



MANAGEMENT OF DIABETES AND HYPERTENSION FOR SENIOR HEALTH

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Diabetes Mellitus

- Diabetes Mellitus (DM) is a disease in which your body either can't produce insulin or can't properly use the insulin it produces.
- Consequently, the body is unable to properly manage your blood sugar levels.



Types of Diabetes

- **Type 1 diabetes:** An autoimmune disease which destroys the pancreatic cells that produce insulin. Its management is insulin-dependent.
- **Type 2 diabetes:** Development of insulin resistance or a deficiency in insulin production. Its management relies on the improvement of healthy style practices as well as medication (insulin is not always needed).
- **Prediabetes:** A condition where blood sugar levels are higher than normal, but are not yet high enough to be diagnosed as type 2 diabetes. It has the potential to be reversed through the improvement of nutrition and lifestyle.
- **Gestational Diabetes:** Form of diabetes that develops during pregnancy, it may be temporary or permanent.

Stage-Targeted Nutrition and Other Healthy Behaviour Intervention Strategies for Type 2 Diabetes

➔			
<p>Prediabetes</p> <ul style="list-style-type: none"> • Weight loss or maintenance* • Portion control • Guidance to include low-GI CHO and reduce refined CHO • Physical activity 	<p>Early type 2 diabetes</p> <ul style="list-style-type: none"> • Weight loss or maintenance* • Portion control • Low-GI CHO • High fibre • CHO distribution • Dietary pattern of choice† • Physical activity 	<p>Type 2 diabetes not on insulin</p> <ul style="list-style-type: none"> • Weight loss or maintenance* • Portion control • CHO distribution • Low-GI CHO • High fibre • Dietary pattern of choice† • Physical activity 	<p>Type 2 diabetes on basal insulin only</p> <ul style="list-style-type: none"> • Portion control • Weight loss or maintenance* • CHO consistency • Low-GI CHO • High fibre • Dietary pattern of choice† • Physical activity <p>Type 2 diabetes on basal-bolus therapy</p> <ul style="list-style-type: none"> • Portion control • Weight loss or maintenance* • CHO consistency initially then learn CHO counting • Low-GI CHO • High fibre • Dietary pattern of choice† • Physical activity

*As appropriate.

†Dietary patterns include Mediterranean, vegetarian, DASH, Portfolio, and Nordic dietary patterns, as well as diets emphasizing specific foods (i.e., dietary pulses, fruit and vegetables, nuts, whole grains and dairy products) which have evidence of benefit for people with diabetes.

Risk Factors of Type II Diabetes

There are various causes of type 2 diabetes, out of which genetic and environmental factors are the most important factors.

Environmental factors such as being overweight, obesity, physical inactivity contribute to type 2 diabetes as they are associated with insulin resistance.

Genetically T2DM consists of monogenic and polygenic forms. These genes increase the risk of developing diabetes mellitus in an individual.

Diabetes
.co.in

Weight

Being overweight or obese (BMI > 25 kg/m²) is a major risk factor for type 2 diabetes.



Family history

Chances of developing type 2 diabetes is 5-10 times higher if your parents or siblings (first – degree relatives) had diabetes.



Gestational diabetes mellitus

If you have a history of gestational diabetes in pregnancy, your risk of developing type 2 diabetes is high.



High blood pressure

People with BP ≥ 140/90 mmHg or/ on treatment for High blood pressure.



Physical inactivity

The lesser active you are, the higher is the risk of diabetes.



Race / Ethnicity

Certain races are at high risk of developing diabetes.

The risk is high if you are an African American, Latino, Native American, Asian American, Pacific Islander.



Other Factors

Various other factors include Low HDL Cholesterol and high triglyceride level, Polycystic ovary syndrome, Prediabetes, Age and Gender

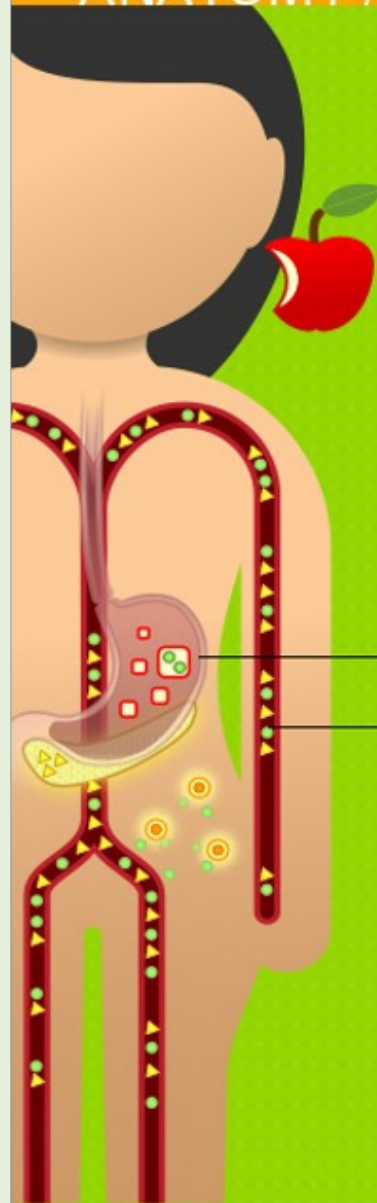


(Anitha, 2020)

What is blood sugar?

Your body breaks down food into sugar—sugar travels through the blood to cells—your body needs this energy to function properly

Some organs, including the brain, need sugar more than others



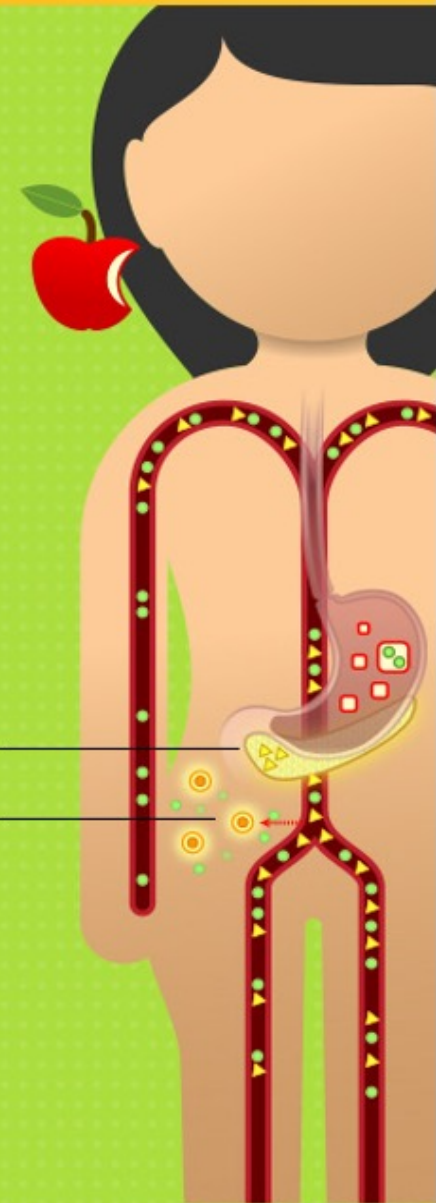
BODY BREAKS FOOD DOWN INTO SUGAR

SUGAR TRAVELS THROUGH THE BLOOD

What is insulin?

