



Eat Well, Age Well

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Agenda

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- ✓ Malnutrition in older adults
- ✓ Why good nutrition is important

02

Section B

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- ✓ Healthy Weight

03

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- ✓ Nutrients of concern
- ✓ Label reading

04

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- ✓ Meal planning strategies
- ✓ Tips for cooking for 1 or 2



01

**Malnutrition in
older adults**



**“Based on the results of the 2008/2009 survey,
34% of Canadians aged 65 or older
were at nutritional risk”
– Canadian Frailty Network**

Why is malnutrition common amongst seniors?



**Loss of sense
of taste/smell**



Medications



**Limited income
and financial
concerns**



**Loneliness
and social
isolation**



Illness/Disease



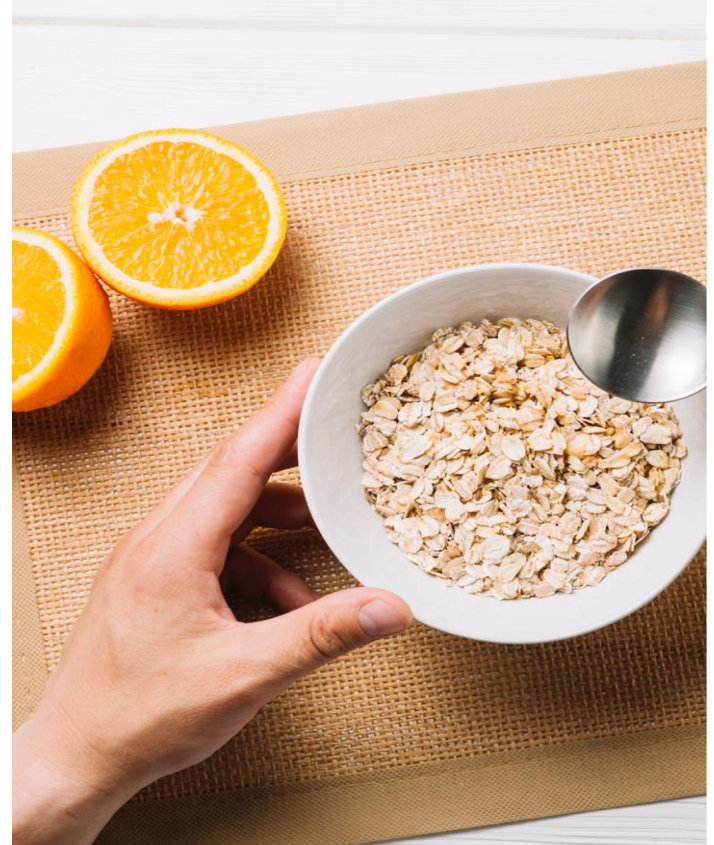
**Mobility
Issues**



**Swallowing and
chewing
difficulties**

Why is healthy eating important?

- ❖ **Maintain independence**
- ❖ **Prevent/Lower risk of chronic conditions such as heart disease and diabetes**
- ❖ **Obtain essential nutrients**
- ❖ **Maintain energy levels**
- ❖ **Reduce risk of falls by preserving muscle and bone mass**
- ❖ **Maximize your quality of life**
- ❖ **Optimal health and wellbeing**
- ❖ **Helps you recover from illness/injury**
- ❖ **Prevents unintentional weight loss/gain**





02

**Basics of Healthy Eating
& Defining a healthy
weight**

What is Healthy Eating?

Balanced Plate Meal Planning Method

Veggies & Fruit

- Low calorie, fibre rich foods, loaded with vitamins & minerals

Healthy Fats & Oils

- Use in moderation for flavour & satiety



Protein

- Helps keep you full between meals
- Supports muscles and immune system
- Animal and plant sources

Water

- Aim for 8-10 cups total fluid daily, about half from water

Whole Grains & Starchy Carbs

- Important source of energy
- Fibre for digestive health & satiety
- B-vitamins & many minerals

Meal frequency

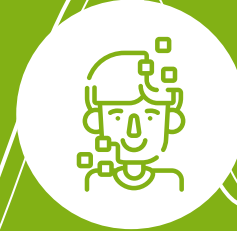


Dependent on appetite, weight loss/weight gain goals, underlying health conditions, preference, physical activity and lifestyle etc.



