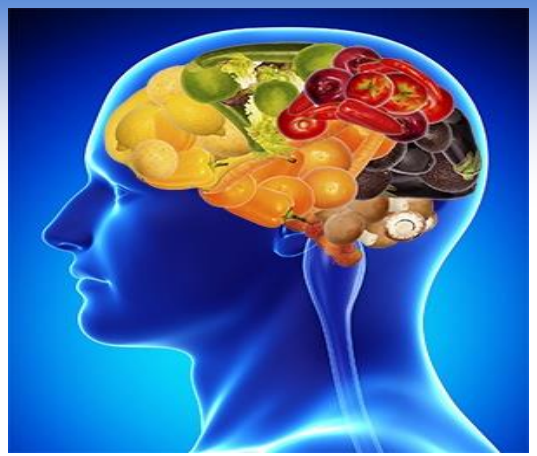

# Nutrition Interventions in Patients Living with Diabetes and Mental Illness

Christina Seely, BSc, RD, CDE

Clinical Dietitian

Parkwood Institute Mental Health Care

Diabetes Update May 4, 2018

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# Learning Objectives

- Reciprocal relationship between mental illness and diabetes
- The key role of nutrition in short and long-term mental health
- Practical nutritional strategies to help optimize mental health

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# Disclosure Statement

- I have **no actual or potential conflict of interest** in relation to this education program.

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# Included Research Highlights

- Dr. Drew Ramsey, MD – professor of psychiatry at Columbia University
  - Author of "*Eat Complete – The 21 Nutrients that Fuel Brainpower, Boost Weight Loss, and Transform your Health*"
- Dr. Carol Greenwood, PhD – senior scientist at the Rotman Research Institute at Baycrest, prof at U of T
  - Author of "*Mindful – Over 100 Recipes for Better Brain Health*"

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# Nutrition and Mental Health Resources (pt and professional)

- https://drive.google.com/drive/folders/0B0XryLKJq6aSRzBIUHc0dHk3WUk

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# DIABETES

# MENTAL ILLNESS

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# How might these factors influence diabetes management?

- Trauma history
- High stress level
- High level of anxiety
- OCD symptoms
- Poor body image
- Depressive symptoms

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# Canadian Diabetes Association 2013 Clinical Practice Guidelines

## Diabetes and Mental Health

Chapter 18

David J. Robinson, Meera Luthra,
Michael Vallis

Canadian Diabetes Association

St Joseph's Health Care London

# 2013 Key Points

1. Psychiatric disorders, particularly depression, anxiety and eating disorders, are prevalent in diabetes
2. Mental illness increases risk of diabetes and diabetic complications
3. Patients taking psychiatric medications need metabolic screening
4. Screening for depression and anxiety is important in patients with diabetes

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# Psychoactive Medications May Predispose to Diabetes

- Especially second-generation antipsychotics (olanzapine, clozapine, risperidone, quetiapine, aripiprazole, ziprasidone)
  - See "*Common Medications used in Mental Health*"
- DM and MI have shared environmental and lifestyle risk factors, ie. socioeconomic deprivation, social adversity, smoking, and reduced physical activity

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# Depressive symptoms in 30% of patients with diabetes

- Depression - leading cause of disability worldwide, twice as prevalent with DM
- Major depressive disorder in 10% with DM
- Co-morbid depression worsens clinical outcomes in DM
  - Lower physical fitness / self care
  - Decreased medication adherence
  - Increased risk of early mortality

*http://www.thelancet.com/diabetes-and-mental-health-disorders*

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# Diabetes Distress

- **Despondency** and **emotional turmoil** related to diabetes, the need for monitoring and treatment, preoccupation with complications, and loss of relationships

- Related to poorer outcomes

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# Screening for depression and anxiety is important in patients with diabetes

| Purpose | Tools |
|---|---|
| Diabetes-specific | • Problem Areas in Diabetes (PAID) Scale<br>• Diabetes Distress Scale (DDS) |
| Quality of Life | • WHO-5 |
| Depression/Anxiety | • Hospital Anxiety and Depression Scale (HADS)<br>• Patient Health Questionnaire (PHQ-9)<br>• Beck Depression Inventory (BDI) |

Websites with psychological / psychiatric scales:
www.phqscreeners.com
www.outcometracker.org/scales_library.php.

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# Classic Features of Depression

- Low energy, flat affect
- Disturbed sleeping and appetite
- Low mood, hopelessness
- May cancel appointments, appear disengaged, easily overwhelmed
- Signs may be difficult to detect – importance of routine screening

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# Other Psychiatric Associations with Diabetes

- Increased prevalence of bipolar disorder
- Anxiety (~14% for general anxiety disorder, and ~24-40% having subclinical anxiety or at least some anxiety symptoms)
- Eating disorders
- Schizophrenia and other psychotic disorders
  - 2-3X prevalence of diabetes

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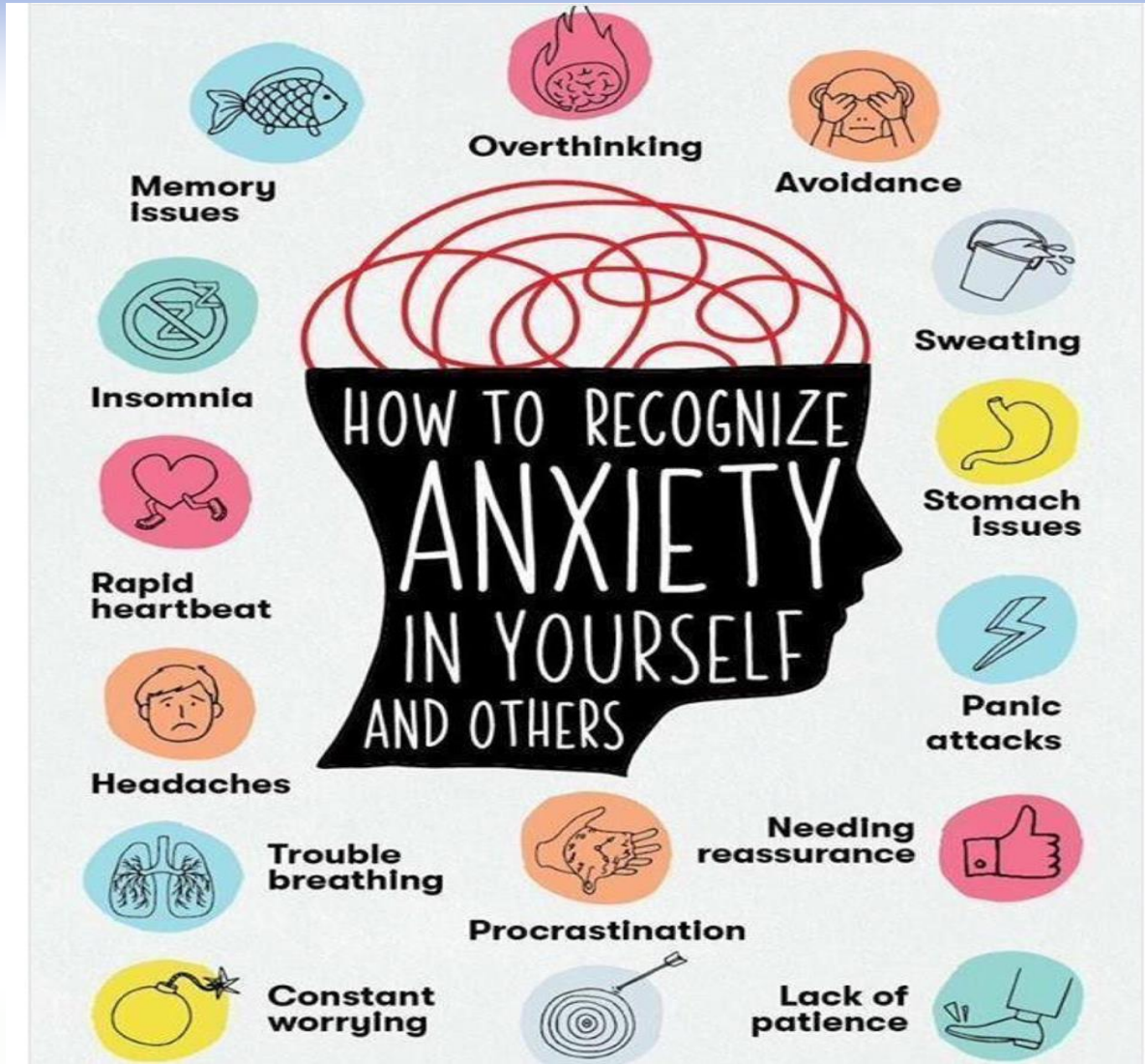


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# Adult Ambulatory Mental Health Referral

- *"As of January 15, 2018, all referrals for adult ambulatory mental health services at LHSC or SJHC should be submitted via this Centralized Access Point e-referral system webform"*
- http://www.lhsc.on.ca/Patients_Families_Visitors/MHCP_Adult/Services/Centralized_Access_Point_Ambulatory.htm

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# Dr. Arya Sharma – Canadian Obesity Network:

- *"An assessment of mental health (the first 'M' of obesity) should be part of every assessment for obesity. Not only can virtually all mental health problems (from mild to severe) promote weight gain, but they can and, in virtually all severe cases, will, present significant barriers to weight management."*

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# ASSESS

## Assess for Obesity Drivers, Complications, and Barriers

- Use the 4Ms framework to assess Mental, Mechanical, Metabolic, and Monetary drivers, complications, and barriers to weight management.