When you eat, your pancreas releases insulin on demand to keep your blood sugar in normal range

The blood moves sugar to cells, which use insulin for energy

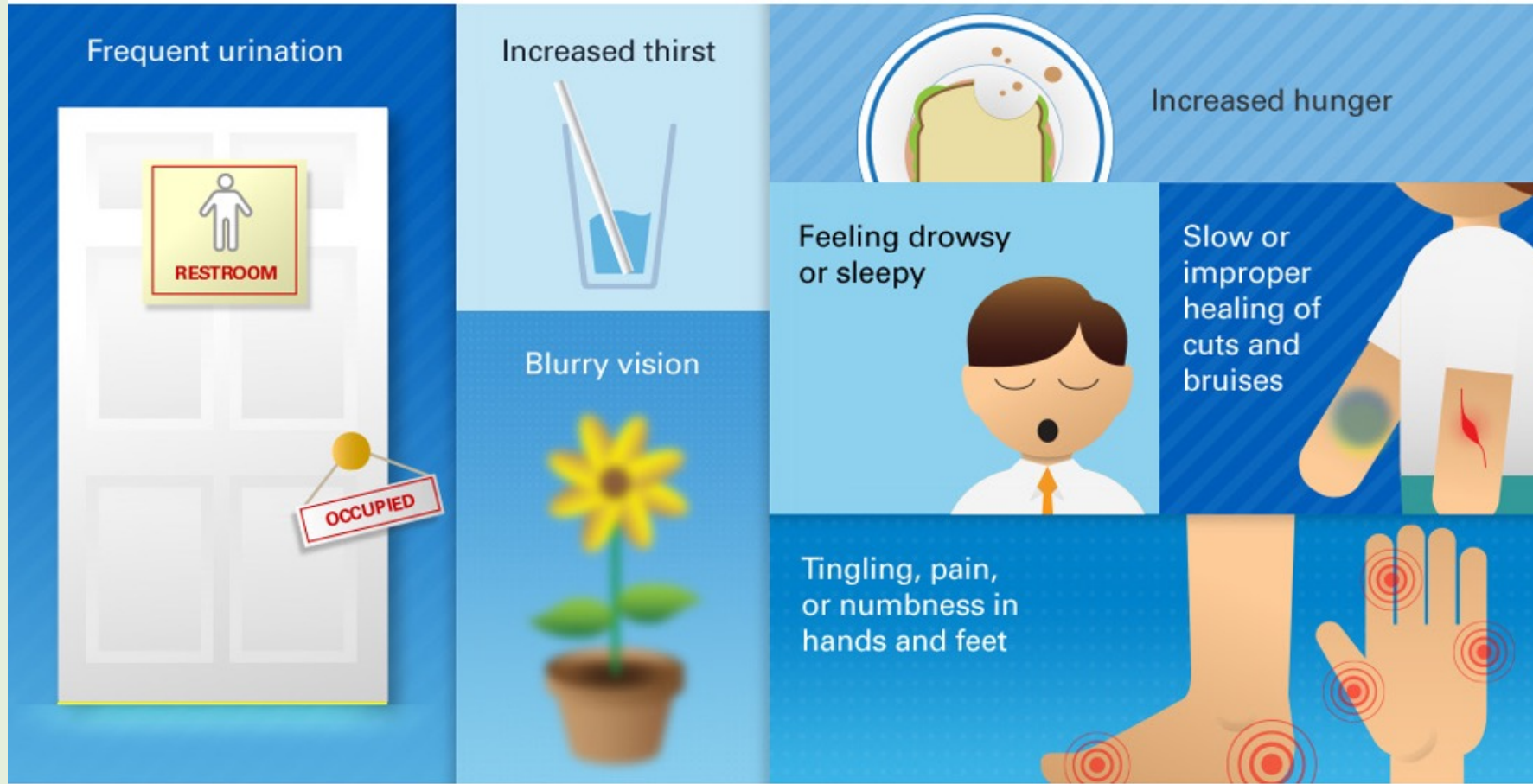


PANCREAS RELEASES INSULIN

SUGAR MOVES TO CELLS

Signs and Symptoms

Symptoms of uncontrolled Type 2 Diabetes



Sometimes, symptoms are mild and go unnoticed, delaying diagnosis

Risks if Not/Poorly Managed

- Cardiovascular diseases and hypertension
- Neuropathy (damage to the nerves located outside of the brain and spinal cord)
- Kidney diseases
- Diabetic retinopathy (eye disease)
- Mental health issues
- Celiac disease (immune reaction to eating gluten)
- Delayed healing, increased risk of infections (can lead to amputation of limbs)
- Increased risk of injuries

How often should I get screened?

- Every 3 years if you are \geq **40 years old** or if you are considered at **high risk** (see calculator)
- If you are considered at **very high risk**, get screened every **6 to 12 months**
- **Are you at risk for diabetes?**
- <https://www.healthycanadians.gc.ca/en/canrisk>

Healthy Habits to Control Glycemia

- Consult a registered dietitian to help you develop a personalized plan
- Prepare **homemade meals** with **fresh unprocessed ingredients**
- Plan meals ahead and eat at regular interval
- **Weight loss** by 5 to 10% can contribute to the normalization of your blood sugar (may not be recommended for older adults at the end of life, who are >70 and frail)
- Incorporate dietary patterns that are **sustainable long-term** and that best align with your goals and values to promote adherence
- Increase **physical activity**

(Sievenpiper et al., 2018)
(Meneilly et al., 2018)

Healthy Foods to control glycemia

- Increase **nuts** and **healthy fats** consumption
- Increase quantity of **viscous soluble fibre** (oats, barley, psyllium) as it slows gastric emptying and the absorption of glucose
- Replace high glycemic index foods by **low glycemic index** (see next slide)
- Combine with proteins when eating higher glycemic index to slow blood sugar peak
- Higher consumption of **fruits and vegetables** reduce the risk of cardiovascular disease and mortality
- Limit alcohol intake (**women:** $\leq 2/\text{day}$ or $\leq 10/\text{week}$ and **men:** $\leq 3/\text{day}$ or $\leq 15/\text{week}$)
 - ! Can cause hypoglycemia in the next 24h if also using insulin) !

Glycemic index

To consult the categories of The Glycemic Food Guide :

<https://guidelines.diabetes.ca/docs/patient-resources/glycemic-index-food-guide.pdf>



Green = Go

Low GI (55 or less) Choose Most Often

Yellow = Caution

Medium GI (56 to 69) Choose Less Often

Red = Stop and think

High GI (70 or more) Choose Least Often

Foods in the high GI category can be swapped with foods in the medium and/or low GI category to lower GI.

