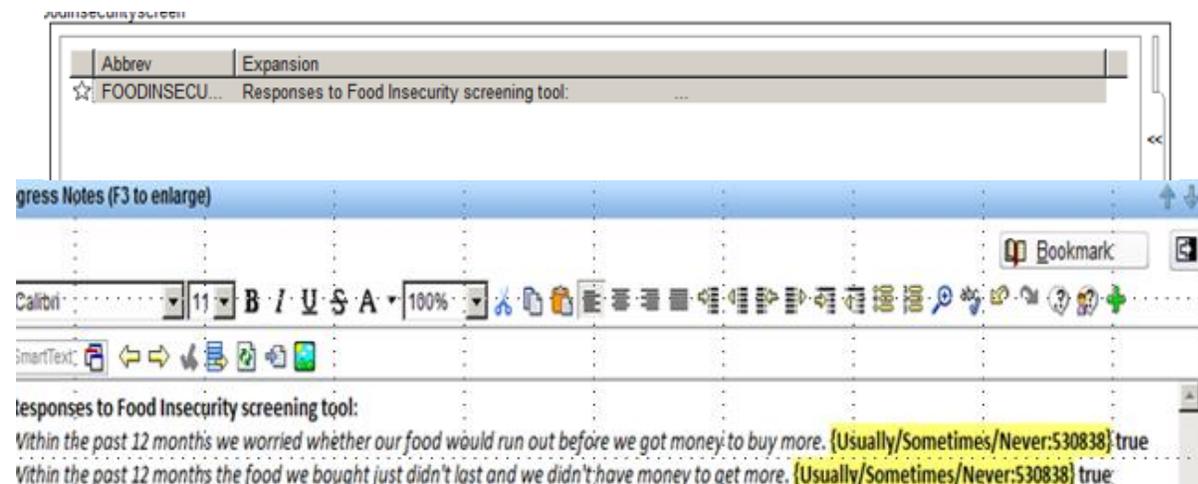


**NO DATA TO SUPPORT Taking
PREVAGEN
or
COCONUT FAT/OIL**

Incorporate
screening for
**FOOD
INSECURITY** into
the Electronic
Medical Record

Simple valid, sensitive, and specific screen for **food insecurity**:

- “Within the past 12 months we worried whether our food would run out before we got money to buy more” *and*
 - “Within the past 12 months the food we bought just didn’t last and we didn’t have money to get more.”
- An affirmative response to either one or both of the above questions provided a sensitivity of 97% and specificity of 83% for identifying food insecurity



How might diet work to slow developing dementia

- Healthy diet may enhance cognitive performance and reduce dementia risk by one or more of several actions:
 - Reducing inflammation and oxidative stress
 - Improving synaptic plasticity
 - Improving synaptic membrane fluidity
 - Improving glucose utilization
 - Improving mitochondrial function
 - Inhibiting beta-amyloid deposition
 - Maintaining blood-brain barrier function
 - Maintaining gut integrity
- Will know more as we learn how diet and microbiome interact and as clinical trials complete
- Check out the clinical trials at:

<https://www.nia.nih.gov/alzheimers/clinical-trials/search/mind%20diet/3454/%2A/500>

MIND Diet

At least 3 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-once serving of nuts each day



Poultry at least twice a week



Fish at least once a week



Beans or legumes at least every other day

A 5-ounce glass of red wine or purple grape juice each day



A most one tablespoon a day of margarine. Use olive oil instead.



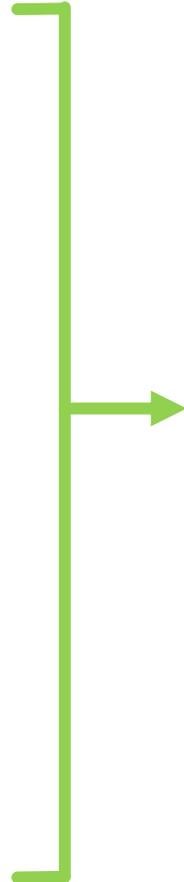
Cheese, fried food and fast food no more than once a week



Pastries & sweets less than 5 times a week



Greek
Mediterranean
Diet
+
Dietary
Approaches to
STOP
Hypertension





Best Diets 2022 ...per US NEWS

(www.usnews.com)

- Expert panel
- Reviewed the most recent research on **40 eating patterns** and rated them according to their:
 - Easiness to follow
 - Ability to produce both short- and long-term weight loss
 - Nutritional completeness
 - Safety
 - Potential for preventing/managing diabetes and heart disease
- **2022 Rankings:**

Best Overall	Easiest to Follow
1. Mediterranean	1. Mediterranean
2. DASH	2. Flexitarian
4. MIND	3. MIND

A **good** diet should be evidenced-based with demonstrated effectiveness, but also **must** be realistic for individuals to adopt.

