## **Nutrition and Brain Health**

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## **Get to Know Your Local Extension**



#### Mission

Extend research-based knowledge to all North carolinians, helping them transform science into everyday solutions that improves lives and grow the state.

FCS - 4-H - Horticulture - Livestock Sustainable Ag - Forestry - Field Crops

# Nutrition's Impact on Brain Health

## **Nutrition and Brain Health**

Balanced nutrition correlated with:

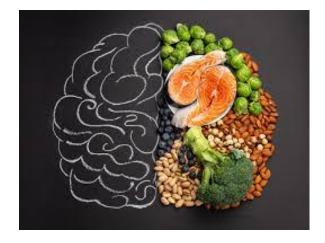
- Improved mental health
- Improved cognitive function
- Increased grey matter in the brain



## Is Your Diet a Risk Factor or is it Protective?

Diet linked to:

- Stroke
- Dementia
- Alzheimer's
- Parkinson's



Diet affects the **speed of general age related cognitive decline** 

## **Research Snapshot**

- Mediterranean dietary pattern has been shown to reduce dementia risk by up to 23% and Alzheimer's by 40%
- Omega 3 fatty acids, in the diet, are linked to dementia prevention
- Saturated fat consumption has been shown to increase risk of dementia
- Getting just 20 percent of calories from **highly processed foods** was linked to a 28% increase in dementia risk
- Many inconclusive and inconsistent results, such as with B vitamins and vitamin E r/t dementia

## How to Spot Ultra Processed Foods

Preservatives, sweeteners and emulsifiers

- Sweetened drinks
- Chips
- Packaged cakes and cookies, mixes
- Le cream, candy, sugary cereals
- **G** Frozen french fries, refined pretzels
- Instant soups, noodles
- Packaged meats like hot dogs, chicken nuggets, fish sticks



# Eating for a Healthy Brain and Body

## **Omega 3 fatty acids**

#### **Fatty Fish**

- Salmon
- Mackerel
- Trout
- **G** Sardines
- Sea bass



#### **Plant Sources**

- Flaxseeds and flaxseed oil
- Chia seeds
- Walnuts
- Canola and olive oils



## **Folate & Other B Vitamins**

- Dark leafy greens
- Beans, peas
- Nuts
- Oranges, lemons
- Bananas
- Melons
- Strawberries
- Fortified cereals and pastas



# Limit Saturated Fats & Avoid Trans Fats

- Butter, palm oil, coconut oil, lard
- Full fat dairy
- High-fat meats
- □ Margarine

Amount Per Servi	ng		
Calories 230	Cal	ories fron	n Fat 4
		% Dail	y Value
Total Fat 8g			12
Saturated Fat 1g			<b>5</b> °
Trans Fat 0g			
Cholesterol 0	mg		0
Sodium 160mg			<b>7</b> °
Total Carbohydrate 37g			12
Dietary Fiber 4g			169
Sugars 1g			
Protein 3g			
			100
Vitamin A			109
Vitamin C			89
Calcium			209
Iron			459
* Percent Daily Value: Your daily value may your calorie needs.			
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
	Less than	300ma	300mc
Cholesterol Sodium Total Carbohydrate	Less than Less than	300mg 2,400mg 300g	300mg 2,400r 375a

## Vitamin E \*limited support

- Wheatgerm
- Safflower oil
- Sunflower seeds
- Almonds, peanuts
  - Beet greens, collard greens, spinach



- Asparagus
- Avocado
- Red bell pepper
- Mango







## **Other Antioxidants**

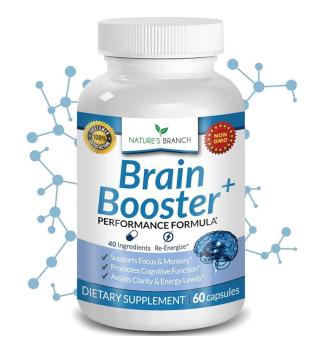
- Tannins (berries)
- Polyphenols (berries, apples, grapes, olives)
- **Curcumin (turmeric)**
- Lycopene (tomatoes)



## **Note on Supplements**

- Taking supplements is typically not as effective as getting your nutrition from actual food
- Do not think of supplements as a magic bullet
- Supplements are unregulated

Ask your doctor if you may be have low Vitamin D or B12

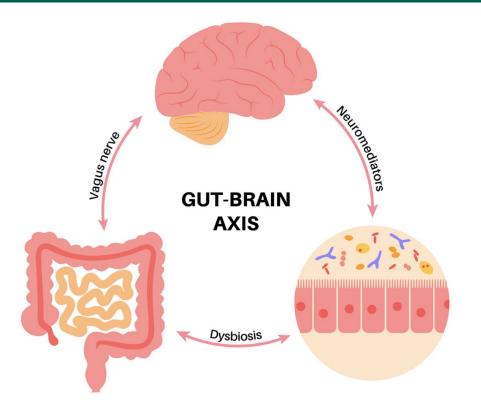


### **Overall Eating Pattern is What Matters**

- More Plants
- Limit Salt
- Limit Saturated & Trans Fats
- Reduce Added Sugars
- Avoid Excessive Alcohol



• Highly Limit Ultra Processed Foods



Research suggests that digestive system activity may affect cognition, including memory.

## Dietary Patterns to Support Brain Health

## **Mediterranean Diet**



## **DASH Diet**