Resources for diabetes

- Educational programs on diabetes offered upon referral from a physician at
 - CLSC de Benny Farm
 - CLSC de Côtes-des-Neiges
 - CLSC de Parc-Extension
 - Montreal Heart Institute Diabetes Clinic
- Websites to get more information
 - <https://www.diabete.qc.ca/en/understand-diabetes/resources/>
 - <https://www.diabetes.ca/>
 - <https://www.lmc.ca/diabetes-education-program/diabetes-resources/>

Hypertension

- *Higher than normal blood pressure readings.* -> (SYS)/(DIA)
 - Units: mmHg (millimeters of mercury)

Patient population	BP threshold for initiation of antihypertensive therapy		BP treatment target	
	SBP mmHg	DBP mmHg	SBP mmHg	DBP mmHg
Hypertension Canada High-Risk Patient*	≥ 130	N/A	< 120	N/A
Diabetes mellitus**	≥ 130	≥ 80	< 130	< 80
Moderate-to-high Risk (TOD or CV risk factors)**	≥ 140	≥ 90	< 140	< 90
Low Risk (No TOD or CV risk factors)**	≥ 160	≥ 100	< 140	< 90

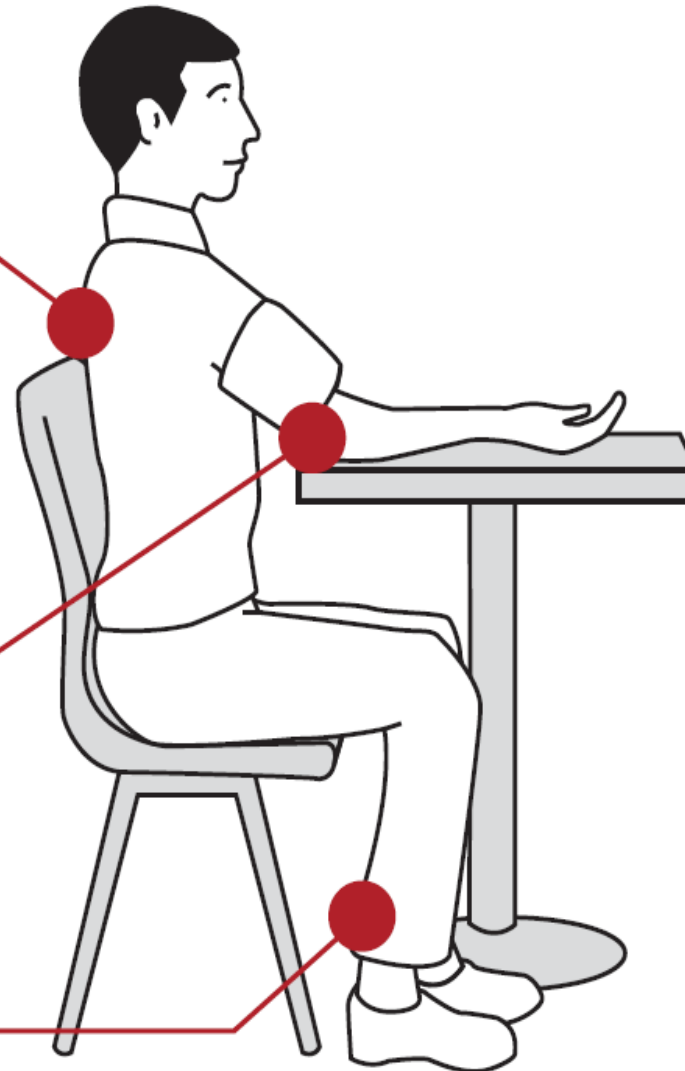
* BP treatment threshold and target based on AOBP measurements

**BP treatment thresholds and targets based on OBPM.

How to Measure Blood Pressure

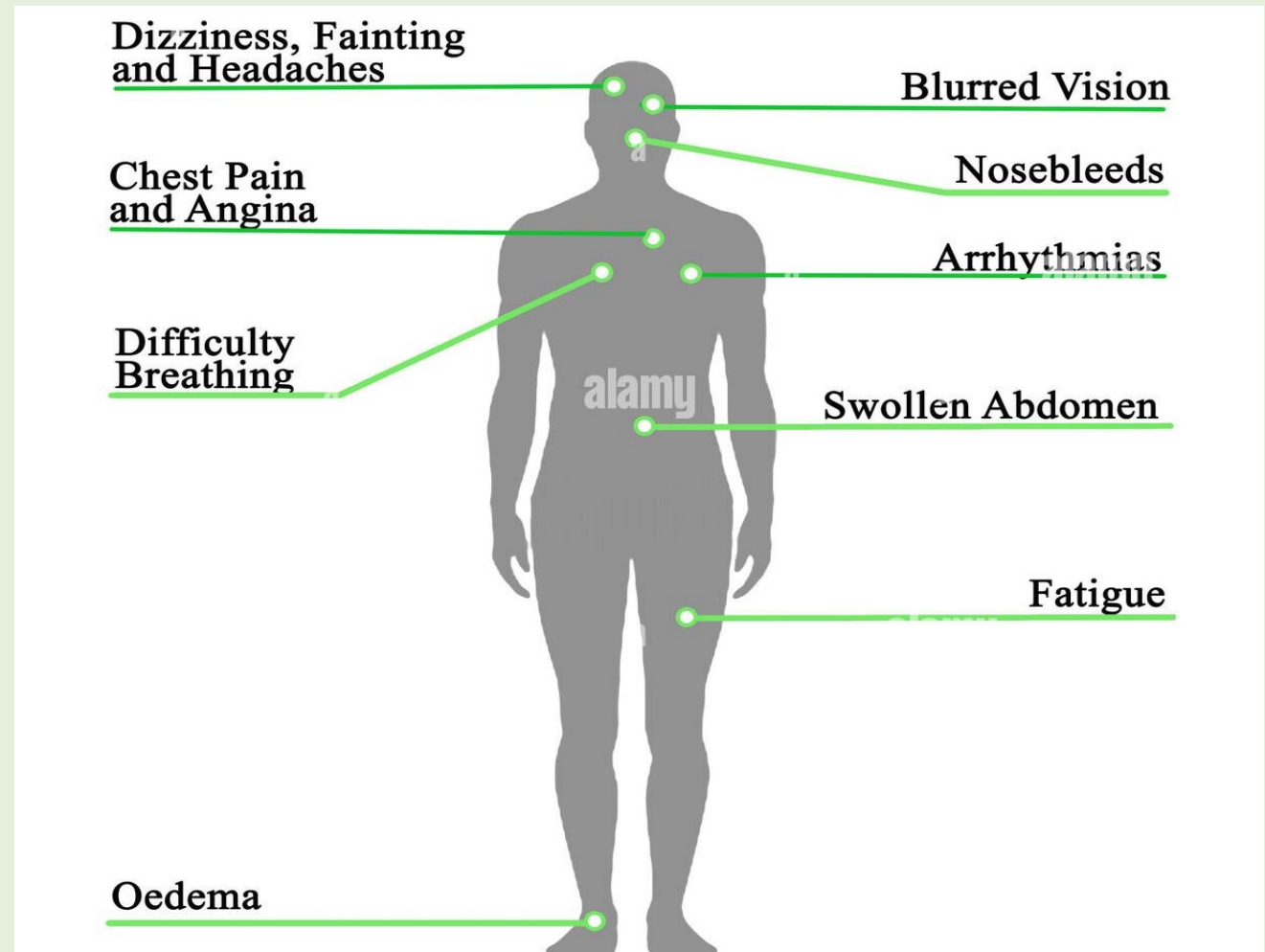
Figure 2: Standardized Technique for Hypertension Measurement (Image reproduced from Hypertension Canada Guideline⁶)

