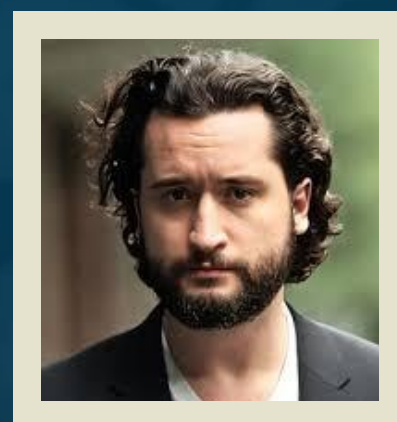


BEACON 2026



The Smart Diet

What Science Says About
Eating for Brain Health



A PRESENTATION BY
JAMES RINI, MD, MPH



Diets & Cognitive Health

- Our diet shapes more than just our body—it affects our **brain health, cognition, and risk for neurodegenerative diseases like Alzheimer's.**
- Many diets have been proposed for brain health, but **which ones are backed by science?**
- **Today, we'll explore:**
 - How different diets impact cognition and dementia risk
 - The key similarities and differences between diets
 - What research tells us about their efficacy



YOU ARE LITERALLY WHAT YOU EAT

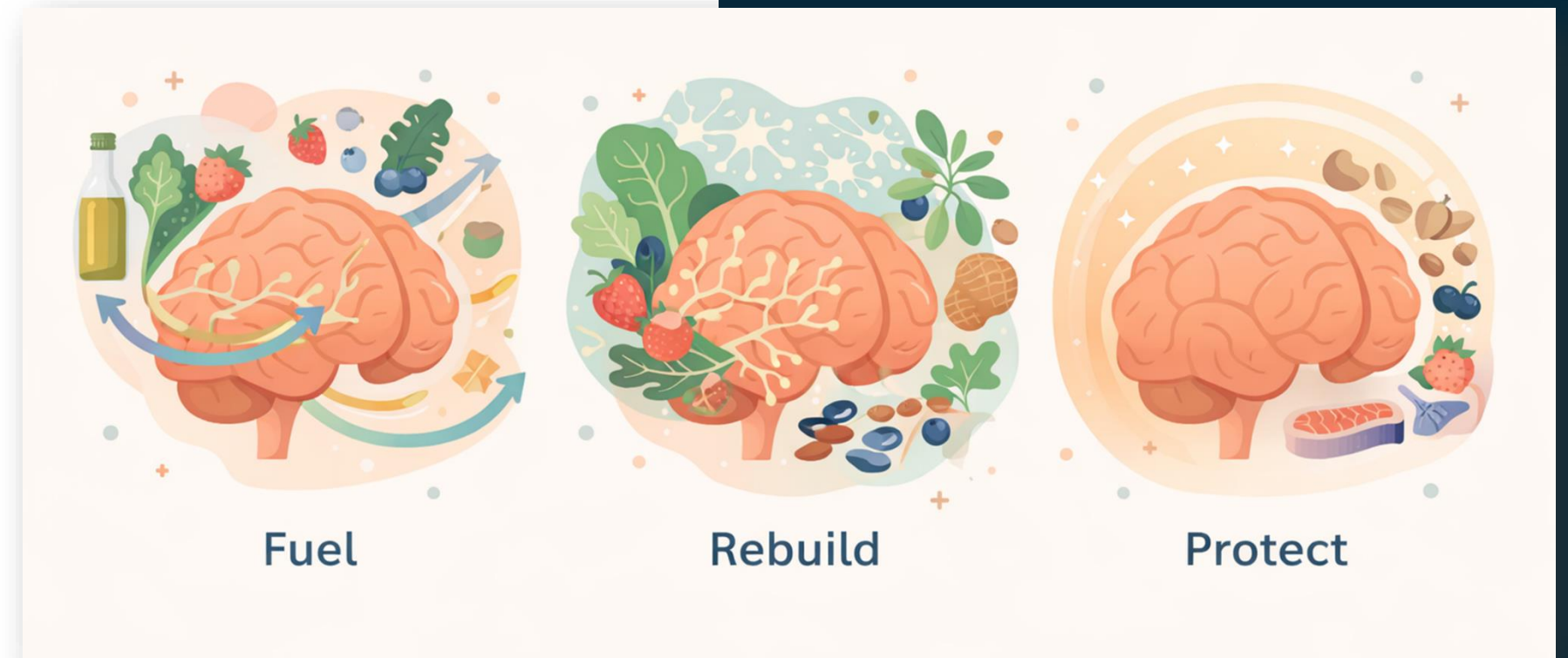
Why Diet Matters for the Brain

The Smart Diet



Our brain relies on proper nutrition for:

- **Fueling** – Provides essential nutrients (glucose, ketones, and healthy fats) to power cognitive functions.
- **Rebuilding** – Supports neuronal repair and neurotransmitter production.
- **Detoxifying** – Helps reduce inflammation and protect brain cells.



Better Diet, Better Brain

Eating whole, plant-based foods and healthy fats may help slow cognitive decline.

The Blue Zones

Longevity, Brain Health, and Diet

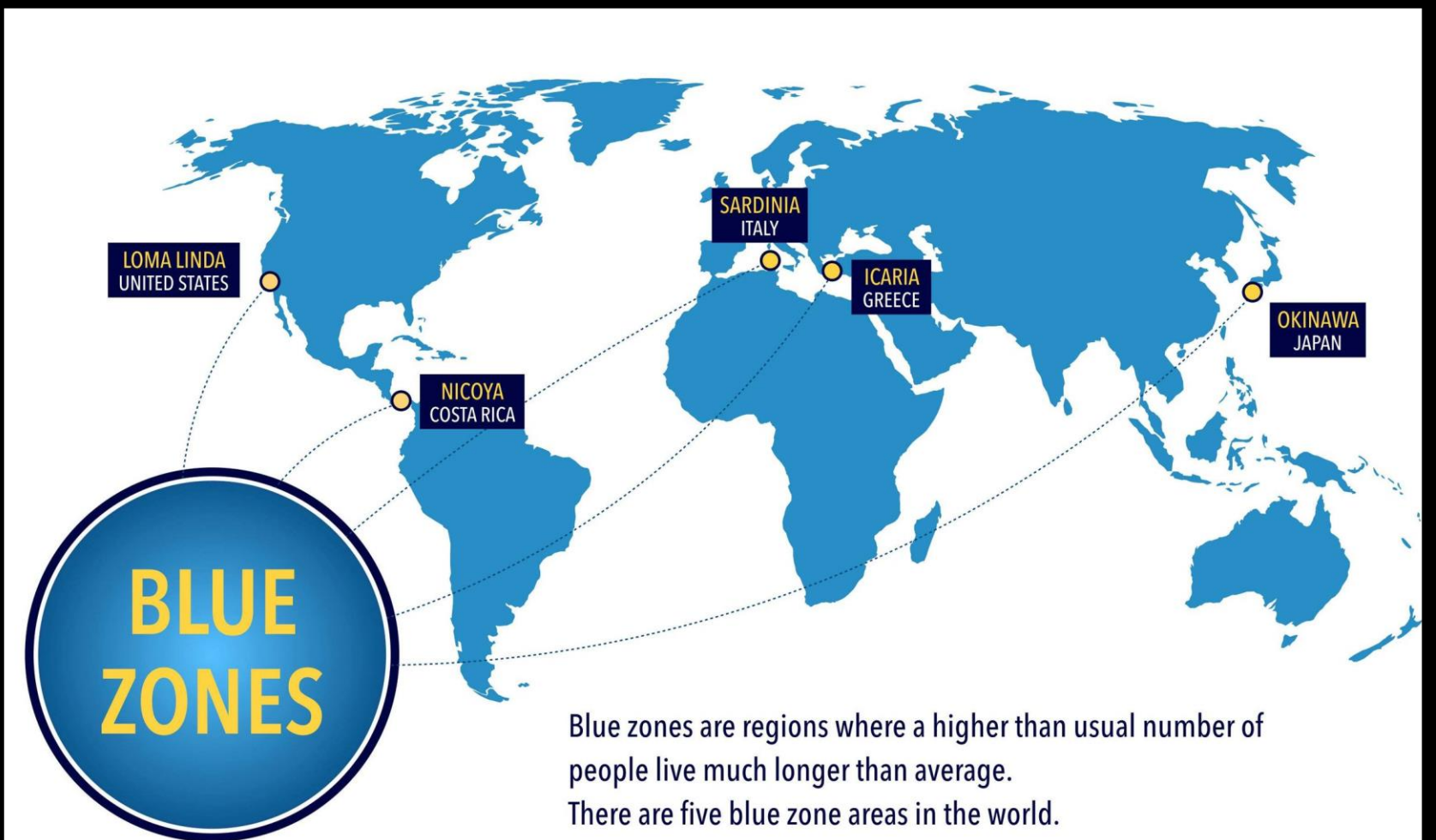
Blue Zones are regions of the world where **people live significantly longer**

