DISRUPT DEMENTIA with nutrition
Keeping Our Brains Young In Our Older Years

Alexandra Lewin-Zwerdling, PhD, MPA
International Food Information Council, GCBH Liaison

Olivia Okereke, MD, MS
Massachusetts General Hospital, GCBH Issue Expert

Sarah Lenz Lock, JD
AARP & Executive Dir. GCBH
INTRODUCTION

Alexandra Lewin-Zwerdling, PhD, MPA
International Food Information Council
OUR BRAINS AS WE AGE

- Physical Changes
- Contributing Factors
- Cognitive Changes
- Protective Factors
Diet impacts brain health.

What is good for the heart is good for the brain.

Long-term healthy eating habits promote good brain health.
Discussion of Brain Food: GCBH Recommendations on Nourishing Your Brain Health

Olivia I. Okereke, MD, SM
Director of Geriatric Psychiatry
Massachusetts General Hospital
EATING HABITS TO IMPROVE OR ADOPT

1. A VARIETY OF FOODS
2. FRESH WHOLE FRUIT AND VEGETABLES
3. CONSUME MORE FISH
4. HEALTHY FATS
# GCBH Recommendations for Brain Health

## A. **Encourage:**
- Berries (not juice)
- Fresh vegetables (in particular leafy greens)
- Healthy fats (such as those found in oils including extra virgin olive oil)
- Nuts (a high calorie food, so limited to a moderate amount)
- Fish and seafood

## A. **Include:**
- Beans and other legumes,
- Fruits (in addition to berries, previously mentioned),
- Low fat dairy, such as yogurt
- Poultry
- Grains

## A. **Limit:**
- Fried food
- Pastries
- Processed foods
- Red meat
- Red meat products
- Whole fat dairy such as cheese and butter
- Salt
EATING HABITS TO LIMIT OR AVOID

1. SATURATED AND TRANS FATS
2. EXCESSIVE WESTERN DIET
3. OVER CONSUMPTION OF ALCOHOL
4. SALT
EATING HABITS TO APPROACH WITH CAUTION

1. PACKAGED & PROCESSED FOODS

2. DON’T START DRINKING

3. CHOCOLATE
DIETARY PATTERNS

The Mediterranean Diet
Nordic Diet
DASH (Dietary Approaches to Stop Hypertension) Diet
MIND (Mediterranean – Dash Intervention for Neurodegenerative Delay) diet

Okinawan Diet

No single food is key to good brain health...
Avoid eating in excess. Quantity and moderation of intake of nutrients matters. Too much of a good thing is often not good either. Using smaller plates is a very effective method for controlling portion sizes.

Use vinegar, lemon, aromatic herbs, and spices to increase flavor in food without increasing salt content. Check the labels of spice blends to determine if they contain salt.

Consider dietary counseling if you are trying to overcome conditions such as hypertension, diabetes, and obesity. Snack on raw, plain, unsalted nuts; they may be beneficial for brain health. Nuts tend to be high-calorie foods because of high fat content, so they should be eaten in moderation.

Purchase food and prepare meals at home. This gives you more control over the salt, sugar, and fat content than if you frequently buy prepared meals or food from restaurants. Read packaged food labels to help you choose healthier options. The nutrition facts panel and ingredients list provides helpful information, such as saturated fat, sodium and sugar content.

Water is preferable to most sodas, fruit juices, and other high calorie drinks due to these beverages possessing high sugar and fat content.
Physical activity has been shown to improve cognition in adults and is important to promote healthy aging.

There are similarities between the diet recommended here for reducing risks for cognitive decline as a person ages and diets that are often recommended for several other chronic health problems.

Just as nutritional needs during childhood are distinct, so too are the needs of people in later life.

A number of studies have linked obesity in midlife with an increased risk for future cognitive decline.

As people age, their ability to perceive thirst diminishes.
PRACTICAL TIPS SUMMARY

1. Use substitutions
   - Calories ≠ Quality

2. Consider: Type vs. Total
   - Sources: Plant vs. Animal

3. Use color
   - Healthy plate is varied
Diet and Lifestyle Strategies for Healthy Brain Aging - **TRANSLATION:**

- Get at least 5 servings of whole fruits & vegetables a day
- Choose more fish and seafood, reduce red meat intake
- Consume heart-healthy fats
- Eat more whole grains and nuts; lay off sweets, excess salt
- Follow light alcohol intake only (but don’t start if not already drinking)
- Adhere to Mediterranean or other brain-healthy diet pattern
- Stay physically and mentally active
- Get adequate sleep and rest, hydration
“...increasing fruit intake by just 1 serving per day has the estimated potential to reduce cardiovascular mortality risk by 8%, the equivalent of 60,000 fewer deaths annually in the United States and 1.6 million deaths globally...”

“...adults age 50 and older who get the recommended amount of fruits and vegetables in a typical day report significantly better brain health compared to those who do not...”
SURVEY RESULTS

Sarah Lenz Lock, JD
Senior Vice President, AARP Policy & Brain Health
Executive Director, Global Council on Brain Health
SURVEY OBJECTIVES

To understand adults’ willingness to eat a healthier diet and the barriers preventing them from healthy eating.

To explore the relationship between brain health & eating habits.

To characterize the eating habits of adults age 40 and older.
MAJOR TAKEAWAYS

MOST ADULTS 40+ ARE NOT GETTING PROPER NUTRITION

• Six out of 10 do not consume the USDA’s recommended amounts of fruits, vegetables;
• More do not consume the recommended amount of dairy, grains, and protein;
• Virtually no one consumes the dietary recommendations in all five food groups; and
• One-third (1/3) do not meet the dietary recommendations in any food group.
MAJOR TAKEAWAYS

MOST ADULTS 40+ SAY THEY WOULD GET PROPER NUTRITION IF...