MIND Diet

Diet Components,
based on research

10 Brain-Healthy Food Groups:

- | | |
|--------------------------|-----------------------|
| ■ Whole grains | 3+ servings/day |
| ■ Green Leafy Vegetables | 6 servings/week |
| ■ "Other" Vegetables | 1+ servings/day |
| ■ Berries | 2+ servings/week |
| ■ Nuts | 5+ servings/week |
| ■ Beans/Legumes | 3+ servings/week |
| ■ Fish | 1+ servings/week |
| ■ Poultry | 2+ servings/week |
| ■ Wine, <i>optional</i> | 1 - 5 oz. serving/day |

5 Brain-Unhealthy Food Groups:

- | | |
|-----------------------|-------------------|
| ■ Pastries and Sweets | < 5 servings/week |
| ■ Red Meat | < 4 servings/week |
| ■ Cheese | < 1 serving/week |
| ■ Fried or Fast Foods | < 1 serving/week |
| ■ Butter/Margarine | < 1 Tbsp/day |

MIND Diet Assessment

LET'S TAKE TIME TO:

Assess your
current eating
pattern

NOTE: this tool is not
meant to assess
everything you eat

MIND Diet Assessment Tool

1. Think about how you usually eat. See how close to the MIND Eating Approach You Are.

	MIND Diet Recommends	I Usually Eat
Whole grains	3 + servings each day	
Green leafy vegetables	6 servings each week	
Vegetables	1+ servings each day	
Nuts	5 servings each week	
Berries	2+ servings each week	
Beans/Legumes	3+ servings each week	
Fish	1+ servings each week	
Poultry	2 servings each week	
Wine	5 oz. serving each day	
Olive oil	Primary added fat in diet	
Pastries and sweets	< 5 servings each week	
Red meat	< 4 (3 oz.) servings each week	
Cheese	< 1 serving each week	
Fried or fast food	< 1 serving each week	
Butter/Margarine	< 1 tablespoon each day	

How to Score MIND Diet Adherence

- For each food group listed, give yourself a score of 0, 0.5, or 1 based on your diet assessment
- Total your score from each food category
- How did you do?
 - HIGH = >8.5
 - MODERATE = 7-8
 - LOW = <6.5
- What areas could you improve?

Food	Score - 0	Score - 0.5	Score - 1
Whole Grains	< 1 serving/day	1-2 servings/day	>3 servings/day
Green Leafy Vegetables	< 2 servings/week	2-6 servings/week	>6 servings/week
Vegetables	<5 servings/week	5-7 servings/week	>1 servings/day
Nuts	<1 serving/month	>1 serving/month, but <5 servings/week	>5 servings/week
Berries	<1 serving/week	1 serving/week	>2 servings/week
Beans and Legumes	<1 serving/week	1-3 servings/week	>3 servings/week
Fish	Rarely	1-3 servings/month	>1 serving/week
Poultry	<1 meal/week	1 serving/week	>2 servings/week
Wine	>1 glass/d OR never	1 serving/month – 6 servings/week	1 serving/day
Olive Oil	Not primary oil		Primary oil
Pastries and Sweets	>7 servings/week	5-6 servings/week	<5 servings/week
Red Meat	>7 servings/week	4-6 servings/week	<4 servings/week
Cheese	>7 servings/week	1-6 servings/week	<1 serving/week
Fried and Fast Food	>4 servings/week	1-3 servings/week	<1 serving/week
Butter and Margarine	>2 Tbsp/day	1-2 Tbsp/day	<1 Tbsp/day



