Hamad Medical Corporation

In Collaboration with Institute for Healthcare Improvement

Middle East Forum on Quality and Safety in Healthcare 2024

10 YEARS OF INSPIRING IMPROVEMENT

Health-Risk Reduction Workshop

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Disclosure Statement

I make the following declaration in relation to this presentation:

- There is NO Conflict of Interest
- There is no bias, either commercial or non-commercial
- There is no plagiarism or copyright infringement

Background:

- Every year, heart disease, diabetes, cancer, and other preventable lifestyle factors account for seven out of ten deaths worldwide.
- By collaborating with multidisciplinary professionals, many of these chronic diseases can be prevented, delayed, or detected early enough to be treated.
- Increased use of clinically proven preventative services in Qatar could save money for individuals and families, in addition to saving millions of life years.

Workshop objectives:

- To improve knowledge, practice and skills related to lifestyle modification which will impact overall quality of life and reduce burden of diseases.
- To apply evidence-based preventive interventions through adapting good physical activity, quitting unhealthy habits, sleep hygiene, stress management and emotional healing, avoidance of risky substances and positive social connection to prevent, treat and often reverse chronic diseases .
- To apply nutrition-based approaches to promote health among the population.
- To empower patients and their families to take an active role in their own health.

‘True Prevention is not waiting bad things to happen, its preventing things from happening in the first place’.

Don McPherson
(first executive director of the Sports Leadership Institute)

What is Preventive medicine?

According to American College of Preventive medicine ‘Preventive medicine is the practice of promoting preventive health care to improve patient well-being’.

The goal is to ultimately prevent disease, disability, and death through emphasizing on <u>population-based interventions.</u>

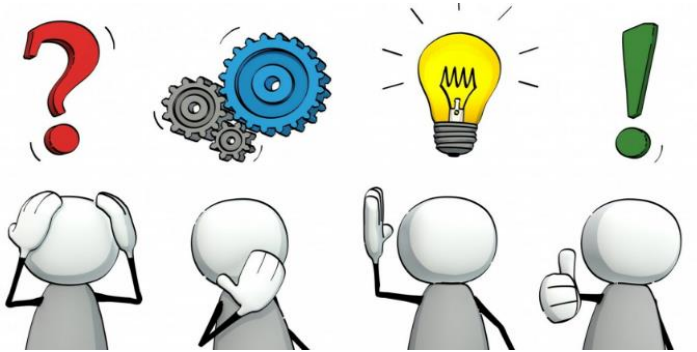
What are the leading causes of mortality and morbidity globally?

Chronic diseases are leading causes of mortality and morbidity globally:

- Cardiovascular disease
- Cancer
- Respiratory disease
- Diabetes

Cardiovascular diseases (CVDs) (who.int)

What do you think about disease reversal?



Yes! It’s possible.

Preventive medicine strategies and changes in lifestyle factors could potentially reverse:

- 93% of diabetes
- 81% of heart attacks
- 50% of strokes
- 36% of all cancers

Lifestyle medicine potential for reversing a world of chronic disease epidemics: from cell to community. https://doi.org/10.1111/ijcp.12509

Time	Title
12:50 - 13:20	Opening Remark
13:20 - 14:20	Healthy eating
14:20 - 14:50	Physical Activity
14:50 - 15:20	**Coffee Break**
15:20 - 16:00	Restorative sleep
16:00 - 16:30	Tobacco cessation counselling
16:30 - 17:00	‘There is no health without mental health’
17:00 - 17:20	Closing Remarks

Thank you

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Clinical Nutrition in the Prevention and treatment of disease

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Learning Objectives

- **At the end of this session, participants will be able to:**

1. Understanding the Role of Nutrition in Disease Prevention
2. Implementing Evidence-Based Nutritional Strategies
3. Collaborating with Interdisciplinary Teams
4. Applying Nutritional Guidelines in Clinical Practice

Introduction

- Clinical nutrition is a specialized field of study concerned with the role of food and nutrients in maintaining health, preventing disease, and managing medical conditions.
- It involves the assessment, nutrition diagnosis, and treatment of nutritional problems, as well as the development of individualized nutrition plans for patients.
- In recent years, there has been growing recognition of the importance of clinical nutrition in the prevention and treatment of disease. This is because many chronic diseases, such as diabetes, heart disease, and cancer, have been linked to poor dietary habits and nutrient deficiencies.
- By addressing these issues through nutrition interventions, it may be possible to reduce the risk of developing these conditions or manage them more effectively..

Aim

The aim of nutrition in health risk reduction

- To optimize health and prevent the development of chronic diseases by providing the body with essential nutrients in appropriate amounts.

The aim of Nutrition interventions

- Nutrition interventions aimed at risk reduction often focus on promoting healthy eating habits, increasing consumption of fruits and vegetables, whole grains, lean proteins, and healthy fats while limiting intake of processed foods high in sugar, salt, and unhealthy fats.
- Additionally, maintaining a healthy weight through proper nutrition and regular physical activity is essential for reducing the risk of obesity-related conditions.

Nutritional Strategies for Preventive Medicine

- **In the field of preventive medicine, various nutritional strategies are employed to promote health and prevent disease, These strategies may include:**

Dietary modifications tailored to individual needs

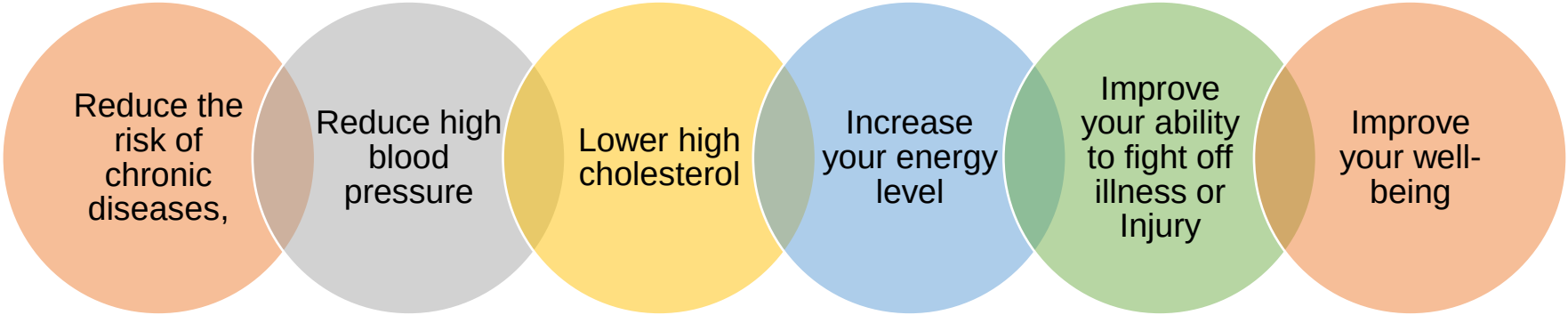
Nutritional counseling

Education on healthy eating habits

Promotion of physical activity alongside proper nutrition

Nutrition and health risk

- Most people know good nutrition and physical activity can help maintain a healthy weight. But the benefits of good nutrition go beyond weight.
- **Good nutrition can help:**



Nutritional status

The nutritional status of an individual has consequences:

- An optimal nutritional status is a powerful factor for health and well-being. It is a major, modifiable and powerful element in promoting health, preventing and treating disease and improving the quality of life.
- **Ideal nutritional status** occurs when the supply of nutrients conforms to the nutritional requirements or needs.

"In balance"	"In caloric excess"	"In caloric deficit"
You are eating roughly the same number of calories that your body is using.	You are eating more calories than your body is using.	You are eating fewer calories than you are using.Your body is pulling from its fat storage cells for energy.
Your weight will remain **stable.**	You will store these extra calories as fat, and you'll **gain weight.**	your **weight is decreasing.**

Nutrition assessment consists of five categories

1.Food/ Nutrition History

- Meals and snack pattern
- Tolerance of food/nutrition
- Intake adequacy

2. Medical History

- Current Illness history
- Use of medication
- Use of supplements

3.Anthropometric Data

- Weight (current, usual, ideal)
- Body Mass Index
- Weight change
- Body composition

4. Laboratory Data

- Electrolytes
- CBC
- Glucose/Hemoglobin A1c
- Lipid profile
- Kidney / Liver function test
- Vitamin D / B12

5. Nutrition – focused physical examination

- Adipose store
- Oral (lips, gums, tongue, mucus membrane)
- General appearance

Weight

Body weight gain may indicate :

- Fat and/or lean tissue repletion
- Fluid retention or fluid overload as in edema
- Ascites and pleural effusion

weight loss may indicate:

- Presence of a disease or nutritional impairment.

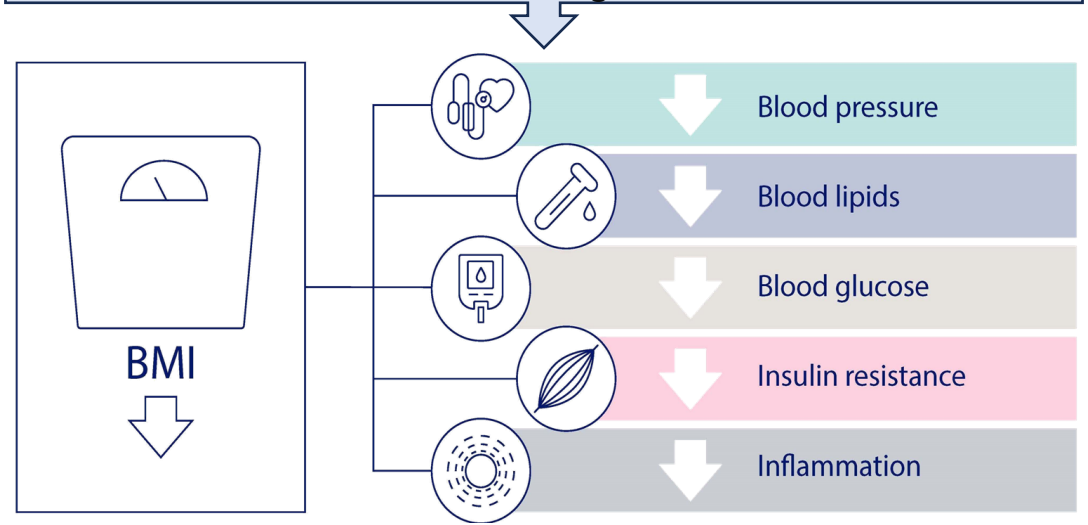
Body Mass Index

BMI Calculation:

***BMI* = Weight (Kg) /Height (m)2**

BMI	Adult
Underweight	< 18.5
Normal	18.5 -24.9
Overweight	25-29.9
Obesity – grade I	30-34.9
Obesity – grade II	35-39.9
Extreme Obesity – grade III	≥40

Reducing body mass index (BMI) improve CVD risk factors, lowering:



Percentage of Weight change

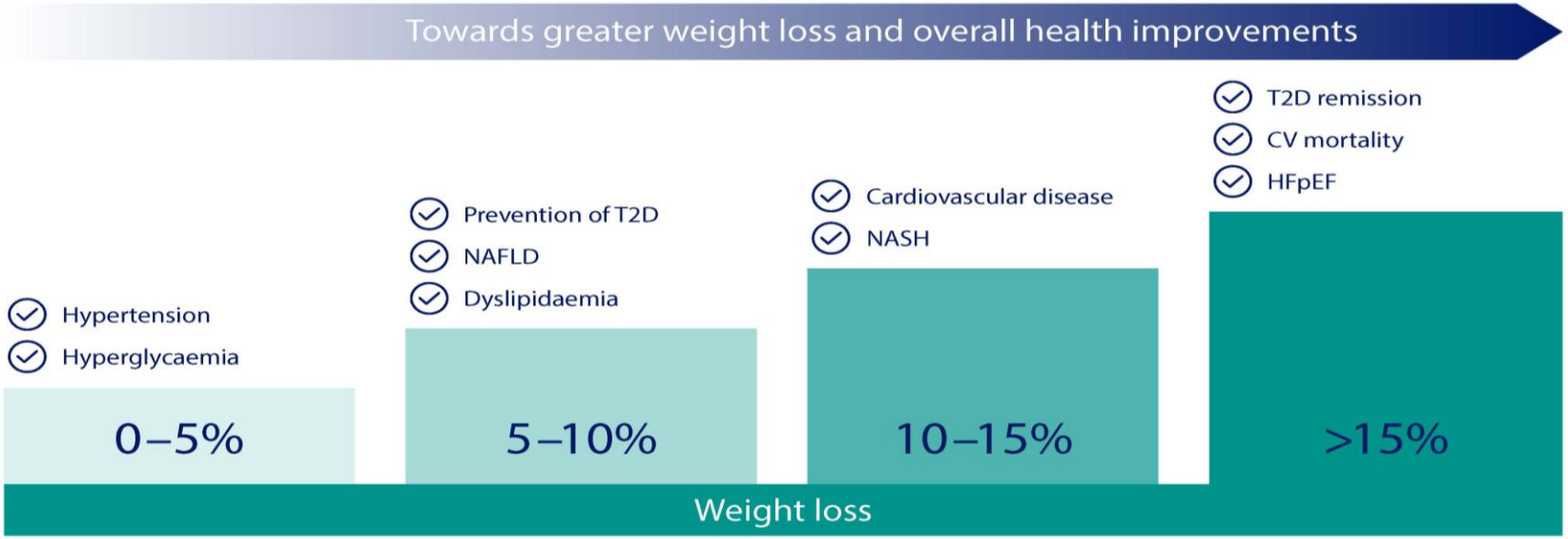
- **Nutritional status may be indicated by using recent body weight changes than the static weight measurement .**

% Weight Change = usual body weight - Current weight/ usual body weight X 100

Interpretation of % Weight Change in Adult Males and Females to Determine Severity of Nutritional Risk

Time	Significant Weight Loss (%)	Severe Weight Loss (%)
1 week	1-2	>2
1 month	5	>5
3 month	7.5	>7.5
6 month	10	>10
Unlimited time	10-20	>20

CVD health benefits resulting from weight loss



Tackling obesity positively impacts different cardiovascular disease risk factors thereby improving overall cardiovascular health.[3,8–11]

CV, cardiovascular; HFpEF, heart failure with preserved ejection fraction; NAFLD, non-alcoholic fatty liver disease; NASH, non-alcoholic steatohepatitis; T2D, type 2 diabetes.

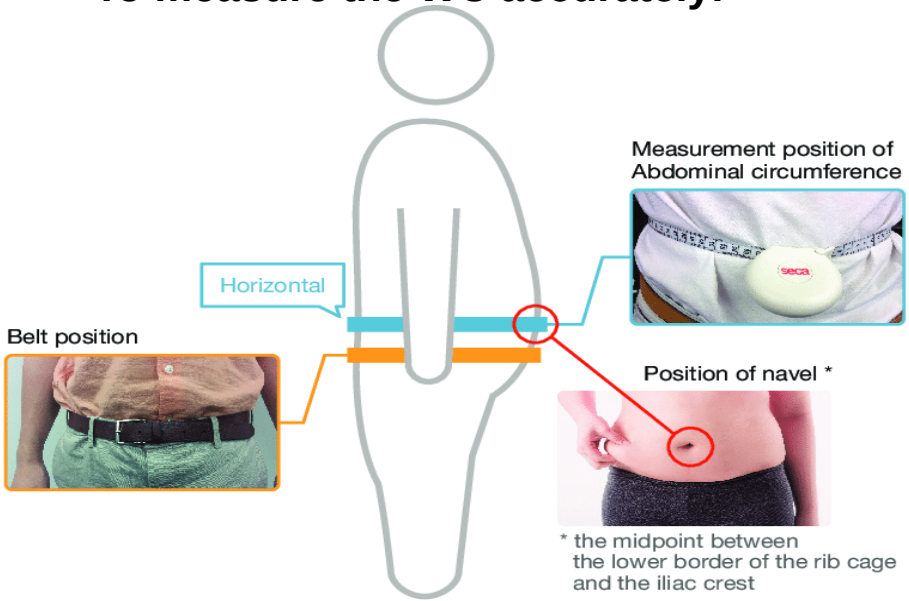
Waist circumference (WC)

- WC is a measurement used to assess abdominal obesity and overall health risk.
- It is a simple and effective way to estimate the amount of visceral fat in the abdomen, which is associated with an increased risk of various health conditions such as heart disease, type 2 diabetes, and metabolic syndrome.

Increased risk abdominal adiposity:	• Men: ≥ 94 cm • Women: ≥ 80 cm
High risk abdominal adiposity:	• Men: WC ≥ 102 cm • Women: ≥ 88 cm

How to Assess the WC?

To measure the WC accurately:



The World Health Organization (WHO) recommend measuring waist circumference as part of regular health check-ups.

This measurement can help identify people who are at increased risk of chronic diseases, even if their body mass index (BMI) is within the normal range

Classification of Overweight and Obesity by BMI, Waist Circumference, and Associated Disease Risk

		Normal:	Obese:
Waist Circumference	Men:	≤ 40 in (≤ 102 cm)	> 40 in (> 102 cm)
	Women:	≤ 35 in (≤ 88 cm)	> 35 in (> 88 cm)

BMI (kg/m²)		**Obesity Class**	↑Disease Risk* Relative to Normal Weight and Waist Circumference)	
Underweight	< 18.5		–	–
Normal**	18.5-24.9		–	–
Overweight	25.0-29.9		Increased	High
Obesity	30.0-34.9	I	High	Very High
	35.0-39.9	II	Very High	Very High
Extreme Obesity	≥ 40	III	Extremely High	Extremely High

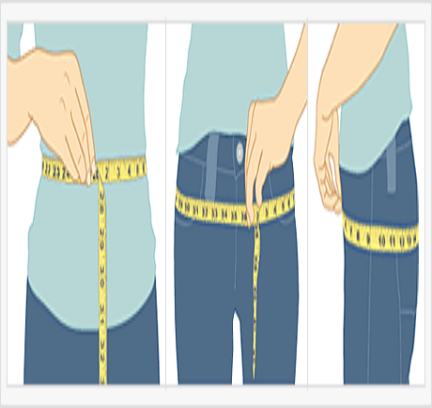
*Disease risk for Type 2 Diabetes Mellitus, Hypertension, and CVD.
**Increased waist circumference can also be a marker for increased risk even in persons of normal weight.
Adapted from "Preventing and Managing the Global Epidemic of Obesity. Report of the World Health Organization Consultation of Obesity." WHO, Geneva, June, 1997.