## The 4Ms of Obesity

### Mental

Cognition
Depression
Attention Deficit
Addiction
Psychosis
Eating Disorder
Trauma
Insomnia

### Mechanical

Sleep Apnea
Osteoarthritis
Chronic Pain
Reflux Disease
Incontinence
Thrombosis
Intertrigo
Plantar Fasciitis

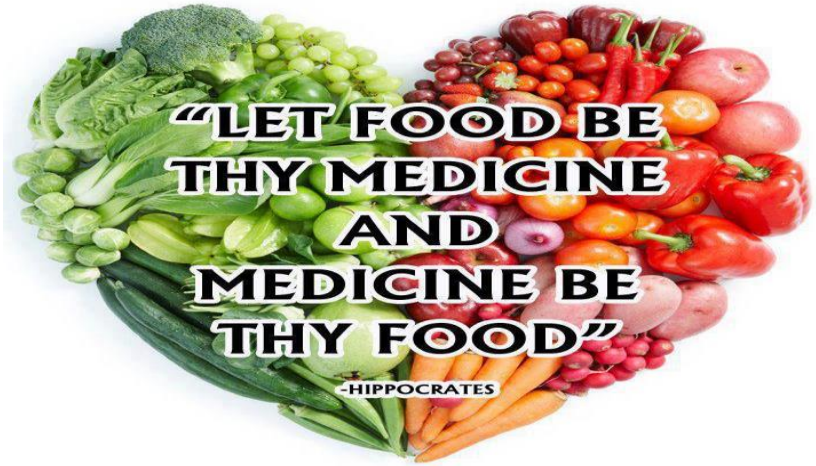

### Metabolic

Type 2 Diabetes
Dyslipidemia
Hypertension
Gout
Fatty Liver
Gallstones
PCOS
Cancer

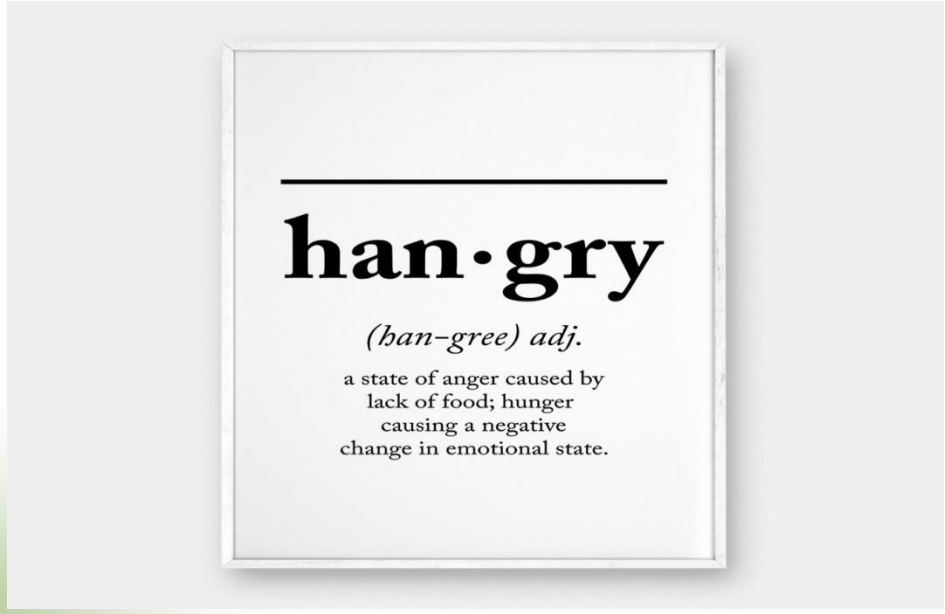

### Monetary

Education
Employment
Income
Disability
Insurance
Benefits
Bariatric Supplies
Weight-Loss Programs

# Nutrition and Mental Health









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# Lancet 2015

- *"Although the determinants of mental health are complex, the emerging and compelling evidence for nutrition as a crucial factor in the high prevalence and incidence of mental disorders suggests that diet is as important to psychiatry as it is to cardiology, endocrinology, and gastroenterology"*

**Nutritional medicine as mainstream in psychiatry 2: 271–74**

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# How many of your patients..

- Skip meals?  Have a poor appetite?
- Have a low intake of fruits and vegetables?
- Eat primarily restaurant food?
- Don’t eat any fish?

How do these habits impact brain function and mental health?

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# Brain Power

- The human brain is the most complex structure in the known universe
- Brain has the hungriest cells in the body
- The brain is only 2% of the body's weight, but uses 20% of food energy
  - It is affected in the short and long term by what people eat and drink
- ¼ of every pump of blood goes to brain

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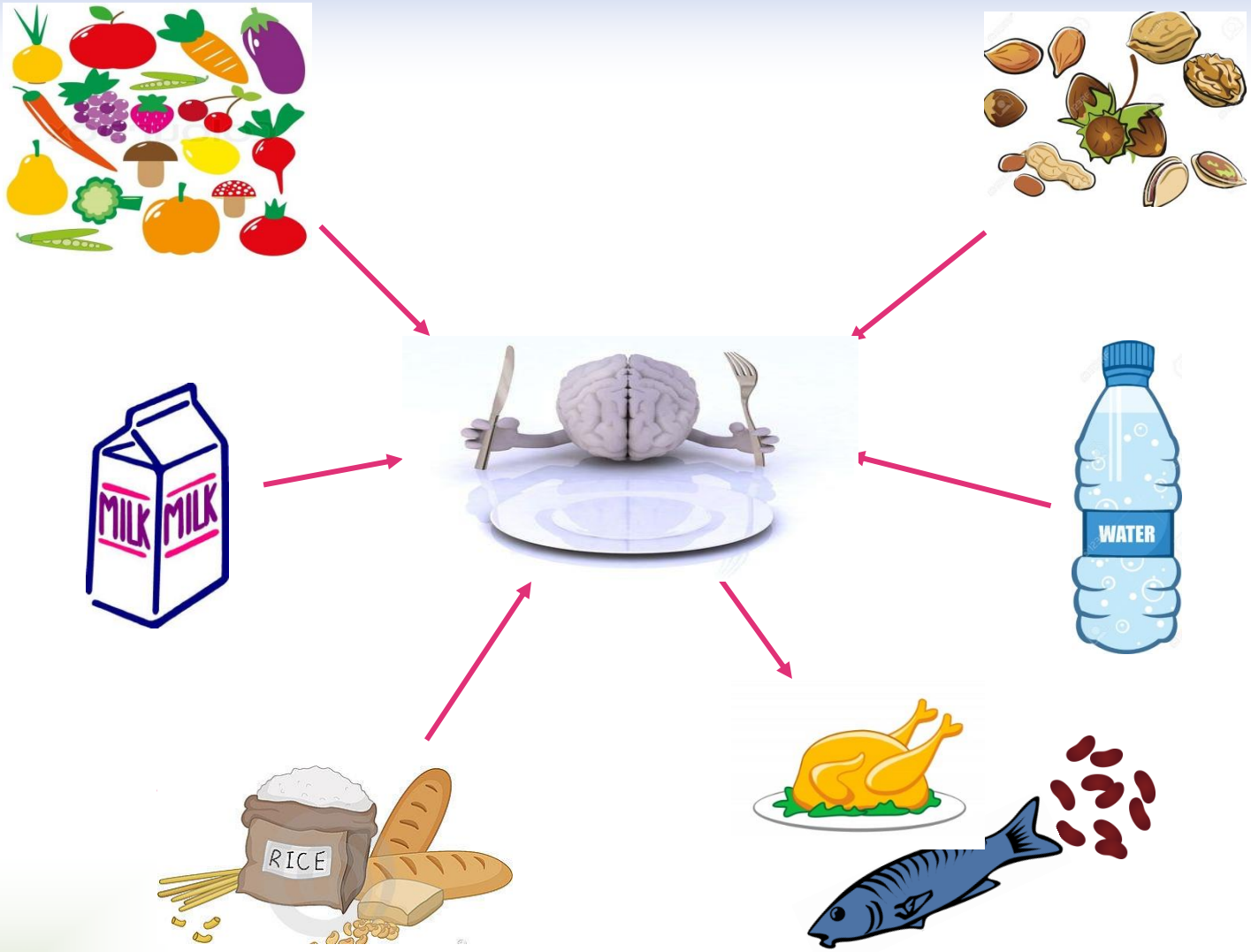


