

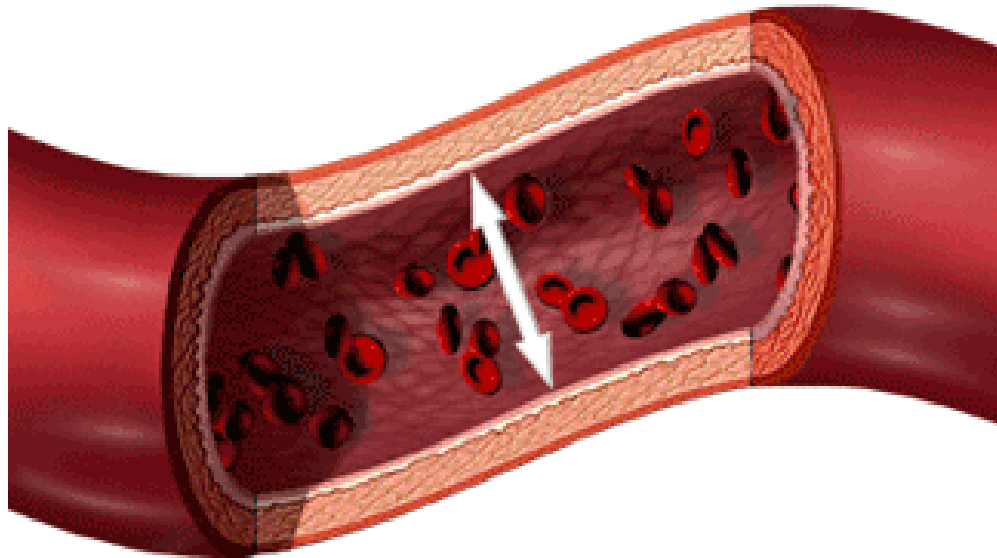
ALI 424: Healthy Eating for Blood Pressure Management



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What is High Blood Pressure?

Blood pressure is the measurement
of force applied to artery walls



What Happens When Your High Blood Pressure is High?

- Heart has to work too hard.
- Arteries become scarred and less elastic.
- Major risk factor for strokes, heart attacks, congestive heart failure and kidney failure.
- Risk of high blood pressure increases as we get older.

How Many Americans Have High Blood Pressure?

- a) 1 in 5
- b) 1 in 3
- c) 1 in 2
- d) 1 in 10



How Many Americans Have High Blood Pressure?

a) 1 in 5

b) 1 in 3* (over 75 million people) CDC

c) 1 in 2

d) 1 in 10

* And only half of those have it under control

How many Canadians are at risk of developing high blood pressure during their lives?

a) 9 in 10

b) 1 in 2

c) 7 in 10

d) 1 in 3

How many Canadians are at risk of developing high blood pressure during their lives?

a) 9 in 10

b) 1 in 2

c) 7 in 10

d) 1 in 3



Heart and Stroke Foundation

What % of heart disease and stroke
can be prevented by a healthy
lifestyle?

- a) 50%
- b) 60%
- c) 70%
- d) 80%

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Dietary Approaches to Stop Hypertension (DASH Trial)

Participants ate a low-fat diet that included:

- 7-10 servings of fruits & vegetables
- 2-3 serv. low-fat dairy
- Whole grains/cereals
- A handful of unsalted nuts/seeds 5x per week.
- Sodium intake was 1500 mg a day.
- Limited added sugar and sweets

National Heart, Lung and Blood Institute

- Significant drop in BP in just 2 weeks.

Reduce Sodium

- Our body needs about 500 mg per day.
- Sodium is found naturally in foods.
- 1 tsp. salt (any type) = 2300 mg sodium