- ✓ Sitting position
- ✓ Back supported
- ✓ Arm bare and supported
- ✓ Use a cuff size appropriate for your arm
- ✓ Middle of the cuff at heart level
- ✓ Lower edge of cuff 3 cm above elbow crease
- ✓ Do not talk or move before or during the measurement
- ✓ Legs uncrossed
- ✓ Feet flat on the floor



Signs and Symptoms

- No significant symptoms
- When to seek medical attention:
 - *Chest pain*
 - *Difficulty of breathing*
 - *Severe headache*
 - *Visual disturbances*
 - *Balance issues*
 - *Weakness or numbness*
 - *Nausea or vomiting*
 - *Severe abdominal pain*
 - *Hematuria*
 - *Confusion*

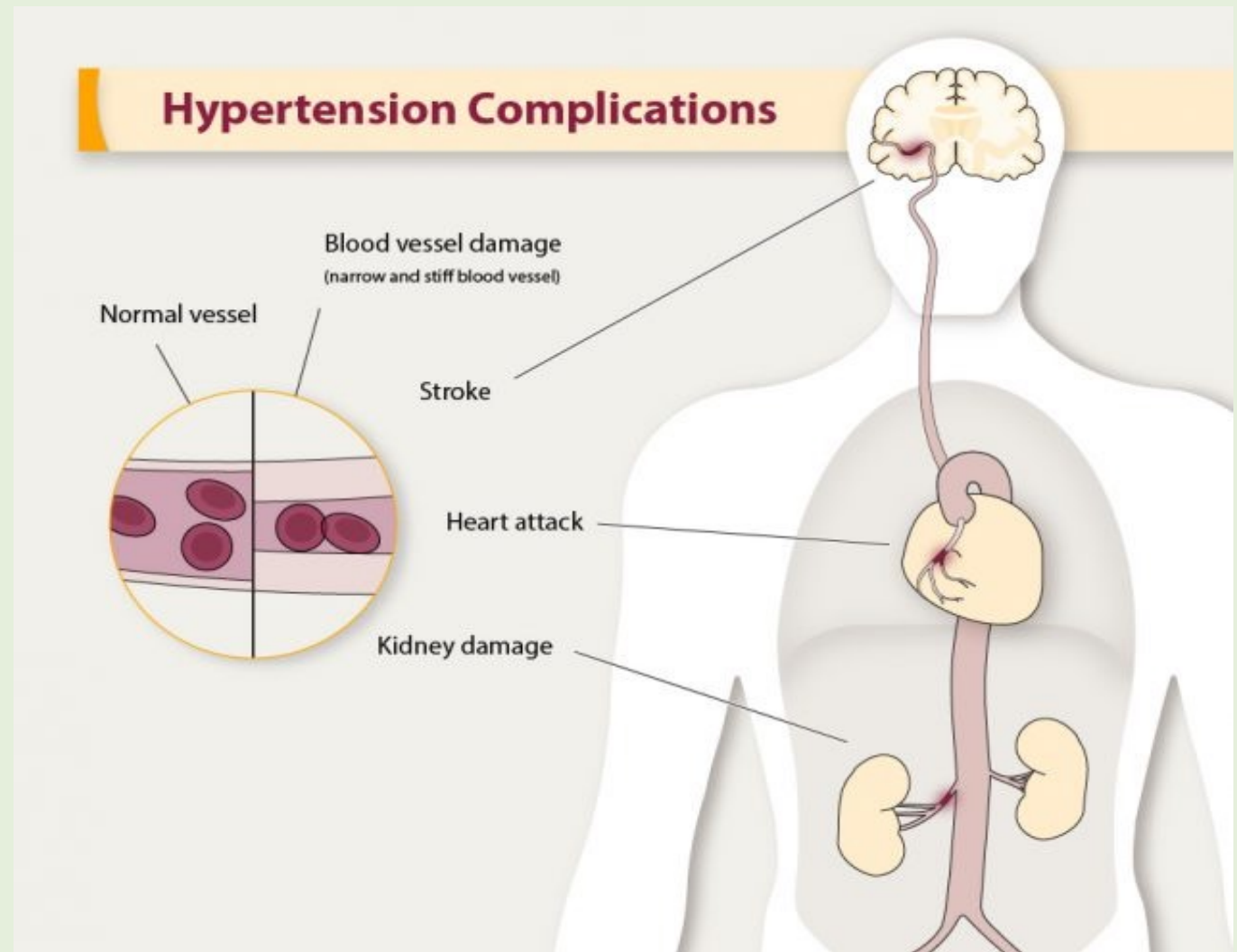


Risk Factors

- **Age**
- **Family history and genetics**
- **Lifestyle Habits**
 - Too much sodium and not enough potassium
 - Excessive alcohol or caffeine.
 - Lack of physical activity.
 - Smoking or using illegal drugs such as cocaine, “bath salts,” and methamphetamine.
 - Lack of good-quality sleep.
- **Medication:** Antidepressants, decongestants (medicines to relieve a stuffy nose), hormonal birth control pills, and non-steroidal anti-inflammatory drugs (NSAIDs) such as aspirin or ibuprofen
- **Other medical conditions** (chronic kidney disease, metabolic syndrome)
- **Race or Ethnicity:** Hispanic, African American
- **Sex:** In older adults, women are higher chance to develop high blood pressure than men

Risk if Not/Poorly Managed

- Risk of fall
- Aneurysm
- Stroke
- Chronic kidney disease
- Eye damage
- Heart attack
- Heart failure
- Peripheral artery disease or carotid artery disease
- Vascular dementia



Tips to control tension : Limit Sodium



Monitor salt intake (should take 1500-2300 mg sodium per day)



Food with more than 300mg sodium per serving may not fit into your daily diet plan. Thus, you can find out how much sodium is in a food by reading the food label.



Do not salt food at the table, add very little when cooking



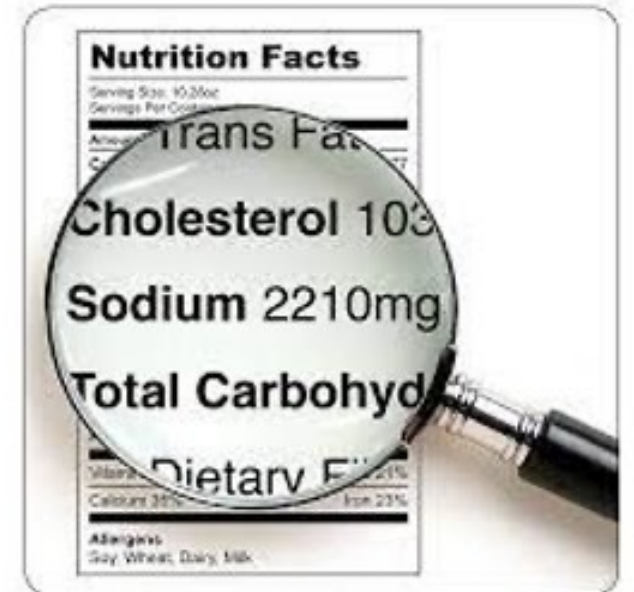
A single teaspoon of salt has 2300 mg of sodium



Choose what you consume carefully when you eat away at home.