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# Brain Fuel

- Brain requires nutrients to build and maintain its structure and function, fuel the quadrillions of connections, and to protect it from disease and premature aging
- Body and brain require more than 50 nutrients, 21 are considered essential as the body can’t make them, they have to come from diet

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# Support Brain Health

- Food is the largest factor within personal control that can help preserve memory and decrease risk of dementia and depression
- Diet can reduce risk of depression up to 40%
- 50% of Alzheimer's diagnoses are attributed to modifiable risk factors including diet and lifestyle associated health conditions

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# Nutrition and the Brain

- A well-nourished brain is more resilient in face of stressors, is more focused, and provides a more stable mood
- In past 20 years, research has proven the brain has capacity to renew and repair itself using nutrients
- Nutrition affects the brain throughout the lifecycle with significant implications for mental health

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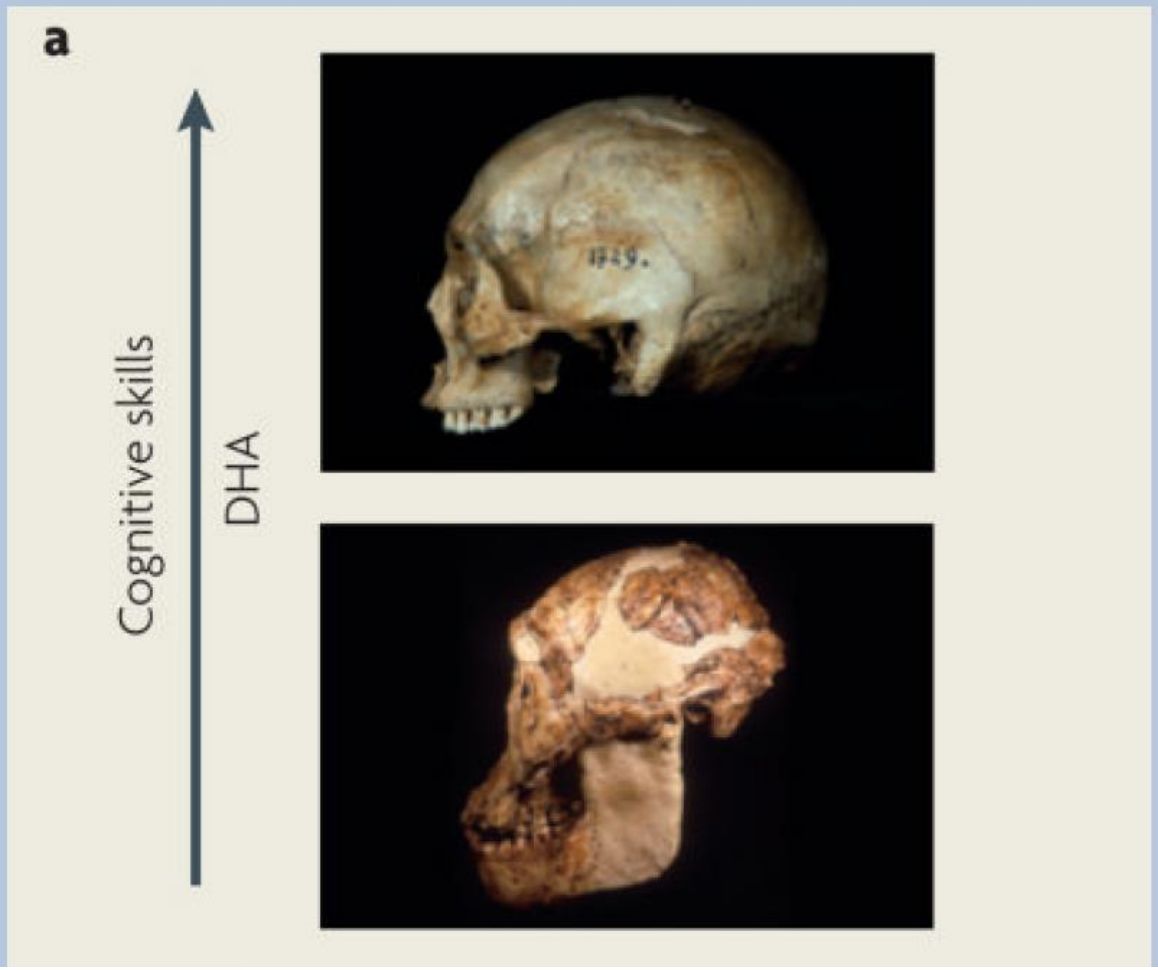
## Feeding as an adaptive mechanism for the development of cognitive skills




Abundant paleontological evidence suggests that there is a direct relationship between access to food and brain size

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# Age 40+ - Impact of Lifestyle

- The health and lifestyle choices made as early as age 40 can determine brain's health and function much later in life
- It is never too early or too late to adopt healthier habits to promote successful aging and functioning for body and brain

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# Diverse Dietary Habits

- A wide range of diet quality exists from “survive” to “thrive”
- Changes in those with the lowest diet quality will have the biggest potential benefits
- Changes can be made from any starting point

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# Changes in Modern Diet

- Increasingly, people are over-fed but under-nourished
- The Western diet is high in processed foods, sugar, restaurant food, and there is a dramatic decrease in the intake of omega-3 fatty acids, plant foods, and fibre

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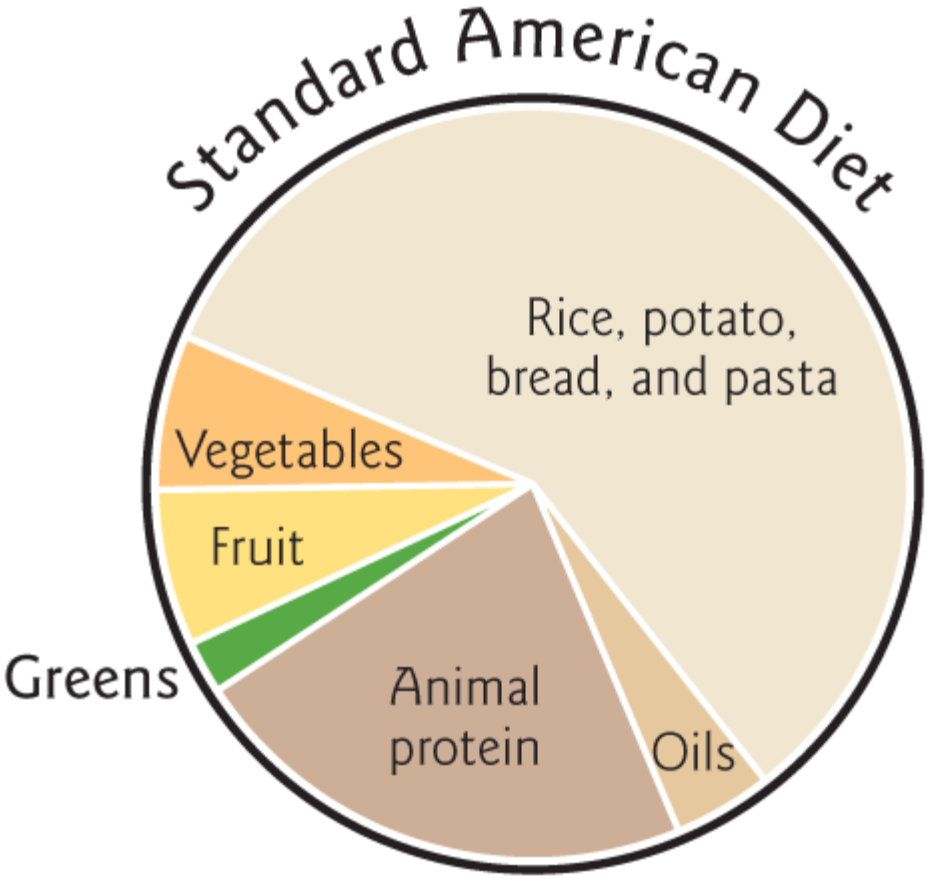
# Standard American Diet (SAD)