**5-6 smaller
more frequent
meals**

(3 meals and 3 snacks
– approx 2-3 hours apart)



**3 main meals
(snacks if
needed)**

Acceptable Macronutrient Distribution Ranges (AMDR)

Males and Females	Total Carbohydrate	Total Protein	Total Fat
19 years and over	45-65%	10-35%	20-35%

A healthy diet includes carbohydrates, protein and fats in the right amounts

Healthy Weight in Adults

65+

- BMI is not accurate, especially in adults
- Consider recent weight change, a significant weight change is defined as 5% change in 1 month, 7.5% change in 3 months, or 10% change in 6 months
 - Example: If your normal weight is 150 lbs, and you lose 15 pounds in 6 months, that is a 10% weight loss
- Target BMI is different for older adults, extra weight is protective!

Classification	BMI Range for Adults	BMI Range for Older Adults 65+	Risk of developing health problems
Underweight	< 18.5	< 22	Increased
Normal weight	18.5 - 24.9	22 - 26.9	Least
Overweight	25 - 30	27 - 29.9	Increased
Obese	≥ 30	≥ 30	Increased

“The ideal BMI range for seniors (65 years and older) is 22 – 29.9 kg/m² and is associated with the lowest mortality risk”

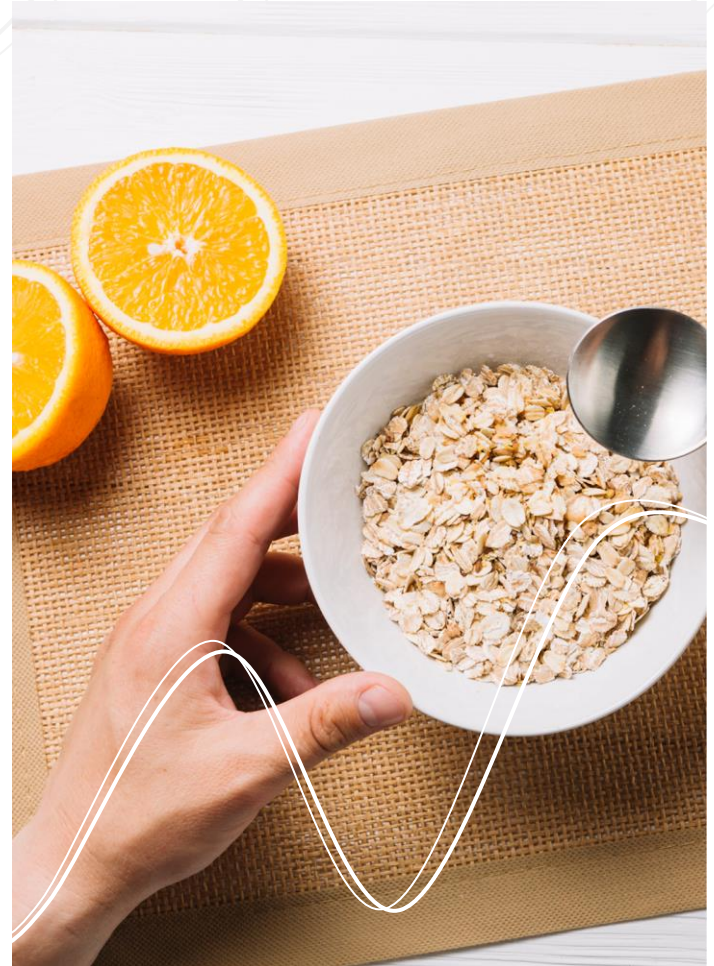


Tips for weight loss

- ◆ Practice portion control
- ◆ Prepare more meals at home
- ◆ Fill half your plate with vegetables
- ◆ Be active every day as able
- ◆ Make small achievable goals
- ◆ Practice mindful eating and listening to your hunger and fullness cues
- ◆ Aim for best weight vs goal weight