Choose low salt or no salt options in restaurants.



More Tips to Limit Sodium

Avoid process foods, eat more fresh foods (Fresh fruits, vegetables, frozen vegetables and fruits with no added juices or sauces)

Fresh meats are lower in sodium than processed meat (bacon, sausage, hotdogs)

"Very low-sodium" products = <35 milligrams of salt per serving

"Low sodium" products = <140mg of salt per serving

Beware of "Unsalted" or "No Added Salt" products. Check your labels!

Add flavours via spices, lemon juice, lime juice, herbs, sodium-free

Tips to control tension : Choose Healthy Fats

Type of Fat	Foods With This Type of Fat	Heart Healthy?
Unsaturated fats	Soybean, canola, olive, or sunflower oil Liquid or soft tub margarines	Yes
Omega-3 fatty acids	Fatty coldwater fish, such as salmon, tuna, mackerel, and sardines Flaxseed oil and ground flaxseed	Yes
Saturated fats	Foods with fat from animals (such as fatty meats, whole milk, butter, cream, and other dairy foods made with whole milk) Palm, palm kernel, or coconut oil (tropical oils)	No
<i>Trans</i> fats	All foods made with hydrogenated oil (Read Nutrition Facts labels: hydrogenated oil may be found in fried foods, crackers, chips, and baked goods made with margarine or shortening.)	No

Food Group	Foods Recommended
Grains	Breads and cereals, especially those made with whole grains such as oats, barley, rye, or whole wheat Pasta, especially when made with whole grains Brown rice Low-fat, low-sodium crackers and pretzels
Vegetables	Fresh, frozen, or canned vegetables without added fat or salt Highly colored vegetables, such as broccoli, greens, sweet potatoes, and tomatoes are especially good for you
Fruits	Fresh, frozen, canned, or dried fruit
Milk and Milk Products	Nonfat (skim), ½% fat or 1% fat milk Nonfat or low-fat yogurt Nonfat, low-sodium cottage cheese Fat-free and low-fat, low-sodium cheese
Meat and Other Protein Foods	Fish (especially fatty fish, such as salmon, fresh tuna, or mackerel) Lean cuts of beef and pork (loin, leg, round, extra lean hamburger) Low-sodium cold cuts made with lean meat or soy protein Skinless poultry Venison and other wild game Unsalted nuts and nut butters Dried beans and peas Low-sodium meat alternatives made with soy or textured vegetable protein Egg whites or egg substitute
Fats and Oils	Unsaturated oils (soybean, olive, canola, sunflower, safflower) Soft or liquid margarines and vegetable oil spreads Salad dressings (nonfat or made with unsaturated oil) Seeds Avocado
Other	Herbs and spices to add flavor to replace salt Unsalted, low-fat snack foods, such as unsalted pretzels or plain popcorn Fat-free or low-fat sweets, such as maple syrup, jelly beans, hard candy, or sorbet

(Academy of Nutrition and Dietetics, n.d.)

Tips for Choosing Heart-Healthy Fats

Instead of...	Try:
Whole milk, cheese, yogurt, and ice cream	1% or skim milk, low-fat cheese, non-fat yogurt, and low-fat ice cream
Fatty, marbled beef and pork	Lean beef, pork, or venison
Poultry with skin	Poultry without skin
Butter, stick margarine	Reduced-fat, whipped, or liquid spreads
Coconut oil, palm oil	Liquid vegetable oils: corn, canola, olive, soybean and safflower oils

Limit egg yolks to two to four per week and avoid organ meats like liver and gizzards to control cholesterol intake

Eat less than 200 milligrams cholesterol per day

Instead of...	Try:
Butter, stick margarine, or solid shortening	Reduced-fat, whipped, or liquid spreads
Beef, pork, or poultry with skin	Fish and seafood
Chips, crackers, snack foods	Raw or unsalted nuts and seeds or nut butters Hummus with vegetables Avocado on toast
Coconut oil, palm oil	Liquid vegetable oils: corn, canola, olive, soybean and safflower oils

Food Group	Foods Not Recommended
Grains	Baked goods made with hydrogenated fat or saturated fat Any grain foods that are high in sodium or added sugar
Vegetables	Canned vegetables (unless they are low sodium or salt free) Pickles; vegetables packed in brine, such as sauerkraut or olives Fried or breaded vegetables; vegetables in cream or butter sauces
Fruits	Fried fruits; fruits in cream or butter sauces
Milk and Milk Products	Whole and 2% fat milk; cream Cheese (except for nonfat or low-fat, low-sodium types) Processed cheese products Foods made from whole milk or cream (such as ice cream or half-and-half)
Meat and Other Protein Foods	Canned or smoked meat or fish Marbled or fatty meats (such as bacon, sausage, hot dogs, regular hamburger) Whole eggs and egg yolks Poultry with skin High-sodium lunch or deli meats (such as salami) Canned beans (unless they are low-sodium or salt-free)

(Academy of Nutrition and Dietetics. n.d.)

Fats and Oils	<p>Solid cooking fats (shortening, butter, stick margarine)</p> <p>Tropical oils (palm, palm kernel, or coconut oil)</p>
Other	<p>Salt, seasoning mixes made with salt</p> <p>Soy sauce, miso</p> <p>Canned or dried soups (except for low-fat, low-sodium types)</p> <p>Bouillon cubes</p> <p>Catsup, barbeque sauce, worcestershire sauce</p> <p>Jarred or bottled salsa (homemade without salt is fine)</p> <p>Sugary drinks (such as soda or fruit drinks)</p> <p>Snack foods made with hydrogenated oil, shortening, or butter</p> <p>High-sodium snack foods (chips, pretzels, salted nuts)</p> <p>High-fat, high-sugar desserts</p> <p>High-fat gravies and sauces</p> <p>Premade foods (boxed pasta mixes, frozen dinners, and so on) if high in sodium or fat</p>
Alcohol	<p>Women: No more than 1 drink per day.</p> <p>Men: No more than 2 drinks per day.</p> <p>(1 drink = 5 ounces [oz] wine, 12 oz beer, or 1½ oz liquor)</p>

Activity

- What is a healthy diet to you?
 - What type of foods?
 - Which proportions?
- Now think about what you eat on a daily basis, is it similar?



Canadian Food Guide

Have plenty of
vegetables and fruits

Eat protein foods

Make water
your drink
of choice

Choose
whole grain
foods



Handy portion guide

Your hands can be very useful in estimating appropriate portions. When planning a meal, use the following portion sizes as a guide:



Grains and starches*/ Fruits*

Choose an amount the size of your fist for grains or starches, or fruit.

Milk and alternatives*

Drink up to 1 cup (250 mL) of low-fat milk with a meal.



Vegetables*

Choose as much as you can hold in both hands. Choose brightly coloured vegetables (e.g., green or yellow beans, broccoli).



Meat and alternatives*

Choose an amount the size of the palm of your hand and the thickness of your little finger.