AKA “the beige diet”, and it is pro-inflammation

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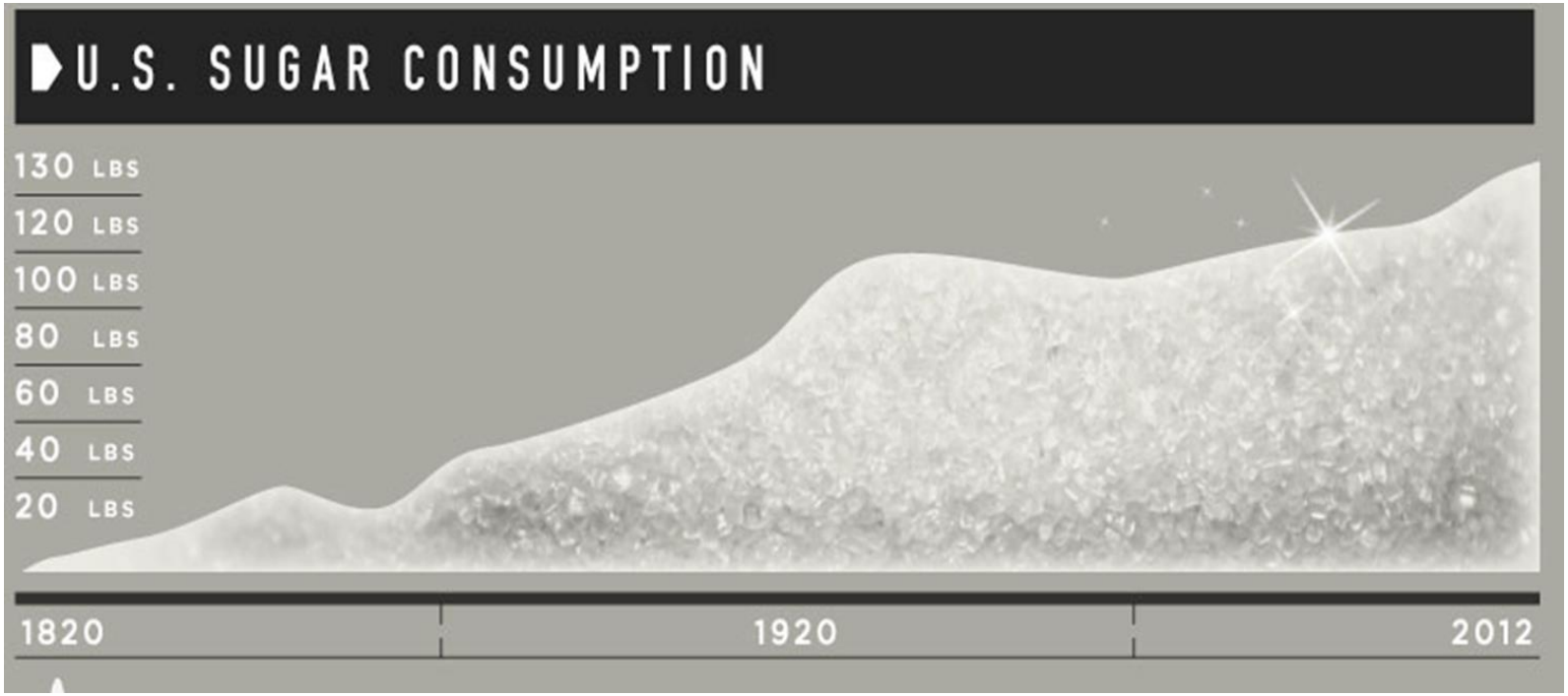
# Sugar Shocked




Americans consume over 130 lbs of sugar / year. High sugar diets are linked with inflammation and weight gain.

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# Western Diet Spread

- Western diet is spreading around the world, even into the four “blue zones” which have the largest concentrations of people living past 100 years
  - The next generation even in these regions is expected to live shorter lives due to less activity and diet changes


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# Nutrition and the Brain

- Brain matter is about 60% unsaturated fat (30-35% omega-3 and omega-6 fatty acids)
- Key nutrients include:
  - Omega-3 fats
  - Minerals such as zinc, magnesium, and iron
  - Vitamins such as folate, B vitamins, antioxidants (vitamin C and E)
  - Amino acids such as tryptophan and tyrosine

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# 21 Brain Essential Nutrients

- **7 for Foundation**
  - Omega-3 fats
  - Zinc
  - Vitamin B12
  - Magnesium
  - Vitamin B9
  - Good bugs: prebiotics and probiotics
  - Complete proteins

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# 21 Brain Essential Nutrients

- **7 for Protection**
  - Vitamin E
  - Vitamin K
  - Vitamin A and Carotenoids
  - Phytonutrients: The polyphenols
  - Monounsaturated fats (MUFAs)
  - Vitamin D
  - Selenium

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# 21 Brain Essential Nutrients

- **7 for Ignition (energy production)**
  - Iron
  - Vitamin B1
  - Choline
  - Calcium
  - Potassium
  - Iodine
  - Vitamin C

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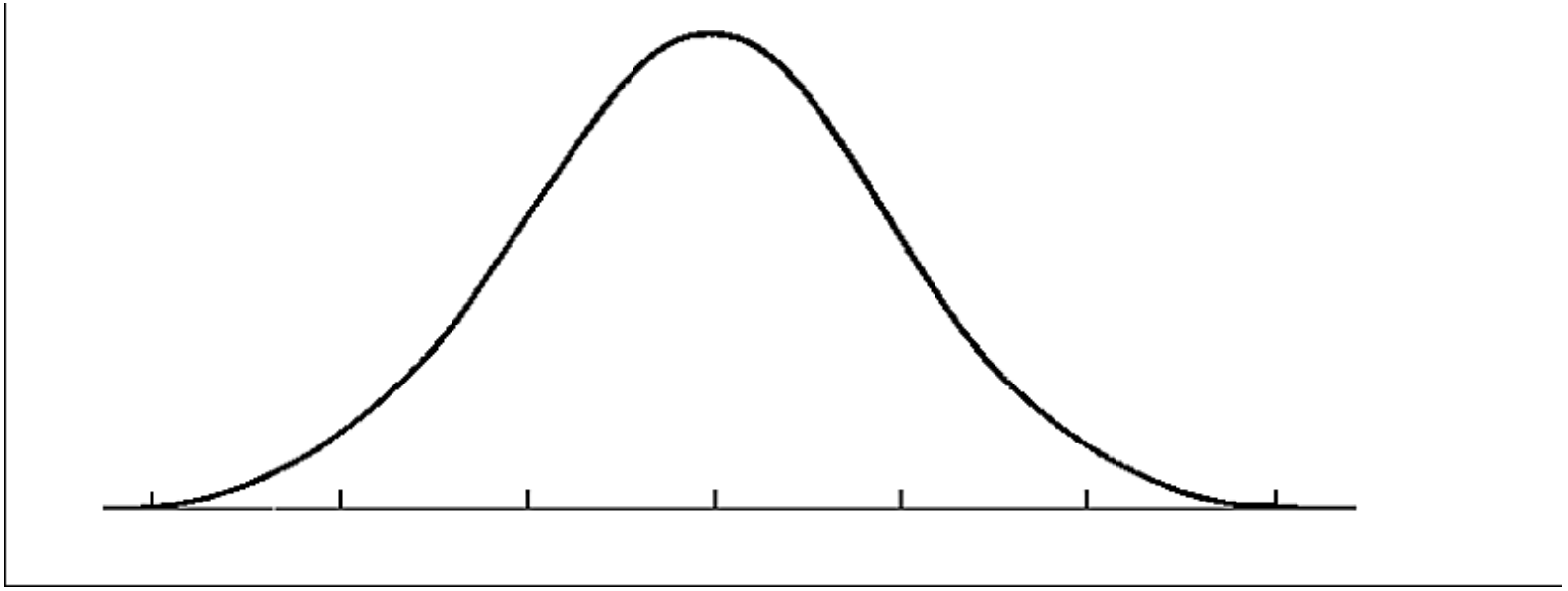
# Avoid Deficient or Toxic Levels



Optimal function occurs over a fairly wide range of nutrient intake levels, however deficient or toxic levels have serious health consequences

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# North Americans Missing Key Nutrients

- Not getting enough:
  - Magnesium – 68%
  - Folate – 75%
  - Vitamin E – 86%

  Becoming deficient in any key nutrient impacts brain and body functioning (may feel run-down, irritable, sluggish, low mood)

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# Inflammation and Mental Health

- Oxidative stress and inflammation are linked as both a cause and consequence of depression
- Chronic disease such as obesity, diabetes etc increase inflammation
- A healthy diet's ability to help lower inflammation reduces risk of some types of physical and mental illnesses

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# Brain Inflammation and Depression

- A 2015 CAMH study found measures of brain inflammation were 30% higher in people with clinical depression
- *“As more than half of people with major depression do not respond to antidepressant treatments, treating depression with anti-inflammatories is one avenue for future research”*

  – Dr. Jeffrey Meyer, CAMH

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# Gut Flora and Mental Health

- Gut microbiome has >100 trillion bacteria and is influenced by diet
- Microbiome also links together stress, inflammation, infection
- 26% of patients with anxiety disorders have IBS
- Gut-brain research is ongoing, ie “Gut Feelings” research team at McMaster

Gut Feelings Research Group

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# Gut Flora and Mental Health

- Animal studies demonstrated that probiotic bacteria can reduce depressive and anxiety symptoms and increase social behaviour
- Transplants of purified fecal bacteria is showing research promise as a treatment for depression, anxiety, and for IBS
- Probiotics and fermented foods can help improve healthy gut bacteria
  - Kefir, kimchi, kombucha, sauerkraut

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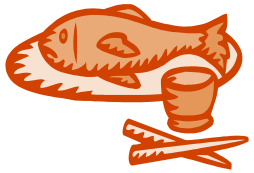
# Healthy Eating Patterns

- Mediterranean diet
  - Rich in fruits, vegetables, whole grains, fish, beans, olive oil, chicken
  - Red meat is had monthly
  - Benefits for physical and mental health



- DASH diet - Designed to lower bp
  - Grains, veggies, fruits, low-fat dairy, nuts seeds, legumes, occasional lean meat
  - Lowers bp, increases HDL, and decreases LDL and TG

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# Mediterranean-DASH Intervention for Neurogenerative Delay (MIND)

- Selection of the most brain-healthy foods from two well-established diets
- Antioxidant rich and anti-inflammatory foods protect the brain and make it harder for plaques to form
- Limits foods that in excess promote plaque formation

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# MIND Diet

- 10 brain-healthy foods: green leafy vegetables, other vegetables, berries, nuts, beans, whole grains, fish, poultry, olive oil and wine
- 5 foods to limit: butter, whole-fat cheese, fried fast foods, red meat, and pastries and sweets

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# How is MIND Diet Different from Mediteranean?