GREEN LEAFY
VEGETABLES



OLIVE OIL



BERRIES



FISH



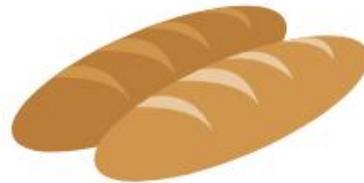
WINE



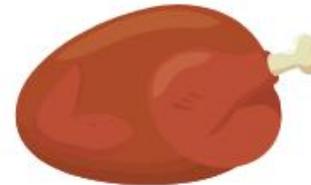
OTHER
VEGETABLES



NUTS



WHOLE GRAINS



POULTRY



BEANS

MIND Diet

Whole Grains

At least
3 servings
per day



- **Limit Refined Grains:** nutrients lost during processing
- **Choose Whole Grains:** minimal processing
 - Unprocessed: barley, brown rice, bulgur, farro, steel cut oats, popcorn, quinoa, wheat berry
 - Lightly Processed: cornmeal, rolled oats, whole grain pasta
 - "Made with": breads, cereals, couscous, crackers
 - ▶ Whole grain council label
 - ▶ "100% Whole" on package label
 - ▶ "Whole" as first word in ingredient list
 - Gluten-Free: amaranth, buckwheat, corn, millet, rice, quinoa, sorghum, teff, certified gluten-free oats

1 serving: 1 slice of bread, ½ cup cooked cereal, pasta or rice, 1 cup dry cereal, and 1 oz. crackers

Green, Leafy Vegetables

At least
1 serving
per day



Photo: Pexels by Scott Webb

- Enjoy raw or cooked
- Fresh, Frozen, or Canned
 - Look for: No Salt Added, Low-Sodium, Unseasoned
- Examples:
 - Lettuces: romaine, arugula, butterhead, bibb
 - Cruciferous Leafy Greens: collards, cabbage, kale, mustard greens, beet greens, bok choy
 - Amaranthacea: spinach, swiss chard

1 serving: 1 cup raw, or ½ cup cooked

Other Vegetables

At least
1 serving
per day



- Choose a variety of types and colors
- Enjoy raw or cooked
- Fresh, Frozen, or Canned
 - Look for: No Salt Added, Low-Sodium, Unseasoned
- Examples: asparagus, beets, carrots, celery, cucumber, eggplant, green beans, green peas, mushrooms, okra, onions, radishes, squash, sweet peppers, sweet potatoes, zucchini

1 serving: 1 cup, raw or ½ cup, cooked

Berries

At least
2 servings
per week



- A key difference between MIND and Mediterranean/DASH
 - Not total fruit intake
 - Nurses' Health Study demonstrated 2+ servings of strawberries or blueberries per week delayed cognitive aging by 2.5 years
- Fresh, Frozen or Canned
 - Look for: No Sugar Added, Packed in Water or 100% Juice
- Examples: Blueberries, Strawberries, Acai, Cranberries, Raspberries, and Blackberries
- Add to plain yogurt, oatmeal, dry cereal, salads, or freeze and blend for a cold dessert

1 serving: 1/2 cup

Nuts

At least
5 servings
per week

- Choose a variety
 - Walnuts are highest in omega-3 fatty acids and gamma-tocopherol
 - Choose unsalted or plain over candied, honey-roasted, or salted varieties

What does 1 oz of nuts look like?

20 – 24 Almonds	170 calories
6 – 8 Brazil nuts	186 calories
16 – 18 Cashews	157 calories
26 – 28 Peanuts	161 calories
18 – 20 Pecan Halves	196 calories
8 – 11 Walnuts	185 calories
45 – 47 Pistachios	159 calories



1 serving: 1 oz. (~1/4 c.)

Tip: Try using an Altoid box to portion nuts.
1 box full equals 3 oz.



Photos: Pexels Marta Branco;
<https://bonhappetee.com/blog/2017/05/25/handy-guide-to-portion-control/>

Beans and Legumes

At least
3 servings
per week



- Examples:
 - Beans/Peas (black, chickpeas, kidney, pinto, white)
 - Edamame (soybeans)
 - Lentils
 - Lima beans
 - Tofu
- Serve in place of meat, make a vegetarian chili, add to soups or stews, top a salad, roast for a snack, or blend into a dip
- Try a plant-based meal a few times each week

1 serving: $\frac{1}{4}$ cup uncooked, or $\frac{1}{2}$ cup cooked

Seafood

At least
1 serving
per week



- No additional benefit *on rate of cognitive decline* with more than 1 serving each week
- Excellent source of biologically-active omega-3 fatty acids
- Limit frying
- Check the EPA/FDA website for up-to-date information on safe-fish consumption



1 serving: 3 - 5 oz.

