



# Food for Thought: Nutrition for Brain Function

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Mackenzie Clapp, MS, RD, LD

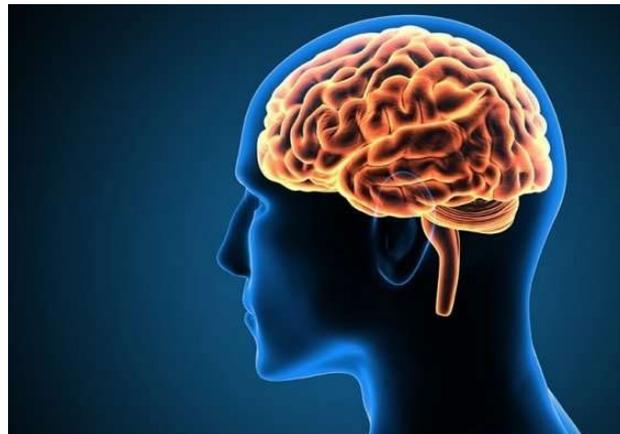


# Brain function at work

- We all need memory, mental sharpness, problem solving skills when on the job
  - Need to quickly solve a scheduling issue
  - Remember the steps to a complicated task
  - Staying focused/present when giving or receiving instructions
- Avoid presenteeism when possible
  - Intense mental distraction while physically present

# Nutrition and brain function

- What you eat can affect how your brain functions, both during a day at work and in the long-term
  - Improve performance on critical thinking/memory tasks
  - Mental energy to avoid “brain fog”
  - Decrease your risk of future chronic disease



# Breakfast for cognitive function

- Eating breakfast has been shown to improve memory and learning skills in students
- Provides your brain with the nutrients it needs to get started with the day
- Caffeine can help, but other nutrients are better than caffeine alone
  - 1994 study: caffeine and breakfast both improved memory-based recall tasks
  - Caffeine also increased blood pressure in participants, while breakfast did not
  - Caffeine and breakfast both resulted in some mood improvement

# Caffeine



Image from Wikipedia.com



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- Can have cognitive benefits, including increased alertness, improved recall, and attention
- However, too much can also have negative impact
  - High blood pressure, increased anxiety, cardiovascular stress, dehydration
- Tea vs. coffee
  - Some research suggests tea may not raise blood pressure as much as coffee but provides similar alertness

# Omega 3 fatty acids

- Omega 3 fatty acids are a type of fat that is found in cold water fish and shellfish, walnuts, flaxseed, and types of algae.
  - Anti-inflammatory and help to build cell membranes in the brain and body
  - Studies show that older adults who ate omega-3 rich fish once per week performed better on brain skills tests

# DHA, EPA, and ALA

- Types of omega-3 fatty acids
  - DHA and EPA come mainly from fish and shellfish
  - ALA comes from nuts and seeds, predominantly flaxseed and walnuts



# Glucose

- Glucose is the simplest form of sugar that comes from carbohydrates being digested
  - Your brain needs glucose to function
- Carbohydrates are not “bad” for you
  - Fruits, dairy, vegetables, whole grains



Image from American Heart Association (heart.org)

# Flavonoids



Image from [foodengineeringmag.com](http://foodengineeringmag.com)

- Flavonoids are the compounds in some fruit and berries that give them their bright colors
  - Can help protect the neurons in your brain from toxins, and help suppress inflammation
  - Good sources include citrus fruit, apples, berries, and green tea

# Activity – Healthy Mind Trail Mix

# Recipe

- 1/2 cup almonds
  - 1/2 cup walnuts
  - 1/3 cup pumpkin seeds
  - 1/3 cup sunflower seeds
  - 1/2 cup dried cranberries
  - 1/2 cup raisins
  - 1/4 cup dark or semisweet chocolate chips
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- Yields ~3 cups
  - Serving size ~1/4 cup

# Questions?

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