Tips for weight gain

- ◆ Eat small, frequent meals throughout the day
- ◆ Add high calorie snacks between meals
 - ◇ Examples: full fat yogurt, cheese and crackers, handful of nuts, toast with peanut butter, milkshake/smoothie
- ◆ Drink fluids separately from meals
- ◆ Add condiments and seasonings to increase flavour
- ◆ Avoid restrictive diets
- ◆ Consider nutrition supplements

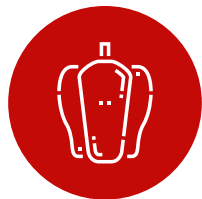




03

**Nutrients of
concern in older
adults**

Protein



Muscle Mass



Wound Healing



**Immune
Function**



Falls and Fractures

Aim for 1.0 – 1.2 grams of protein per kg of body weight

Fluids

- Dehydration is associated with increased morbidity and mortality in older adults
- You may be at risk of dehydration as you age due to:
 - Decrease in sensation of thirst
 - Decrease in body fluid
 - Decreased kidney function, more water lost during urination
 - Certain health conditions and medications



IT'S GREAT TO HYDRATE.

Staying hydrated benefits your body.



What is hydration?
Your body needs water to function. Hydration is the process of replacing water within your body.



What are sources of hydration?
Water is best. Water-rich foods (like fruits and veggies) also work to hydrate you.



Why is hydration important?
Staying hydrated helps your heart pump blood through the body, and helps to rid the body of waste. It also helps to regulate body temperature.



Rethink what you drink.
Avoid sugary fruit juices and sodas. (Even many "sports drinks" are high in sugar and calories.) Caffeinated beverages cause you to lose fluids and become less hydrated.



Staying well-hydrated.

Each person is different. But, in general, experts recommend about 15 and a half cups (or 3.7 liters) of fluids per day for men, and about 11 and a half cups (or 2.7 liters) of fluids per day for women. (Note that's cups, not glasses. Drinking glasses and water bottles often hold more than one cup.)



Make hydration a habit.

Our "Habit Coach" videos unpack the science behind habits.

Make good hydration a daily routine.

Signs and symptoms of dehydration

**Dry mouth
and/or skin**

Constipation

**DARK URINE
and/or less urine
output**

Sunken Eyes

Fatigue

**Light
headedness
and/or headache**

Nausea

**Low Blood
Pressure**

Calcium

- Important for healthy bones and teeth
- Prevent/Maintain osteoporosis
- Aim to get the majority of your calcium through foods
 - Potential negative side effects from too much supplemental calcium

Adults	Recommended Amount	Tolerable Upper Intake
19-50 years women 19-70 years men	1000 mg	2500 mg
> 50 years women > 70 years men	1200 mg	2000 mg

“OSTEOPOROSIS IS A DISEASE CHARACTERIZED BY LOW BONE MASS AND DETERIORATION OF BONE TISSUE, WHICH CAN LEAD TO INCREASED RISK OF FRACTURE” – Osteoporosis Canada

Calcium Content of Common Foods

Below is a list of the calcium content of different foods.
Serving sizes are based on average portions, and calcium content is approximate.*



MILK & MILK DRINKS

Food (200ml)	Calcium (mg)
Milk, semi-skimmed	240
Milk, skimmed	244
Milk, whole	236
Milkshake	360
Sheep Milk	380
Coco Milk	54
Soy Drink (non-enriched)	26
Soy Drink (calcium-enriched*)	240
Rice Drink	22
Oat Milk	16
Almond Milk	90

YOGHURT

Food (150g)	Calcium (mg)
Yoghurt, flavoured	197
Yoghurt, with fruit pieces	169
Yoghurt, natural	207