Guidelines for daily intake:
1500 mg/day = $\frac{3}{4}$ tsp. salt



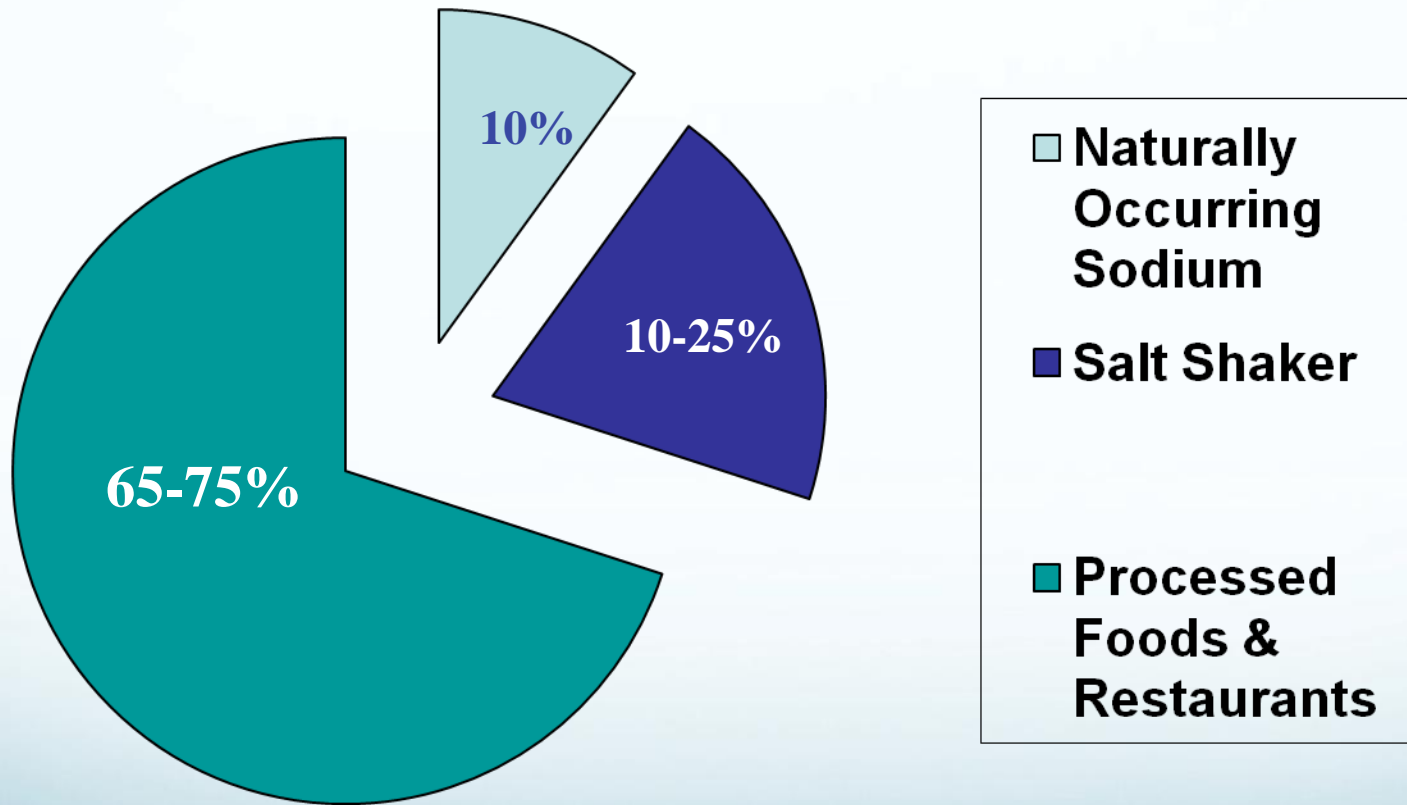
How Much Sodium Does the Average Canadian Eat?

- a) 2000 mg
- b) 2400 mg
- c) 3400 mg
- d) 4000 mg


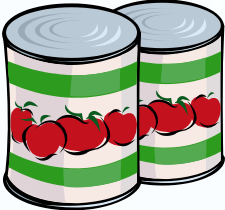
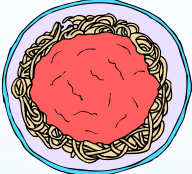

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- d) 4000 mg

Main Sources of Sodium in Our Diets



Sodium in Processed Food

Food	Serving Size	Sodium (mg)
	1 medium	14
	1/2 cup	292
	1/2 cup	749
	1/2 cup	1300



Dining Out

- Make requests.
- Look at sauces, gravies, dressings, extra toppings.
- Be careful of “healthy” options such as salads.
- Watch portion sizes.
- Look at the nutrition information for chain restaurants.



