

An abstract geometric pattern composed of numerous triangles in various colors including yellow, orange, red, pink, purple, blue, and green, creating a mosaic-like effect on the left side of the slide.

Nutrition and Brain Health in Individuals with Down Syndrome

What does the evidence tell us?

By Maria Kupreeva, MSc RD
Registered Dietitian

Outline

- Background on nutrition and brain health
- MIND way of eating
- Easy strategies



Alzheimer's Disease Risk in Down Syndrome



The National Down Syndrome Society says that about 30 out of every 100 people with Down Syndrome in their 50s have Alzheimer's disease.



For people with Down Syndrome in their 60s, about 50 out of every 100 have Alzheimer's disease.

Lifestyle and Brain Health

- *nutrition*
- *cognitive training*
- *physical activity*
- *sleep quality*
- *socialization*

Brain and Food

- Food & nutrition
 - *What we eat & our brain's overall well-being are linked*
- Brain is made from food
 - *Food affects how our brain is built*
 - *How our brain is built affects how it works*





Nutrition for Brain Health

- Mediterranean + DASH = MIND
- Highlights:
 - *More plant-based and include vegetables, fruits, beans and lentils, nuts and seeds, whole grains, legumes, healthy fats, fish, and poultry.*
 - *Minimizing the consumption of red meat, sweets, processed foods, and sugar-sweetened beverages.*

MIND: Food Frequency Specifics



Vegetables: 2 or more servings per day; at least one serving of leafy green vegetable per day

Berries: 2 to 5 servings per week, minimum; not including dried berries

Whole grains: 3 or more servings per day; emphasis on grains that are minimally processed

Nuts and seeds: 5 or more servings per week; includes peanuts

Beans: 3 to 4 servings per week, minimum

Seafood: 1 or more serving per week; focus on fatty fish such as salmon, mackerel, herring or sardines

Poultry: 2 or more servings per week; focus on light meat without skin

Extra-virgin olive oil: 2 tablespoons per day; specifically extra-virgin olive oil, not other types of olive or vegetable oils

Key Nutrients

- Protein
- Carbohydrate
- Omega-3
- Vitamin D
- Over 40 nutrients daily
- Antioxidants “rust-proofing” brain
- Anti-inflammatory “cooling” the brain



Easy Ways to Incorporate Brain-Healthy Foods

Nuts and seeds for a snack (1/4 cup mixed raw or roasted nuts)

Add a handful of **leafy greens** as a side

Include **fatty fish** twice per week

Add **beans and lentils** in soups and stews

Add a vegetable and fruit at every meal and snack

Increase **variety**, not just quantity

Contact

- maria@goldenagenutrition.ca
- maria.kupreeva@gmail.com