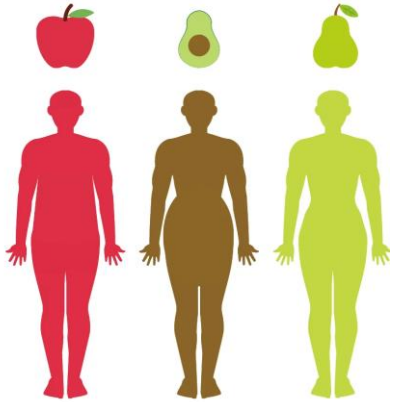
Waist-to-hip ratio (WHR)

- **The waist-to-hip ratio (WHR) is a measurement used to assess the distribution of body fat. which is calculated by dividing the waist measurement by the hip measurement.**

Waist-to-hip ratio (WHR) = Waist measurement / Hip measurement

WHR ratio mean





Women	Health Risk	Body Shape
0.80 or below	Low	Pear
0.81 to 0.85	Moderate	Avocado
0.85+	High	Apple

Men	Health Risk	Body Shape
0.95 or below	Low	Pear
0.96 to 1.0	Moderate	Avocado
1.0+	High	Apple

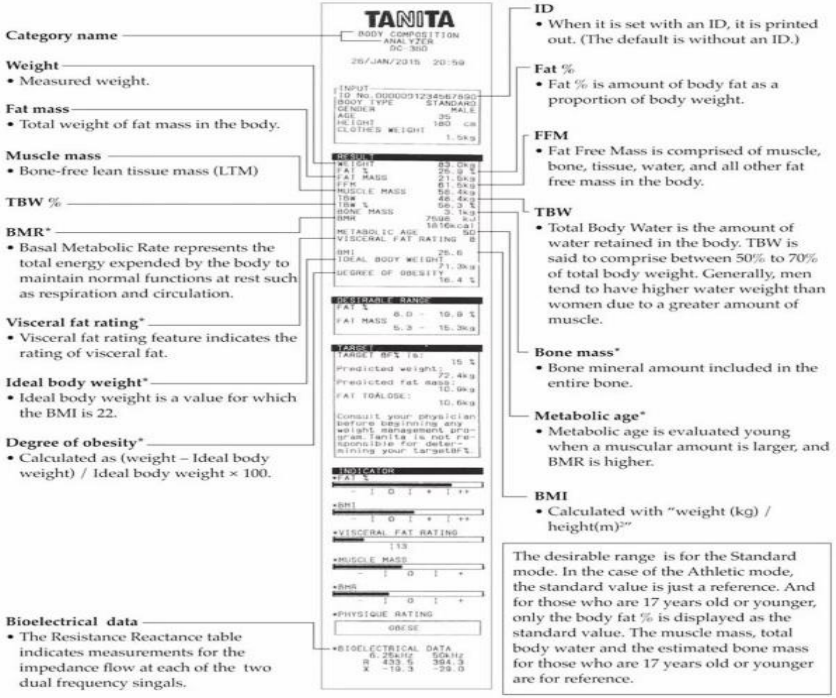
Activity 1:
Know your body shape

Body composition

Body composition is a method of describing what the body is made of.

It includes fat, protein, minerals and body water. It also describes weight more accurately than BMI.

Body composition analysis can accurately show changes in fat mass, muscle mass, and body fat percentage.

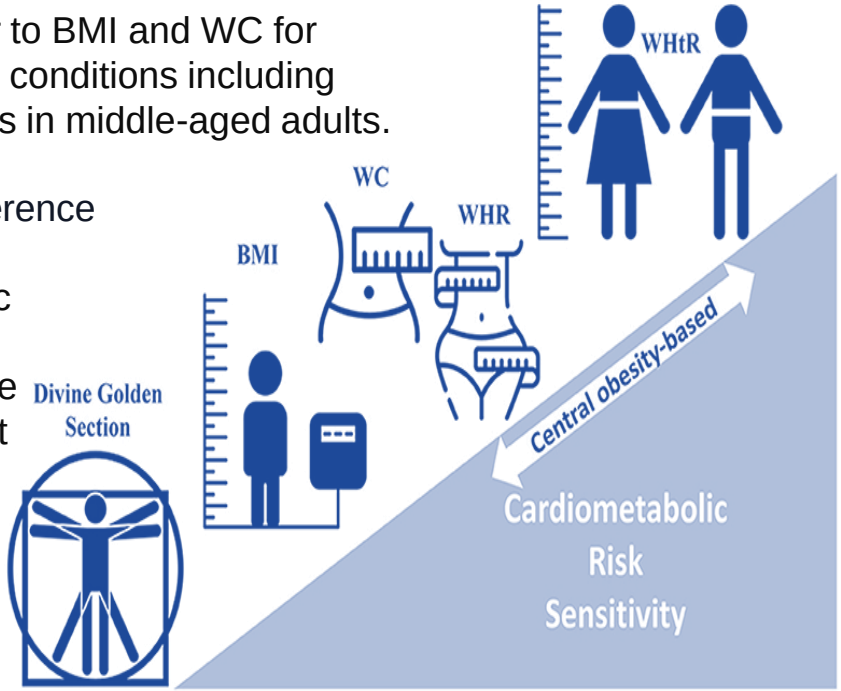


Cardiometabolic risk prediction

- Several studies have established WHtR as superior to BMI and WC for predicting the onset and severity of cardiometabolic conditions including hypertension, diabetes, and cardiovascular diseases in middle-aged adults.

- **To calculate WHtR =** Height in (cm)/waist circumference

- Cardiometabolic risk prediction with anthropometric indicators.
- Body mass index (BMI; kg.m^2), waist circumference (WC), waist-to-hip ratio (WHR), and waist-to-height ratio (WHtR).
- Low-to-high cardiometabolic risk prediction sensitivity (gray scalene triangle)



Metabolic Syndrome

- **Metabolic syndrome is defined as having at least three of the following five cardiometabolic risk factors:**

Obesity:
- waist size > 38-41 inches in men
- > 32 inches in women

High blood pressure:
- BP reading of 130/85 or higher

High blood sugar:
- HbA1c of 5.7-6.4 or fasting blood glucose level of 100-125 mg/dL

Triglyceride levels:
- fasting triglyceride level of 150-180 or HDL cholesterol <40 for men and <50 for women

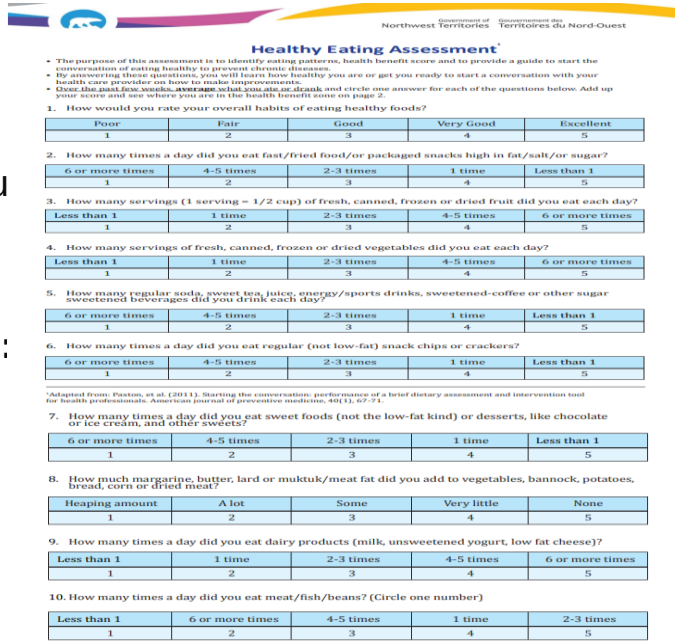
Healthy Eating Assessment

- The purpose of this assessment is to identify eating patterns, health benefit score and to provide a guide to start the conversation of eating healthy to prevent chronic diseases.

- By answering these questions, you will learn how healthy you are or get you ready to start a conversation with your health care provider on how to make improvements.

- **Determine your Health Benefit score here and Next Steps:**

Total Score	10-19	20-29	30-39	40-50
Health Benefit Zone	Needs Improvement	Fair	Good	Excellent
Action Plan	Take this questionnaire with you when you meet with your healthcare provider to create an action plan that fits your lifestyle.		Keep up the great work and continue to make healthy food choices.	



Government of Northwest Territories | Gouvernement des Territoires du Nord-Ouest

Healthy Eating Assessment*

- The purpose of this assessment is to identify eating patterns, health benefit score and to provide a guide to start the conversation of eating healthy to prevent chronic diseases.
- By answering these questions, you will learn how healthy you are or get you ready to start a conversation with your health care provider on how to make improvements.
- Over the past few weeks, average what you ate or drank and circle one answer for each of the questions below. Add up your score and see where you are in the health benefit zone on page 2.

1. How would you rate your overall habits of eating healthy foods?

Poor	Fair	Good	Very Good	Excellent
1	2	3	4	5

2. How many times a day did you eat fast/fried food/or packaged snacks high in fat/salt/or sugar?

6 or more times	4-5 times	2-3 times	1 time	Less than 1
1	2	3	4	5

3. How many servings (1 serving = 1/2 cup) of fresh, canned, frozen or dried fruit did you eat each day?

Less than 1	1 time	2-3 times	4-5 times	6 or more times
1	2	3	4	5

4. How many servings of fresh, canned, frozen or dried vegetables did you eat each day?

Less than 1	1 time	2-3 times	4-5 times	6 or more times
1	2	3	4	5

5. How many regular soda, sweet tea, juice, energy/sports drinks, sweetened-coffee or other sugar sweetened beverages did you drink each day?

6 or more times	4-5 times	2-3 times	1 time	Less than 1
1	2	3	4	5

6. How many times a day did you eat regular (not low-fat) snack chips or crackers?

6 or more times	4-5 times	2-3 times	1 time	Less than 1
1	2	3	4	5

*Adapted from: Paxton, et al. (2011). Starting the conversation: performance of a brief dietary assessment and intervention tool for health professionals. American journal of preventive medicine, 40(1), 67-71.

7. How many times a day did you eat sweet foods (not the low-fat kind) or desserts, like chocolate or ice cream, and other sweets?

6 or more times	4-5 times	2-3 times	1 time	Less than 1
1	2	3	4	5

8. How much margarine, butter, lard or muktuk/meat fat did you add to vegetables, bannock, potatoes, bread, corn or dried meat?

Heaping amount	A lot	Some	Very little	None
1	2	3	4	5

9. How many times a day did you eat dairy products (milk, unsweetened yogurt, low fat cheese)?

Less than 1	1 time	2-3 times	4-5 times	6 or more times
1	2	3	4	5

10. How many times a day did you eat meat/fish/beans? (Circle one number)

Less than 1	6 or more times	4-5 times	1 time	2-3 times
1	2	3	4	5

Nutritional lab assessment

Components of a Nutritional Lab Assessment:

CBC:	RBC, WBC, and platelets, which can indicate nutrient deficiencies.
Iron Studies:	Iron levels in the blood are crucial for assessing anemia and iron deficiency.
Vitamin Levels:	Vitamin D, B12, and folate
Electrolyte Levels:	Electrolyte imbalances can affect hydration
Urinalysis:	Hydration status, kidney function, and certain nutrient levels.
Metabolic Panel:	CMP & BMP to evaluate kidney function, liver function, blood glucose levels, and electrolyte balance.

Benefits of a Nutritional Lab Assessment:

Identifying Nutrient Deficiencies

↓

Personalized Nutrition Recommendations

↓

Monitoring Health Progress

Impact of Nutrition on Chronic Disease Prevention and Management

- According to the WHO, chronic diseases account for 71% of all global deaths, with 85% of these deaths occurring in low- and middle-income countries.
- Many chronic diseases are linked to unhealthy diets, lack of physical activity, and other lifestyle factors.
- Nutrition plays a critical role in the prevention and management of chronic diseases.
- A balanced diet can help reduce the risk of developing chronic diseases, improve overall health, and minimize the impact of existing conditions.

Healthy diet

- **A healthy diet** is one that provides the necessary nutrients, in the right quantities, to maintain good health and support normal growth and development. A healthy diet can help prevent chronic diseases such as obesity, heart disease, diabetes, and cancer, and can also help manage existing conditions.

Rich in vegetables, fruits, whole grains, legumes (beans and lentils), sea food and nuts → Moderate in low-fat / non-fat dairy products → Lower in red and processed meats → Low in saturated fat, Na, refined grains and added sugars.

- Studies have shown that people who eat this type of diet have a reduced risk of heart disease, diabetes, and possibly cancer and other chronic conditions.

Food and reduce the risk of chronic disease

There are certain foods that have significant health benefits and can reduce the risk of chronic disease.

Berries:	• fiber and antioxidants
Fish	Omega 3
Leafy green veg:	• Vit A,C, and Ca
Nuts:	• protein, monosaturated fats,
Olive oil:	• Vit E, polyphenols, mono-saturated
Whole grains:	• Fiber, phytonutrients, Vit B
Yogurt:	Ca, protein, look for live cultures- lactobacillus, L. acidophilus, S. thermophilus
Legumes:	beans (in soya and peas): fiber, folate, plant protein
Tomatoes:	Vit C, lycopene

Diet Management for Hypertension

How to control hypertension?

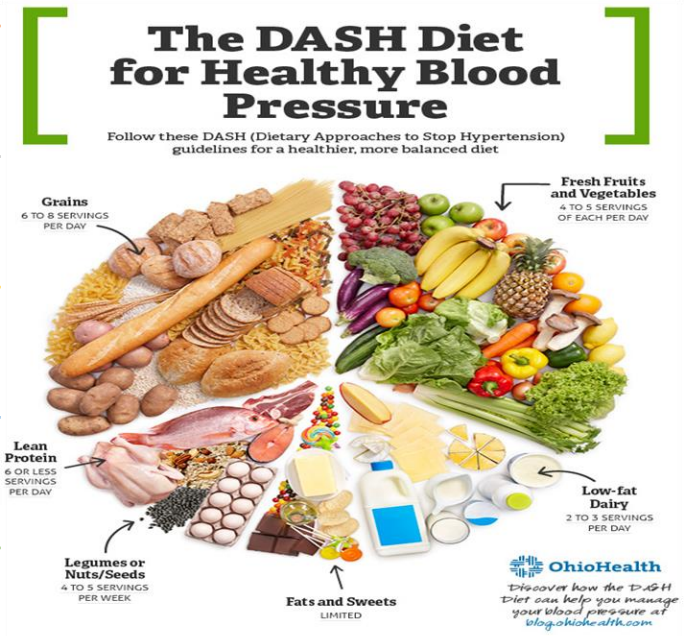
Maintain a healthy weight; Weight loss in overweight and obese patients helps lowers blood pressure.

Follow a healthy eating plan, which includes reducing dietary sodium intake to less than 2,300 mg per day.

Eat healthy diet which is rich in vegetables and fruits, these are good source of fibers and minerals and low in calories.

Use low fat milk and milk products (yoghurt, laban, labneh, low salt cheese) not more than two cups per day. Milk and milk products are rich source of calcium, potassium, and magnesium; these minerals help in reduction of blood pressure.

Restrict fat intake by reducing oil in cooking and avoid fried food.



Diet Management for Diabetes

- **Tips to make changes to carbohydrate intake and to improve blood sugar:**

Reduce sugary foods and drinks as much as possible. These food not only effect your diabetes control but can also cause weight gain due to their high calories content

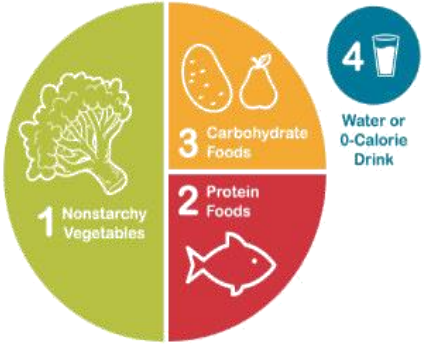
Choose sugar free drinks and use artificial sweeteners if needed.

drink only small amount of pure fruit juice

Reduce total portion of starchy food at meals and try to replace them with more vegetables and salad on your plate

Eat legumes and nuts more often. These food slow down the digestion and absorption of carbohydrate and don't cause spikes in blood glucose levels either due to their low carbohydrate and/or high fat content

Dairy products do not affect blood glucose too much due to their low carbohydrate content and are good source of calcium and other important nutrients. Choose low fat dairy products.



Diet Management for Dyslipidemia

How to reduce cholesterol and triglycerides in the blood

- Reduce intake of all kinds of fat especially Trans fat and saturated fat
- Check Food Labels
- Limit intake of simple sugars (Sweets, desserts, candies, chocolate, soft drinks, alcoholic beverages, energy drinks and sweetened hot drinks).
- Reduce intake of sweets; it is high in simple sugar and fat
- Reduce refined carbohydrates such as white bread, white pasta, white rice, pastries and replace with whole grain food products.
- Consume Fiber rich foods such as fruits, vegetables and legumes.
- Replace full fat dairy products with low fat or fat free dairy products

Diet Management for obesity

- **Obesity management refers to the comprehensive approach taken to address and treat obesity in individuals , It involves:**
  - a combination of lifestyle modifications
  - Dietary changes
  - Physical activity
  - Behavioral therapy
  - Pharmacotherapy
  - and in some cases, surgical interventions to help individuals achieve and maintain a healthy weight

5A's of obesity management

Ask	Permission to discuss weight Explore readiness to change/address
Assess	Obesity stage and/or BMI, for co-morbidities Drivers, complications, and barriers
Advise	Discuss benefits of modest weight loss in context Discuss treatment options
Agree	Agree on realistic weight loss expectations Agree on SMART behaviour change goals Agree on a treatment plan
Assist	Assist in addressing drivers and barriers Assist in accessing resources Refer prn / arrange follow up

Diet Management for obesity

DIAGNOSIS AND MEDICAL MANAGEMENT OF OBESITY				
DIAGNOSIS		COMPLICATION-SPECIFIC STAGING AND TREATMENT		
Anthropometric Component (BMI kg/m²)	**Clinical Component**	**Disease Stage**	**Chronic Disease Phase of Prevention**	**Suggested Therapy (based on clinical judgment)**
<25 <23 in certain ethnicities waist circumference below regional/ethnic cutoffs		**Normal weight** (no obesity)	**Primary**	• **Healthy lifestyle:** healthy meal plan/physical activity
25–29.9 23–24.9 in certain ethnicities	Evaluate for presence or absence of adiposity-related complications and severity of complications • Metabolic syndrome • Prediabetes • Type 2 diabetes • Dyslipidemia • Hypertension • Cardiovascular disease • Nonalcoholic fatty liver disease • Polycystic ovary syndrome • Female infertility • Male hypogonadism • Obstructive sleep apnea • Asthma/reactive airway disease • Osteoarthritis • Urinary stress incontinence • Gastroesophageal reflux disease • Depression	**Overweight stage 0** (no complications)	**Secondary**	• **Lifestyle therapy:** Reduced-calorie healthy meal plan/physical activity/ behavioral interventions
≥30 ≥25 in certain ethnicities		**Obesity stage 0** (no complications)	**Secondary**	• **Lifestyle therapy:** Reduced-calorie healthy meal plan/physical activity/ behavioral interventions • **Weight-loss medications:** Consider if lifestyle therapy fails to prevent progressive weight gain (BMI ≥27)
≥25 ≥23 in certain ethnicities		**Obesity stage 1** (1 or more mild to moderate complications)	**Tertiary**	• **Lifestyle therapy:** Reduced-calorie healthy meal plan/physical activity/ behavioral interventions • **Weight-loss medications:** Consider if lifestyle therapy fails to achieve therapeutic target or initiate concurrently with lifestyle therapy (BMI ≥27)
≥25 ≥23 in certain ethnicities		**Obesity stage 2** (at least 1 severe complication)	**Tertiary**	• **Lifestyle therapy:** Reduced-calorie healthy meal plan/physical activity/ behavioral interventions • **Add weight-loss medication:** Initiate concurrently with lifestyle therapy (BMI ≥27) • **Consider bariatric surgery:** (BMI ≥35)

a. All patients with BMI ≥25 have either overweight or obesity stage 0 or higher, depending on the initial clinical evaluation for presence and severity of complications. These patients should be followed over time and evaluated for changes in both anthropometric and clinical diagnostic components. The diagnoses of overweight/obesity stage 0, obesity stage 1, and obesity stage 2 are not static, and disease progression may warrant more aggressive weight-loss therapy in the future. BMI values ≥25 have been clinically confirmed to represent excess adiposity after evaluation for muscularity, edema, sarcopenia, etc.
b. Stages are determined using criteria specific to each obesity-related complication; stage 0 = no complication; stage 1 = mild to moderate; stage 2 = severe.
c. Treatment plans should be individualized; suggested interventions are appropriate for obtaining the sufficient degree of weight loss generally required to treat the obesity-related complication(s) at the specified stage of severity.
d. BMI ≥27 is consistent with the recommendations established by the US Food and Drug Administration for weight-loss medications.

Abbreviation: BMI = body mass index.

Diet Management for obesity

- **1- Life style Change**

Change your dietary habits and lifestyle to maintain the weight you attained, which has a positive impact on your health.

Rapid weight loss in a short time period is unhealthy and weight that was attained will hardly be maintained. Be realistic. Try to lose about 1kg per week.