• They were aware that it could reduce their risk of cognitive decline, heart disease, or diabetes;
• It was more affordable to do so;
• They had access to healthier options; and
• It was recommended by their doctor/health care provider.
MAJOR TAKEAWAYS

MENTAL WELLBEING AND BRAIN HEALTH

• Adults who eat at least the recommended amount of fruits and vegetables report better brain health and have higher average mental well-being scores.
• Adults age 40+ who eat fish/seafood in a typical week but not red meat report better brain health and higher average mental wellbeing scores compared to individuals who eat red meat but not fish/seafood in a typical week.
• Individuals who follow some of the eating patterns included in the Mediterranean diet report better brain health and high mental well-being scores.
• Women eat better than men.
MAJOR TAKEAWAYS

WILLINGNESS TO CHANGE

• The majority say they are confident they can eat a healthier diet and intend to do so.
• Large majorities of adults say they would be likely to eat a healthy diet knowing it may reduce their risk of cognitive decline/dementia, diabetes, and heart disease.
• Most adults say they are likely to change their diet in specific ways knowing it is good for their brain (eat more fish/seafood, limit red meat, limit whole-fat dairy)
BARRIERS TO HEALTHY EATING

- Costs
- Identity
- Tastes
- Doctors
Adults age 40+, on average, are more likely to consume enough fruits and vegetables but not enough dairy, protein, or grains.

<table>
<thead>
<tr>
<th>What should people eat?*</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fruit</td>
<td>1.5-2 cups per day</td>
</tr>
<tr>
<td>Vegetables</td>
<td>2-3 cups per day</td>
</tr>
<tr>
<td>Dairy</td>
<td>3 cups per day</td>
</tr>
<tr>
<td>Protein</td>
<td>5-6 servings day</td>
</tr>
<tr>
<td>Grain foods</td>
<td>5-7 servings per day</td>
</tr>
</tbody>
</table>

* Percent who consume the recommended amount from each food group*

- Fruit: 46%
- Vegetables: 40%
- Dairy: 19%
- Protein: 8%
- Grain foods: 2%

* From: [https://www.choosemyplate.gov](https://www.choosemyplate.gov) (Amount varies by age and gender)
Virtually no one consumes the dietary recommendations in all five food groups and one-third (34%) of adults age 40 and older do not meet the dietary recommendations in any of the food groups.

Out of five food groups, the percentage of adults who consumed the recommended number of servings in each

<table>
<thead>
<tr>
<th>Food group</th>
<th>Percent who consumed no servings to six or more servings per day, by food group</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>One</td>
</tr>
<tr>
<td>Fruits</td>
<td>14%</td>
</tr>
<tr>
<td>Vegetables</td>
<td>7%</td>
</tr>
<tr>
<td>Grain foods</td>
<td>8%</td>
</tr>
<tr>
<td>Protein</td>
<td>1%</td>
</tr>
<tr>
<td>Dairy</td>
<td>10%</td>
</tr>
</tbody>
</table>

Q6 to Q10 About how many servings of [fruits, vegetables, grain foods, protein, dairy] do you eat in a typical day?

Note: Examples of servings were provided for each food group.
More than twice as many women than men consume the recommended amount of fruits and vegetables combined and vegetables alone. Women are also more likely to consume the recommended amount of dairy foods.

*Statistically significant difference.
MORE F&V = SELF REPORTED BETTER BRAIN HEALTH

Adults age 40 and older who eat the recommended amount of fruits and vegetables report better brain health.

Q6/Q7 About how many servings of (fruits/vegetables) do you eat in a typical day? (None, One, Two, Three, Four, Five, Six or more)
Results are statistically significant.
More than six in 10 (63%) adults age 40 and older eat poorly saying that they “ate nutritious and well-balanced meals” three or four days per week or less often. While about one-third (35%) ate nutritiously “most or all of the time,” significantly more adults age 65+ ate well.

Significantly more adults age 65 and older said they ate nutritiously 5-7 days per week compared to adults age 40-54 (44% vs. 28%).

Percent of time “ate nutritious and well-balanced meals”

- Most or all of the time (5-7 days): 35%
- Moderate amount of time (3-4 days): 37%
- Little of the time (1-2 days): 20%
- Rarely (less than 1 day): 6%
Lots of Room for Improvement

Virtually no one consumes the dietary recommendations in all five food groups and one-third (34%) of adults age 40 and older do not meet the dietary recommendations in any of the food groups.

Out of five food groups, the percentage of adults who consumed the recommended number of servings in each

<table>
<thead>
<tr>
<th>Food group</th>
<th>None</th>
<th>One</th>
<th>Two</th>
<th>Three</th>
<th>Four</th>
<th>Five</th>
<th>Six or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fruits</td>
<td>14%</td>
<td>40%</td>
<td>27%</td>
<td>13%</td>
<td>4%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Vegetables</td>
<td>7%</td>
<td>32%</td>
<td>35%</td>
<td>17%</td>
<td>5%</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>Grain foods</td>
<td>8%</td>
<td>33%</td>
<td>31%</td>
<td>18%</td>
<td>6%</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>Protein</td>
<td>1%</td>
<td>20%</td>
<td>34%</td>
<td>24%</td>
<td>10%</td>
<td>5%</td>
<td>6%</td>
</tr>
<tr>
<td>Dairy</td>
<td>10%</td>
<td>40%</td>
<td>30%</td>
<td>13%</td>
<td>3%</td>
<td>2%</td>
<td>2%</td>
</tr>
</tbody>
</table>

Q6 to Q10 About how many servings of [fruits, vegetables, grain foods, protein, dairy] do you eat in a typical day?

Note: Examples of servings were provided for each food group.
THANK YOU!