- Less demanding with fewer required servings of fish, grains, fruits, and vegetables
- No emphasis on dairy or limits on total fat
- Specifically recommends leafy green vegetables
- Only fruit recommendation is berries

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# MIND Diet

- Created by Rush University Medical Center and Harvard University
- Rush Memory and Aging Project (MAP) - followed 923 people aged 58 to 98 years, results published in 2015
- Compared how closely diets reflected MIND, Mediterranean, and DASH diets

*Alzheimers Dement. 2015 September; 11 (9): 1007-1014*

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# MIND Diet Scoring (1 pt each)

1) At least 3 servings of whole grains
2) Two serving of vegetables
3) 1 glass of wine
4) Leafy greens at least 6 X per week
5) Nuts at least 5X per week
6) Beans 4X per week
7) Berries twice a week
8) Poultry 2x per week
9) Fish 1X per week
10) Olive oil as the main oil

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# Foods to Limit (1 pt each)

1) Less than 1 T butter/margarine per day
2) Sweets less than 5X per week
3) Red meat fewer than 4X per week
4) Less than one serving of whole-fat cheese each week
5) Fried fast food less than once a week.

- MIND diet scores ranged from 2.5 to 12.5, average score 7.4. Results were divided into top, middle, and lowest scores

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# MIND Diet

- Results showed reduced risk of developing Alzheimer' disease by 35% when followed moderately, to 53% when followed closely
- See "*Mental Health and Nutrition Diet Studies*" folder on resource G drive

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# Comparing Diets

- Mediterranean diet top third scores cut Alzheimer's risk by 54%
- DASH diet top third of scores cut risk of Alzheimer's by 39%
- Moderately following any of the three diets (the middle diet scores) showed the biggest Alzheimer's risk reduction from the MIND diet

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# Rush University MAP Study #2

- Used 19 standardized tests to evaluate five cognitive domains and compared to MIND diet score
- “The study findings suggest the MIND diet substantially slows cognitive decline with age - by seven and a half years - for those with top MIND diet scores

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# Not only Mediterranean or MIND diets

- Many styles of cooking (e.g., Asian, North American and European) can support better brain health provided they are rich in fruits, vegetables and whole grains, and low in fat and highly processed foods

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# SMILES Study

- 12-week study of an adjunctive dietary intervention in the treatment of moderate to severe depression. 67 participants.
- Seven 1:1 nutritional consulting sessions with education on Mediterranean diet delivered by a RD (control group received social support visits)
- Depression symptomatology was the primary endpoint, assessed by MADRS (Montgomery-Asberg Depression Scale) at 12 weeks

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# SMILES Study Results

- At 12 weeks, 32.3% of the dietary support group and 8.0% of the social support control group achieved depression remission criteria of a score less than 10 on the MADRS
- "*Our study results suggest that dietary improvement guided by an RD may provide an efficacious treatment for this highly prevalent disorder*"

Felice N. Jacka et al. BMC Medicine 2017 15:23

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# HELFIMED Trial

- A Mediterranean-style diet and omega-3 supplements vs control group of social group
- Received 3 month supply of fish oil
  - 2 capsules per day
  - 450 mg DHA and 100 EPA each
- Group session with RD, then cooking workshops every 2 wks (simple, healthy, affordable Mediterranean-style meals) and provided food hampers

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# HELFIMED Trial

- Used Depression Anxiety Stress Scale (DASS-21) and the Assessment of Quality of Life (AQoL)-8D outcome measures
- 152 participants ages 18-65
- A validated 14 Mediterranean diet questionnaire assessed diet adherence
  - see "*Mediterranean diet score*" in the professional resources of G-drive

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# HELFIMED Results at 3 Months

- DASS depression score – improved 45% in the MedDiet group, 26.8% in social group
- 72% reduction in number of people with severe anxiety in MedDiet group
- 69% reduction in number of people with severe levels of stress in Med Diet group
- Results sustained at 6 months
- One participant went so far as to say she was ‘born again’ by good food
- Possible influence of positive expectation bias

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# Food and Mood

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# Neurotransmitters Impacted by Diet

- Serotonin, dopamine, norepinephrine, and acetylcholine are manufactured directly from food components
  - They are sensitive to food intake, and a change in dietary patterns can have profound effects on behavior, eating patterns, sleep, and energy level

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# Serotonin

- Produced in the gut from tryptophan aided by vitamins B6, B12, and folate
- Tryptophan is found in most protein foods
  - nuts, seeds, tofu, cheese, meat, fish, beans, lentils and eggs
- Carbohydrate from meal → insulin release → most amino acids transfer into cells → allows free entry of tryptophan into the brain → ↑ serotonin levels

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# Poor Food Intake and Mood

- Consumption of a diet low in carbohydrate can worsen depression (? keto diets)
- Low food intake contributes to lower blood sugar, difficulty concentrating, fatigue
- Regular (every 3-5 hours) meals and snacks contributes to a stable, happy mood
  - Why? Because the brain prefers a steady stream of glucose

Understanding nutrition, depression and mental illnesses
Indian J Psychiatry. 2008 Apr-Jun; 50(2): 77–82

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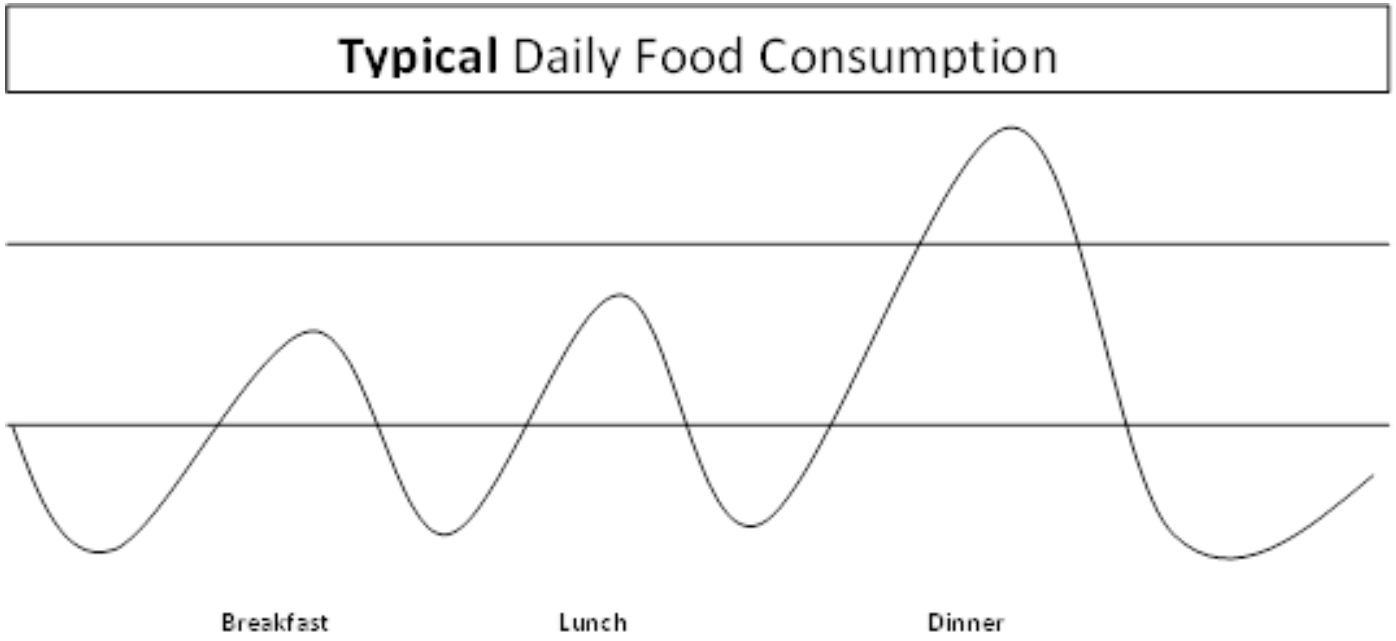
# Optimize Brain Fuel During Peak Hours