Start your weight reduction program by avoiding high calories foods, as it is clear in the attached table.

Distribute your food into 3 main meals and 2-3 snacks in between, with maintaining a regular timing.

Avoid overeating and stick to specific portion size using small utensils, eat slowly and chew your food properly.

Diet Management for obesity

- **1- Life style Change**

Reading the food label helps in selection of suitable food items and calorie contents.

Keep time for daily regular exercises not less than 30 minutes (continuous), if you are unable to do so, do it in bouts of 10 minutes 3 times a day.

Respect your body walk faster and more often, increase gradually you're in door physical activity.

During weight reduction the body will lose water faster than fat, so keep consumption of adequate amount of water 8-10 cups/day, it helps in weight loss and cleans your body from waste products.

Diet Management for obesity

2- How to choose your food?

Reduce fat intake, use vegetables oil like (olives oil, corn oill), and avoid solid fat.

Follow the healthy ways in food preparation as grilling, boiling, steaming, and backing.

Avoid fried and fatty foods.

Consume the recommended amount of protein while dieting by taking good protein sources like (chicken, egg, and legumes).

Fiber rich foods e.g. (fruits, vegetables, and whole grain) also good sources of vitamins and minerals.

Starchy foods are required to provide your daily energy needs, consume the recommended and avoid overconsumption.

Avoid simple sugar, sweets, sweetened juices, and soft drinks.

Reduce consumption of appetizers; it is rich in salt and promote over consumption of foods.

Nutrition for a Healthy Life

Question

- **Which of the following increases the risk of cardiovascular disorders in patients with obesity?**
  A. Osteoporosis
  B. Excess abdominal fat
  C. Psychologic disorders
  D. Gastric ulcer

Holistic nutrition

Holistic nutrition is a form of nutrition that focuses on the whole person, considering their physical, mental, emotional, and spiritual health. It emphasizes the connection between mind, body, and spirit in achieving optimal health and wellness.

This approach to nutrition goes beyond just looking at individual nutrients and instead looks at how all aspects of a person's life can impact their overall well-being.

Brain health

Eating pattern affect mental and brain health as same as it affects our physical health.

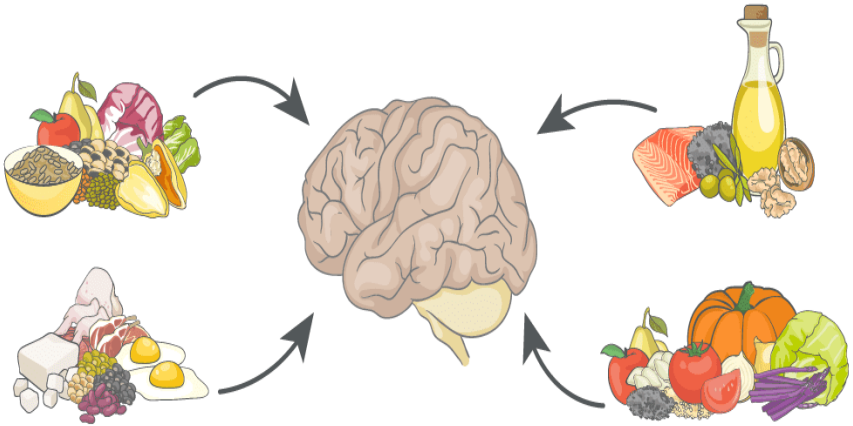
Many studies have linked nutritious diet with better brain health, whereas the mechanisms how nutritious diet enhance and optimize brain function are not yet known.

Many theories have linked between healthy diet and oxidative stress, and control inflammation, and its affect to certain processes in the brain.

It has been investigated that deficiency of some macro and micronutrients cause abnormal levels of neurotransmitters like serotonin and dopamine in the brain that having significant role brain health in mood regulation and anxiety coping.

Types of foods boosting brain function:

1. Green Leafy Vegetables
2. Whole Grains
3. Healthy Fat
4. Antioxidant-Rich Foods
5. Nuts
6. Water

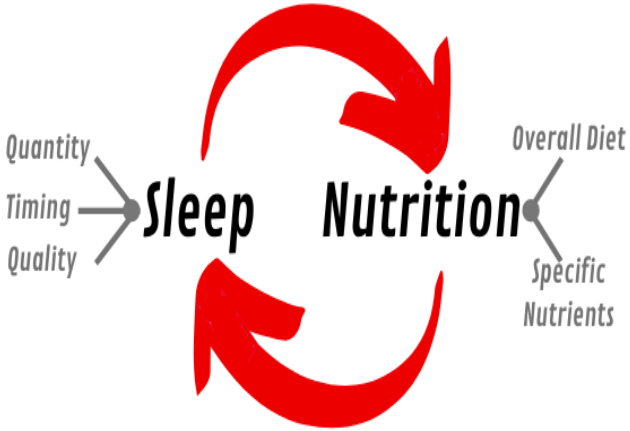


Recommendations

Combine	• Combine the Mediterranean diet and the DASH diet to create a dietary pattern that maintain and improve brain health.
Stay	• Stay hydrated
Eat	• Eat good source of healthy fat (fatty fish) twice in weekly basis.
Include	• Include Leafy vegetables and whole grains in your main meals.
Decrease	• Decrease intake of refined sugar to the minimum.
Use	• Use olive oil as a main oil.
Take	• Take the nuts as healthy and nutritious a snack
Avoid	• Avoid alcohol overconsumption, excessive intake can lead to memory loss, behavioral changes and sleep disruption.

Sleep

- Diet and nutrition can influence the quality and duration of our sleep, and certain foods and drinks can make it easier or harder to get the sleep that we need.
- Recognizing the connections between sleep and nutrition helps in optimizing both, so that we can eat smarter, sleep better, and live a healthier life.
- Making changes to our diet can promote good sleep, as some foods and drinks have effect on our sleep



Nutritional tips to get better sleep

Reduce	• Reduce your caffeine consumption
Reduce	• Reduce alcohol consumption and avoid alcohol before bed
Take	• Take one exchange of tart cherry before sleep, it is a natural rich source of the sleep-inducing hormone melatonin
Eat	• Eat complex carbohydrates such as whole-wheat toast or a bowl of oatmeal before bed,they trigger the release of the sleepy hormone serotonin, and don't take long time to digest.
Avoid	• Avoid fatty or high-protein foods before bed
Avoid	• Avoid spicy food before bed
Take	• Take healthy meals over the day that are rich with fruits, vegetables and fiber and low in simple sugars, salt and fat will give better sleep

Nutritional tips to get better sleep

Maintain	• Maintain a healthy body weight
Drink	• Drink a cup of chamomile tea every day
Make	• Make it a habit to consume one kiwi fruit /day
Include	• Include fatty fish in your meal plan, it is rich with vitamin D, and omega-3 fatty acids, both of which have properties that may improve the quality of your sleep
Take	• Take the recommended quantity of skimmed or low-fat milk and dairy products and enjoy turkey and a punch of pumpkin seeds, it is good source of tryptophan and has a positive effect on your sleep
Don’t go	• Don’t go to bed while you are so full or hungry, take a light healthy meal 2-3 hours before bedtime

How sleep affects what -- and how much -- you eat

Stress

Our need for nutrients increases during periods of stress because it affects healthy eating patterns.

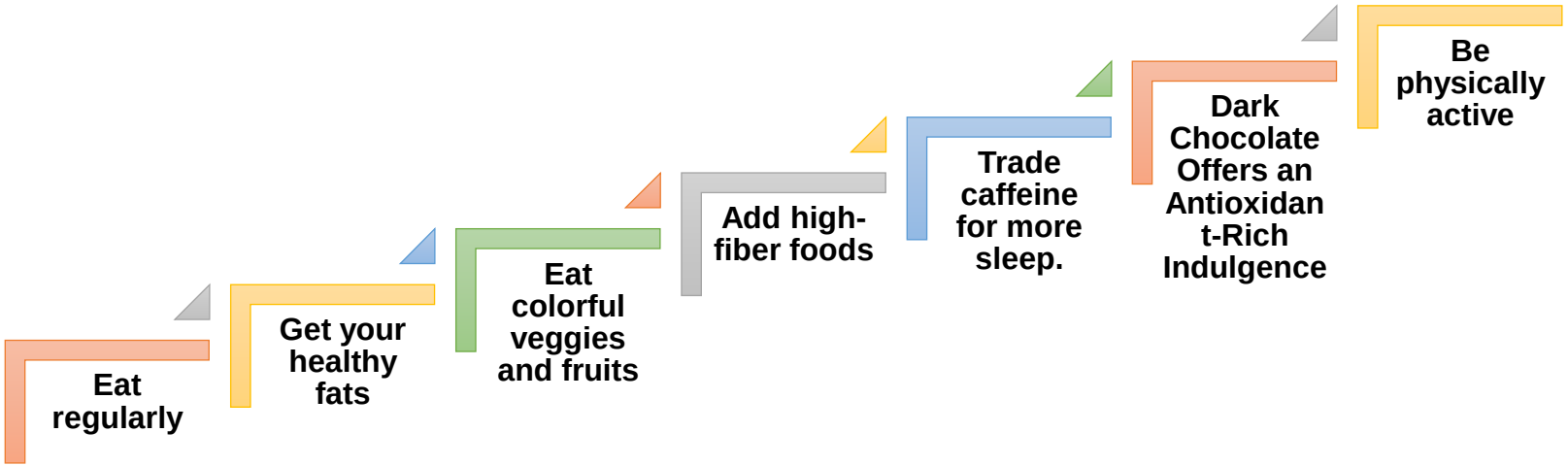
Protein, fat, and carbohydrates are needed to produce energy, but will be upset when there is high demands on the body which can lead to increase demand of other nutrients, such as Vitamin C and many B vitamins that are used to produce energy.

Stress and diet have always been linked. Many people use foods as rewards, but when you are feeling stress usually will use something low in nutrients and high in salt, fat and sugar.

Many people tend to eat when anxious, even when not feeling hungry. On the other hand, others who are under stress lose the desire to eat and frequently miss meals and snacks

How can nutrition affect stress

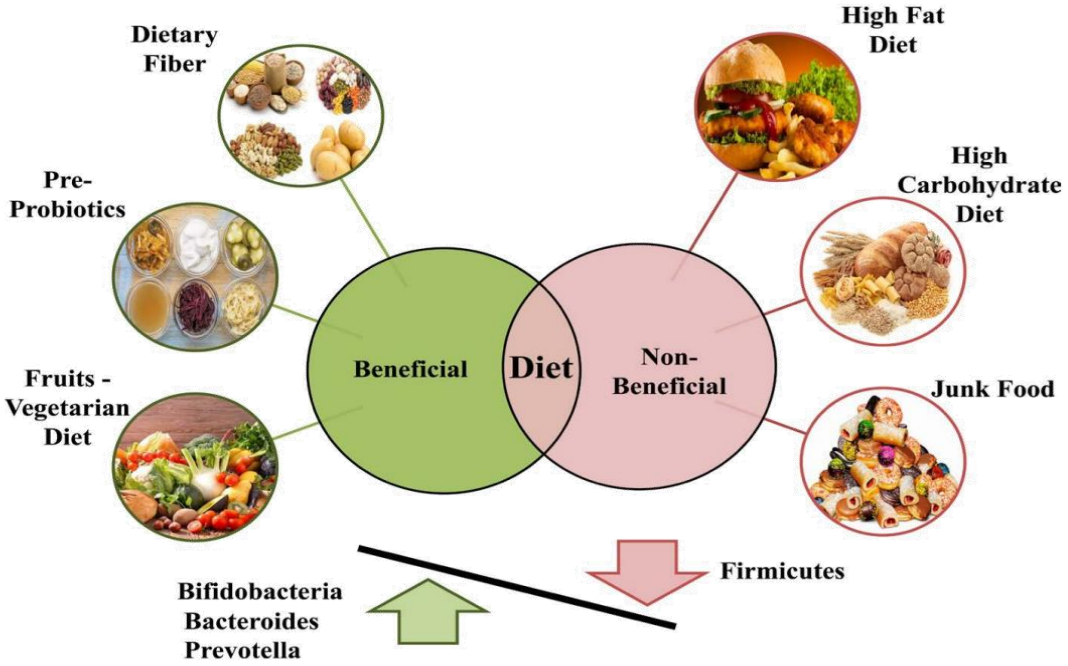
Dietary recommendations to reduce stress



Gut health

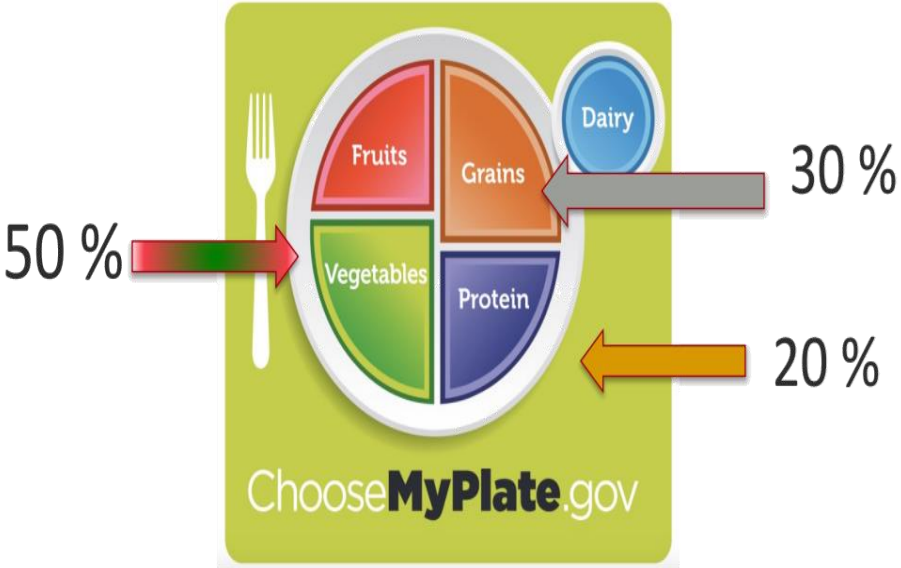
- A healthy gut is supported by an overall healthy lifestyle that includes getting enough sleep, managing mood and stress, and engaging in regular exercise. However, one of the most important things you can do to promote gut health is to change your eating habits.

What is considered a healthy gut diet?



My plate

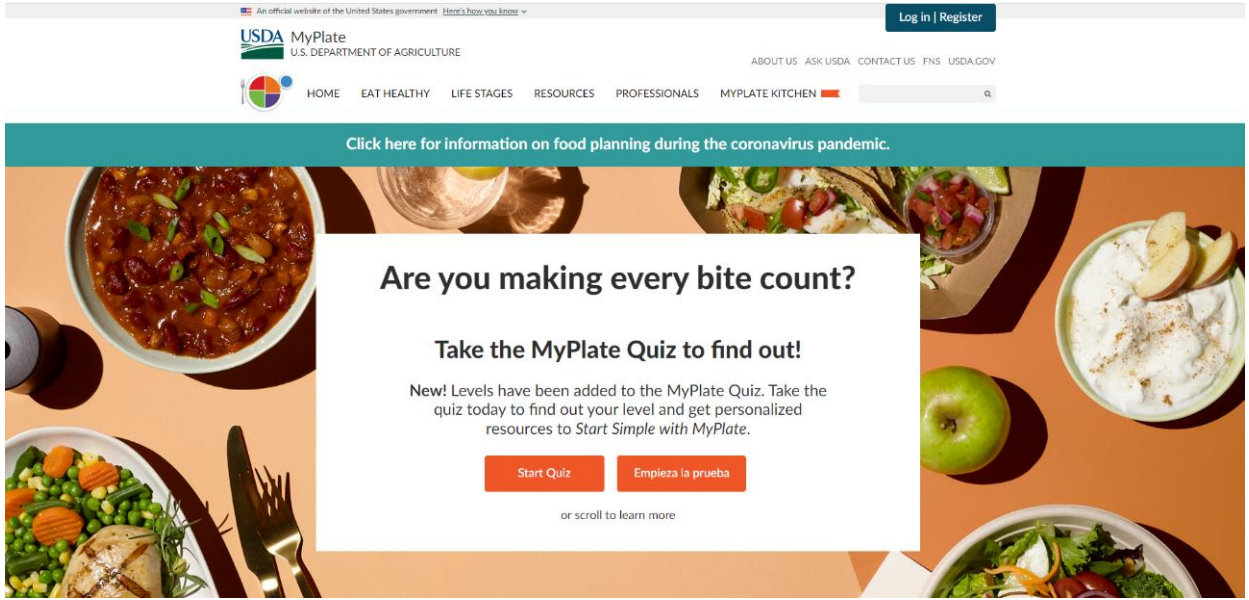
- Make half your plate fruits and vegetables
  - Focus on whole fruits and vary your veggies
- Make half your grains whole grains
- Vary your protein routine
- Move to low-fat or fat-free dairy milk or yoghurt
- Choose foods and beverages with less added sugars, saturated fat, and sodium



MyPlate Nutrition tips

- Balance calories in with exercise or calories burned
- Enjoy your food, but eat less
- Use a smaller plate, bowl, or glass
- Make half your plate fruits and vegetables
- Switch to fat free or 1% milk
- Eat more whole grains
- Eat foods lower in sodium (salt)

ChooseMypPlate.gov



Serving Size Vs. Portion Size

Serving Size

A **serving size** is a standard measure of a food that is used to quantify nutrition data for comparative purposes, it is <u>not</u> the suggested quantity of food you should eat.

Portion Size

A **portion size** is how much food you choose to eat at a given time, based on your hunger cues and health goals, which may be more or less than a serving size.

Serving Size And Portion Size - How Much Is One Serving

Daily servings from each food group

General guidelines for the number of daily servings from each food group

Grains and starchy vegetables: 6-11 servings a day

Non-starchy vegetables: 3-5 servings a day

Fruit: 2-4 servings a day

Dairy: 2-3 servings a day

Lean meats and meat substitutes: 4-6 ounces a day

Fats, oils, and sweets: Eat sparingly

Let's take some examples of portion size: a visual guide

Whole Grain Bread

- 1 serving = 1 slice
- A slice of bread is proportional to the size of one DVD disc.

Butter

- 1 serving = 1 teaspoon
- One small pat of butter is equal to one serving size.

Green Peas

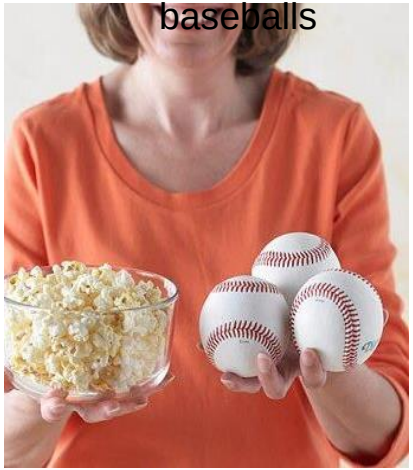
1 1 serving = 1/2 cup

- A serving-size side of green peas is equal to half of a baseball.