Fat*

Limit fat to an amount the size of the tip of your thumb.

* Food group names taken from *Beyond the Basics: Meal Planning for Healthy Eating, Diabetes Prevention and Management*.
© Canadian Diabetes Association, 2014.

Canadian Food Guide (age 60 and over)

the most important is to improve your diet, not make it perfect (something is better than nothing)!

vegetables and fruit, including: dark green vegetables (kale and Bok choy each day), orange vegetables (carrots and sweet potato most days)

whole grain foods: oats, wild rice, whole wheat pasta

protein foods: eggs, nuts and seeds, fish and shellfish, beans, peas, and lentils, lean red meats, including wild game, lower fat dairy products such as milk and yogurt, fortified soy beverages, tofu, soybeans and other soy products

Canadian Food Guide (Continued)

If you are 51 years of age or older, take a supplement with 400 IU (10 µg) of [vitamin D](#) every day.

If your sense of taste or smell has changed, try different spices and herbs to add more flavour, instead of salt. You can also switch up the texture and temperature of foods to make them more interesting.

If some foods have become more difficult to eat, try choosing and preparing foods differently. For example, for a softer texture, try cooking vegetables instead of eating them raw

How to Read Labels

Serving Size & Calories →

Limit These Nutrients →

Get Enough of These →

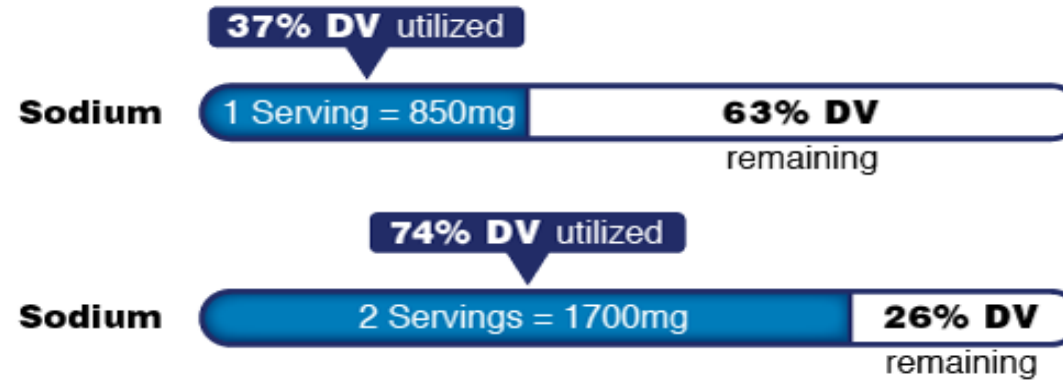
Daily Value Recommendations →

Nutrition Facts			
Serving Size 3 oz. (85g)			
Serving Per Container 2			
Amount Per Serving			
Calories 200	Calories from Fat 120		
% Daily Value*			
Total Fat 15g	20 %		
Saturated Fat 5g	28 %		
Trans Fat 3g			
Cholesterol 30mg	10 %		
Sodium 650mg	28 %		
Total Carbohydrate 30g	10 %		
Dietary Fiber 0g	0 %		
Sugars 5g			
Protein 5g			
Vitamin A 5%	Vitamin C 2%		
Calcium 15%	Iron 5%		
*Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs.			
	Calories	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300mg	375mg
Dietary Fiber		25g	30g

- 5% DV or less is a little
- 15% DV or more is a lot

<https://www.canada.ca/content/dam/canada/health-canada/migration/healthy>

Portion Control



Based on a 2,000 Calorie Diet

Nutrient	DV	%DV	Goal
Saturated Fat	20g	=100% DV	Less than
Sodium	2,300mg	=100% DV	Less than
Dietary Fiber	28g	=100% DV	At least
Added Sugars	50g	=100% DV	Less than
Vitamin D	20mcg	=100% DV	At least
Calcium	1,300mg	=100% DV	At least
Iron	18mg	=100% DV	At least
Potassium	4,700mg	=100% DV	At least

Out of these two labels, which one would you choose? why?

Cracker A

Nutrition Facts	
Per 9 crackers (23 g)	
Amount	% Daily Value
Calories 90	
Fat 4.5 g	7 %
Saturated 2.5 g + Trans 0 g	13 %
Cholesterol 0 mg	
Sodium 280 mg	12 %
Carbohydrate 12 g	4 %
Fibre 1 g	4 %
Sugars 0 g	
Protein 3 g	
Vitamin A 0 %	Vitamin C 0 %
Calcium 2 %	Iron 8 %

Cracker B

Nutrition Facts	
Per 4 crackers (20 g)	
Amount	% Daily Value
Calories 90	
Fat 2 g	3 %
Saturated 0.3 g + Trans 0 g	2 %
Cholesterol 0 mg	
Sodium 90 mg	4 %
Carbohydrate 15 g	5 %
Fibre 3 g	12 %
Sugars 1 g	
Protein 2 g	
Vitamin A 0 %	Vitamin C 0 %
Calcium 2 %	Iron 8 %

Out of these two labels, which one would you choose? why?

Plain Yogurt

Nutrition Facts	
Serving Size 1 container (226g)	
Amount Per Serving	
Calories 110	Calories from Fat 0
	% Daily Value*
Total Fat 0g	0 %
Saturated Fat 0g	0 %
<i>Trans Fat</i> 0g	
Cholesterol Less than 5mg	1 %
Sodium 160mg	7 %
Total Carbohydrate 15g	5 %
Dietary Fiber 0g	0 %
Sugars 10g	
Protein 13g	
Vitamin A 0 %	Vitamin C 4 %
Calcium 45 %	Iron 0 %

*Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs.

Fruit Yogurt

Nutrition Facts	
Serving Size 1 container (227g)	
Amount Per Serving	
Calories 240	Calories from Fat 25
	% Daily Value*
Total Fat 3g	4 %
Saturated Fat 1.5g	9 %
<i>Trans Fat</i> 0g	
Cholesterol 15mg	5 %
Sodium 140mg	6 %
Total Carbohydrate 46g	15 %
Dietary Fiber Less than 1g	3 %
Sugars 44g	
Protein 9g	
Vitamin A 2 %	Vitamin C 4 %
Calcium 35 %	Iron 0 %

*Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs.

Recognized Diets for Diabetics

- **Mediterranean diet** (high consumption of fruits, vegetables, legumes, nuts, seeds, cereals, whole grains; moderate-to- high consumption of olive oil, low-to moderate consumption of dairy products, fish, poultry, wine and, low consumption of red meat,)
- **Vegetarian dietary patterns** (includes vegetarian, vegan, lacto-ovo-vegetarian...)
- **Dietary Approach to Stop Hypertension (DASH):** Increased consumption of vegetables, fruits and low-fat dairy products, as well as whole grain, poultry and nuts.

While these do not necessarily align with all different cultural diets, the goal is not to change your food to eat the same way, but to incorporate their healthy components (include more nuts, healthy oils, etc.) It can be by following suggested recipes or by adapting meals that you are used to preparing at home.

DASH Diet

DASH Eating Plan

The Benefits: Lowers blood pressure & LDL "bad" cholesterol.