Tip: Use the palm of your hand or a deck of playing cards to estimate a 3-4 oz portion

Fish High in Protein and Omega-3s

Herring
Lake Trout
Oysters
Mackerel
Pollock
Salmon
Sardines
Scallops
Shrimp
Squid
Tuna

Photos: Pixabay;
<https://pngimg.com/image/8474>;
<https://bonhappetee.com/blog/2017/05/25/handy-guide-to-portion-control/>

Poultry

At least
2 servings
per week



Photos: Pixabay;
<https://pngimg.com/image/8474>;
<https://bonhappetee.com/blog/2017/05/25/handy-guide-to-portion-control/>

- White meat
- Skinless
- Lean ground poultry
 - 90/10% or higher
- Examples:
 - Chicken/Turkey breast
 - Turkey tenderloin
 - Ground chicken or turkey
 - ▶ Use to replace ground beef in any recipe (burgers, meatballs, tacos, spaghetti, etc)



1 serving: 3-5 oz.

Tip: Use the palm of your hand or a deck of playing cards to estimate a 3-4 oz portion

Alcohol

Up to
1 serving
of red wine
per day



Photo: bruce mars

- **Not required** to start drinking wine if you do not already drink
- Recommended to limit wine intake to 5 oz per day if you drink already
- Moderate intake may lower risk of dementia and slow cognitive decline
- More than 5 oz per day could lead to alcohol-related dementia

1 serving: 5 oz.

Olive Oil

Primary
added fat
in diet



Photo: Pixabay

- Good source of monounsaturated fats
 - Mainly Omega-9 (oleic acid)
- Unrefined olive oil is made from pressing olives
 - Extra virgin – lower acidity and more flavor
 - Classic/Regular – more refined, more acid and less flavor
 - Light – highly refined, lighter in flavor
- Some suggest 3-4 Tbsp/day (~44g) of extra virgin oil in cooking or dressings (*but stay within calorie budget*)
- Other oils that may support brain health: canola, corn, cottonseed, grapeseed, peanut, safflower, sesame, soybean, sunflower, walnut
- *No data* to support use of coconut oil

Use to replace butter/margarine in diet

5

“Brain Unhealthy” Foods

That contribute to cognitive **decline**

1. Red Meat

- Less than 4 times per week
- High-fat beef, lamb, pork, hotdogs, salami, bologna, sausages, bacon, roast-beef, ham



2. Butter or Margarine

- Less than 1 Tbsp. per day
- Try using olive oil instead



3. Cheese

- Less than 1 oz. per week



4. Pastries and Sweets

- Less than 5 times per week
- Enjoy as special treats occasionally



5. Fried and Fast Foods

- Less than 1 time per week

How would I do this?

- Meeting the basics of the MIND approach requires about 900 calories
 - Without other foods, one will most likely need a multivitamin/mineral supplement 3 times a week, and 1,000 mg calcium with vitamin D
- RDNs at ECU Family Medicine can help by developing a personalized structured meal plan tailored to the lifestyle of the individual

1,200 Calorie Sample Meal Plan following MIND diet		
Breakfast	<ul style="list-style-type: none">• 1 Dairy• 2 Starches• 1 Fruit	<ul style="list-style-type: none">• 1 cup yogurt• ½ cup granola• ½ cup blueberries
Lunch	<ul style="list-style-type: none">• 2 Starches• 2 oz. Lean meat• 1 Vegetable• 1 Fat• 1 Fruit	<ul style="list-style-type: none">• Whole grain bun• 2 oz. chicken breast• 1 dark green salad• 1 Tbsp. olive oil-based vinaigrette• 1 small apple
Dinner	<ul style="list-style-type: none">• 2 Starches• 3 oz. Lean meat• 1 Vegetable• 5 oz. Wine	<ul style="list-style-type: none">• ½ cup starchy beans• ½ cup corn• ½ cup cauliflower• 3 oz. fish filet• 5 oz. glass red wine
Snack(s)	<ul style="list-style-type: none">• 1 oz. nuts• 1 Fruit	<ul style="list-style-type: none">• 200 calories of nuts• 1 small orange