- **Air-Popped or Light Microwave Popcorn**

1 serving = 3 cups

- Snack away on the healthier varieties of popcorn and enjoy a serving size of three baseballs



Serving Size Card

1 Serving Looks Like . . .

Grain Products

1 cup of cereal flakes = fist

1 pancake = compact disc

½ cup of cooked rice, pasta, or potato = ½ baseball

1 slice of bread = cassette tape

1 piece of cornbread = bar of soap

1 Serving Looks Like . . .

Vegetables and Fruit

1 cup of salad greens = baseball

1 baked potato = fist

1 medium fruit = baseball

½ cup of fresh fruit = ½ baseball

¼ cup of raisins = large egg

1 Serving Looks Like . . .

Dairy and Cheese

1 ½ oz. cheese = 4 stacked dice or 2 cheese slices

½ cup of ice cream = ½ baseball

Fats

1 tsp. margarine or spreads = 1 dice

1 Serving Looks Like . . .

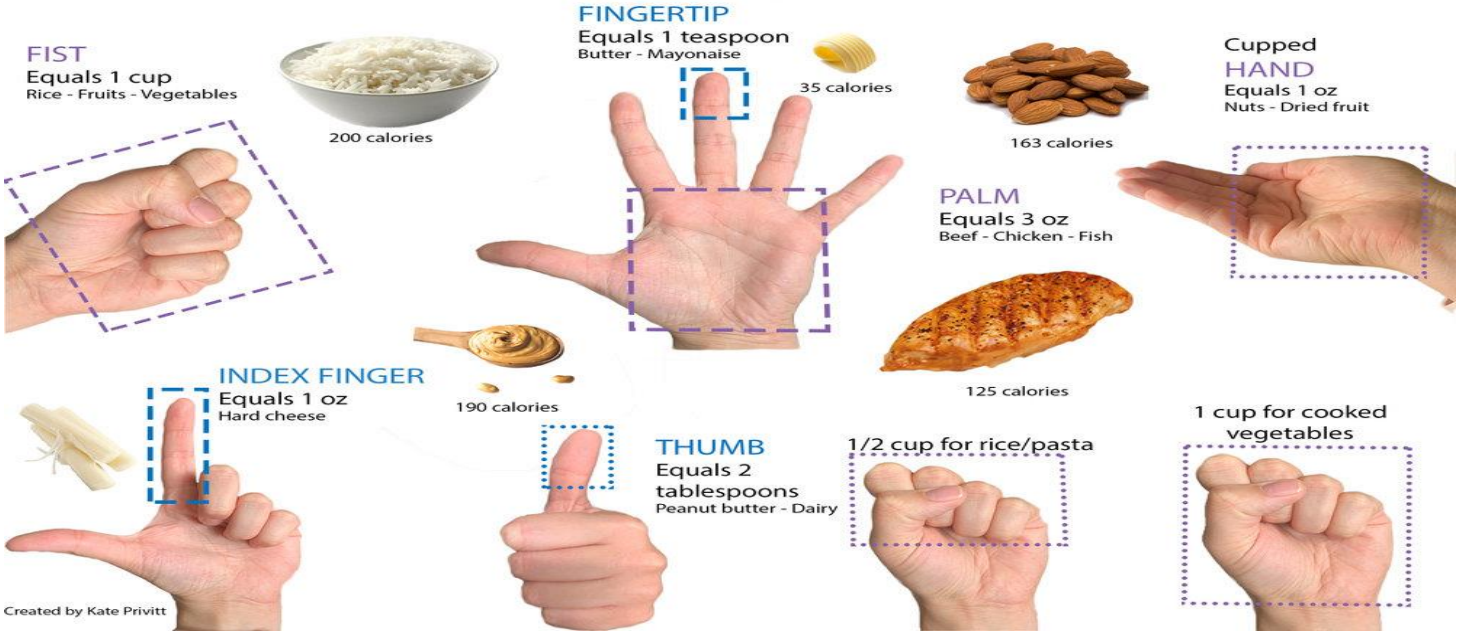
Meat and Alternatives

3 oz. meat, fish, and poultry = deck of cards

3 oz. grilled or baked fish = checkbook

2 Tbsp. peanut butter = ping pong ball

Hand-Size Portion Guide



How can I manage food portions at home?

Avoid eating in front of the TV

Focus on what you are eating, chew your food well.

Eat slowly so your brain has time to realize your stomach is full, which may take at least 15 minutes.

Use smaller dishes, bowls, and glasses so you eat and drink less.

Eat fewer high-fat, high-calorie foods, such as desserts, chips..

Eat meals at regular times. Delaying meals or skipping meals altogether may cause you to overeat later in the day.

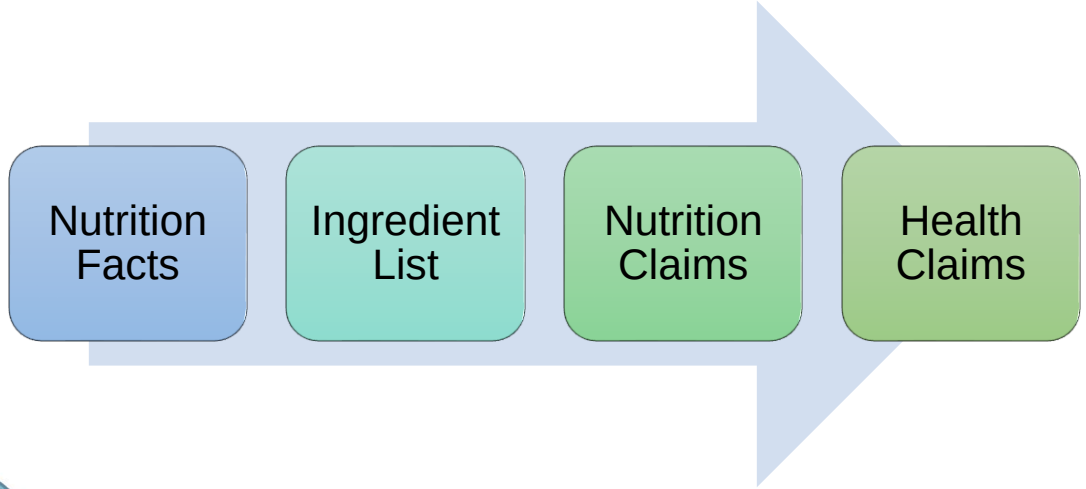
Buy snacks, such as fruit or single-serving prepackaged foods that are lower in calories. If you buy bigger bags or boxes of snacks, divide the items into single-serving packages right away so you aren’t tempted to overeat.

How can I manage portions when eating out?

1. Share a meal with a friend or take half your meal home.
2. Avoid all-you-can-eat buffets.
3. Order one or two healthy appetizers or side dishes instead of a whole meal.
4. Ask to have the basket of bread or chips removed from the table.
5. If you have a choice, pick the small-size rather than large-sized drink.
6. Look for calorie information
7. Stop eating and drinking when you're full.

Food label

- **Food and Drug Administration (FAD) designed a food labeling as an effective tool to protect the health, well-being, and food safety of consumers.**



Food label

Ingredient List

- Foods are listed in order of the ingredient highest in weight to the ingredient lowest in weight.
- When choosing packaged foods, check the list of ingredients to make sure that whole foods rather than ingredients like sugar (glucose or fructose) or white or refined wheat flour
- Ingredient list is also a source of information for people with food allergies.

Nutrition and Health Claims

- Nutrition and health claims are both concerned with the benefits of consuming a food product, but they approach it from different angles.
- Nutrient content claims describe the amount of a nutrient in a food, while health claims describe a relationship between a food substance and reduced risk of a disease or health-related condition.

Nutrition Facts

- Use Nutrition Facts
  - To easily compare similar foods.
  - To look for foods with a little or a lot of a specific nutrient.
  - To select foods for special diets.
- Check the serving size: This will tell consumer the size of a single serving and the total number of servings per container (package).

Nutrition Facts

Use Percent Daily Value (%DV) as a guide:

The %DV shows how much a nutrient in a serving the food contributes to a total daily diet

Limit certain nutrients:

Saturated fat, sodium, added sugars and Trans fat (should choose zero).

Get enough of the beneficial nutrients:

Calcium, dietary fiber, iron, magnesium, potassium, and vitamins A, C, D and E.

Nutrition Facts

8 servings per container

Serving size 2/3 cup (55g)

Amount per serving

Calories 230

	% Daily Value*
Total Fat 8g	10%
Saturated Fat 1g	5%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 160mg	7%
Total Carbohydrate 37g	13%
Dietary Fiber 4g	14%
Total Sugars 12g	
Includes 10g Added Sugars	20%
Protein 3g	
Vitamin D 2mcg	10%
Calcium 260mg	20%
Iron 8mg	45%
Potassium 235mg	6%

* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

Quick hint

Sample label for macaroni and cheese

Start here

Limit these nutrients

Get enough of these nutrients

Quick guide to % DV:
- 5% or less is low
- 20% or more is high

Nutrition Facts

Serving Size 1 cup (228g)
Servings Per Container 2

Amount Per Serving

Calories 250 — Calories from Fat 110

	% Daily Value*
Total Fat 12g	**18%**
Saturated Fat 3g	**15%**
Trans Fat 1.5g	
Cholesterol 30mg	**10%**
Sodium 470 mg	**20%**
Total Carbohydrate 31g	**10%**
Dietary Fiber 0g	**0%**
Sugars 5g	
Protein 5g	
Vitamin A	4%
Vitamin C	2%
Calcium	20%
Iron	4%

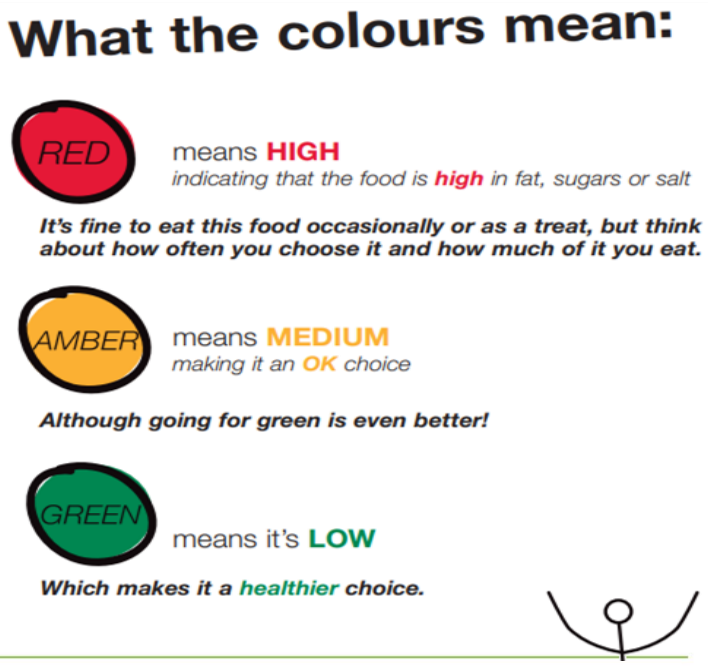
* Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs:

	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		300g	375g
Dietary Fiber		25g	30g

Activity

Traffic light

- **It was designed to give consumers an immediate idea as to whether something is:**
- Healthy (green or low) or not (red or high) in terms of fat, saturated fat, sugar, salt and energy.
- This help the consumers decide the quicker healthier choices.



Red, amber and green color coding

Text	LOW	MEDIUM	HIGH	
Colour code	Green	Amber	Red	
Fat	≤ 3.0g/100g	> 3.0g to ≤ 17.5g/100g	> 17.5g/100g	> 21g/portion
Saturates	≤ 1.5g/100g	> 1.5g to ≤ 5.0g/100g	> 5.0g/100g	> 6.0g/portion
(Total) Sugars	≤ 5.0g/100g	> 5.0g and ≤ 22.5g /100g	> 22.5g/100g	> 27g/portion
Salt	≤ 0.3g/100g	> 0.3g to ≤ 1.5g/100g	>1.5g/100g	>1.8g/portion

Note: portion size criteria apply to portions/serving sizes greater than 100g

Healthy food choices

The choices you make about what you eat and drink matter. They should add up to a balanced, nutritious diet.

We all have different calorie needs based on our gender, age, and activity level.

Health conditions can play a role too, including if you need to lose weight.

Choose food from all five groups and follow the tips below.

Healthy snack

Healthy Beverage

Don’t forget!

Make it a habit to eat a variety of healthy foods each day.

- Eat plenty of vegetables and fruits, whole grain foods and protein foods. Choose protein foods that come from plants more often.
- Choose foods with healthy fats instead of saturated fat
- Limit highly processed foods. If you choose these foods, eat them less often and in small amounts.
- Prepare meals and snacks using ingredients that have little to no added sodium, sugars or saturated fat
- Choose healthier menu options when eating out
- Make water your drink of choice
- Replace sugary drinks with water
- Use food labels
- Be aware that food marketing can influence your choices

Setting up a clinical practice at staff clinic

10 YEARS OF INSPIRING IMPROVEMENT

مؤسسة حمد الطبية
Hamad Medical Corporation

In Collaboration with
Institute for Healthcare Improvement

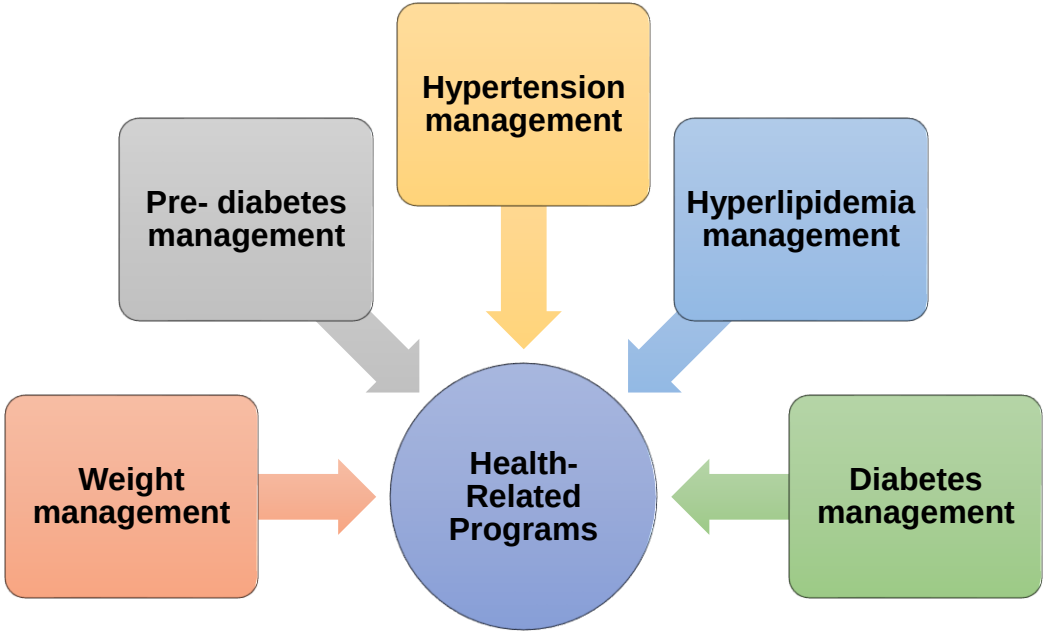
Brought to you by Hamad Healthcare Quality Institute

Objectives of Dietitian wellness clinic

- Early assessment and management in individuals known to have Prediabetes , Prehypertension, Dyslipidemia , overweigh/obese.
- Enhancement of healthy life style including diet, physical activity, and weight loss
- To provide educational material that emphasizes the relationship between adequate nutrition and good health.

Clinic programs of service

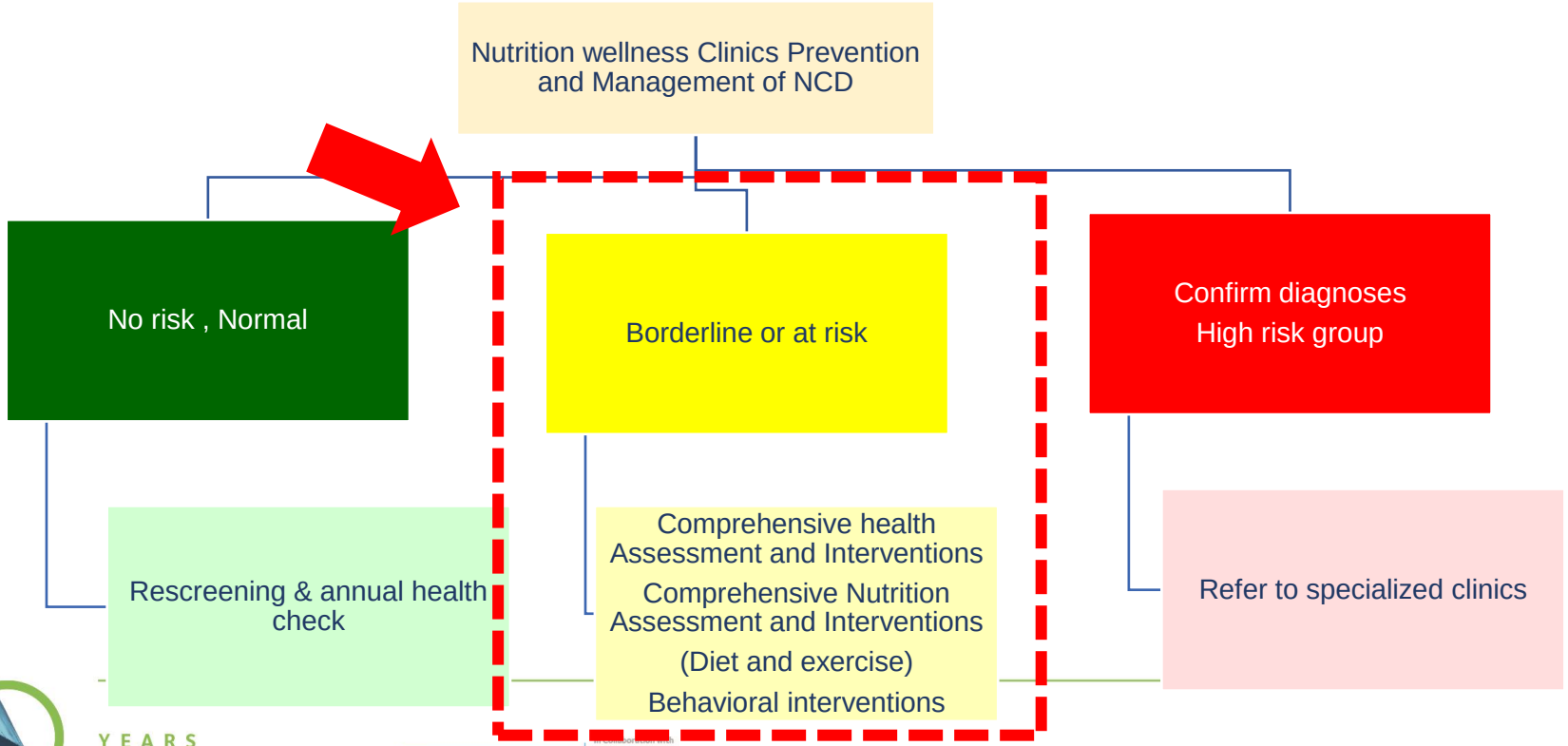
- **Health programs and services might include:**