 **Eat This**

 **Limit This**

 Vegetables	 Fatty meats
 Fruits	
 Whole grains	 Full-fat dairy
 Fat-free or low-fat dairy	
 Fish	 Sugar sweetened beverages
 Poultry	
 Beans	 Sweets
 Nuts & seeds	
 Vegetable oils	 Sodium intake

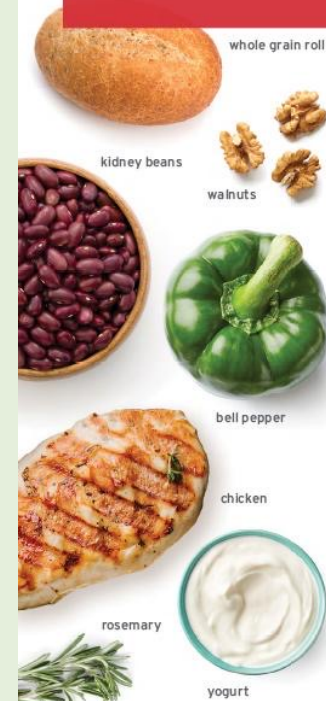
www.nhlbi.nih.gov/DASH

DASH EATING PLAN

A Week With the DASH Eating Plan

HEALTHY EATING, PROVEN RESULTS

Eating a variety of delicious foods and cutting back on salt can help lower your blood pressure. What are you waiting for? Take control of your heart health with the DASH eating plan.



The DASH eating plan requires no special foods and has no hard-to-follow recipes. The following DASH menus allow you to plan healthy, nutritious meals for a week. There are a variety of delicious whole foods that fill you up while fueling your body and lowering your blood pressure and cholesterol levels. You'll find plenty of fruits and vegetables, fish, poultry, lean meats, beans, nuts, whole grains and low-fat dairy.

Built around the recommended number of servings in each of the DASH food groups, these menus sometimes call for you to use lower sodium, low-fat, fat-free, or reduced-fat versions of products. These menus are based on 2,000 calories a day. Serving sizes should be increased or decreased for other calorie levels. Daily sodium levels are either 2,300 milligrams or, by making the suggested changes, 1,500 milligrams.

The total daily servings by DASH food group are listed at the top. Next to each food item on the daily menu, you can check the exact serving amount for that item.

These menus give examples of heart healthy meals. How can you create your own and make the DASH eating plan part of your daily life?

- Start by learning how your current food habits compare with the DASH eating plan by using the [What's on Your Plate?](#) worksheet for a few days.
- Explore the [Heart Healthy Eating](http://HeartHealthyEating.nhlbi.nih.gov) webpage (hearthealthyeating.nhlbi.nih.gov) to try new foods or learn how to make old favorites heart healthy.
- Choose your favorite foods from each of the DASH food groups based on your daily calorie needs to make your own healthy menus.
- Don't worry if some days are off target for your daily totals. Just try your best to keep the average of several days close to the recommended servings and sodium levels.

Following the DASH eating plan means you'll be eating delicious food that is also good for you. It can help you control your blood pressure, manage your weight, and lower LDL (bad) cholesterol levels—keeping your heart healthy.

KEY TO FOOD GROUPS |  Grains  Vegetables  Fruits  Dairy  Meats, Fish, and Poultry  Nuts, Seeds, and Legumes  Fats and Oils  Sweets and Added Sugars

DASH EATING PLAN

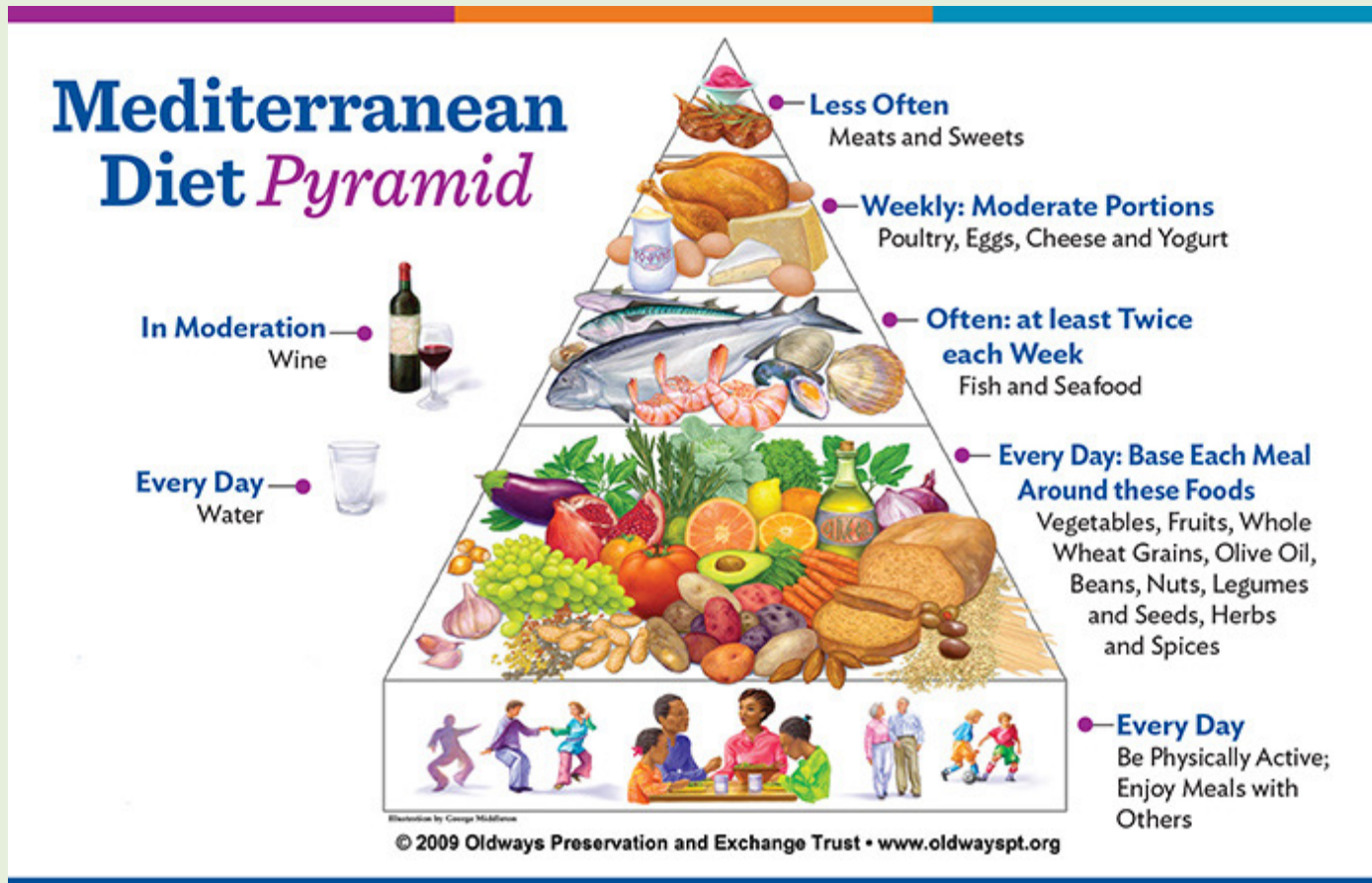
The DASH Eating Plan is a heart healthy approach that has been scientifically proven to lower blood pressure and have other health benefits. To learn more, go to www.nhlbi.nih.gov/DASH.