How Much Sodium in this 2 Piece Chicken Meal?



How Much Sodium in this 2 Piece Chicken Meal?



2862 mg

How Much Sodium in this Large Slice of Pizza?



How Much Sodium in this Large Slice of Pizza?



1660 mg

How Much Sodium in this Biryani?



How Much Sodium in this Biryani?



1395 mg

How Much Sodium in this Shawarma?



How Much Sodium in this Shawarma?



830 mg

How Much Sodium in this Bowl of Vegetable Soup?



How Much Sodium in this Bowl of Vegetable Soup?



930 mg

How Much Sodium in this Slice of Whole Grain Bread?



2 toast at breakfast + sandwich at lunch = 800 mg

How Much Sodium in this Slice of Whole Grain Bread?



150-200 mg

2 toast at breakfast + sandwich at lunch = 800 mg

Cook at Home More Often



Replace Salt with Herbs & Spices

- Taste before adding any type of salt.
- Use herbs, spices, vinegar, lemon juice and **salt-free** seasoning blends.
 - ***Mrs. Dash***™, ***McCormicks***

*****Do not use salt substitutes such as 'No Salt' or 'Half Salt*****



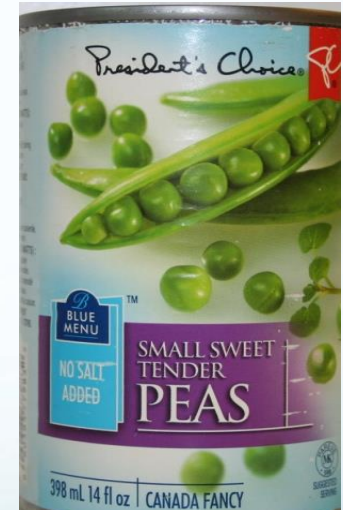
Beware of Pre-mixed Spices



- Can contain up to 1000-2000 mg of sodium!

Look at the Label

- Read Labels
 - Look for ***“No-Salt-Added”*** and ***“Low Sodium”*** condiments & food products.
 - Nutrition Facts (look for low %DV)
 - Ingredients List (is sodium in the first few ingredients?)



Nutrition Facts			
Serving Size 1 cup			
Servings Per Container 2			
Amount Per Serving		% Daily Value*	
Calories 130			
Fat 7 g		11 %	
Saturated 2.5 g		13 %	
+ Trans 0 g			
Polyunsaturated Fat 3 g			
Monounsaturated Fat 0.7 g			
Cholesterol 0 mg			
Sodium 35 mg		1 %	
Carbohydrate 17 g		6 %	
Fibre 3 g		12 %	
Sugars 12 g			
Protein 4 g			
Vitamin A	25 %	Vitamin C	40 %
Calcium	8 %	Iron	8 %
Thiamine	10 %	Riboflavin	8 %
*Based on a 2,000 Calorie diet.			
Calories per gram:			
Fat 9	Carbohydrate 4	Protein 4	

→ **5% or less**



Nutrition Facts Valeur nutritive		Amount / Teneur	% DV / % VQ *	Amount / Teneur	% DV / % VQ *
Per 1/2 can (106 g) par 1/2 boîte (106 g)		Total Fat / Lipides	11 g 16 %	Cholest / Cholest	60 mg
		Saturated / saturés	2.5 g 13 %	Sodium / Sodium	85 mg 4 %
		+ Trans / trans	0 g	Potassium / Potassium	370 mg 11 %
		Polyunsat / Polyinsat.	3 g	Carb / Glucides	0 g 0 %
		Omega-6 / oméga-6	0.3 g	Fibre / Fibres	0 g 0 %
		Omega-3 / oméga-3	2.5 g	Sugars / Sucres	0 g
		Monounsaturat / monoinsaturé	5 g	Protein / Protéines	18 g
Calories 170		* % Daily Value / % valeur quotidienne : Vit A 4 % • Vit C 0 % • Calcium 20 % • Iron / Fer 6 %			
INGREDIENTS: WILD RED SOCKEYE. INGRÉDIENTS : SOCKEYE ROUGE SAUVAGE.		CLOVER LEAF SEAFOODS MARKHAM, ONTARIO L3R 5B7 CANADA			