- Often 90-100 years old
- Low rates of chronic disease.
- Low rates of dementia

Blue Zones suggest that longevity and brain health may be supported by **shared lifestyle patterns** such as plant-forward diets, regular movement, social connection, and purpose.



The SMART Diet



BLUE ZONES MATTER BECAUSE THEY SHOW US WHAT HEALTHY AGING CAN LOOK LIKE WHEN SUPPORTIVE HABITS ARE WOVEN INTO DAILY LIFE.

The Blue Zones

Aegean Island, Greece



- **Signature foods:** wild greens, legumes, olive oil, fish, herbal teas
- **Lifestyle pattern:** low stress, natural movement, rest, strong community
- **Brain-health lesson:** anti-inflammatory eating plus a slower, socially connected rhythm of life

The SMART Diet



ACROSS VERY DIFFERENT CULTURES, LONGEVITY TENDS TO CLUSTER AROUND SIMPLE FOOD, STEADY MOVEMENT, CLOSE RELATIONSHIPS, AND A MEANINGFUL DAILY LIFE.

The Blue Zones

Mountain villages of Sardinia



- **Signature foods:** Beans, garden vegetables, sourdough bread, olive oil, sheep's milk foods, and red wine in moderation
- **Lifestyle pattern:** Daily walking, intergenerational living, outdoor life, and frequent social connection
- **Brain-health lesson:** Brain health appears to be reinforced by steady movement, strong family structure, and a nutrient-dense traditional diet.

The SMART Diet



ACROSS VERY DIFFERENT CULTURES, LONGEVITY TENDS TO CLUSTER AROUND SIMPLE FOOD, STEADY MOVEMENT, CLOSE RELATIONSHIPS, AND A MEANINGFUL DAILY LIFE.

The Blue Zones

Okinawa Japan's Ryukyu Islands



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MAP VECTOR

- **Signature foods:** Sweet potatoes, tofu, seaweed, turmeric, green tea, fish, and other plant-forward staples
- **Lifestyle pattern:** Eating in moderation, strong social circles, lifelong routine, and a deep sense of purpose
- **Brain-health lesson:** Moderation, belonging, and purpose may be just as important for healthy brain aging as the food itself.

The SMART Diet



ACROSS VERY DIFFERENT CULTURES, LONGEVITY TENDS TO CLUSTER AROUND SIMPLE FOOD, STEADY MOVEMENT, CLOSE RELATIONSHIPS, AND A MEANINGFUL DAILY LIFE.