CHEESE

Food	Serving (g)	Calcium (mg)
Hard Cheese (e.g. Cheddar, Parmesan, Emmental, Gruyère)	30	240
Fresh Cheese (e.g. Cottage Cheese, Ricotta, Mascarpone)	200	138
Soft Cheese (e.g. Brie, Camembert)	60	240
Feta	60	270
Mozzarella	60	242
Cream Cheese	60	180

CREAM & DESSERTS

Food	Serving	Calcium (mg)
Creams, double, whipped	30ml	21
Cream, full	30ml	21
Custard made with milk, vanilla	120g	111
Ice Cream, vanilla	100g	124
Pudding, vanilla	120g	120
Rice Pudding	200g	210
Pancake	80g	62
Cheese Cake	200g	130
Waffle	80g	47

MEAT, FISH AND EGGS

Food	Serving (g)	Calcium (mg)
Egg	50	27
Red Meat	120	7
Chicken	120	17
Fish (e.g. Cod, Trout, Herring, Whitefish)	120	20
Tuna, canned	120	34
Sardines in Oil, canned	60	240
Smoked Salmon	60	9
Shrimp	150	45

Calcium Rich Foods

BEANS & LENTILS

Food	Serving (g)	Calcium (mg)
Lentils	80 raw 200 cooked	40
Chick Peas	80 raw 200 cooked	99
White Beans	80 raw 200 cooked	132
Red Beans	80 raw 200 cooked	93
Green/French Beans	900 Cooked	50

STARCHY FOODS

Food	Serving (g)	Calcium (mg)
Pasta (cooked)	180	26
Rice, White (boiled)	180	4
Potatoes (boiled)	240	14
White Bread	40 (slice)	6
Wholemeal Bread	40 (slice)	12
Muesli (cereal)	50	21
Naan	60	48

FRUITS

Food	Serving (g)	Calcium (mg)
Orange	150	60
Apple	120	6
Banana	150	12
Apricot	120 (3 pieces)	19
Cumquat (dried gooseberry)	120	72
Figs, dried	60	96
Raisins (dried grapes)	40	31

VEGETABLES

Food	Serving (g)	Calcium (mg)
Lettuce	50	19
Kale, Collard Greens	50 (raw)	32
Bok Choy/Pak Choi	50 (raw)	20
Gombo/Okra	120 (raw)	77
Cress	120 (raw)	188
Rhubarb	120 (raw)	103
Carrots	120 (raw)	36
Tomatoes	120 (raw)	11
Broccoli	120 (raw)	112

NUTS & SEEDS

Food	Serving (g)	Calcium (mg)
Almonds	30	75
Walnuts	30	28
Hazelnuts	30	56
Brazil Nuts	30	28
Sesame Seeds (hulled)	15	6
Tahini Paste	30	42

PROCESSED FOODS

Food	Serving (g)	Calcium (mg)
Quiche (cheese, eggs)	200	212
Omelet with Cheese	120	235
Pasta with Cheese	330	445
Pizza	300	378
Lasagna	300	228
Cheeseburger	200	183

OTHERS

Food	Serving (g)	Calcium (mg)
Tofu	120	126
Seaweed	100	70
Wakame	100	150

*Please note that the calcium content given for the foods listed is approximate, as calcium content varies depending on the method of production or brand. Some of the foods listed may be available as calcium-enriched products in some countries (e.g. non-dairy drinks, cereals, breads).

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Be sure you're getting enough calcium in your diet! Check your country's calcium recommendations or visit <https://www.osteoporosis.foundation/patients/prevention/calcium>



How do I know if I need a calcium supplement?



The image shows a laptop screen displaying a web form titled "OSTEOPOROSIS CALCIUM CALCULATOR". The form is for user selection and includes the following elements:

- OSTEOPOROSIS** logo with a Canadian maple leaf icon.
- CALCIUM CALCULATOR** subtitle.
- Select your sex *** label.
- Two radio button options: **Female** (with a female icon) and **Male** (with a male icon).
- Select your age *** label.
- Two radio button options: **19-49** and **50+**.
- A blue **NEXT** button at the bottom.

