

11.1 Therapeutic diets

blood pressure	ضغط الدم	Chew	مضغ	Choking	اختناق
consistency	تناسق	Cure	دواء	dairy	اللبان
Decrease	ينقص	Eliminate	استبعد	fat	دهن
Fork	شوكة	gain	يكسب	Hazard	خطر
Increase	يزيد	inserted	تم إدراجها	Intake	المدخول
life expectancy	متوسط العمر المتوقع	Lump-free	خالية من مقطوع	Mashed / pureed	مهروس
medication	دواء	Minced	مفروم	modified	معدل
Moist	رطبة	Oesophagus	المريء	plan	مخطط
Provide	يمد	reduce	يقلل	Reflex	لا إرادي
Smooth	سلس	stomach	معدة	Swallow	ابتلاع
texture	قوام	Tongue	لسان	Tube	أنبوب

Therapeutic relates to the healing of disease. **Diet relates to** foods & drinks that you regularly eat.

Therapeutic diet refers to the use of diet or certain foods to treat and manage diseases.

nutrition : eating and drinking the food needed for health and growth

A therapeutic diet is a special diet plan designed by a healthcare professional.

It controls the intake of certain types of foods or nutrients based on the nutritional needs and health status of a patient.

Therapeutic diets can be altered for nutrients, texture, food allergies or food intolerances.

يمكن تغيير الأنظمة الغذائية العلاجية حسب العناصر الغذائية ، القوام ، الحساسية الغذائية أو عدم تحمل الطعام.

Who benefits from therapeutic diets?

It's very important for people who have an illness or disease to have a **healthy diet**.

A therapeutic diet can benefit individuals with health conditions such as:

Cardiovascular disease القلب والأوعية الدموية	Obesity السمنة	Diabetes السكري	Food allergies حساسية الطعام	Digestive diseases أمراض الهضم	Eating disorders اضطرابات الأكل
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Therapeutic diets can play an important role in managing a disease.

It can **reduce the amount of medication that's needed**, **increase quality of life** and even **increase life expectancy**. **In some cases, a therapeutic diet can cure some conditions.**

Example If someone has **hypertension**, they may be able to get their blood pressure back to a healthy level by **making changes to their diet**.

إذا كان شخص ما يعاني من ارتفاع ضغط الدم، فقد يتمكن من إعادة ضغط الدم إلى مستوى صحي عن طريق إجراء تغييرات على نظامه الغذائي.

modification : the process of changing parts of something.

texture : the way that a food or drink feels in your mouth.

sodium : a micronutrient otherwise known as salt.



Common reasons for why a patient may be given a therapeutic diet :	
-	To increase, decrease or eliminate a type of food or nutrient, such as dairy or salt.
-	To maintain or improve nutritional status.
-	To provide extra calories for weight gain.
-	To balance the diet.
-	To remove certain foods that affect medication.
-	To help with digestion.
-	To remove foods due to allergies or intolerances.
-	To provide changes in texture due to problems with chewing or swallowing.

Types of therapeutic diets

It can be grouped together depending on the type of modification (change) that is happening to the diet.

some of the most common types of therapeutic diets.				
1. Nutrient modification	2. Texture modification	3. Tube feeding	4. Food allergy/intolerance modification	5. Additional feeding

Nutrient modifications

where 1 or more nutrients are added or removed from the diet.

Nutrient modifications are normally used to help fight diseases such as osteoporosis, hypertension or diabetes.

Adding or removing nutrients can reduce the effects of a disease.

Common nutrient modified diets include:				
Low sugar diet	Low sodium (salt) diet	Low-fat diet	High fibre diet	Renal diet (low sodium, potassium and phosphorous)

Texture modification

Swallowing is a complex function.

When we eat food, it's chewed and moved around the mouth until it reaches an area at the back of the tongue.

Here the swallow reflex is triggered.

some people, the brain doesn't register when the food reaches this area.

Some people don't have teeth to properly chew food.

Eating and drinking can become a slow and difficult process, and choking is a hazard.

The medical term used to describe when people have problems with swallowing food is dysphagia.

The texture and consistency of food can be modified to make eating easier for these people.

Normal swallow

Dysphagia

3 main levels of texture modification of foods:	
Soft	when food is cooked or cut so it can be easily chewed with minimal effort. عندما يتم طهي الطعام أو تقطيعه حتى يسهل مضغه بأقل جهد
Minced & moist	food is soft, easily mashed with a fork; any lumps that are present are smooth. الطعام طري وسهل هرسه بالشوكة؛ أي كتل موجودة تكون ناعمة
Puree diet	food is smooth, moist and lump-free; Sometimes pureed food is grainy. يكون الطعام ناعماً ورطباً وخالياً من الكتل؛ في بعض الأحيان يكون الطعام المهروس به جزيئات كالحبوب

Read the information about the following patients and decide which type of texture modification is appropriate for each.

1. Zainab has dementia and sometimes she forgets to fully chew her food. She tries to swallow large chunks of food which causes her to choke. Zainab has all of her teeth but sometimes she forgets to chew the harder chunks of food.

تعايني من الخرف، هنا عندها كل أسنانها بس بتنسى تهضم الأكل القاسي فاللي نافع لحالتها هو السوفت لأنها بس بتنسى تمضغ القاسي أما بالنسبة للأكل العادي ففيها تمضغه

Texture modification required: **soft texture**

2. Ibrahim recently had a stroke. He cannot fully open his mouth or move it in a chewing motion. Ibrahim's brain does not always register when there is food in his mouth in order to open his oesophagus to allow food to pass to his stomach.