The Blue Zones

Nicoya Peninsula



- **Signature foods:** Corn, beans, squash, tropical fruits, herbal teas, and simple whole-food meals
- **Lifestyle pattern:** Lifelong physical activity, family-centered living, regular sun exposure, and practical daily purpose
- **Brain-health lesson:** Consistent movement and a simple, minimally processed diet may help support resilience across the lifespan.

The SMART Diet



ACROSS VERY DIFFERENT CULTURES, LONGEVITY TENDS TO CLUSTER AROUND SIMPLE FOOD, STEADY MOVEMENT, CLOSE RELATIONSHIPS, AND A MEANINGFUL DAILY LIFE.

The Blue Zones



The Smart Diet

LESSON: A SLOWER, LOWER-STRESS, PLANT-FORWARD WAY OF LIFE MAY HELP PROTECT THE BRAIN OVER TIME.



Slow down.

Eat simply.

Walk daily.

Stay connected.

Belong deeply.

Live with purpose.

LESSON: DAILY MOVEMENT, FAMILY STRUCTURE, AND SHARED MEALS MAY REINFORCE HEALTHY BRAIN AGING.



LESSON: MODERATION, SOCIAL BELONGING, AND A STRONG SENSE OF PURPOSE MAY BE AS IMPORTANT AS THE FOOD ITSELF.



LESSON: SIMPLE WHOLE FOODS AND LIFELONG PHYSICAL ACTIVITY MAY BUILD LONG-TERM RESILIENCE FOR THE BRAIN.



Specifically...

- **Eat Mostly Plants**
 - Vegetables at every meal
 - Use olive oil as primary fat
 - Meat = occasional, not central
- **Stop Before Full**
 - Eat until ~80% full (Hara Hachi Bu)
 - Smaller portions, slower meals
- **Move All Day**
 - Walk whenever possible
 - Replace sitting with natural movement
 - Think: garden, carry, stand, walk
- **Downshift Daily**
 - Build in intentional pauses
 - Nap, pray, reflect, or unplug
- **Stay Connected**
 - Prioritize daily human interaction
 - Maintain a sense of purpose (“Ikigai”)



**It's not a diet—
it's a daily pattern of living**



Big Three Diets

The Smart Diet



Mediterranean Diet

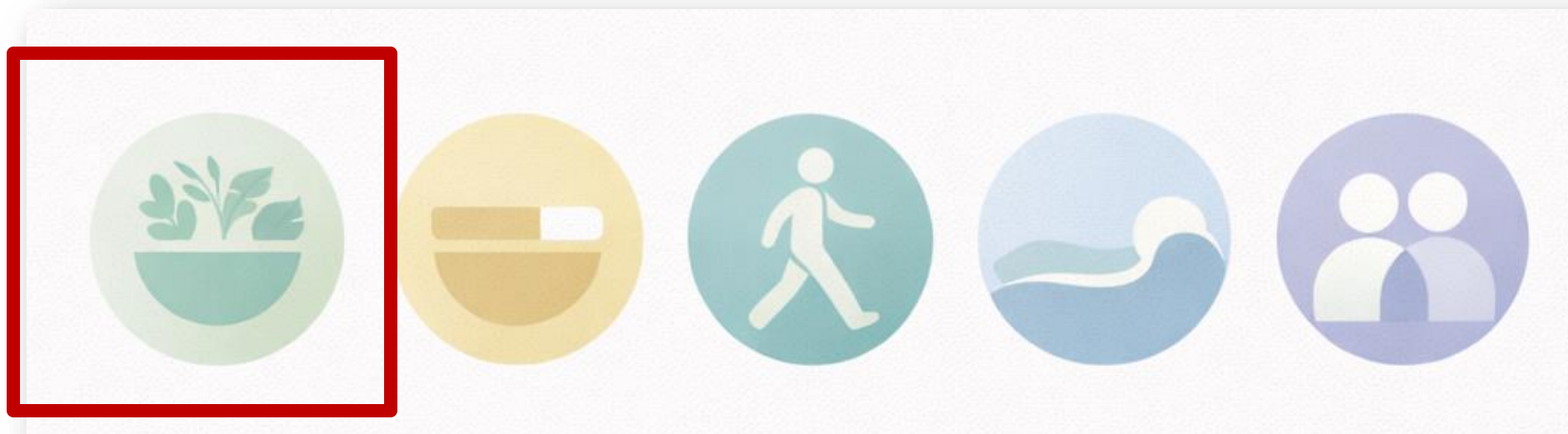
- Traditional eating pattern of Mediterranean
- Emphasizing High in olive oil, fish, whole grains, fruits, & vegetables.