[Calcium Calculator | Osteoporosis Canada](#)

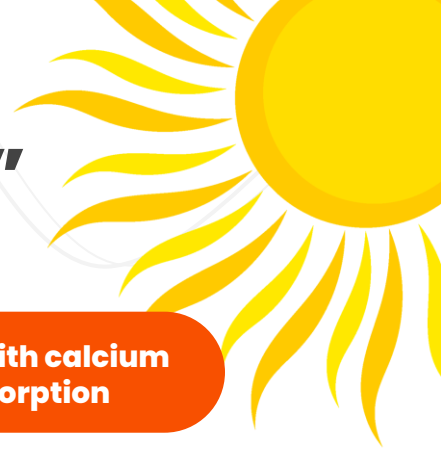
Calcium Supplements

	Pros	Cons
Calcium Carbonate	Least expensive	Needs stomach acid for absorption: must take with food
	Fewer pills needed to meet needs	Not appropriate if low stomach acid or on medications such as PPI's that cause low acid (ie) Nexium, Prevacid, Dexilant, Pantoloc
		May be constipating
		Competes for absorption with iron * If anemic/low in iron, use a different type
Calcium Citrate	Absorbed well on empty stomach	More expensive than carbonate form – may need more since there is less elemental calcium per tablet
	No gastrointestinal side effects	

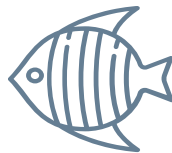
Key takeaways:

- ✓ Speak with your doctor, nurse practitioner, or dietitian before starting any supplement
- ✓ Look for **elemental** calcium on the label to determine the dosage
- ✓ Don't take more than 500-600 mg of calcium at one time

Vitamin D “The Sunshine Vitamin”



**Maintenance of
healthy bones and
teeth**



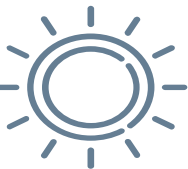
**Helps with calcium
absorption**

Immune System



**Reducing
Inflammation**

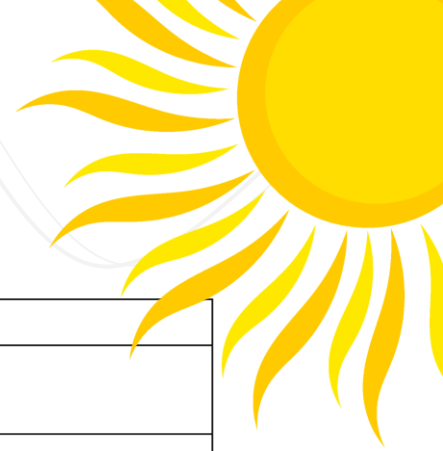
Heart Health



**Mental health
conditions such as
depression**

**Some types of
cancers**

Vitamin D Rich Foods



Food	Serving Size	Vitamin D (IU)
Salmon, sockeye/red, canned, cooked or raw	75g (2 ½ oz.)	530-699
Soy Beverage, fortified with Vitamin D	250ml (1 cup)	123
Milk (3.3% homo, 2%, 1%, skim, chocolate milk)	250ml (1cup)	103
Egg, Yolk, cooked	2 large	57-88
Sardines, Pacific, canned	75g (2 ½ oz.)	144
Tuna, albacore, raw or cooked	75g (2 ½ oz.)	82-105
Halibut, cooked	75g (2 ½ oz.)	144

*Few Foods Naturally
Contain Vitamin D*

Vitamin D Supplements



Recommend vitamin D3 supplements for Canadians of all ages

Age	Recommended Amount	Tolerable Upper Intake	Supplement Recommendations – Osteoporosis Canada
19-50 years	600 IU/d	4000 IU/d	400 – 1000 IU/d
51-70 years	600 IU/d	4000 IU/d	800 - 2000 IU/d
70 years or younger adults at risk	800 IU/d	4000 IU/d	800 – 2000 IU/d