Goal: Spacing food intake equally over meals helps provide the brain with more nutrients for the heaviest workload periods during the day

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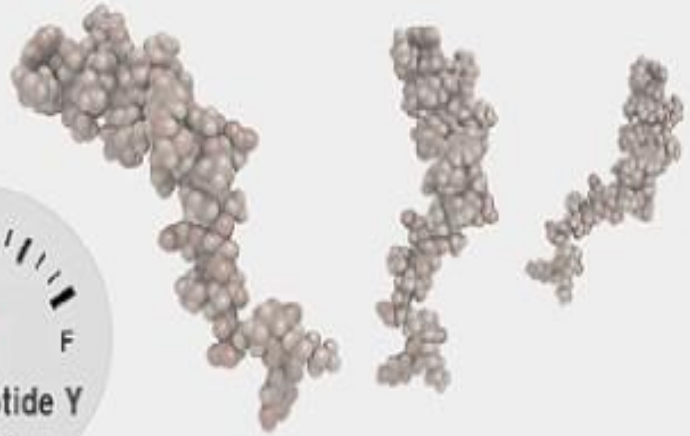
# “Hangry”

## Hunger, anger, and neuropeptides

How chemicals in the brain can make you hungry and hangry

THE CONVERSATION

When nutrient levels drop and the body gets hungry, the brain releases a chemical called **neuropeptide Y**.

**Neuropeptide Y** has several functions, including increasing food intake. It is produced in various parts of the brain, including the hypothalamus, and acts on a variety of receptors, including the **Y1 receptor**.

This increase in neuropeptide Y increases appetite and is thought to produce an associated change in aggression and aggressive behaviour.

# Fluid Intake

- The brain relies on a high blood flow, and blood is 82% water
- Daily fluid needs: Men ~3 L, Women ~2.2 L
- Hyperglycemia increases risk for dehydration
- 1% dehydration is correlated to a 5% drop in cognitive function
- 2% dehydration can cause short-term memory impairment, difficulty focusing, headaches
- Prolonged dehydration can cause brain cells to shrink in size and mass (typically in elderly)

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# Caffeine

- World's most widely consumed psychoactive substance
- By increasing alertness it allows temporary improvement in mental performance
- Observational studies suggest that moderate caffeine intake (2-3 medium cups/day coffee) offers protection against mild cognitive impairment
  - Max 400 mg caffeine/day. Excessive caffeine can cause anxiety, increase stress response, headaches, insomnia, dependence

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# Antioxidants

- Brain is especially prone to oxidative damage due to high metabolic activity
- Oxidative damage and neural inflammation are thought to contribute to neurodegenerative disorders, anxiety, depression
- Preventative antioxidant nutrients include vitamin E, vitamin C, carotenoids and flavonoids (found in plant foods)

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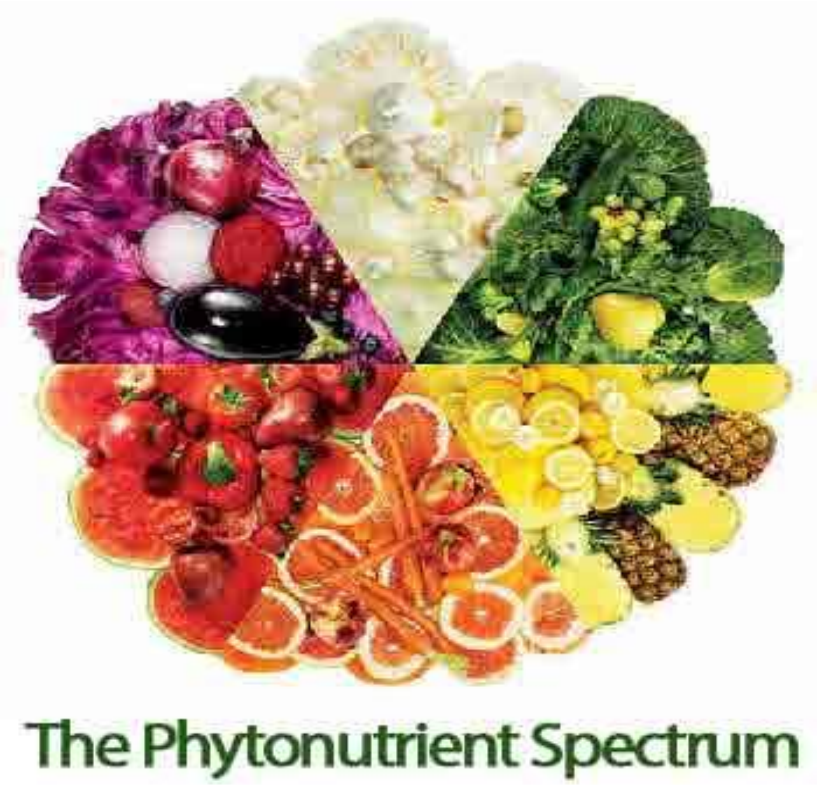
# Eat the Rainbow




Every colour offers different benefits

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# Vitamin D and Mental Health

- Increasingly implicated in the pathology of cognition and mental illness
- Receptors on most tissues and cell types, including throughout the CNS
- Helps regulate enzymes in brain, protects neurons from free radicals, reduces inflammation
- Strong evidence - 1000 IU of Vit D3 daily is needed to maintain optimal Vit D level >75 nmol/L. Diet provides avg of only 200IU/ day

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# Vitamin D and Mental Health

- Lower vitamin D levels found in populations with depression, SAD, schizophrenia, cognitive decline
- Suicide rates peak in early spring when vitamin D levels are lowest
- People who have depression are less likely to have adequate vitamin D even in summer as they often spend more time indoors

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# Alcohol – Health Benefits

- Red wine is a staple of Mediterranean diet (small glass with dinner)
- Tannins may help protect and relax arteries
- Resveratrol in high doses helped prolong life in animal studies
- Light to moderate alcohol use may reduce risk of dementia

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# Alcohol – Health Caveats

- Alcohol is easy to overconsume, is a source of simple sugars, and can increase hunger and risk of hypoglycemia
- Heavy drinking can cause Korsakoffs
- Alcohol is a CNS depressant and can worsen low mood, low energy
- Even moderate alcohol may increase risk for other diseases such as breast cancer

# Top Brain Health Foods

- Seafood
- Greens
- Nuts
- Beans/legumes

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# Seafood (Omega-3 fats)

- Contains omega-3 fats, zinc, iron, vitamin B12, and iodine
- Omega-3 fats build brain cell membranes, reduce inflammation, and promote new brain cell formation
- Omega-3 fat can improve mood and memory and reduce occurrence of brain disorders from depression to dementia
- Countries with highest intake of fish have lowest incidence of major depressive disorder