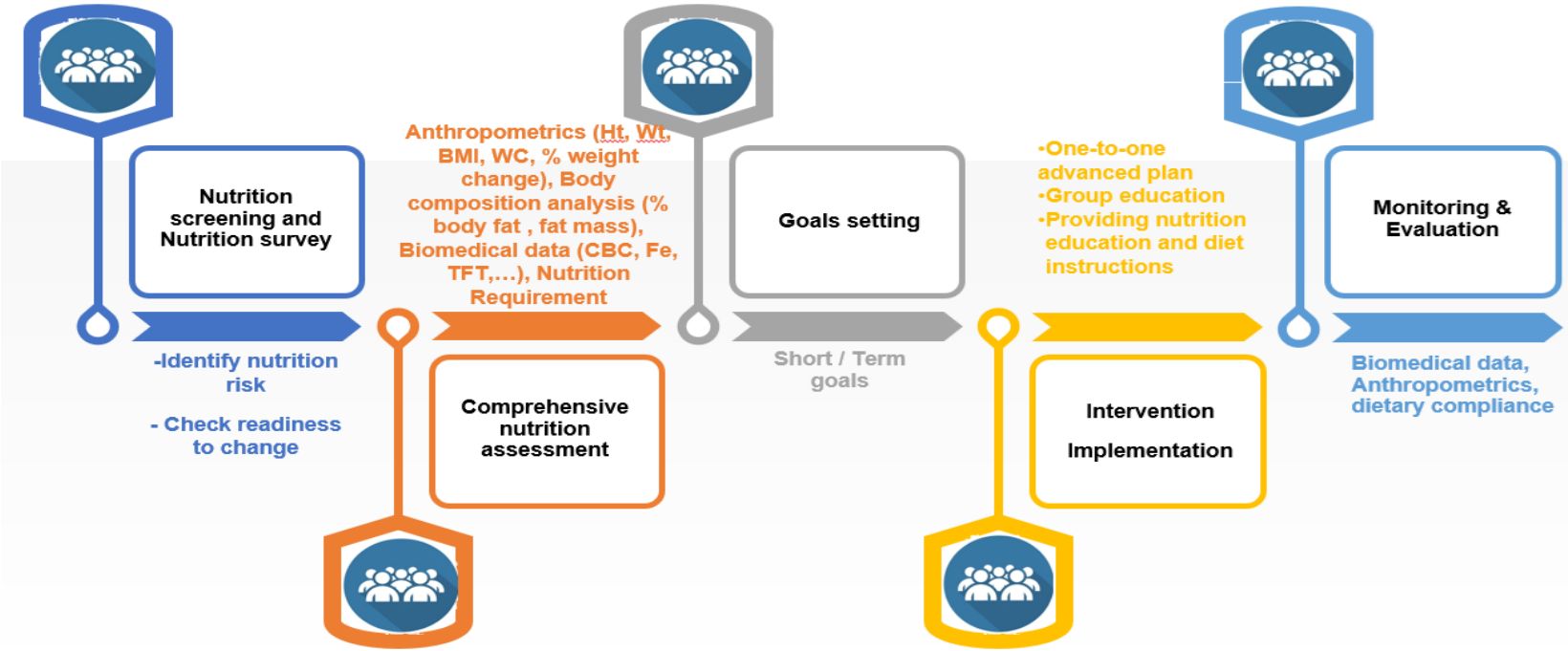
Scope of service

Nutrition Wellness clinic:	Performing a comprehensive nutrition assessment for employee
	Assess nutritional status
	Determining the nutrition diagnosis
	Planning and implementing a nutrition intervention using evidence-based nutrition practice guidelines
	Monitoring and evaluating an individual's progress toward goals
	Provide specific nutritional management for those failed to reach targets.
	Management of overweight/obesity and NCD according to guidelines
	Discuss the patient's dietary, physical activity and behavioral goals

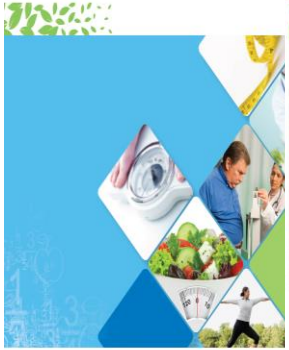
Referral pathway



Clinical Dietitian wellness clinic Pathway



Educational Materials



10 YEARS OF INSPIRING IMPROVEMENT

In Collaboration with Institute for Healthcare Improvement

Brought to you by Hamad Healthcare Quality Institute

Follow-up Visits

- **The amount of follow-up provided will depend on the staff needs**

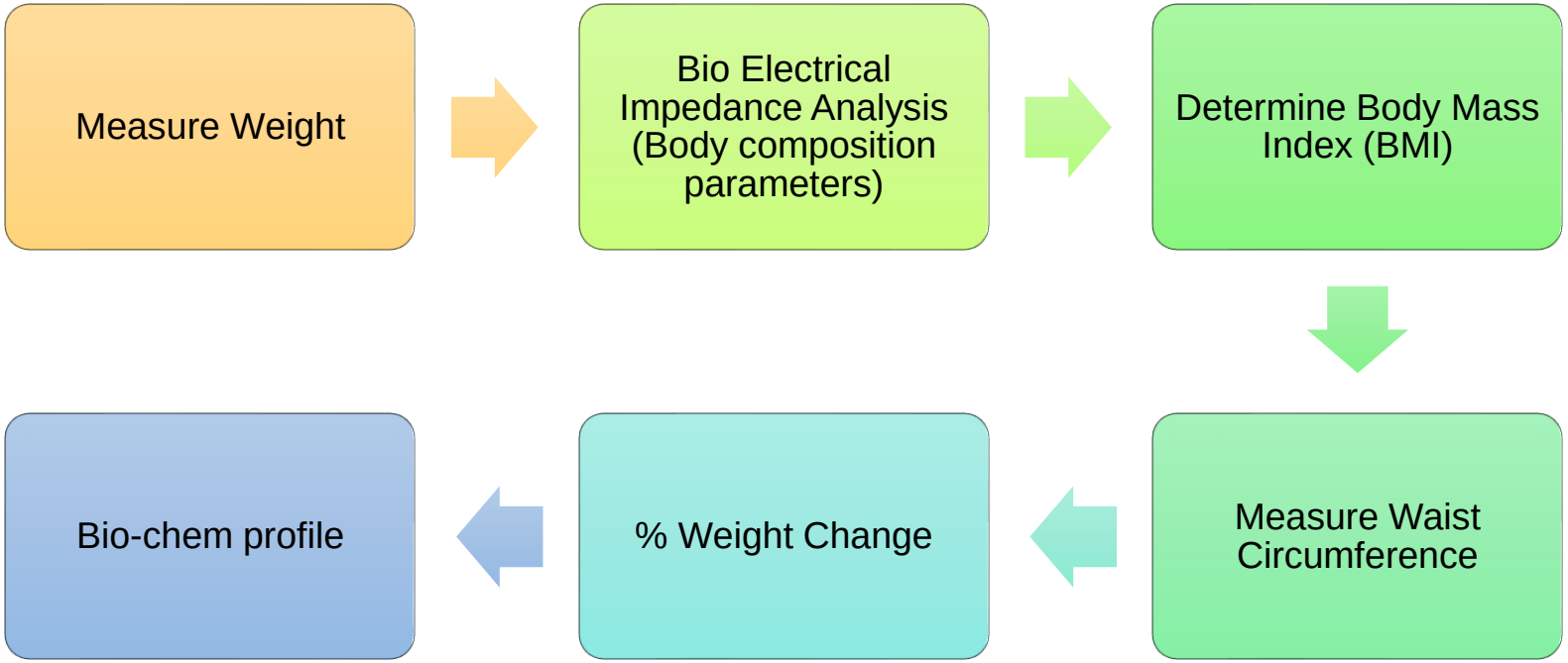
2weeks after initial visit for the following purposes:

- Weight monitoring.
- Problem-resolution, if indicated (medicine, dietary or physical activity).
- Monthly group meetings for next 3 months on exercise, nutrition and behavior change topics.

KPIs

- Percentage of employees who have reduced their weight by 10%
- Percentage of employees who have reduced Body composition parameters
- Percentage of employees who have 30 minutes of any type of physical activity five times per week
- Percentage of employees who decrease waist circumference at least 5-10 cm in a month.
- Percentage of employees who have blood pressure within normal range / control
- Percentage of employees who have Lipid profile within normal range
- Percentage of employees who have HbA1c% < 5.7

Monitoring the following



Case study

Patient Background:

- A 45-year-old Female, has a history of obesity. She has struggled with weight management for most of her life and has tried various diets and exercise routines without long-term success. Her BMI is currently 30, classifying her as obese. She often resorts to fast food and processed meals for convenience, which contributes to her weight gain

Medical History:

- She has been diagnosed with hypertension, hyperlipidemia and type 2 diabetes, both of which are commonly associated with obesity. She also experiences joint pain and fatigue, which further impact her quality of life. Her blood work shows elevated cholesterol TG and HbA1C% levels .

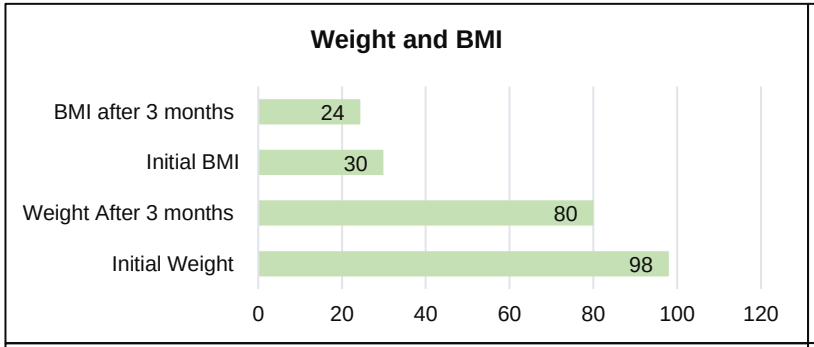
Treatment Plan:

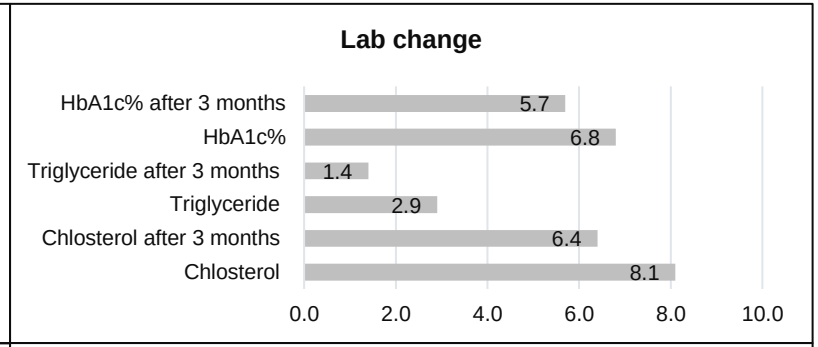
- She is on medication for hypertension and diabetes, as well as regular monitoring of her blood sugar levels. She has been advised to follow a balanced diet and increase her physical activity to help manage her weight and improve her overall health.

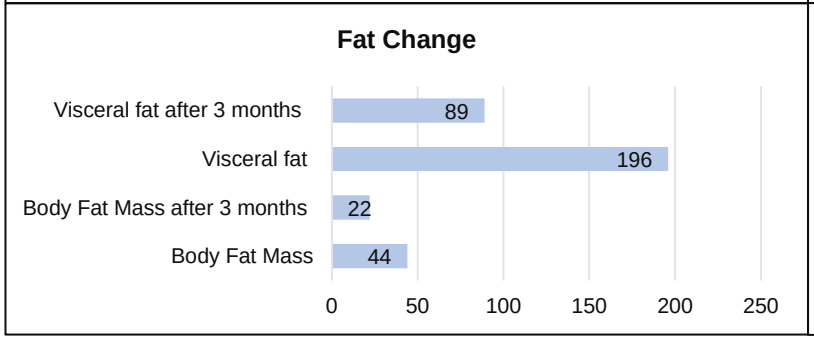
Goals:

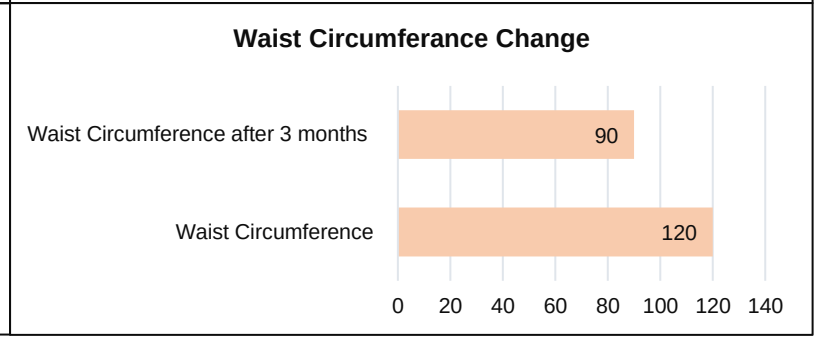
- The long-term goals for her include achieving a sustainable weight loss of 10-20% of her current body weight over the next year through lifestyle modifications. This can significantly improve her blood pressure, blood sugar control, cholesterol levels, and overall well-being.

Case study / Result









Book your appointment

Contact information:

Location: Preventive Medicine Division Dietitian clinic – HMC Staff Medical Center , Hamad bin khalifa medical city

Tel. No: 40256861

Type of referral:

Physician referral

Self referral

Scan me

Conclusion

Nutrition plays a vital role in preventive medicine by serving as a fundamental element in maintaining health and preventing chronic diseases.

The impact of nutrition on overall well-being underscores its significance as a primary intervention in preventive healthcare.

By promoting healthy eating habits and addressing nutritional needs at both individual and population levels, preventive medicine can effectively reduce the incidence of chronic diseases and improve public health outcomes.

By adopting a nutritious diet and lifestyle, individuals can positively impact their health outcomes and reduce the likelihood of developing chronic diseases associated with poor dietary choices. Education on proper nutrition and making informed food choices are key components of risk reduction strategies that aim to improve overall health and well-being.

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Thank you

10 YEARS OF INSPIRING IMPROVEMENT

Physical Activity

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Disclosure Statement

I make the following declaration in relation to this presentation:

- There is NO Conflict of Interest
- There is no bias, either commercial or non-commercial
- There is no plagiarism or copyright infringement

Learning Objectives

At the end of this session, participants will be able to:

1. Understand the importance of physical activity for health.
2. Understand the sedentary lifestyle
3. Learn about the recommended guidelines for physical activity.
4. Understand the FITT Principle & prescription for physical activity.

Introduction

Q. What is physical activity?

WHO defines physical activity as any bodily movement

produced by skeletal muscles that requires energy expenditure.

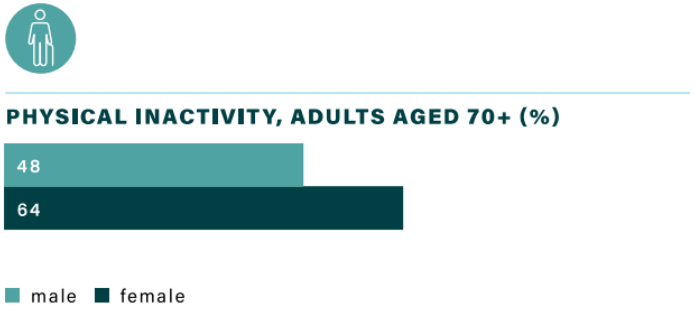
Burden of Physical inactivity: Globally

- More than 25% of the world's adult population (1.4 billion adults) are insufficiently active.

- Around 1 in 3 women and 1 in 4 men are physically inactivity.

- Levels of inactivity are twice as high in high-income countries compared to low-income countries.

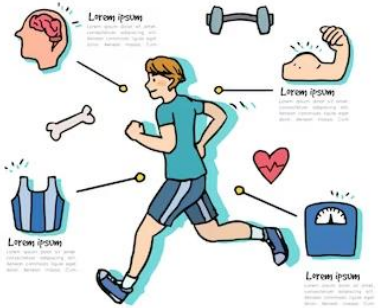
Burden of Physical inactivity: Locally



Benefits of physical activity

Benefit of physical activities

- Weight Management.
- Strengthen Your Bones and Muscles.
- Improve Your Ability to do Daily Activities and Prevent Falls.
- Increase Your Chances of Living Longer.
- Manage Chronic Health Conditions & Disabilities.
- Improve your mental heath and mood.
- Help you quit smoking.



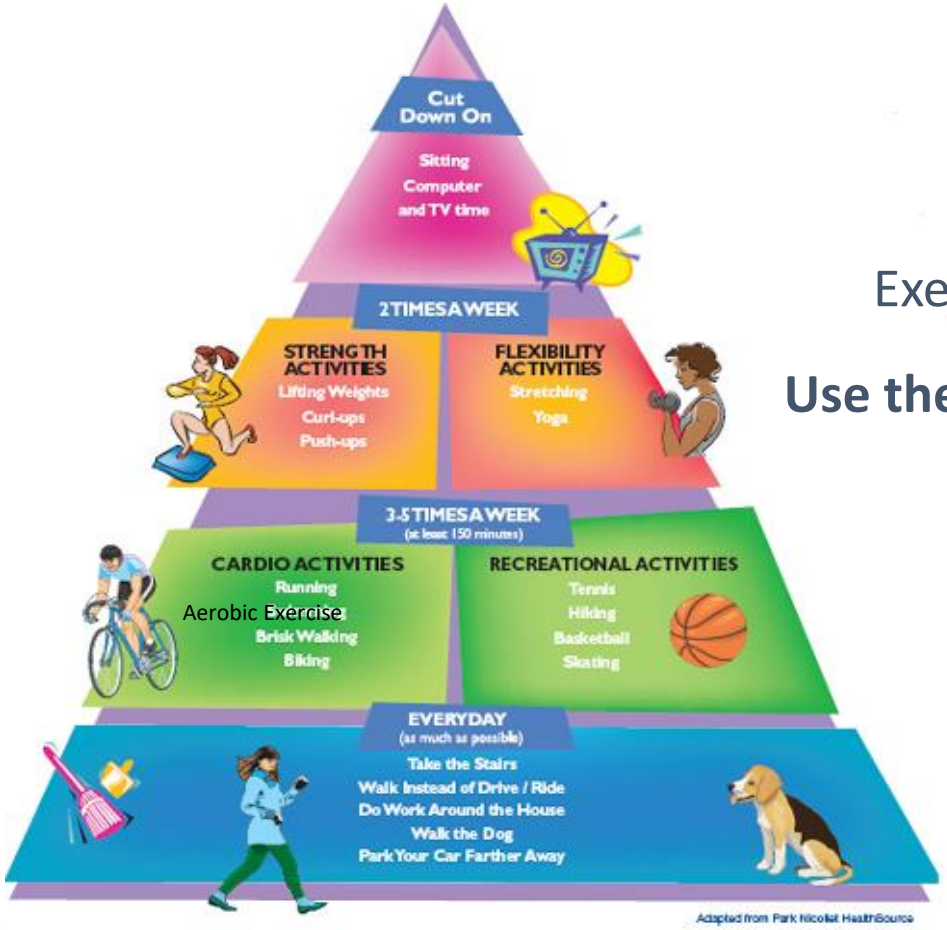
Benefits of physical activity

- **Getting people to be more active may be the ultimate low-cost therapy for achieving improved health outcomes**

- Regular physical activity is associated with health benefits at any body weight.

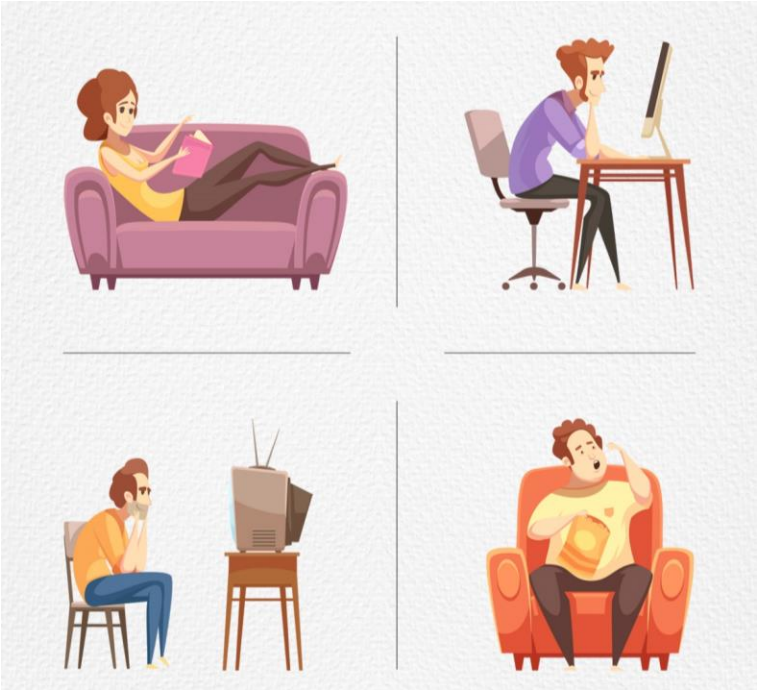
Exercise: Where to Begin?

