

# Food & Mood

## Nutrition to Fight the Winter Blues

### Don't cut the carbs

#### Why Carbohydrates are important?

- 1) They are the main fuel source for the brain.
  - 2) They are needed to create serotonin.
- **Serotonin:** a brain chemical which improves mood and how we feel.

Not getting enough carbohydrates in your diet can result in feelings of tiredness, “fuzzy mind”, and poor mood.

**Carbohydrate rich foods:** fruit, milk products, grain & starches, potatoes, corn

#### Recommendation:

- Include grain/starch at each meal
- Make at least half of your grains whole grains in a day
- Avoid highly processed/refined carbohydrates (e.g. white breads, white rice, white pasta, sweets, baked goods)



### Limit caffeine

Too much caffeine can have adverse effects such as irritability, headache, insomnia, and feelings of anxiousness.

#### Recommendation:

- Limit caffeine intake to no more than 200-400mg/day

	Serving size	Caffeine (mg)
Coffee	1 cup (8oz)	80-180
Energy drink	1 cup (8oz)	80-125
Black tea	1 cup (8oz)	43-60
Green/white tea	1 cup (8oz)	25-45
Cola	1 can (355mL)	25-43
Dark Chocolate	1 bar (40g)	27



## Drink water

---

*Water makes up about 80% of the brain and is essential in its functioning*

---

Poor hydration can result in restlessness, irritability, tiredness, and poor mood.

### **Recommendation:**

Aim to consume:

- Females: 2.2L/day (9cups)
- Males: 3L/day (12cups)
- **Good fluid sources:** milk, water, herbal tea, club soda

## Eat fish

Fat is vital for proper brain function<sup>1</sup>

### **Omega-3 fats:**

- 33% dry weight of brain is composed of omega-3 fats
- 3 common forms: ALA, EPA, DHA
- Decline in omega-3 in diets has been associated with increased incidence of depression
- Fish consumption associated with reduced risk of depression
- Foods rich in EPA/DHA provide the most brain health benefits<sup>2</sup>
- **Sources of EPA/DHA:** fatty fish, omega-3 eggs
- **Sources of ALA:** flaxseed, chia seed, walnuts, soybeans

### **Recommendation:**

- Eat 2 servings of fatty fish/week



## Eat fruits and veggies

**Antioxidants:** rid the body of oxidants/free radicals

- **Sources:** mostly fruits and vegetables, some in nuts, seeds, tuna, garlic, fish, green/white tea

**Oxidants/free radicals:** unstable molecules. Too many within the body can result in inflammation and damage to the body.

- **Sources (avoid):** saturated & trans fats, stress, anxiety, pollution, alcohol

Inflammation of the brain found to be associated with depression and anxiety. Antioxidants have been shown to possess antidepressant and anti-anxiety activity.

### **Recommendation:**

- Aim to consume 7-10 servings of fruits and vegetables per day.
- Eat at least 1 dark green and 1 orange vegetable each day.



## B-Vitamins

Role in brain health- needed to:

- Breakdown carbohydrates → sugar
- Create healthy brain cells
- Create neurotransmitters
  - (mood regulating brain chemicals, e.g. serotonin, dopamine)

Deficiency in B vitamins have been associated with depression, poor memory, stress.

### Food sources:

- B1, B2, B3, B6 : Whole grains, green vegetables, meat and alternatives, milk products, fortified breads and cereals
- B12- meat, fish, dairy products, eggs

## Other Vitamins & Minerals

Deficiency in the nutrients below has been associated with negative mental health symptoms

Nutrient	Common Food source
Folic acid	dark green vegetables, dried legumes, enriched pasta, flour
Iron	meat, fish and poultry, dried beans, peas and lentils, some fruits and vegetables, fortified flour, cereal, pasta
Vitamin C	vegetables and fruit
Magnesium	legumes, nuts, seeds, fish, whole grains.
Zinc	seafood, meat, seeds, and cooked dried beans, peas and lentils

## Overall Recommendation

Eat a balanced diet according to Canada's Food guide

A balanced meal looks like: ( $\frac{1}{2}$  plate veggies,  $\frac{1}{4}$  plate grain/starch,  $\frac{1}{4}$  protein)

### Milk Products

- ✓ B vitamins



### Vegetables

- ✓ Antioxidants
- ✓ Folic Acid
- ✓ Vitamin C



### Fruits

- ✓ Antioxidants
- ✓ Folic Acid
- ✓ Vitamin C

### Healthy Fats

(e.g. vegetable oils, avocado, soft margarine, nuts)

- ✓ 2-3tbsp/day



### Protein

- ★ Fish 2x/week
- ✓ Iron
- ✓ B-vitamins
- ✓ Magnesium
- ✓ Zinc



### Whole grains

- ✓ Carbohydrate
- ✓ B-vitamins
- ✓ Folic acid



Limit caffeine to 300-400mg/day

- about 2-3cups coffee/day

Aim to drink this much water:

- Females: 2.2L/day (9cups)
- Males: 3L/day (12cups)