Vitamin B12

Populations at higher risk of Vitamin B12 deficiency

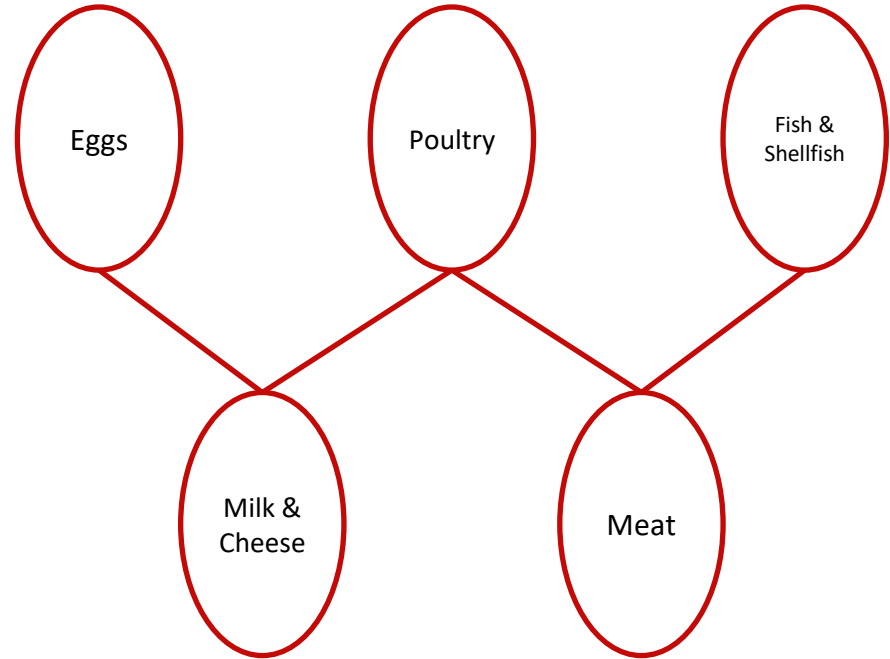
1. Older adults—due to reduced stomach acidity as we age
2. Individuals who have had gastrointestinal procedures
3. Individuals following vegetarian/vegan dietary patterns
4. Individuals on medications that interfere with Vitamin B12 absorption such as Proton Pump Inhibitors (PPIs) such as Nexium, Prevacid, Pantoprazole etc and Metformin



Vitamin B12

Vitamin B12 is important for:

- Red blood cell formation and preventing anemia
- Reducing risk of age related macular degeneration (vision loss)
- Slowing cognitive decline and improving memory
- Improving energy levels (for those low in B12)



Vitamin B12 Supplements

- Available in oral supplements and injections
- Injections bypass the stomach so can help for those who have poor absorption
- Recommended daily intake of B12 is 2.4 micrograms for adults
- The percentage of vitamin B12 absorbed by supplements is small
 - Estimated that the body absorbs 10 mcg from a 500 mcg supplement
- Reference range for normal B12 level is >138 pmol/L, however in older adults, an ideal level may be closer to 300 pmol/L

As always, check with your healthcare provider to have your B12 level checked and before starting a supplement



Dietary Fibre

Benefits

- Blood sugar and cholesterol management
- Satiety
- Gut health

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Sources

- Fruits and vegetables, whole grains, legumes, nuts and seeds

Recommendations

- Males over 50 years of age: 30 g fibre per day
- Females over 50 years of age: 21 g fibre per day





Label Reading

How to read a nutrition facts label?