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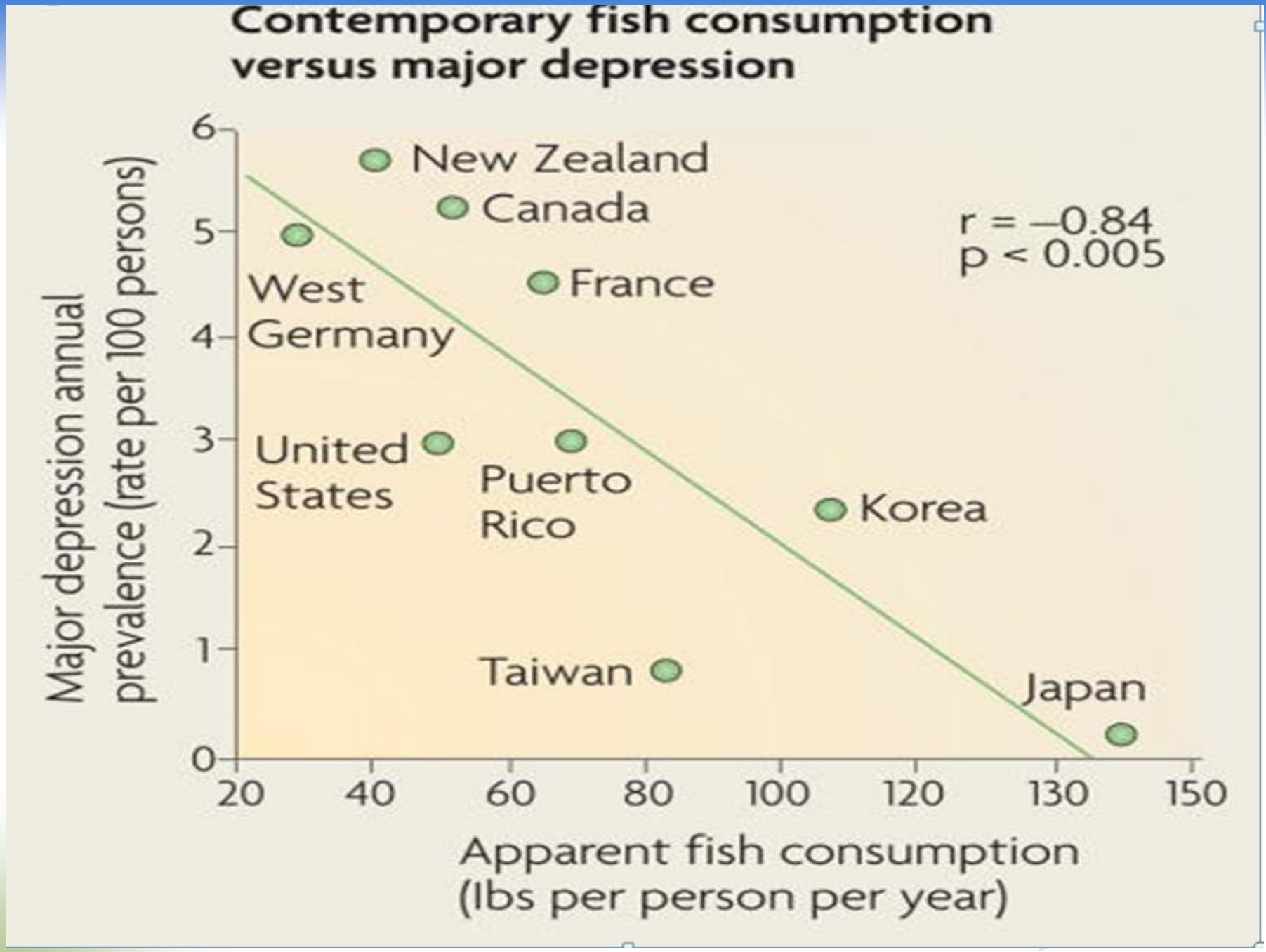
Contemporary fish consumption versus major depression
Major depression annual prevalence (rate per 100 persons)
6
5
4
3
2
1
0
New Zealand
Canada
West Germany
France
United States
Puerto Rico
Korea
Taiwan
Japan
r = –0.84
p < 0.005
20
40
60
80
100
120
130
150
Apparent fish consumption (lbs per person per year)

# Omega-3 Fats

- Excellent sources include salmon, sardines, mackerel, herring
- Good sources include halibut, lobster, shrimp, white canned tuna
- Aim for 1-2 servings of fatty fish per week
- Omega-3 supplements of avg 3 g daily for 6-8 weeks improved depressive symptoms by 35% as per meta-analysis of research
  - http://www.dhaomega3.org/Mental-Health
  - Vegetarians can take algae omega-3 supplements

1 g daily intake of EPA and DHA is recommended to maintain brain health – Nutritional Factors Affecting Mental Health, 2016

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# Leafy Greens

- Kale, 1 cup chopped, 33 calories
  - Vitamin A: 206%
  - Vitamin K: 684%
  - Vitamin C: 134%
  - Vitamin B6: 9%
  - Manganese: 26%
  - Calcium: 9%
  - Copper: 10%

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# Nuts

- 22 almonds = 162 calories (measure using ¼ cup)
  - Vitamin E 37%
  - Manganese 37%
  - Magnesium 20 %
  - Protein 6 grams

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# Lentils

- 1 cup = 230 calories
  - Folate 90%
  - Fibre – 67%
  - Iron – 37%
  - Protein 18 g

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# Nutrition Lifestyle Tips

- Include whole grains
  - Provides antioxidants, B vitamins, minerals, fiber
  - Helps slow rise and fall of blood sugar levels
  - 1 in 6 grains that Canadians eat are whole grain
- Enhance the flavors of foods with spices and herbs - many are potent antioxidants
- Consume raw nuts, seeds, and oils derived from them on a regular basis

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# Nutrition Lifestyle Tips

- For greater mental energy and alertness during the day, eat higher amounts of protein at breakfast and lunch

- Balance blood sugar and neurotransmitter function with a mix of protein, fat, and carbohydrate at every meal and snack
  - 3 or 4 food groups at each meal

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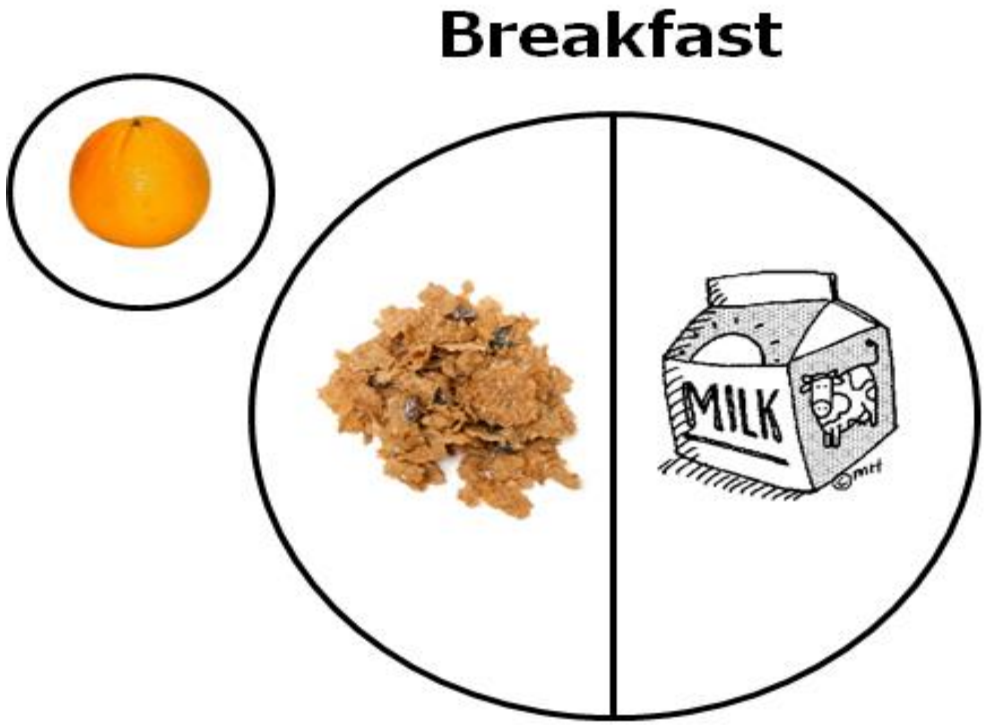
# Combining Food Groups

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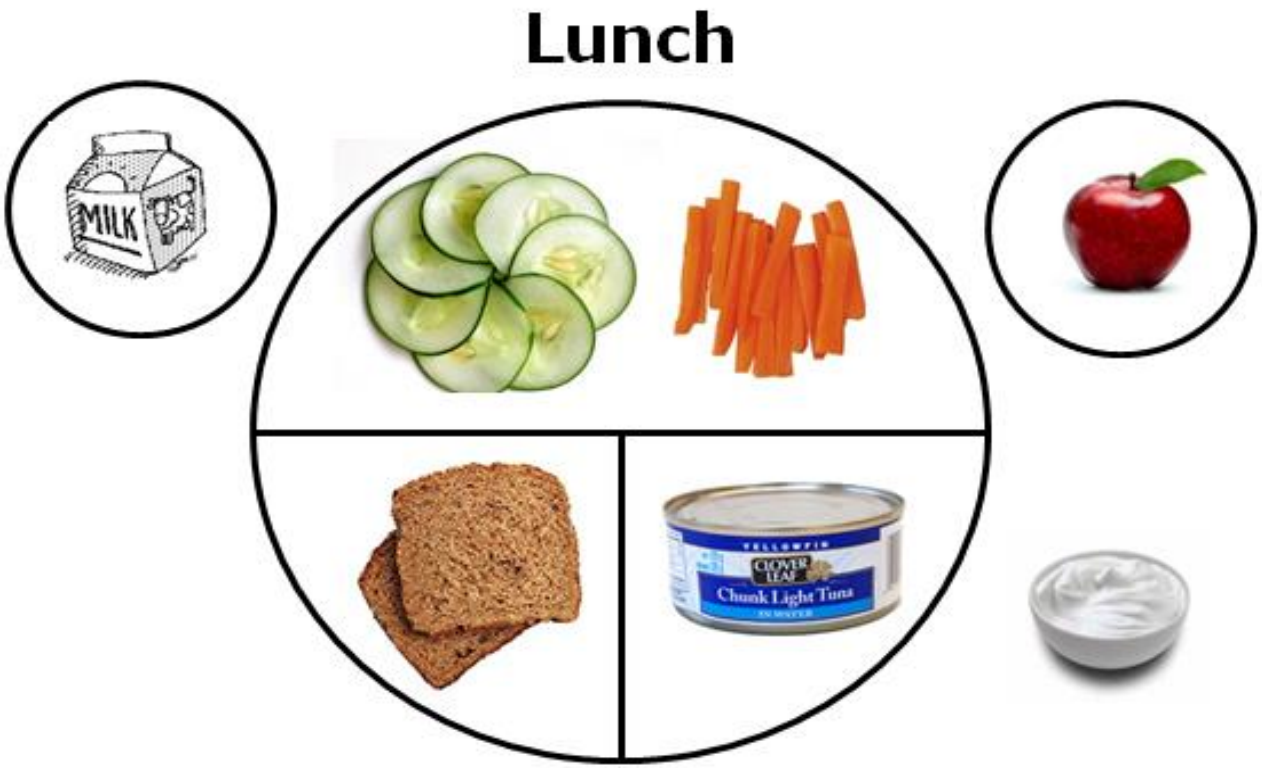
# Divided Plate