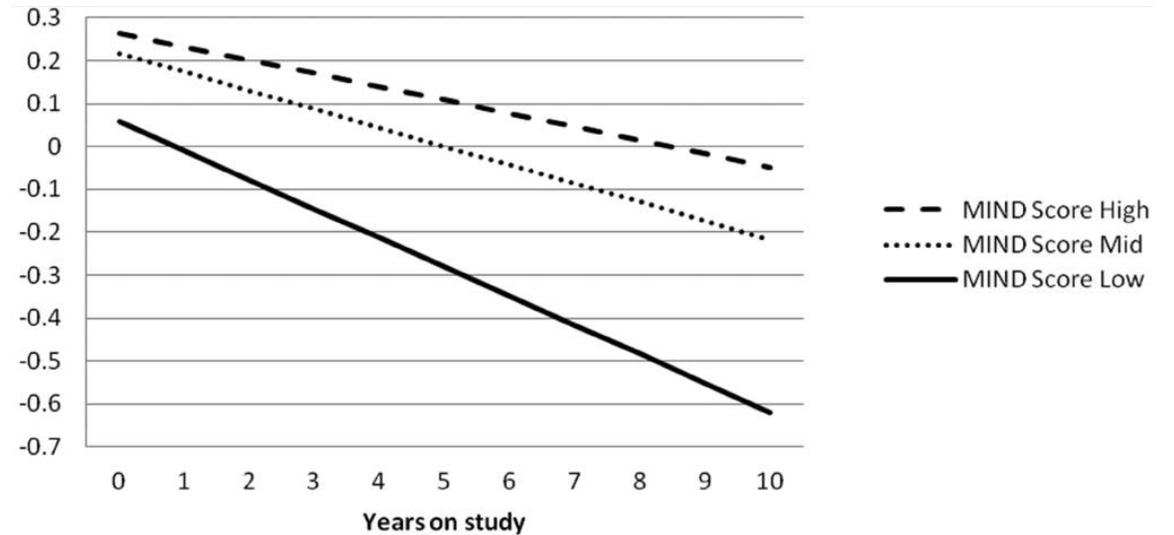
ADHERENCE

- In 2015, Morris and her coworkers demonstrated that **greater adherence** to the MIND diet yielded **greater benefit**
 - 53% reduction in AD rate
- They also demonstrated that **moderate benefit** can still be achieved with **moderate adherence**
 - 35% reduction in AD rate

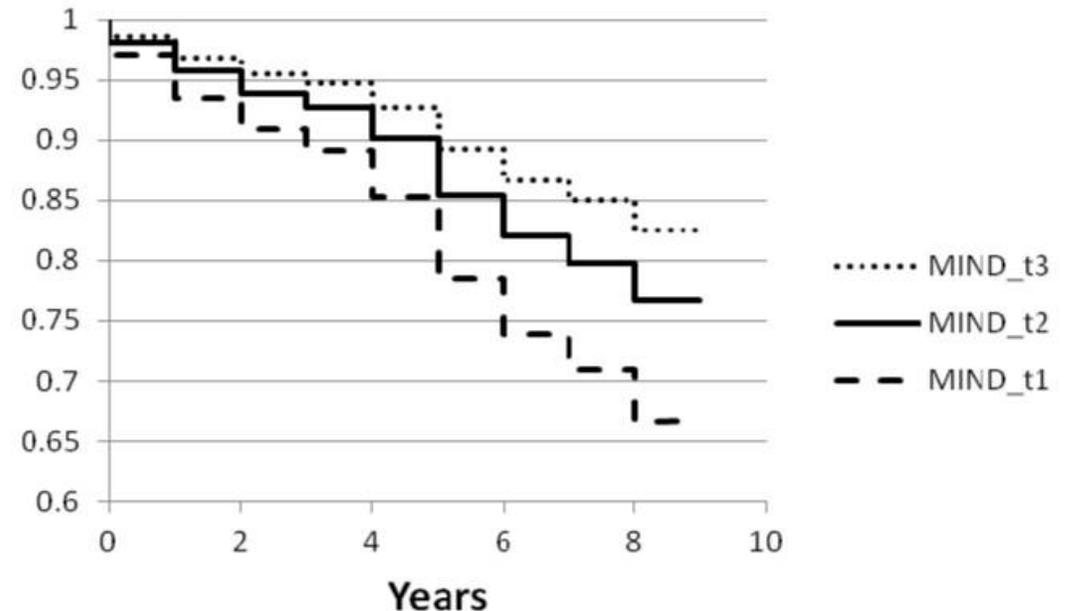
A. Morris MC, Tangney CC, Wang Y, et al. MIND diet slows cognitive decline with aging. *Alzheimers Dement.* 2015;11(9):1015-1022. doi:10.1016/j.jalz.2015.04.011