DASH Diet

- Derivate of Mediterranean diet
- Designed for heart health and blood pressure
- Emphasizing low sodium, lean protein, high fiber.

MIND Diet

- A hybrid of Mediterranean and DASH
- Designed for cognitive health
- Emphasizing berries & leafy greens.





MIND vs Mediterranean vs DASH

Shared Core Principles

- **Plant-forward**, whole-food dietary patterns
 - High intake of vegetables, fruits, grains, legumes
- **Emphasis on healthy fats** (especially unsaturated fats)
- **Reduced processed foods** and added sugars

- Shared Brain-Relevant Mechanisms
 - ↓ Neuroinflammation
 - ↓ Oxidative stress
 - ↑ Vascular health and perfusion
 - ↑ Metabolic stability (glucose, insulin)

- **Shared Outcomes**
 - Lower risk of cognitive decline
 - Lower risk of dementia and Alzheimer disease
 - Slower longitudinal cognitive decline





MIND vs Mediterranean vs DASH

Where they actually diverge

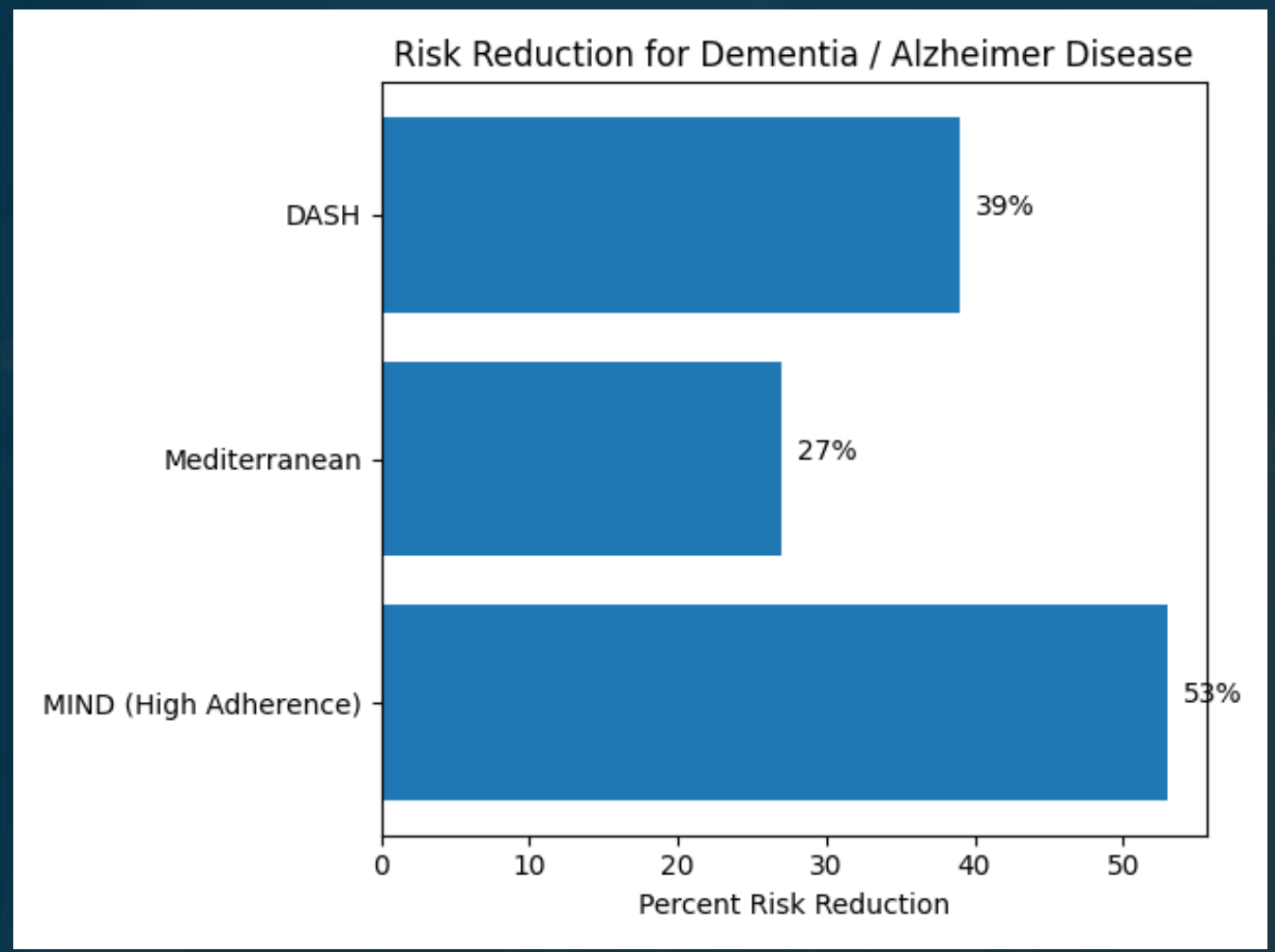
- **MIND Diet (Brain-Specific Optimization)**
 - Prioritizes leafy greens and berries
 - Shows benefit even with moderate adherence
- **Mediterranean Diet (Most Proven Overall)**
 - Emphasis on olive oil, fish, nuts, social eating
 - Broadest cardiometabolic and longevity evidence
- **DASH Diet (Vascular Control)**
 - Focus on low sodium, low saturated fat
 - Strongest impact on hypertension/vascular risk

- **MIND targets the brain directly**
- **Mediterranean supports the whole system**
- **DASH protects the vascular foundation**