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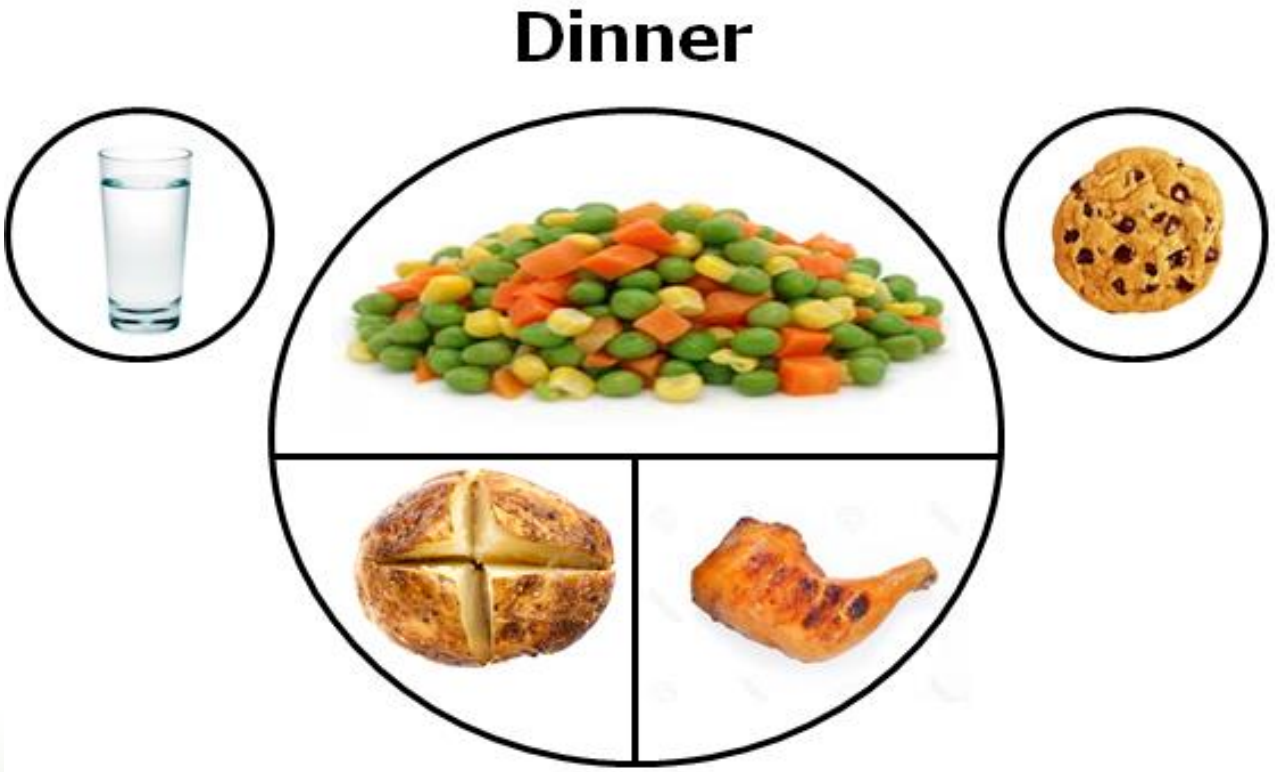
# Divided Plate

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# Food Insecurity

- 69.5% of those who rely on government assistance report food insecurity
- Income is the number one predictor of diet quality and physical health status
- Food insecurity is linked to higher rates of mental illness

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# Special Diet Allowance

- People receiving OSDP can call their caseworker and ask to be mailed the Special Diet Allowance form
- A doctor, nurse practitioner, or dietitian can fill out form
- Approved conditions listed on-line, include diabetes, HTN, high cholesterol, BMI >40
  - Monthly amounts for the list above is ~ $50-$85

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# Lower Cost Brain Healthy Options

- Frozen vegetables or fruits (picked and frozen at peak of freshness)
- Canned beans, tuna
- Eggs (contain majority of the essential nutrients), 4 / week with diabetes
- Whole wheat bread or pasta
- Peanuts (vs pricier almonds / walnuts)

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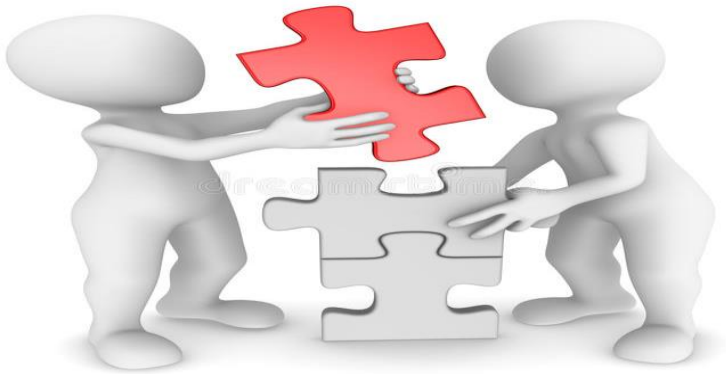
# Practical Ideas for Working with People Living with Mental Illness



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# SMART Goals Tailor to Person

- **S**pecific, **M**easurable, **A**ction-oriented, **R**ealistic, **T**ime Frame
- Ask person what is most realistic for their goal(s)
- Ask are they open to setting a time frame to achieve goal, and are they willing to track it (ie. food journal)? These parts may feel overwhelming

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# Anxiety Disorders and Nutrition

- Can trigger somatic complaints (physical symptoms), such as GI symptoms, fear of choking, fear of gaining weight
- May be preoccupied/hypervigilant about areas such as bowel regularity, wt goals
- May be fearful of negative health outcomes

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# Working with Patients with Anxiety

- May have many concerns
- May worry about “what ifs”
- May struggle to make decisions
- May ask the same or similar questions repeatedly

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# Working with Patients with Anxiety

- Simplify information, aim for concise and clear
- Reassure patient as needed
- Repeat information as requested
- Avoid giving alarming information if possible, aim for a positive tone
- Provide adequate time for listening to their concerns, answering questions and a clear summary of the plan (written out if possible)

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# Working with Patients with Anxiety

- Narrow choices if they seem paralyzed on making a decision “which of these three options would you prefer?”
- Help them work through any “worst case scenario” worries by providing an objective and reassuring viewpoint
  - Ie. How could you reassure an anxious patient who is worried about the risk of hypoglycemia?

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# Working with Patients with Depression

- May have no interest in any type of food, not even previous favourites
- May feel full easily when they do try to eat (body adapts to low intake)
- May have somatic concerns such as nausea or stomach aches
- May have little to no motivation to eat/drink
- Less common is comfort eating/emotional eating

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# Working with Patients with Depression – No Appetite

- Encourage liquid nutrition such as Glucerna, milk
- Encourage small amounts of solids, anything they can manage
- Educate on key role of nutrition to support improvements in mood/energy, help produce serotonin, and to counter effects of low blood sugar
- Discuss how eating small amounts of food at regular times gradually trains the body to expect food again, and appetite can be restored

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# Working with Patients with Depression

- Emphasize with pt's struggles, offer hope that things will improve
  - Validate how it is hard for them to eat or exercise at present, but that there is hope it will get easier
- Express empathy if they are struggling to attend their appointments regularly, vs considering them non-compliant
- Double check if any weight loss is intentional or related to poor appetite

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# Possible Steps for Patients

- Increase intake of vegetables/fruits by 1-2 servings?
- Eat more frequently (goal every 3-6 hours?)
- Increase water intake?
- Eat at home more often?
- Have fish more often?
- Try healthier options when eating out?

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# Possible Steps for Patients

- Try new recipes (can search “easy, low-cost”)?
- Plan out meals before getting groceries?
- Try a vegetarian meal with beans?
- Have protein at each meal?
- Try healthier snack options?

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# Nutrition and Mental Health Podcast

- http://foodandhealthtoday.com/nutrition-and-mental-health-part-5-with-rd-christina-seely/

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# Conclusion

- There is a reciprocal relationship between mental illness and diabetes
- Diet and nutrition are essential pieces of the puzzle in the physical and mental health of people living with diabetes and/or mental illness
- Focus positive messaging on fueling up to benefit body and brain vs focusing on foods to limit

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# Questions? Interested in more Information?

E-mails or calls always welcome

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