Step 1 – Check the serving size

The entire nutrition facts label is based on the listed amount

Nutrition Facts Valeur nutritive

Per 1 cup (250 mL)
pour 1 tasse (250 mL)

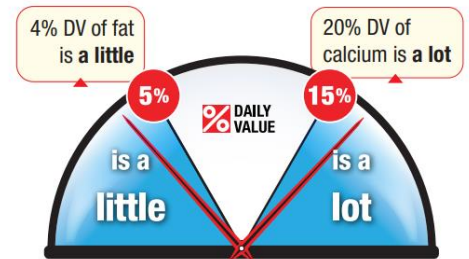
	% Daily Value*
	% valeur quotidienne*
Calories 110	
Fat / Lipides 0 g	0 %
Saturated / saturés 0 g	0 %
+ Trans / trans 0 g	
Carbohydrate / Glucides 26 g	
Fibre / Fibres 0 g	0 %
Sugars / Sucres 22 g	22 %
Protein / Protéines 2 g	
Cholesterol / Cholestérol 0 mg	
Sodium 0 mg	0 %
Potassium 450 mg	10 %
Calcium 30 mg	2 %
Iron / Fer 0 mg	0 %

*5% or less is a little, 15% or more is a lot

*5% ou moins c'est peu, 15% ou plus c'est beaucoup

Step 2 – Assess the % Daily Value

Indicates whether a product is high or low in a specific nutrient



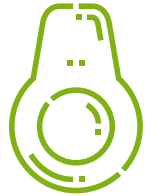
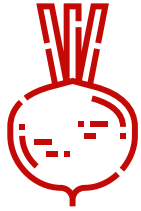


04

Meal Planning Strategies

Tips for cooking for 1 or 2 people

Tips when cooking for one or two



- Meal plan for the week
- Try batch cooking – cook once and freeze in individual portions
- Cut recipes in half
- Utilize frozen fruits and vegetables
- Make single sheet-pan meals – easier to prep and less clean up
- Utilize kitchen equipment – crock pot, rice cooker, air fryer
- Keep low sodium canned goods on hand to add to meals
- Try already cut and washed ingredients such as pre-sliced fresh fruit, ready to eat fresh vegetables, rotisserie chicken etc



Quick and Easy Meal Ideas

- **Breakfast:**

- Plain oatmeal with fruit and nuts
- Yogurt parfait with fruit and granola
- Whole grain toast with peanut butter and banana slices
- Smoothie with frozen fruit and yogurt/milk
- English muffin with egg and cheese
- High fibre cereal with milk and fruit
- Eggs with whole grain toast (omlette, hard boiled, scrambled...)
- Avocado toast



Quick and Easy Meal Ideas

- Salad with chicken breast and avocado
- Homemade bean and veggie soup
- Sandwich/wrap on whole grain bread
- Egg and vegetable omelet + toast
- Pita pizza
- Quesadilla with black beans and cheese
- Homemade chili
- Tuna melt: mix tuna, celery, mayonnaise and shredded cheese, spread on buns and melt in oven
- Mini cheese board – low fat cheese cubes, lean deli meat, olives, pickles, grapes, whole grain crackers



Quick and Easy Meal Ideas

- **Dinner:**
 - Whole wheat pasta with vegetables and chicken
 - Stir fry with brown rice, frozen vegetables, and edamame
 - Baked chicken, potatoes and vegetables
 - Chickpea/lentil curry + rice
 - Tacos/fajitas
 - One-pot casserole. Put these together, and bake:
 - One part meat, poultry or beans, such as kidney beans or black beans
 - Two parts vegetables (e.g. peas, carrots, tomatoes or celery)
 - Two parts rice, macaroni or noodles
 - Sauce to moisten (e.g., low sodium canned cream soup or tomato sauce)
 - Salmon/Trout/Halibut with cooked vegetables and brown rice/ whole wheat pasta
 - Fried egg, cheese, tomato and lettuce on whole grain toasted bun, vegetable sticks
 - Flatbread pizza – low sodium tomato sauce, vegetables and mozzarella cheese baked on pita, tortilla or naan.





Thanks!

Do you have any
questions?

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