National Heart, Lung, and Blood Institute

<https://www.nhlbi.nih.gov/resources/week-dash-eating-plan>

Mediterranean diet



Mediterranean Diet Shopping List

Vegetables

The Mediterranean lifestyle focuses on the use of seasonal fresh vegetables. Frozen and canned veggies that are low-sodium are also okay to consume.

Must-have

- Garlic
- Onions/Spring Onions
- Leafy Greens
- Tomato (fresh, canned, sauce...)

Other

- Asparagus
- Artichokes
- Beets
- Bell Peppers
- Broccoli
- Cabbage
- Carrots
- Eggplant
- Green Beans
- Mushrooms
- Olives
- Peas
- Squash (including zucchini)
- _____
- _____

Nuts and Seeds

Nuts and seeds are used in cooking and also as snacks. They are a good source protein, fiber, and healthy fats.

- Walnuts
- Almonds
- Cashews
- Flax
- Peanuts
- Pine Nuts
- Pumpkin Seeds (Pepitas)
- Sunflower Seeds
- _____
- _____

Healthy Oils/Fats

Quality extra virgin olive oil is the main fat used in our Mediterranean cooking. We use Greek extra virgin olive oils from organically grown and processed Koroneiki olives.

- Extra virgin olive oil (we use Private Reserve and Early Harvest olive oils. Visit our shop on TheMediterraneanDish.com)
- Avocado Oil
- Grape Seed Oil
- Ghee (clarified butter, not very often)
- _____
- _____

Dairy and Eggs

In the Mediterranean lifestyle, dairy, including a variety of cheeses, are enjoyed in moderation. Choose traditional "real" cheese and avoid highly processed cheeses.

- Yogurt (Greek yogurt preferred)
- Cheeses such as feta, ricotta and fresh mozzarella, burrata, Parmesan
- Eggs, preferably organic, free range
- _____
- _____

Fruits

Fruits are a good source of energy and helpful to weight control. Include fresh fruit, dried fruit, and frozen without added sugars.

- Apples
- Apricots
- Avocados
- Bananas
- Berries
- Cherries
- Dates
- Figs
- Grapes
- Lemons (used regularly)
- Melon
- Oranges
- Peaches
- Plums
- Pomegranates
- _____
- _____

Beans and Legumes

Beans are used regularly in the Mediterranean way. They are budget-friendly, and a good source of fiber and protein. When using canned beans and legumes, opt for low-sodium. And be sure to rinse and drain before using.

- Black Beans
- Chickpeas (Garbanzo)
- Hummus
- Kidney Beans
- Lentils
- Pinto Beans
- White Beans (Cannellini)
- _____
- _____

Herbs and Spices

Perhaps the most exciting part about eating the Mediterranean way is the generous use of fresh herbs and quality spices, which add bold and exciting flavor without the use of too much salt nor adding extra fat.

- Basil
- Bay Leaves
- Cilantro
- Mint
- Parsley
- Oregano

Spices such as Aleppo pepper, Allspice, cumin, coriander, harissa, paprika, sumac, turmeric, za'atar and more. Visit our shop for all natural and organic Mediterranean spices on TheMediterraneanDish.com

Grains and Such

Among other benefits, grains are a good source of fiber, vitamin Bs, and minerals. As much as possible, use wholegrain products, which are said to help with weight management and reduce the risk of heart disease.

- Barley
- Bulgur
- Frekkeh
- Couscous
- Oatmeal
- Pasta
- Polenta
- Quinoa
- Rice
- Breads (we use whole grain, or pita)
- _____

Seafood

Fish is a good source of lean protein. Oily fish like wild salmon provide a great deal of Omega 3s. Eating the Mediterranean way allows you to incorporate fish and seafood at least twice a week (consult your physician). As much as possible, choose wild fish. Frozen fish is fine to use.

- Small fatty fish, such as sardines
- White fish such as cod
- Wild salmon
- Shell fish such as crab, shrimp, and lobster
- Tuna (including quality low sodium canned tuna)
- _____
- _____

Examples of recipes at:

- <https://www.diabetes.ca/nutrition---fitness/recipes?Categories=&MealType=Dinner&SearchText=&Sort=&Page=3>
- <https://www.nhlbi.nih.gov/resources/week-dash-eating-plan>
- <https://www.diabetes.ca/nutrition---fitness/meal-planning/7-day-mediterranean-healthy-meal-plan>
- <https://www.diabetesfoodhub.org/mediterranean.html>

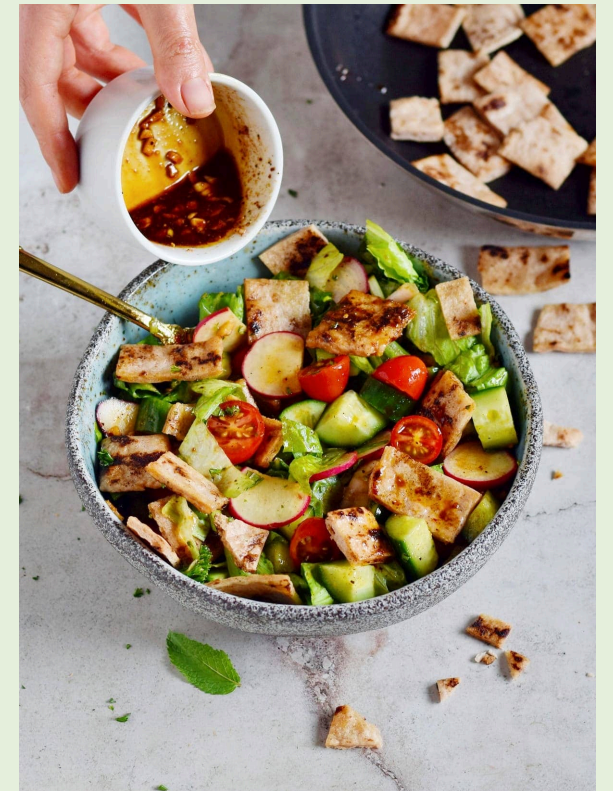
Are these examples of balanced meals? How Could we improve them?



Jollof rice



Banku and tilapia



Fattoush Salad

Resources For Support

- Your local CLSCs
- Food banks
 - Multi-Caf,
 - Mada Community Center (Kosher),
 - Sun Youth Organization,
 - Centre Communautaire Restauration Vertical,
 - Share the Warmth,
 - The Food Pirate...
- Sami fruits (fruits and vegetable at affordable prices)
- Find existing resources in your neighborhood here:

<https://docs.google.com/document/d/1EgBuE8YQD4wnTjw7799Ty3Lj2gaOd70FTcc6Guo7jLc/edit>

Final Activity

- What would you do if you are having low blood sugar?
- What is high blood pressure?
- What is the recommended sodium intake?
- Which food has a high glucose index?
- What is the sodium amount of this sauce can?

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