Use the Physical Activity Pyramid



Adapted from Park Nicollet HealthSource

Sedentary Lifestyle

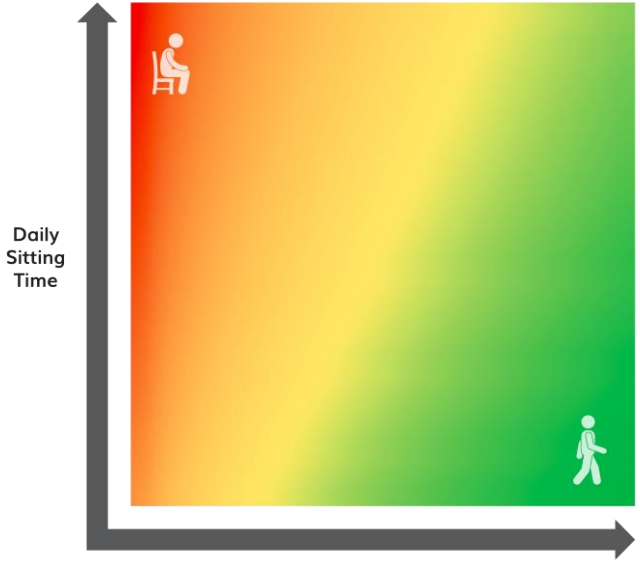


Move More and Sit Less

Sitting too much is a health hazard and it is associated with increased risk of:

- All-cause mortality
- Cardiovascular disease mortality
- Cardiovascular disease
- Type 2 diabetes
- Colon, endometrial, and lung cancers

Relationship Among Moderate-to-Vigorous Physical Activity, Sitting Time, and Risk of All-Cause Mortality in Adults



Risk of all-cause mortality decreases as one moves from red to green.

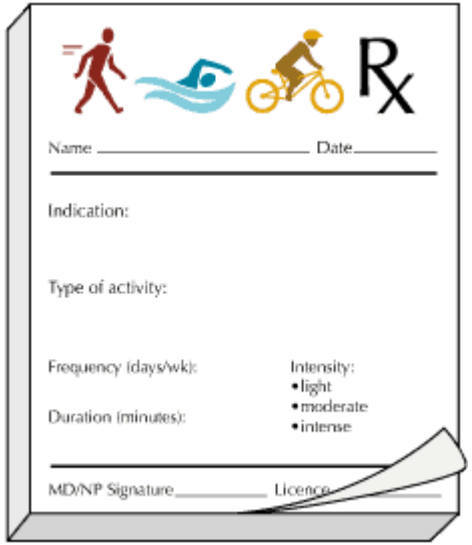
Move More and Sit Less

- **Being physically active does not cancel out the negative effects of sitting too much, so it is important to be as active as possible.**

- How can you be less sedentary?
  - Take a walk break frequently during long bouts of sitting
  - Stand up as frequently as you can
  - Stand up and do work whenever possible

(http://supportersize.org/are-you-sitting-too-much/)

Physical Activity: Types & Prescription



FITT Principle

Aerobic Exercise

- Aerobic exercise is any activity that engages the cardiovascular systems
  - This mode of physical activity involves large muscle groups.
- Examples include:
  - Walking, running, cycling, swimming
  - Recreational activities (football and basketball)

Exercise Prescription: FITT Principle

Aerobic Exercise: A total of 150 minutes of moderate to vigorous physical activity per week

- **F- Frequency (How often)**
  - 3-5 days per week
- **I- Intensity (How hard)**
  - Moderate to Vigorous
    - Moderate: feels somewhat hard (you should be able to talk but not be able to sing)
    - Vigorous: feels challenging (you shouldn't be able to say more than a few words without pausing)
- **T- Time (How long)**
  - 20 - 60 minutes
  - Can be accumulated in 10 minute bouts throughout the day
- **T- Type (What type)**
  - Walking, jogging, bike

Resistance Training

- **Resistance training** is a form of physical activity designed to improve muscular fitness by exercising a muscle or muscle groups against external resistance.

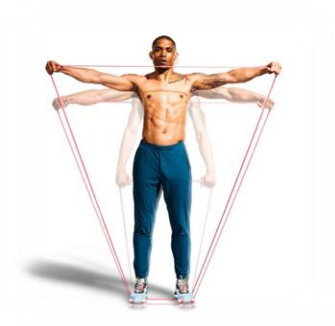
- In addition to increasing your muscular fitness, resistance training can:
  - *Help protect joints from injury*
  - *Help builds strong bones*
  - *Improve posture, mobility and balance*

https://www.acsm.org/docs/default-source/brochures/resistance-training.pdf?sfvrsn=6

Resistance Training

Common types of resistance training equipment include:

- Body weight
- Free weights
- Machine assisted weight
- Resistance bands



https://www.acsm.org/docs/default-source/brochures/resistance-training.pdf?sfvrsn=6

Exercise Prescription: FITT Principle

- **F- Frequency (How often)**
  - 2 - 3 days per week
    - At least 1 day of rest between sessions that use the same muscle groups

- **I- Intensity (How hard)**

  Choose an appropriate number of repetitions for your goal
    - *General recommendations are 8 - 12 repetitions*

- **T- Time (How long)**
  - At least 1 set of 8-12 repetitions (times movement is performed)
  - Work to a point of fatigue
    - *Most commonly recommendation: **2-3 sets** of 8-12 reps*

- **T- Type (What type)**
  - Dumbbells, machines,
  - Choose 8-10 separate exercises that target the major muscle groups

Flexibility (stretching)

Flexibility: is the ability for a joint to move through a full range of motion

- F- Frequency (How often)
  - At least 2-3 days per week with the greatest gains occurring with daily exercise
- I- Intensity (How hard)
  - Stretch to the point of feeling tightness or slight discomfort
- T- Time (How long)
  - Hold a static (not moving) stretch for 10-30 seconds
- T- Type (What type)
  - Choose at least one exercise that targets each of the major muscle groups

Specific PA recommendations for different diseases

Medical Conditions	Heart Diseases	Osteoarthritis	Osteoporosis	Cancer	Disabilities
Aerobic Exercise Program					
Frequency	3 – 5 days/ week (or more)	3 – 5 days/ week (or more)	3 – 5 days/ week (or more)	3 – 5 days/ week (or more)	3 – 5 days/ week (or more)
Intensity	Moderate to vigorous (Talk Test*)	Moderate to vigorous (Talk Test*)	Moderate	Moderate to vigorous (Talk Test*)	Moderate
Time	30 – 60 minutes/day	30 – 60 minutes/day	30 – 60 minutes/day	30 – 60 minutes/day	≥ 30 minutes per day or ≥ 150 minutes per week
Type	Rhythmic exercises using the major muscle groups	Rhythmic exercises using the major muscle groups	Rhythmic exercises using the major muscle groups	Rhythmic exercises using the major muscle groups	Cardiovascular activities
Resistance Exercise Program					
Frequency	2 days/week (non-consecutive days)	2 days/week (non-consecutive days)	2 days/week (non-consecutive days)	2 days/week (non-consecutive days)	2 non-consecutive days weekly
Intensity	Moderate = 60-70% 1 RM	Moderate = 60-70% 1 RM	Moderate = 60-70% 1 RM	Moderate = 60-70% 1 RM	Low to Moderate
Time	8-12 Reps per set of exercise 1-2 Set(s) of each exercise Moderate speed movements (6 seconds per repetition) 2-3 Minutes rest between sets	8-12 Reps per set of exercise 1-2 Set(s) of each exercise Moderate speed movements (6 seconds per repetition) 2-3 Minutes rest between sets	8-12 Reps per set of exercise 1-2 Set(s) of each exercise Moderate speed movements (6 seconds per repetition) 2-3 Minutes rest between sets	8-12 Reps per set of exercise 1-2 Set(s) of each exercise Moderate speed movements (6 seconds per repetition) 2-3 Minutes rest between sets	≥ 30 minutes per day or ≥ 150 minutes per week
Type	8-10 Compound exercises that target all of the major muscle groups	8-10 Compound exercises that target all of the major muscle groups	8-10 Compound exercises that target all of the major muscle groups	8-10 Compound exercises that target all of the major muscle groups	Muscle strengthening activities

*Talk test: is a measurement of relative intensity. With moderate-intensity activity, you can talk but not sing during the activity. In case of vigorous-intensity activity, you will not be able to say more than a few words without pausing to take a breath.

Medical Conditions	Obesity	Diabetes	Hypertension	Asthma	Chronic Obstructive Pulmonary Disease
Aerobic Exercise Program					
Frequency	≥ 5 days per week (moderate) or ≥ 3 days per week (vigorous) or 3 - 5 days per week (combination of both)	3 – 5 days/ week (or more)	3 – 5 days/ week (or more)	3 – 5 days/ week (or more)	3 – 5 days/ week (or more)
Intensity	Moderate to vigorous	Light to Moderate	Low to Moderate	Moderate to vigorous (Talk Test*)	Moderate to vigorous (Talk Test*)
Time	45 – 60 minutes/day	30 – 60 minutes/day	30 – 60 minutes/day	30 – 60 minutes/day	30 – 60 minutes/day
Type	Rhythmic exercises using the major muscle groups.	Rhythmic exercises using the major muscle groups.	Rhythmic exercises using the major muscle groups	Rhythmic exercises using the major muscle groups	Rhythmic exercises using the major muscle groups
Resistance Exercise Program					
Frequency	≥ 2 days/week (non-consecutive days)	2 days/week (or more) (non-consecutive days)	2 - 3 days/week (non-consecutive days)	2 - 3 days/week (non-consecutive days)	2 days/week (non-consecutive days)
Intensity	Moderate 60-70% 1 RM	Moderate = 60-70% 1 RM	Moderate = 60-70% 1 RM	Moderate = 60-70% 1 RM	Moderate = 60-70% 1 RM
Time	8-12 Reps per set of exercise 1-2 Set(s) of each exercise Moderate speed movements (6 seconds per repetition) 2-3 Minutes rest between sets	8-12 Reps per set of exercise 1-2 Set(s) of each exercise Moderate speed movements (6 seconds per repetition) 2-3 Minutes rest between sets	8-12 Reps per set of exercise 1-2 Set of each exercise Moderate speed movements (6 seconds per repetition) 2-3 Minutes rest between sets	8-12 Reps per set of exercise 1-2 Set(s) of each exercise Moderate speed movements (6 seconds per repetition) 2-3 Minutes rest between sets	8-12 Reps per set of exercise 1-2 Set(s) of each exercise Moderate speed movements (6 seconds per repetition) 2-3 Minutes rest between sets
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*Talk test: is a measurement of relative intensity. With moderate-intensity activity, you can talk but not sing during the activity. In case of vigorous-intensity activity, you will not be able to say more than a few words without pausing to take a breath.

Aspetar. Qatar National Physical Activity Guidelines, 2nd ed. Aspetar Orthopaedic and Sports Medicine Hospital; Doha, Qatar: 2021.

Tips For Success

Tips For Success

- **Evaluate your priorities**
  - *Is health one of your top priorities?* If not, it should be ☺
- **Find workouts that suit your** interests and lifestyle.
- **Set short-term, attainable goals** so you will quickly see results and success.
- **Find an exercise partner** as training with someone is helpful.
- **Make exercise a non-negotiable part** of your day and try not to make excuses.

Exercise is Medicine

The Importance of Exercise…23 and a Half Hours

https://youtu.be/aUaInS6HIGo

Resources

- Exercise is Medicine Website
  - http://www.exerciseismedicine.org/
    - *Information, handouts to hang up on bulletin boards, PowerPoints with information*
- WHO guidelines on physical activity and sedentary behaviour: at a glance.
- American College of Sports Medicine (ACSM)
  - http://www.acsm.org/
- Aspetar. Qatar National Physical Activity Guidelines, 2nd ed. Aspetar Orthopaedic and Sports Medicine Hospital; Doha, Qatar: 2021.
- Benefits of Physical Activity, CDC.
  - Benefits of Physical Activity | Physical Activity | CDC

Thank you

Restorative Sleep

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Patient Educator

Disclosure Statement

There is NO Conflict of Interest in relation to this presentation

Learning Objectives

At the end of this session, participants will be able to:

1. To understand the importance of sleep
2. To identify the factors associated with sleep
3. To understand the role of preventive medicine physicians in reducing the risk of unhealthy sleep in a health risk reduction clinic

Outline

- Definitions
- Benefits of healthy sleep
- Burden of unhealthy Sleep
- Common Sleep Disorders
- Risk factors, sign and symptoms of sleep problem
- Negative consequence of unhealthy sleep on health
- Preventative Sleep Strategy
- Conclusion
- Activities: Health Risk Reduction for Sleep

Introduction

What is Sleep?

- **Sleep** is a complex biological process that helps people process new information, stay healthy, and re-energize.
- Sufficient sleep is essential for maintaining optimal physical health, mental and emotional functioning, and cognitive performance.
- Periods of sleep and wakefulness are part of how our bodies function.
- Sleep has two dimensions: duration **(quantity)** and depth **(quality).**
- During sleep, the brain cycles through two distinct phases:

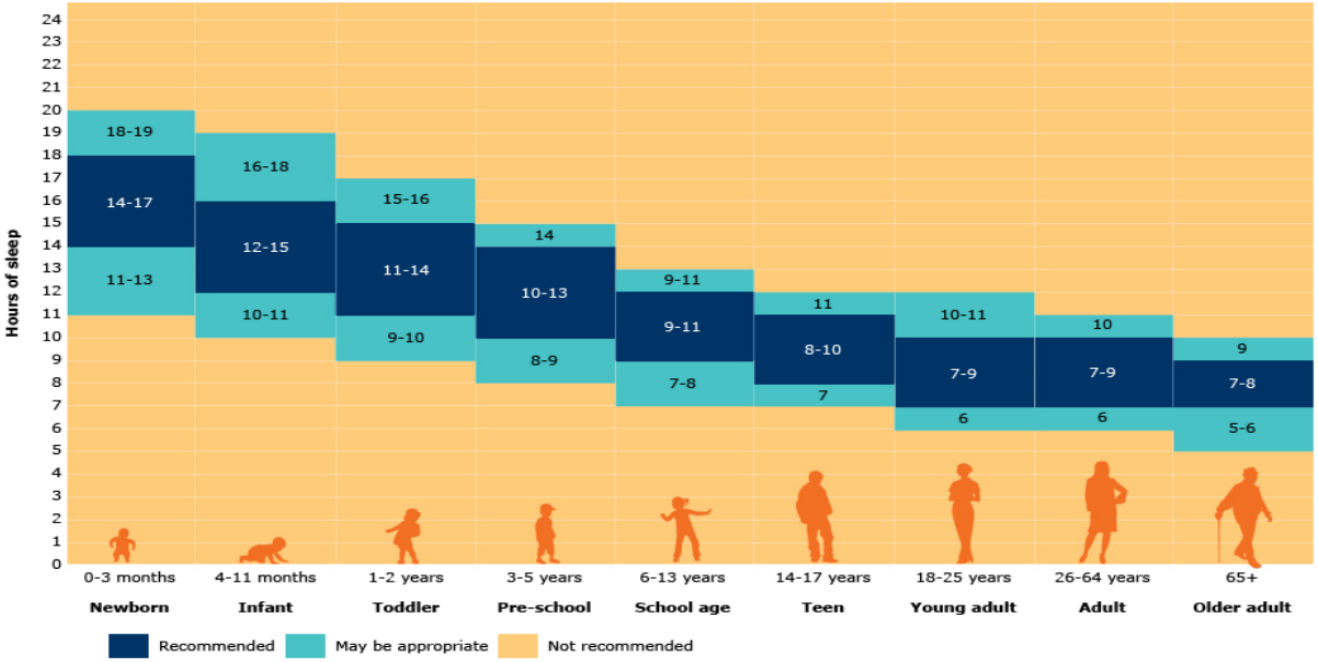
✓ **Rapid Eye Movement (REM) Sleep**

✓ **non- Rapid Eye Movement (REM) sleep**

Not completing the full sleep process can stress your body.

Benefits of healthy sleep

How Much Sleep Do We Need



* These recommendations are very similar, but not identical to those from the American Academy of Sleep Medicine (AASM).[1,2]

Burden of Sleep Disorders

Burden of unhealthy Sleep

Globally

- **1 of 3** of people not having enough sleep.
- **55.64%** of the world population had poor sleep quality.

In the GCC countries

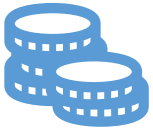
- The prevalence of insomnia found to be
- A total of 63.9% across all six countries, which is high compared to the rest of the world

UAE	66.7%
Kuwait	63.9%
Saudi Arabia	64.4%
Oman	48.4%
Qatar	61.4%
Bahrain	63%

Burden of unhealthy Sleep

- **Direct cost** of sleep related problems **16 billion dollars**

- **Indirect cost 50-100 billion**



Common Sleep Disorders

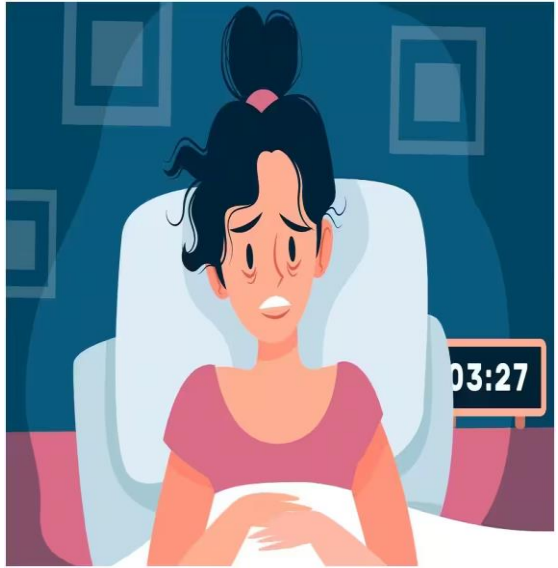
Common Sleep Disorders

- **Sleep insufficiency** as a disorder characterized by excessive daytime sleepiness caused by curtailed sleep almost every day for at least three months Which impact the alertness, performance, and health, by either:
- Reduced total sleep time (**decreased quantity)**

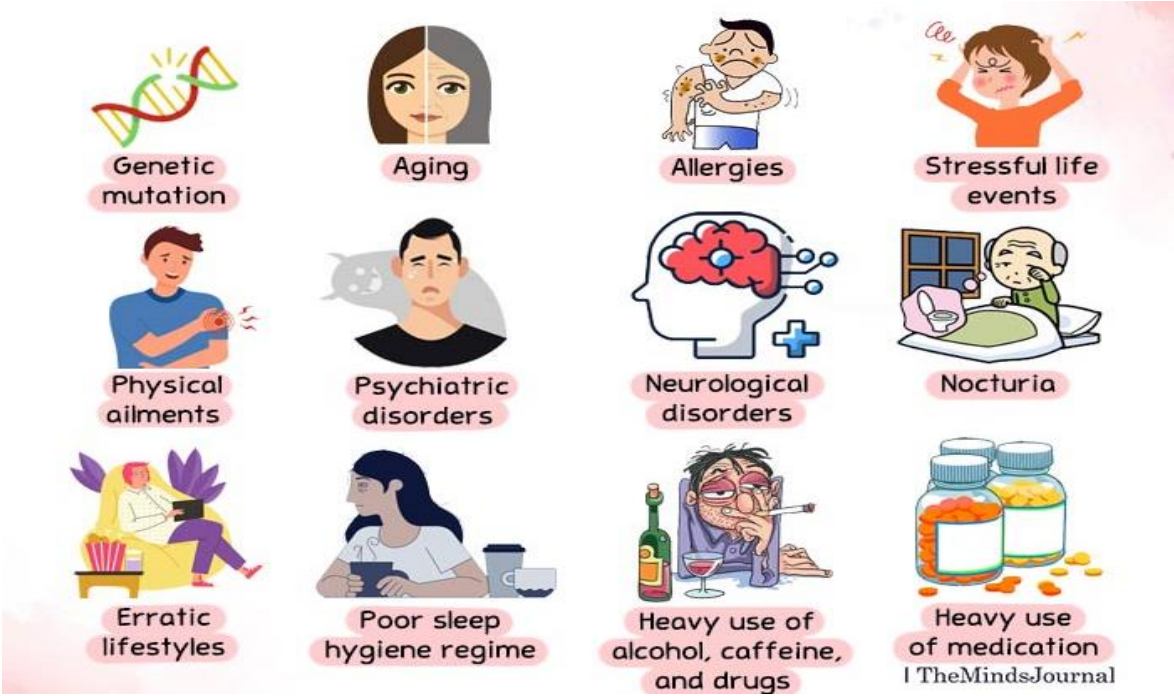
  Or
- Fragmentation of sleep by brief arousals (**decreased quality**).