B. Morris MC, Tangney CC, Wang Y, Sacks FM, Bennett DA, Aggarwal NT. MIND diet associated with reduced incidence of Alzheimer's disease. *Alzheimers Dement.* 2015;11(9):1007-1014. doi:10.1016/j.jalz.2014.11.009

A. MIND Diet adherence and rate of cognitive decline



B. MIND Diet adherence and rate of Alzheimer's Disease



1. **Focus first** on making diet changes that are *easiest* for you,
2. **Then** begin to work on making more difficult changes

For example, what can you substitute for cheese?

Try **NUTRITIONAL YEAST** or “**nooch**”

- Can be added to food for flavor
- Many plant-based eaters find it a favorable replacement for cheese and lower in calories
- Yeast grown in a medium with cane sugar or molasses, then collected and processed
 - Loses leavening ability
- Some are fortified with vitamins and minerals like zinc, magnesium, phosphorus, Vitamin B12, and folic acid
 - Read the label as brands vary

Check out:

- Pass the Nooch: 5 Ways to Incorporate Nutritional Yeast Into Every Meal
<https://www.onegreenplanet.org/vegan-food/pass-the-nooch-5-ways-to-incorporate-nutritional-yeast-into-every-meal/>

Coffee & Caffeine



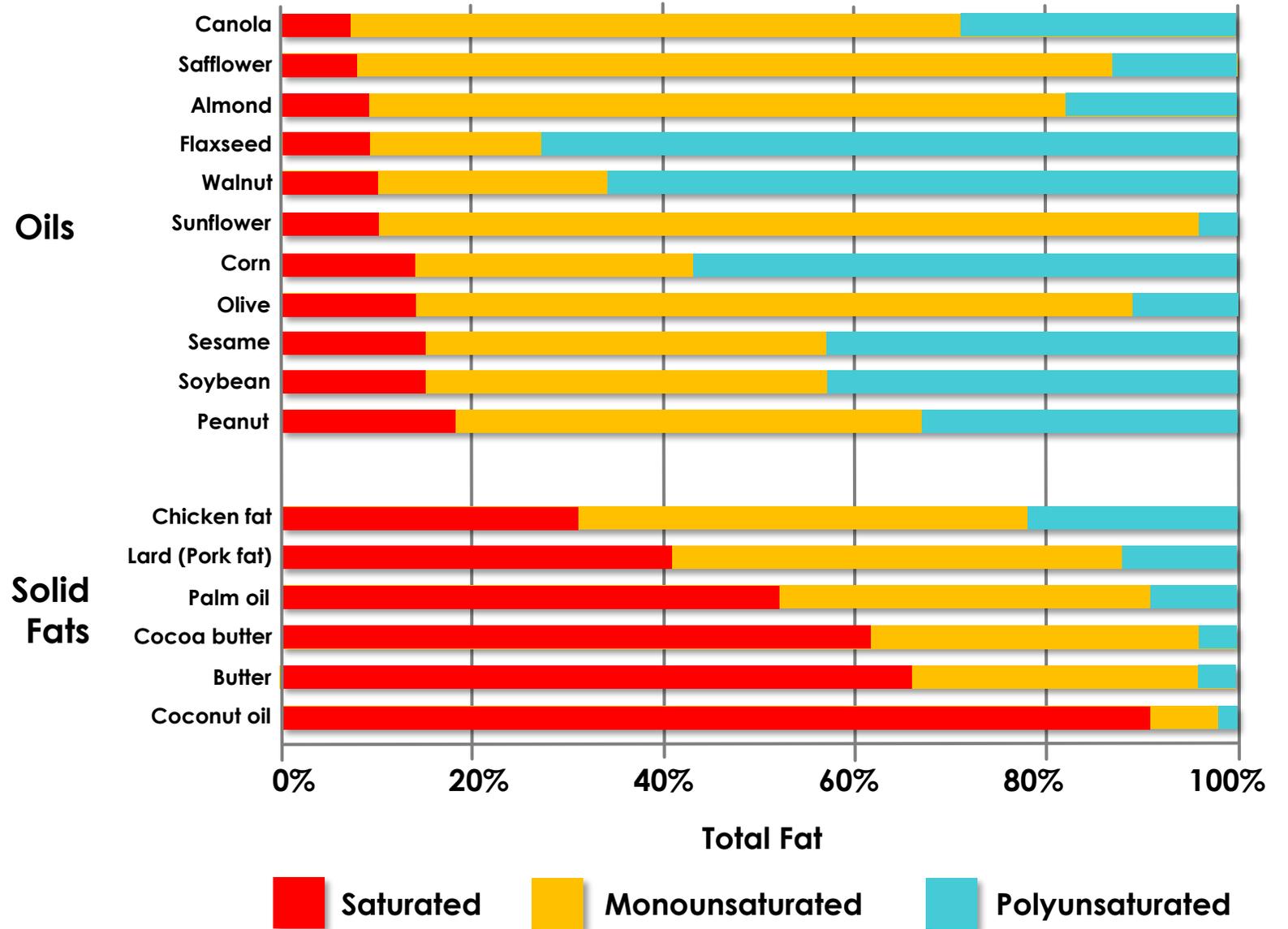
Photo: rawpixel

- Caffeine affects the brain and central nervous system with an immediate boosting effect on neurotransmitters
- Studies of the effect of caffeine on cognitive performance on tests show *short term improvement* in planning, creative thinking, memory and reaction time
- **Inconsistent results** of the effects of caffeine/coffee for the prevention of cognitive decline or dementia
 - Caffeine may block inflammation in the brain, specifically adenosine receptors
 - Coffee may positively affect the build up of a key protein – tau - in Alzheimer's disease
 - Coffee (200 mg caffeine) shown to boost memory short term
 - Coffee shown to protect against Type 2 Diabetes

Adapted from Morris MC, Diet for the Mind, 2017

Eat healthy fats

- ❖ Choose more unsaturated fats (oils), and limit saturated fats (solid fats)



Adapted from www.NutritionAction.com
USDA FoodData Central <https://fdc.nal.usda.gov/index.html>

LET'S MAKE A SMART GOAL

- ❖ Look back at your diet assessment sheet