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Valeur nutritive					
Per 1/2 can (106 g) par 1/2 boîte (106 g)	Total Fat / Lipides	11 g	16 %	Cholest / Cholest.	60 mg
	Saturated / saturés	2.5 g	13 %	Sodium / Sodium	440 mg
	+ Trans / trans	0 g		Carb / Glucides	0 g
	Polyunsat / Polyinsat.	3 g		Fibre / Fibres	0 g
	Omega-6 / oméga-6	0.3 g		Sugars / Sucres	0 g
Calories 170	Omega-3 / oméga-3	2.5 g		Protein / Protéines	18 g
	Monounsaturat / monoinsaturé	5 g			
* % Daily Value / % valeur quotidienne : Vit A 4 % • Vit C 0 % • Calcium 20 % • Iron / Fer 6 %					
INGREDIENTS: WILD RED SOCKEYE, SALT. INGRÉDIENTS : SOCKEYE SAUVAGE, SEL.					
CLOVER LEAF SEAFOODS, L.P. MARKHAM, ONTARIO L3R 5B7 CANADA					

Hidden Sodium



- MSG
- Preservatives e.g. sodium benzoate
- In 'brine' or 'broth'
- Baking soda/baking powder
- Pre-seasoned/pre-basted meats

What Else You Can Do

Drain and rinse canned beans, chickpeas, etc.



Other Components of Food that Lower Blood Pressure

Potassium
Magnesium
Calcium

Foods High In Potassium



7 to 10 Servings of Fruits & Vegetables



Vegetables and Fruit: Canada's Food Guide recommends 7 to 10 servings of Vegetables and Fruit a day depending on your age and gender. Here's what a Food Guide serving looks like.

Fresh, frozen or canned vegetables

1/2 cup (125 mL) = 1/2 fist



Leafy vegetables

1 cup (250 mL) = 1 fist



Whole fruit

1 fruit = 1 fist



Fresh, frozen or canned fruit

1/2 cup (125 mL) = 1/2 fist



Dried fruit

1/4 cup (60 mL) = Cupped hand



Aim to fill
half your
plate.

Foods High In Magnesium



Foods High In Calcium



Food Sources of Calcium

Food	mg Calcium
Milk (1 cup)	300
Yogurt (3/4 cup)	275
Hard Cheese (1.5 oz)	250-350
Canned Salmon (2.5 oz)	200
Tofu (3/4 cup)	300
Almonds (1/4 cup)	93
Kale, cooked (1/2 cup)	95
Spinach, cooked (1/2 cup)	154

Average daily intake goal for adults: 1000-1200mg

Foods In Islamic Medical Wisdom



What About Supplements?



- Individual nutrients found in supplements do not have the same blood pressure lowering effect as whole foods.
- Foods also contain other compounds such as phytochemicals and antioxidants that work beyond the vitamin and mineral content.
- Taking high dose supplements can cause more harm than good. They can also react with medications.
- Always speak to your health care provider before starting a supplement.

What About Sugar?



Added & Free Sugar Intake



How Much Sugar in a Chocolate Bar?



How Much Sugar in a Chocolate Bar?



42.6 g

How Much Sugar in a Donut?



How Much Sugar in a Donut?



13 g

How Much Sugar in Medium Double Double?



How Much Sugar in Medium Double Double?



22 g

How Much Sugar in a Frappuccino?



How Much Sugar in a Frappuccino?



66 g

How Much Sugar in a Can of Soda?



How Much Sugar in a Can of Soda?



40 g

How Much Sugar in a Glass of Pure Orange Juice?



How Much Sugar in a Glass of Pure Orange Juice?



27 g

Eat your fruits and vegetables whole instead of drinking them!

How Much Sugar in Fruit Bottom Yogurt?



How Much Sugar in Fruit Bottom Yogurt?



24 g

Regular Exercise

- Helps keep blood pressure in check.
- Helps manage stress.



Take Home Message ...

Eat home cooked meals made from
fresh ingredients more often!

Resources



- sodium101.ca
- healthuniversity.ca (Cardiac College/Diabetes College/Thrive)
- Nutrition Action cspi.net
- Eatright Ontario 1-877-510-5102
- eatrightontario.ca