Common Sleep Disorders

- **Sleep Insomnia** is defined as difficulty either falling or staying asleep that is accompanied by daytime impairments.
- There is **no single** established cause of insomnia
- Can occur alongside **other health conditions**.



Risk factors for unhealthy Sleep



Sign and symptoms of sleep problem

Irritability	Weight gain
Attention deficits	Decreased work performance
Decreased concentration	Lack of energy
Poor motivation	Strong urge to take naps during the day
Depression & anxiety	Fatigue
Restlessness	Irregular breathing pattern

Video

https://youtu.be/jhgHmZdm7mE?si=ZmVRSdZxIw8ifwMZ

Shift Work Sleep Disorder (SWSD)

Shift Work Sleep Disorder (SWSD)

SWSD causes difficulties adjusting to a different sleep/wake schedule, which results in significant issues with:

- Sleeping when you want.
- Staying asleep.
- Unwanted sleepiness.

Shift Work Sleep Disorder (SWSD)

How common is shift work sleep disorder?

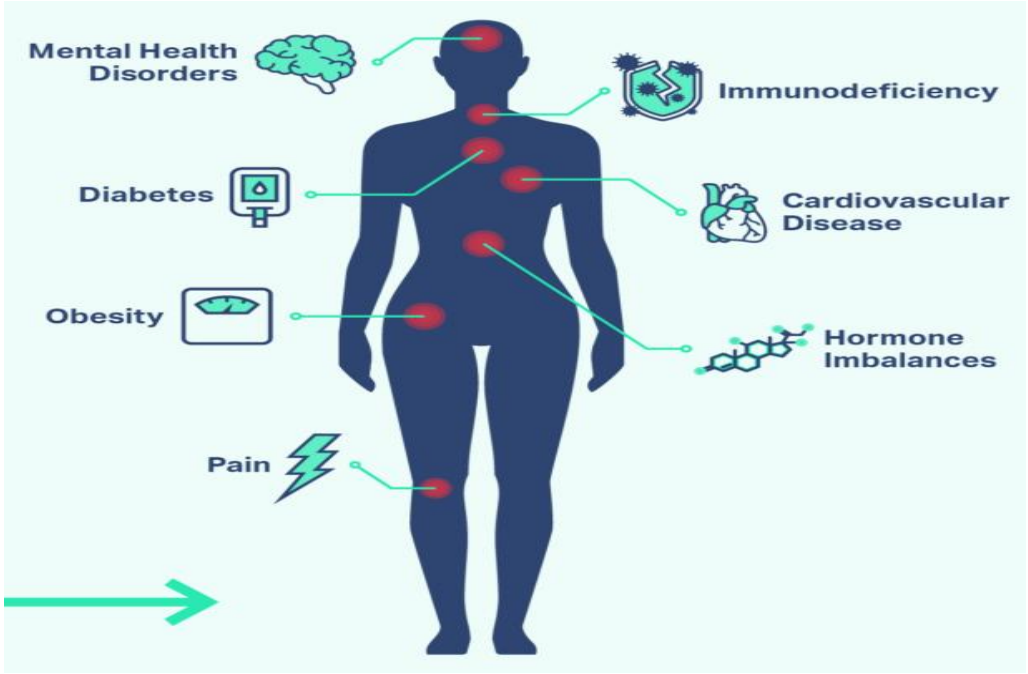
- Shift work sleep disorder is **common**.
- It affects **10% to 40%** of people who work nontraditional shifts for their job.

Symptoms of shift work sleep disorder (SWSD)

There are two main symptoms of SWSD

- **Insomnia**: Insomnia typically affects people with SWSD differently depending on when they work. For example, people with SWSD who work **between 4 a.m. and 7 a.m**. often have trouble falling asleep, **while** those who work in the **evening tend** to have issues staying asleep.
- **Hypersomnia**: Hypersomnia is excessive sleepiness at unwanted times. This often occurs when a person with SWSD is at work **during the night or early morning hours**. It can be dangerous and impair work performance.

Negative Consequences of unhealthy sleep



Risk on Health

Negative Consequences Of unhealthy sleep

- Accidents
- Workplace Errors
- Quality of Life

Preventative Strategy for Sleep Disorders

Preventative Strategy for Sleep Disorders

Establish a regular sleep schedule by going to bed and waking up at the same time every day, even on weekends.

Keep a cool, comfortable environment in your bedroom for sleeping.

Use comfortable sheets and limit noise and light exposure in the bedroom.

Reduce stress by practising relaxation techniques such as meditation or yoga before bedtime.

Avoid caffeine and alcohol before bedtime.

Avoid working or using electronic devices in bed.

Preventative Strategy for Sleep Disorders

1. Sleep Diary

- Sleep diaries provide valuable information about sleep patterns and practices to ensure individuals are getting enough habitual sleep.

Consensus Sleep Diary

ID/Name: _____

	Sample							
Today's date	4/5/11							
1. What time did you get into bed?	10:15 PM							
2. What time did you try to go to sleep?	11:30 PM							
3. How long did it take you to fall asleep?	55 min							
4. How many times did you wake up, not counting your final awakening?	6 times							
5. In total, how long did these awakenings last?	2 hours 5 min							
6a. What time was your final awakening?	6:35 AM							
6b. After your final awakening, how long did you spend in bed trying to sleep?	45 min							
6c. Did you wake up earlier than you planned?	☒ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
6d. If yes, how much earlier?	1 hour							
7. What time did you get out of bed for the day?	7:20 AM							
8. In total, how long did you sleep?	4 hours 10 min							
9. How would you rate the quality of your sleep?	☐ Very poor ☒ Poor ☐ Fair ☐ Good ☐ Very good	☐ Very poor ☐ Poor ☐ Fair ☐ Good ☐ Very good	☐ Very poor ☐ Poor ☐ Fair ☐ Good ☐ Very good	☐ Very poor ☐ Poor ☐ Fair ☐ Good ☐ Very good	☐ Very poor ☐ Poor ☐ Fair ☐ Good ☐ Very good	☐ Very poor ☐ Poor ☐ Fair ☐ Good ☐ Very good	☐ Very poor ☐ Poor ☐ Fair ☐ Good ☐ Very good	☐ Very poor ☐ Poor ☐ Fair ☐ Good ☐ Very good
10. How rested or refreshed did you feel when you woke up for the day?	☐ Not at all rested ☒ Slightly rested ☐ Somewhat rested ☐ Well-rested ☐ Very well-rested	☐ Not at all rested ☐ Slightly rested ☐ Somewhat rested ☐ Well-rested ☐ Very well-rested	☐ Not at all rested ☐ Slightly rested ☐ Somewhat rested ☐ Well-rested ☐ Very well-rested	☐ Not at all rested ☐ Slightly rested ☐ Somewhat rested ☐ Well-rested ☐ Very well-rested	☐ Not at all rested ☐ Slightly rested ☐ Somewhat rested ☐ Well-rested ☐ Very well-rested	☐ Not at all rested ☐ Slightly rested ☐ Somewhat rested ☐ Well-rested ☐ Very well-rested	☐ Not at all rested ☐ Slightly rested ☐ Somewhat rested ☐ Well-rested ☐ Very well-rested	☐ Not at all rested ☐ Slightly rested ☐ Somewhat rested ☐ Well-rested ☐ Very well-rested
11a. How many times did you nap or doze?	2 times							
11b. In total, how long did you nap or doze?	1 hour 10 min							
12a. How many drinks containing alcohol did you have?	3 drinks							
12b. What time was your last drink?	9:20 PM							
13a. How many caffeinated drinks (coffee, tea, soda, energy drinks) did you have?	2 drinks							
13b. What time was your last drink?	9:20 PM							
14. Did you take any over-the-counter or prescription medication(s) to help you sleep? If so, list medication(s) dose, and time taken	☒ Yes ☐ No Medication(s): Relaxo-Herb Dose: 50 mg Time(s) taken: 11 PM	☐ Yes ☐ No Medication(s): Dose: Time(s) taken:	☐ Yes ☐ No Medication(s): Dose: Time(s) taken:	☐ Yes ☐ No Medication(s): Dose: Time(s) taken:	☐ Yes ☐ No Medication(s): Dose: Time(s) taken:	☐ Yes ☐ No Medication(s): Dose: Time(s) taken:	☐ Yes ☐ No Medication(s): Dose: Time(s) taken:	☐ Yes ☐ No Medication(s): Dose: Time(s) taken:
15. Comments (if applicable)	I have a cold							

Questions 1 through 10 are to be completed within one hour of getting out of bed in the morning. Questions 11 through 15 are to be completed before bed.

Brought to you by Hamad Healthcare Quality Institute

Preventative Strategy for Sleep Disorders

2. Wearable Devices

- Sleep tracking devices offer an advantage of obtaining real-time data using wireless technology.

Preventative Strategy for Sleep Disorders

3. Morning light

Regular bright light exposure in the mornings may help to maximize alertness and maintain a regular circadian rhythm.

4. Avoid Bad behaviors

- Naps after 3 PM
- Heavy meals in the evening

Preventative Strategy for Sleep Disorders

5. Medication

- Changing medications or dosages that cause excessive sleepiness **(don't stop taking a medication unless your healthcare provider approves it).**
- Taking medications or supplement like **(melatonin).**

Preventative Strategy for Sleep Disorders

6. Nutrition

There are indications that certain foods can make you sleepy or promote better sleep

(This based on a particular research study and in other cases on the underlying nutritional components of the food or drink)

Foods that help promote better Sleep

❖ **Kiwi**

✓ Eating **two kiwis one hour before bedtime** found that they **fell asleep faster**, slept **more**, and had **better sleep quality**

❖ **Tart Cherries**

✓ Drinking **two one-cup servings of tart cherry juice per day** were found to have **more total sleep time and higher sleep efficiency**.

Foods that help promote better Sleep

- **Milk**
- ✓ contains melatonin
- **Fatty Fish**
- ✓ healthy dose of vitamin D and omega-3 fatty acids
- **Nuts**
- ✓ Like almonds, walnuts, pistachios, and cashews

Preventative Strategy for Sleep Disorders

7. Consultation with the Health care Provider

- Taking history
- Screening test
- Assessment and evaluation
- Referral to sleep specialist for further evaluation by a sleep study (polysomnogram)

Health risk reduction clinic-HMC-Staff Clinic

Evidence-based practice

The Association Between Smartphone Addiction and Sleep: A UK Cross-Sectional Study of Young Adults

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- **39%** young adults reported smartphone addiction.
- Smartphone addiction was associated with **poor sleep, independent of duration of usage**

Evidence-based practice

RESEARCH

Association of sleep quality with nutritional status and body mass index in adults

Yetişkinlerde uyku kalitesinin beslenme durumu ve beden kütle indeksi ile ilişkisi

Mehmet Arif İçer[1], Makbule Gezmen Karadağ[2]

- The results of the study indicate that there is a relationship between sleep quality and **nutritional status (percentage of saturated fatty acids) , and BMI**.

Pittsburgh Sleep Quality Index (PSQI) Exercise

During the past month:

- How many hours of actual sleep did you get at night? *(This may be different from the number of hours you spent in bed)*

  ☐> 7 hours

  ☐6-7 hours

  ☐5-6 hours

  ☐< 5 hours

- When do you usually go to bed at night? ____ AM/PM

- When do you usually get up in the morning? ____ AM/PM

- How long (in minutes) has it usually takes you to fall asleep each night

  ☐≤15 minutes

  ☐16-30 minutes

  ☐31-60 minutes

  ☐>60 minutes

- Have you had trouble sleeping because you wake up in the middle of the night or early morning?

  ☐Not during the past month

  ☐Less than once a week

  ☐Once or twice a week

  ☐Three or more times a week

- How would you rate your sleep quality overall?

  ☐Very good

  ☐Fairly good

  ☐Fairly bad

  ☐ Very bad

Remember

Life's meaningful experiences.
EXERCISE
NUTRITION
STRESS MANAGEMENT
SLEEP

Conclusion

1. Along with nutrition and exercise, **sleep is one of the pillars of health**.
2. **Lack of sleep is impacted our health negatively,** by increasing the risk of heart disease, depression, weight gain, inflammation, and sickness
3. Just like you prioritize your diet and physical activity, **it's time to give sleep the attention it deserves.**

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- https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10539036/#:~:text=They%20found%20the%20prevalence%20of,of%20the%20world%20%5B15%5D.
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Thank you

10 YEARS OF INSPIRING IMPROVEMENT

‘Tobacco Cessation: The 5 A’s

Dr. Ayman Al-Dahshan
Specialist, Preventive Medicine HMC

Disclosure Statement

I make the following declaration in relation to this presentation:

- There is NO Conflict of Interest
- There is no bias, either commercial or non-commercial
- There is no plagiarism or copyright infringement

Learning Objectives

At the end of this session, participants will be able to:

1. Recognize tobacco's health impacts.
2. Understand Qatar's tobacco situation.
3. Learn the "5 A's" for cessation.
4. Explore evidence-based cessation interventions.

Outline

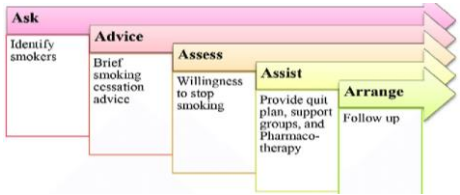
1

Tobacco Impact on Health

2

Situation in Qatar

3

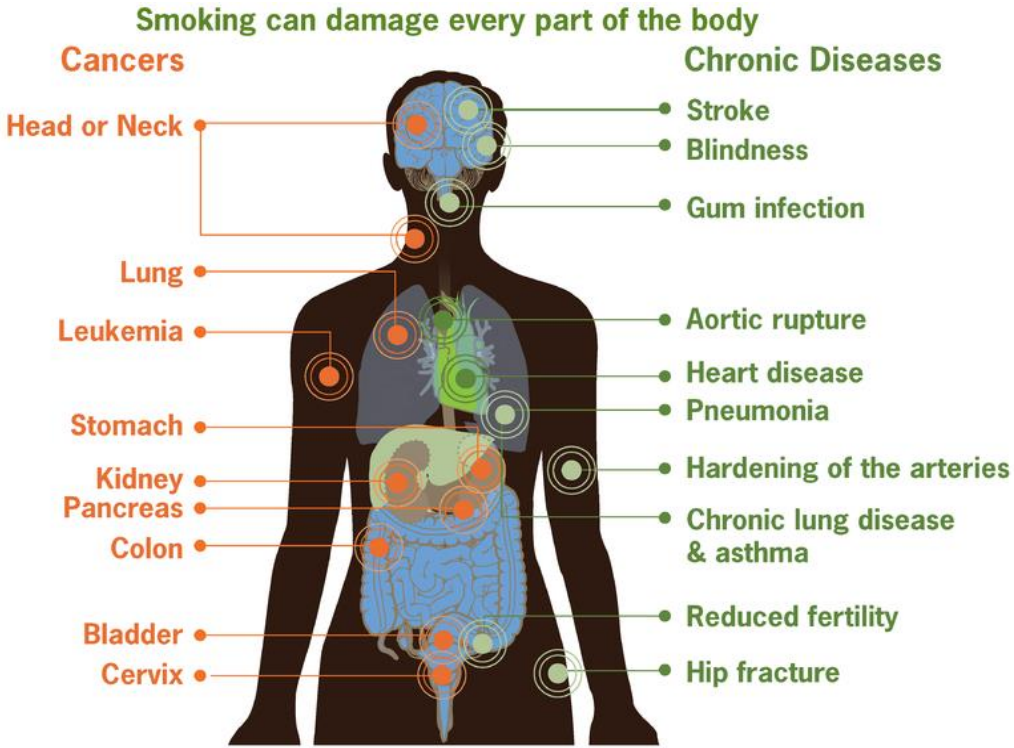


Tobacco Cessation:
The 5 A's

4

Tobacco Cessation interventions

Tobacco Impact on Health



www.cdc.gov; www.surgeongeneral.gov

“No Safe Level of Smoke Exposure”

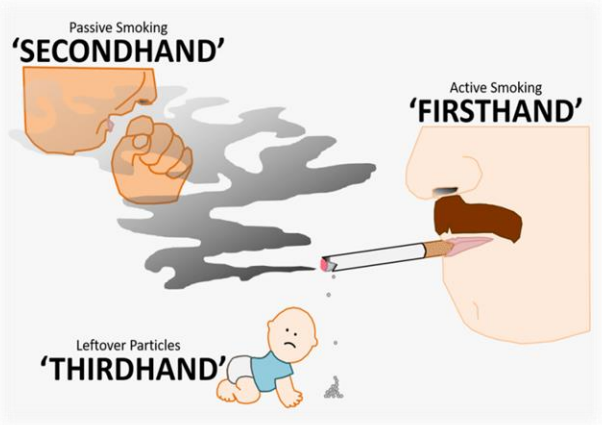
Secondhand smoke

- Secondhand smoke is smoke from burning tobacco products.
- There is no safe level of exposure to secondhand smoke; even brief exposure can cause serious health problems.
  - Rapid mechanisms of action:
    - ✓ Endothelial dysfunction
    - ✓ Platelet aggregation
    - ✓ Inflammation

“No Safe Level of Smoke Exposure”

Third-hand smoke

- Thirdhand smoke is made up of the pollutants when tobacco is smoked.
- These pollutants builds up on surfaces such as clothing, furniture, bedding and carpets.
- Thirdhand smoke can't be eliminated by ventilating the rooms, opening windows, or confining smoking to only certain areas of a home.
- Thirdhand smoke residue can remain for months or years



Quitting Benefits

- Cardiovascular and pulmonary benefits are immediate
- Cancer risk lowered after a few years
- Reducing cigarettes not enough

Outline

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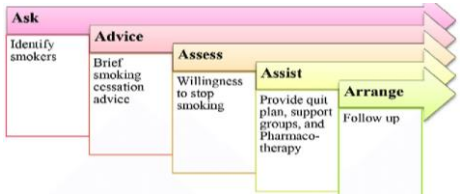

Tobacco Cessation:
The 5 A's

4

Tobacco Cessation interventions

Tobacco Use in Qatar

- In Qatar, the most recent statistics shows that approximately **25%** of adults in Qatar are current tobacco users.

- Of these, about 43% are cigarette smokers, 21% smoke waterpipe, 3% are Medwakh users, and 2% use electronic cigarette.

- The mean age for smoking initiation is 20 years.

Factor Associated with Tobacco use in Qatar

- Men are 6 times more likely to be current tobacco users compared to women (AOR: 6.37, 95%CI 5.36–7.58);

- Age group (18–24) are more likely to be tobacco users compared to other age groups.

- Individuals living with a smoker at home are 2 times more likely to use tobacco than those living without smokers at home (95% CI 1.92–2.54).

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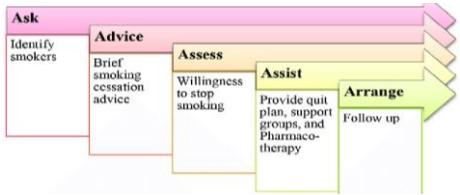

Tobacco Cessation:
The 5 A's

4

Tobacco Cessation interventions

Have you ever used the 5 As model for treating tobacco use in your practice?