- ❖ What is one area you could improve and want to work on improving today?

2. **Decide.** Which behavior(s) are you willing to try and change by eating more or less of the foods asked about? Basically, you will eat more salads, beans, berries, and whole grains. You will adapt to using more olive or canola oil and less butter, margarine, and other spreads. You will eat fish and chicken or turkey a couple of times a week, nuts almost every day. You can, but don't have to, enjoy a small glass of wine every day. You will eat fast or fried food only once a week. Red meat is not forbidden but you will only eat lean and unprocessed meat. Visit with your registered dietitian nutritionist (RDN) to create your meal plan.
3. **Set a SMART GOAL.** (Specific, Measurable, Achievable, Realistic/Relevant, Time Bound)
Here is an example: Latasha will eat one more serving of green leafy vegetables a day for 7 days a week for the next two weeks.

My SMART GOAL: _____

Resources

- Morris MC, Diet for the Mind, 2017, Little and Brown
- Morris MC, Tangney CC, Wang Y, et al. MIND diet slows cognitive decline with aging. *Alzheimers Dement*. 2015;11(9):1015-1022. doi:10.1016/j.jalz.2015.04.011
- Morris MC, Tangney CC, Wang Y, Sacks FM, Bennett DA, Aggarwal NT. MIND diet associated with reduced incidence of Alzheimer's disease. *Alzheimers Dement*. 2015;11(9):1007-1014. doi:10.1016/j.jalz.2014.11.009
- MedinsteadofMeds.com is a website from NC State University and Eat Smart Move More NC. Great tasting recipes, videos, tips, tools and more
- Brain Health Kitchen is cooking program founded by physician, chef, and culinary instructor Annie Fenn, that teaches regular people how to cook and eat more foods that may lower their risk of dementia. Check out her website at <https://www.brainhealthkitchen.com> to discover more recipes and tips to support your brain health!



Questions?



Email us:

- Brittany Smith MS, RDN, LDN
smithbrit21@ecu.edu
- Kathy Kolasa PhD, RDN, LDN
kolasaka@ecu.edu

Interested in making an appointment with a Registered Dietitian Nutritionist?

- Ask your provider for a referral or
- Call ECU Family Medicine (252)744-4611 to self-refer