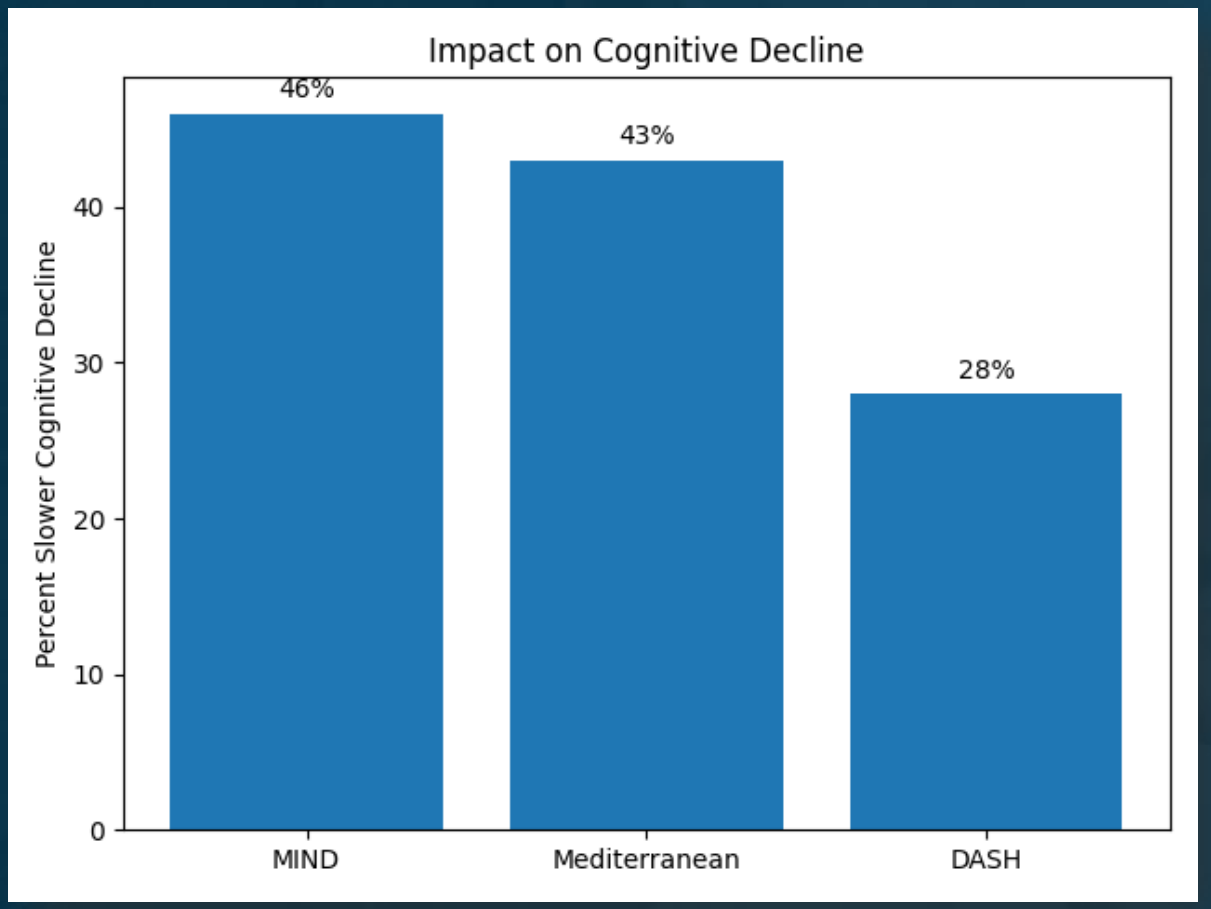




The Smart Diet



- **MIND Diet (Most Brain-Specific)**
 - 35% lower Alzheimer's risk with moderate adherence
 - 53% lower Alzheimer's risk with high adherence
 - Slows cognitive decline \approx 7.5 years equivalent aging delay
 - 17–22% lower overall dementia risk (meta-analyses)
- **Mediterranean Diet (Strongest Trial Evidence)**
 - 27% lower Alzheimer's risk (meta-analysis)
 - 15–20% lower overall dementia risk (pooled data)
 - 40–45% slower cognitive decline (cohort-based estimates)
 - Best supported by randomized trials (PREDIMED)
- **DASH Diet (Vascular Brain Protection)**
 - 39% lower Alzheimer's risk (high adherence cohort data)
 - 20% lower dementia risk (meta-analysis trend)
 - 28% slower cognitive decline (cohort estimates)
 - 40% lower late-life cognitive decline risk (recent large cohort)



Morris et al., 2015
Tangney et al., 2014
Valls-Pedret et al., 2015
Barnes et al., 2023
García-Casares et al., 2021
Nucci et al., 2024
Chen et al., 2023



It's More Than Just Diet!

- Mediterranean, DASH, and MIND diets **ALL** reduce dementia risk
 - **The MIND diet has the strongest link** to slower cognitive decline
 - Higher adherence = Greater protection
 - Avoid extreme fad diets (Keto and Ornish)
 - Lack scientific backing
 - Mixed results
- Blue Zone populations thrive on **lifestyle** habits beyond just diet.

Longevity isn't just about what you eat—it's how you live!



- ✓ Whole-food
- ✓ Consistency
- ✓ Moderation
- ✓ Natural Movement
- ✓ Socializing
- ✓ Purpose

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