مؤخراً حصله جلطة، هنا عقله مش دايماً بيلاحظ أنه فيه أكل بفمه لينفتح المريء ويدخل الطعام للمعدة لهيك أنسب شي البيوري لأنه قوامه بينبلع بسهولة

Texture modification required: **puree texture**

3. Mariam has multiple sclerosis. She has had a few choking incidents recently. Most of the time her mouth works fine, but sometimes she struggles with chewing food. Sometimes she does not experience dysphagia but it is very unpredictable.

مصابة بالتصلب المتعدد، مؤخراً حصلها شوية حوادث اختناق، معظم الوقت فمها يعمل كويس بس أحياناً بيصير معها عسر بلع غير متنبأ به، الأسهل لها مينسد أند مويست لأنه بتقدر تمضغ معظم الوقت وبنفس الوقت رطب عشان عسر البلع

Texture modification required: **minced and moist texture**

4. Zayed has cancer of the mouth. He is undergoing treatment which has had many side effects. They include pain in the mouth, lack of saliva being produced and severe stiffness of the muscles in his mouth.

قلة اللعاب حيقل قدرته على مضغ الأكل كويس وعنده تصلب شديد بالفم هذا عدا الألم نرى هنا أن الأفضل له بيوري

Texture modification required: **puree texture**

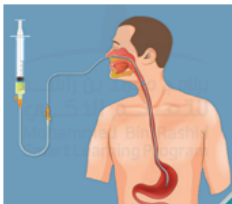
Tube feeding

People may need tube feeding because they cannot get enough nutrients on their own, it could be because they have problems with their mouths or have difficulty swallowing food.

The nutrients they receive are similar to normal food and their bodies digest them in the same way.

In some cases, tubes are inserted through the **nose** or **mouth** and go down the oesophagus into the **stomach**.

In other cases, the tubes are inserted directly into the stomach.



moist : slightly or barely wet; not completely dry.

11.2 Diet for overweight

balance	توازن	Basal metabolic rate	معدل الأيض الأساسي	Burn	حرق
cancer	سرطان	Daily	يومي	dense	كثيف
Gradually	تدريجياً	Intensity	شدة	obesity	سمنة
Overweight	زيادة الوزن	thermal affect	التأثير الحراري	Throughout	طوال

Overweight and obesity

If a person is **overweight** or **obese**, it **increases the risk of developing other diseases** such as diabetes, heart disease and cancer.

BMI between 25-29.9 is classed as overweight.

BMI above 30 is classed as obese.

Someone **overweight** or **obese** may be **advised by their doctor** to **lower their weight to improve their health**.

It should be done in a controlled and healthy way, by gradually reducing the number of calories a person consumes and increasing their physical activity levels.

Energy balance

Balance of calories consumed through eating and drinking compared to calories burned throughout the day.

Energy balance equation: $Energy\ balance = energy\ input - energy\ output$

energy input is the calories that come from foods and drinks that have been consumed.

Energy output is made up of three different things:

Basal metabolic rate (BMR)

most of your energy is used up doing basic functions such as **breathing** and **blood circulation**. Even when you are sleeping your body is burning calories. The rate at which your body burns calories when it is at total rest is called your BMR. This is the number calories that your body needs to simply survive.

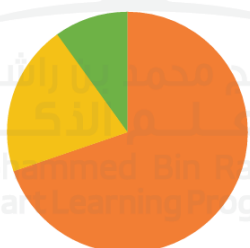
Physical activity

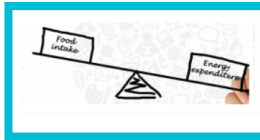
Anything that raises your heart rate above resting is counted as physical activity. Daily activities are even classed as physical activity, such as walking upstairs.

Thermal effect of food

energy that is used to chew, digest and store food. This uses the least amount of energy

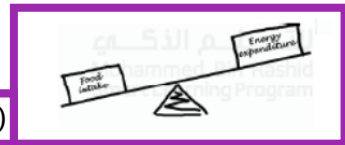
Energy output





gain weight (positive energy balance)

lose weight (negative energy balance)



To lose weight :

reduce the number of calories consumed.

تقليل عدد الكالوريز المستهلكة

Eat less energy dense foods and have a better diet.

تناول أطعمة أقل كثافة في الطاقة واتباع نظامًا غذائيًا أفضل

Increasing the amount of calories that are used up but with doing more physical activity each day or increasing the intensity of exercise to burn more calories than normal.

زيادة كمية السعرات الحرارية المستهلكة ولكن مع ممارسة المزيد من النشاط البدني كل يوم أو زيادة شدة التمارين الرياضية لحرق سعرات حرارية أكثر من المعتاد

increasing energy output by doing exercise

زيادة إنتاج الطاقة عن طريق ممارسة التمارين الرياضية

Diet for overweight

Eat a variety of foods each day.

Try to eat enough fruit and vegetables every day.

Reduce intake of foods that are processed, and high in saturated fat.

Reduce the intake of food and drinks that have high sugar content.

Choose food high in protein, lean meat, fish, eggs and legumes.

Make sure that the diet has enough cereals and their products.

Reduce the intake of sodium and foods that are high in salt.

Eat foods high in fibre; this will help with digestion and keep you feeling full for longer.

Make sure that the diet contains enough calcium. Good sources include milk and dairy products.

Consume enough water every day.



Weight maintenance