The 5 A's of Tobacco Treatment

offer HCPs a simple, proven approach to help patients in smoking cessation

ASK	→	about tobacco USE and EXPOSURE
ADVISE	→	tobacco users to QUIT
ASSESS	→	READINESS to make a quit attempt
ASSIST	→	with the QUIT ATTEMPT
ARRANGE	→	FOLLOW-UP care

The Opportunity

- Effective treatments and clinical interventions exist to help smokers quit.

- 70-80% of smokers visit a healthcare facility annually.

- Even brief advice from a HCP increases quit rates.

- Smokers expect their HCP to ask about their smoking.

The five A's – Ask, Advise, Assess, Assist, Arrange – offer HCPs a simple, proven approach.

The Problem

- Many Health Care Professionals (HCPs) feel that they lack the time & training to help patients quit smoking.
- HCPs can become discouraged because most smokers try to quit multiple times before succeeding.
- In the absence of well-designed systems, HCPs may be inconsistent in delivering cessation interventions.
- While HCPs have been improving on the Ask & Advise steps, they struggle with the “Assist” & “Arrange” steps.

Ask, Advise, Refer

ASK → about tobacco USE

ADVISE → tobacco users to QUIT

REFER → to other resources

REFER:
- ASSIST
- ARRANGE

Barriers and Facilitators of 5 As

Barriers to 5 A's

- Competing priorities
- Believing counseling is not an appropriate service
- Uncomfortable asking about smoking
- Being a smoker

Facilitators of 5 A's

- Believing treatment is important as a professional responsibility
- Awareness of TDT Guidelines
- Had cessation training

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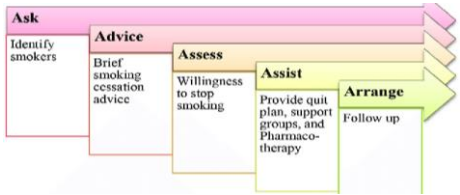


Tobacco Cessation:
The 5 A's

4

Tobacco Cessation interventions

Tobacco Dependence: A 2-part Problem

Tobacco Dependence

Physiological	Behavioral
The addiction to nicotine	The habit of using tobacco
↓ Treatment	↓ Treatment
Medications for cessation	Behavior change program

Nicotine Withdrawal Effects

- Irritability/frustration/anger
- Anxiety
- Difficulty concentrating
- Restlessness/impatience
- Depressed mood/depression
- Insomnia
- Impaired performance
- Increased appetite/weight gain
- Cravings

Smoking cessation intervention

Smoking cessation intervention comprise

behavioral counseling and pharmacotherapy

Quit smoking Medications

Non-prescription medications

These non-prescription medications are available to you while you are in the hospital and at your local pharmacy:

Nicotine Patch	A patch that contains nicotine. You apply the patch to your body once a day.
Nicotine Gum	A special type of gum that contains nicotine. You do not chew it like regular gum, so it is important how to learn to use this medicine correctly. You can use the gum several times a day.
Nicotine Lozenge	A lozenge (like a hard candy) that contains nicotine. Nicotine is released as the lozenge dissolves. You can use the lozenges several times a day.

Prescription medications

Ask your doctor if these additional prescription medicines may be right for you when you go home from the hospital:

Nicotine Nasal Spray	A spray that delivers nicotine through the nose.
Nicotine Inhaler	An inhaler that you puff on. Nicotine is absorbed through your mouth and throat. An inhaler may mimic the hand-to-mouth habit of smoking.
Varenicline (Chantix®)	A pill that reduces withdrawal symptoms and makes smoking less enjoyable. This pill does not contain nicotine.
Bupropion SR (Zyban®)	A pill that reduces withdrawal symptoms. This pill does not contain nicotine. *(This pill is also available in the hospital.)*

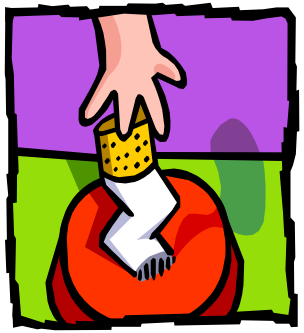
Take Home Message

Every patient encounter is a chance to address tobacco use.

With awareness of its impact and the use of effective strategies like the 5 A's,

you ALL can empower patients toward quitting for better health"

THANK YOU



YOU CAN DO IT!!

10 YEARS OF INSPIRING IMPROVEMENT

‘There is no health without mental health’

Dr. Sarah Naja

Specialist, Preventive Medicine HMC

Disclosure Statement

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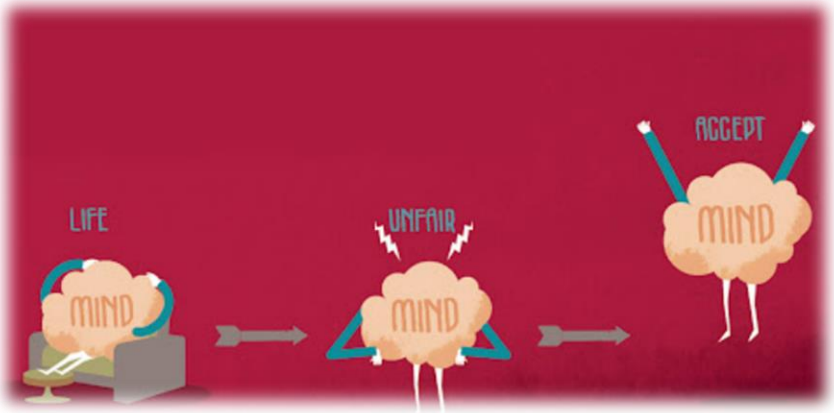
Learning Objectives

At the end of this session, participants will be able to:

1. Objective 1:To discuss burden and determinants of mental health
2. Objective 2: To explain ‘Mental Health’ aspect of Health Risk Reduction
3. Objective 3: To improve preventive mental health skills

‘A Healthy Outside Starts From Inside’



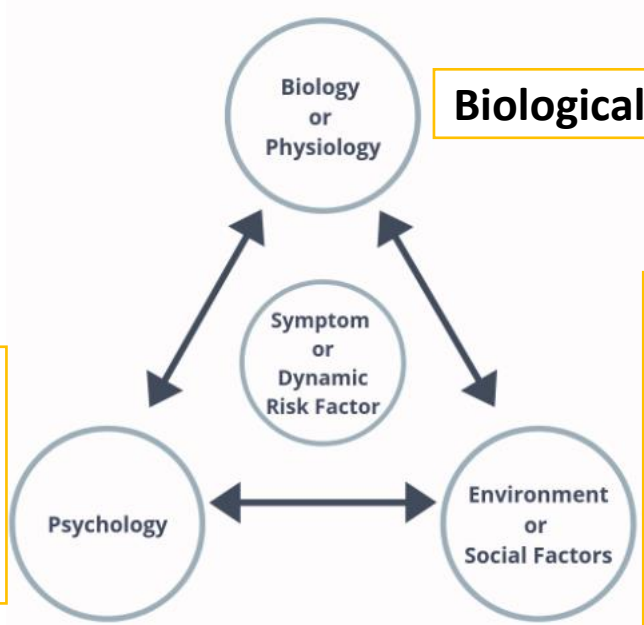
Outline

- Introduction ‘**There is No health without Mental Health’**
- Burden of mental disorders (Globally, Qatar, GCC)
- Determinants of mental disorders
- Preventative strategies
- Exercise-1: ‘Mental Health Risk Assessment’
- Exercise-2: ‘Cases discussion’
- Exercise -3:‘Self-reflection’Practice
- Exercise-4:’Grounding techniques’ Practice

- Mental disorders **can affect anyone** **(1 in every 8 people** in the world live with a mental disorder) (WHO).
- Mental disorders remained **among the top ten leading** causes of burden worldwide, with **no evidence of global reduction** in the burden since 1990 (systematic analysis 1990-2019).

World Health Organization. WHO Fact Sheet. https://www.who.int/news-room/fact-sheets/detail/mental-disorders
DOI:https://doi.org/10.1016/S2215-0366(21)00395-3

Determinants of mental illness



Biological factors (genetics, gender)

Psychosocial Factors (emotional skills, etc..)
Drug induced (substance use, etc)

Exposure to **unfavourable circumstances** – including poverty, violence, adverse childhood experiences (30%), inequality and forced displacement.

Global prevalence of mental health diseases

- An estimated **14.7%** of people in the Eastern Mediterranean Region have a mental health condition – the second highest prevalence among all WHO regions.
- Specifically, **Depression** affects **5%** of adults & **Anxiety** disorders affects **4%** of adults.

Erlangsen E, Khan M, Su M, et al(14 Oct 2023): Situation Analysis of Suicide and Self-Harm in the WHO Eastern Mediterranean Region, Archives of Suicide Research, DOI: 10.1080/13811118.2023.2262532

World Health Organization (WHO). Depressive disorder Anxiety Disorders. Available from: https://www.who.int/news-room/fact-sheets/detail/depression

What is the estimated prevalence of mental disorders in Qatar?

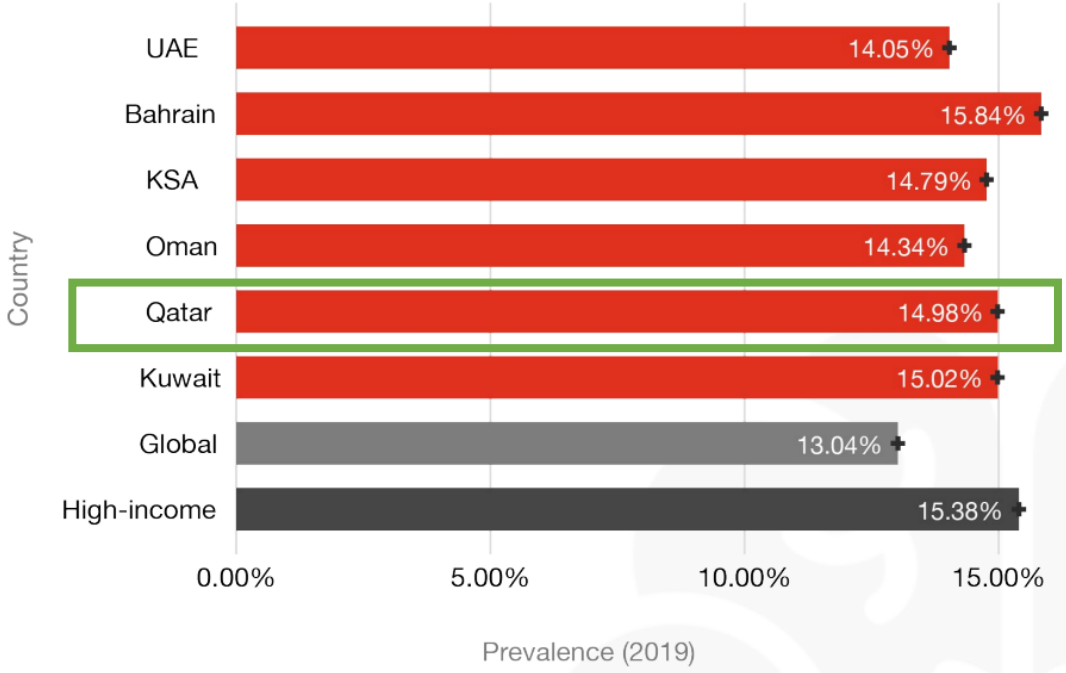
A-19.4 %

B-5.7%

C-14.98%

D-47.8%

Estimated prevalence of mental disorders (IHME, 2019)



PwC Middle East. *FINAL PART1: The socio-economic impact on untreated mental illness (pwc.com)*

Stress

Stress can be defined as a state of worry or mental tension caused by a difficult situation.

Not all stress are bad!

Eustress is the other form of stress that is positive. We may feel challenged such as graduation or getting married.

Scholars suggest that stressful experiences may also have the potential to **strengthen resilient** capacities.

World Health organization (WHO). Stress. Available from https://www.who.int/news-room/questions-and-answers/item/stress#:~:text=Stress%20can%20be%20defined%20as,experiences%20stress%20to%20some%20degree

Psychological Distress

Psychological distress (PD) is broadly defined as a state of **emotional suffering** characterized by symptoms of depression (e.g., loss of interest) and anxiety (e.g., restlessness).

It is a **continuous experience** of feeling overwhelmed (**fight and flight reaction)** and it affected **36.5%** of general population during covid-19 pandemic in Qatar.

Physical and Psychosocial Well-Being of Hospitalized and Non-Hospitalized Patients With COVID-19 Compared to the General Population in Qatar
Front. Psychiatry, 13 December 2021 https://doi.org/10.3389/fpsyt.2021.792058

What could be stressful to You?

A-Work

B-Financial Issues

C-Studying

D-Relationships

Results

Many reasons can lead to stress..

Work	Roommate	Legal matters
Classes	Childcare	Mental health
Studying	Finances	Law violation
Relationship with partner	Appearance	Spiritual/Religious issues
Relationship with family	Physical Health	Major/Career decisions
Relationship with friends	Not “fitting in”	Attitudes/thoughts
Trauma	Getting married	Buying a house
Change in residence	Change to a new school	Change in amount of recreation
Change in amount of social activities	Change in eating habits	Death of friend/family member

Why Do We "Stress Out"?

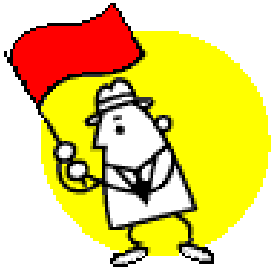
For **two major** reasons:

- We *perceive* a situation as dangerous, difficult, or painful.
- We don't believe we have the *resources* to cope.

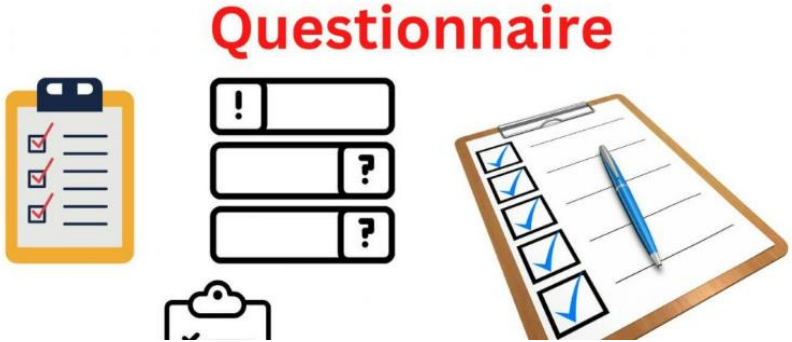
How do u know your stressed?

For some people its headache, muscle ache, racing heart rate or you get irritated with people.

What are your "red flags," or warning signs?



Mental Health Risk Assessment



Mental Health Risk Assessment Results

PHQ-2
Assess Depression: Score above 3

GAD-2
Assess Anxiety: Score above 3

Perceived Stress scale
Assess stress: Score above 6

Preventative strategies

I-Practicing self-care:

-Self-care toolkit

II-Understanding our thoughts

III-Exploring behaviour and emotions behind it

-Self-reflection

IV-Soothing techniques

-Grounding techniques

-Mindfulness

I-Self-care toolkit : Practicing Self-care

1. Eat healthy

2. Avoid short term coping mechanisms (Avoid alcohol, smoking /limit caffeine and sugar)

3. Boost your energy through being active

4. Find a support system and connect with others/ Ask for help when you need it!

5. Find a hobby /Get organized **(prioritize)**

6. Have a good night sleep and know how to relax!

Now!

Which of these domains you want to focus on?

Once you know the domain you want to focus on commitment is needed !

Life is 10% what happens to you and 90% how you react to it.

-Charles R. Swindoll

II-Understanding our thoughts

Why our thoughts are important?

1-Because they impact our feelings and the way we act [our behaviour]

2-Thoughts are not always real (not facts).

3-Aiming for balance (3 positive thought for one negative thought)

4-To recognize thinking habits and patterns (thinking traps: Jumping into conclusion, Catastrophizing, Generalizing etc)

Case 1: Mary & Mark

Identify thinking trap?

‘Mary’ received a phone call from her manager ‘Mark’.

‘Mark’ wants to meet her in his office.

Mary started to think that her manager want to fire her and she will not be able to afford nursery for her child, she will be kicked from her apartment as she is jobless and landlord owns her money. She will struggle financially and will not find a job easily.

In the meeting, Mark congratulate Mary for her good Job and offered her promotion.

Case 2:Henry & Emily

Identify thinking trap?

Henry : I forget to bring nappies for my child.

Henry: I am useless. I am all over the place. I can never do anything right. I always forget the nappies ! I always mess up ! Emely will get so angry about me when she comes home! She will think how useless is her husband.

How to avoid thinking traps?

First: **Notice**

Second : **Pause**

Third: **Question**; question the evidence your using that make you think this way.

Fourth: **Reflect;** self-reflection! “Is an active introspective practice aimed at understanding and evaluating one's emotions, cognitions, and actions motivated either by curiosity or interest in the self in context”.

Falon L, etal.The coping insights evident through self-reflection on stressful military training events: Qualitative evidence from self-reflection journals
https://onlinelibrary.wiley.com/doi/full/10.1002/smi.3141

Lets practice!

Self-reflection

1-Awareness of emotion or behavior

Pinpoint to emotion or behavior?

Where you experience it in your body?

How does it feel?

Give it a name?

Tip: Deep breathing aids in this process

2-Listen to the emotion

What is it trying to tell you?

It may come up in sounds, images, memories.

Where does this emotions come from?

How did this hurt you before?

Tip: Important not to judge or assume, allowing the response to come up on its own.

4-How does this behavior help you or protect you?

5- **Validate** the emotion and the behavior

‘It makes sense that I am feeling (insert feeling) because in the past… and I protected myself by…

6-Tell yourself ‘this anxiety no longer serves its purpose’.

7-Allow yourself to sit with the emotion, as part of you that you are in control of, not the other way around.

Remember:

“We are not slave for our emotions, they are purely messages”.

be.
here.
now.

Live in the Present Moment!

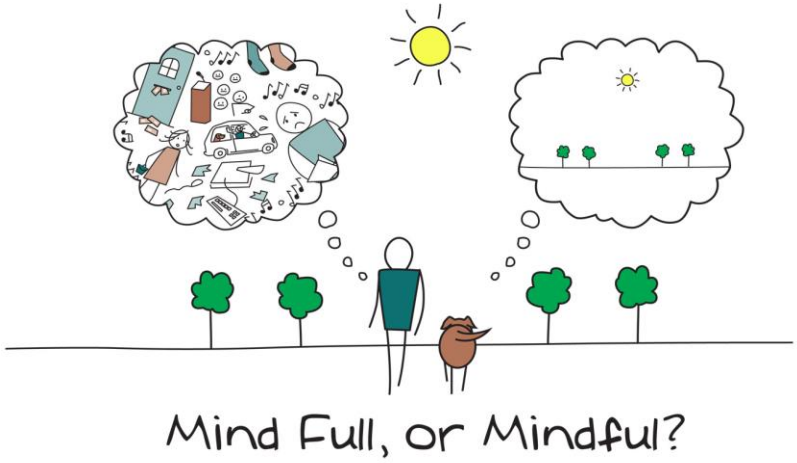
Techniques for grounding – Bringing self into present moment where you are always safe

Mindfulness meditation

Breath from your nose

Hold on your breath for three seconds

Breath out from your mouth



TIP: You can do this anytime / anywhere/ when you need to take a break

Video

- 1 minute mindfulness exercise. – YouTube

- self holding excercise short video conference - Google Search

Engaging the senses

Counting the things you **see**, **hear, touch** on your skin, **smell** and **taste**

Video

- Engaging the senses meditation - Google Search

Mindful letting go

Three steps:

1-Deep breath, and upon exhalation saying to self ‘ I am aware of (insert feeling)’

2-Deep breath, and upon exhalation saying to self ‘ I breath into …’

3-Deep breath, and upon exhalation saying to self ‘ I let go of..’

Self-holding Exercise

Congratulations!

You had the willingness and put in the effort to learn to manage your own symptoms, to learn self-regulation.

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Thank you