DIETARY & LIFESTYLE GUIDELINES FOR OLDER PEOPLE

65+

The Mediterranean way



As we grow older, the significance of sustaining a healthy and balanced lifestyle escalates, not merely as a choice but as a fundamental cornerstone of our well-being.

As we age, our bodies undergo changes, necessitating adjustments to our dietary and physical activity routines to maintain and enhance our health. The Mediterranean diet, renowned for its nutritious and balanced approach, serves as an exemplary model, particularly beneficial in the context of aging. This publication emphasizes the crucial interplay between a wholesome diet and regular physical activity, a synergy that significantly bolsters our quality of life as we advance in age.

In a society where the demographic landscape is progressively aging, the importance of disseminating knowledge about healthy living cannot be overstated. This guide aims to empower those aged 65 years and above, along with their caretakers, to make enlightened decisions that foster well-being through balanced nutrition and adequate physical engagement. Adhering to the advice laid out in these guidelines is instrumental in staving off numerous age-related health issues, thereby enhancing your capacity to lead an autonomous and fulfilling life.

As we age, our metabolism is likely to become less active, and the body's efficiency in absorbing certain nutrients begins to decrease. By following these guidelines, we can reduce the risk of chronic diseases such as diabetes, high blood pressure, cholesterol, heart disease, obesity, circulatory and arthritis problems, as well as degenerative brain diseases like Alzheimer's and other forms of dementia.

We at the Directorate are committed to supporting you in this journey toward aging gracefully, ensuring that you are equipped with the knowledge and tools necessary to make informed choices about your health and well-being.

Together, let us age well, embracing each day with the zest and zeal it deserves.

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The Mediterranean diet and the new food based dietary guidelines for older people

The traditional Mediterranean diet consists mainly of plant-based foods such as vegetables, fruit, wholegrains (for example oats, brown rice, barley), potatoes, legumes (for example, beans, chickpeas, lentils, split peas), nuts, seeds, herbs and spices. It also includes fish, chicken, eggs and low-fat dairy products, though the latter are eaten less frequently.

Red meat (such as beef, lamb and pork) should be eaten less often, whereas processed meats (such as sausages, smoked meat, salted and cured meat) and sugar-sweetened foods and drinks should be avoided and kept to a minimum.

In addition to nuts and seeds as sources of fat, the Mediterranean diet favours olives and extra virgin olive oil due to their protective factors. Eating 'whole' foods, meaning 'fruit' instead of 'fruit juice', or 'brown rice' instead of 'white', helps to improve the function of blood vessels, thus managing blood pressure as well as to better regulate blood cholesterol and glucose levels. Drinking sufficient water or infused water drinks without added sugars is part of the Mediterranean diet. The Mediterranean way of life includes physical activity, balanced with enough rest and sufficient hours of sleep. In everyday life, eating is part of socialising and hospitality, where food shopping, preparation and eating is shared in a pleasurable way with family and friends.

These dietary guidelines for older people offer guidance on how to make smart food choices from different food groups and in the right quantity. They are built on the principles of the traditional Mediterranean Diet. They are also aligned to the MIND^{*} (Mediterranean Intervention for Neurodegenerative Delay Diet) (2015), where recent studies have shown that it substantially slows cognitive decline with age. Considerations for sustainability were made when drafting these guidelines particularly in relation to animal products in an ongoing effort to reduce the negative impact on our environment and climate.

> *Morris MC, Tangney CC, Wang Y, Sacks FM, Barnes LL, Bennett DA, Aggarwal NT (2015). MIND diet slows cognitive decline with aging. Alzheimers Dementia. 2015; Sept 11(9): 1015-1022



How much should older people eat and drink?

The following table is a guide for older people on the number of servings per day for each of the food groups, and on the food serving size in order to stay healthy and prevent diseases as they age.

A guide to the number of servings and serving size per day

| Food | Servings per day | Serving size |
|---|--|--|
| Wholegrain cereal, cereal products and potatoes (complex carbohydrates) | 3 | 30-40g porridge oats. 30-40g wholegrain unsweetened cereal. 1 slice of wholemeal bread. 1 slice of wholemeal Maltese bread. 50g raw barley or wholegrain couscous or bulgur wheat or quinoa or brown rice or polenta or millet. |
| Vegetables | 6 (3 green leafy vegetables and 3 other vegetables) | 1 handful of dark green leafy vegetables, examples: spinach, broccoli, cabbage, cauliflower, parsley, brussel sprouts, kale, watercress and rocket leaves. 1 handful of a mix of other vegetables such as garlic, shallots, onions, spring onions, beetroots, kohlrabi, tomatoes, carrots, aubergines, zucchini, bell peppers, green beans and mushrooms. |
| | | |



| Serving size | Tips | Notes |
|--|---|--|
| 60g raw wholegrain pasta 80g raw potato or sweet potato with skin on 1 small wholegrain wrap | When possible, eat potatoes with their skin on, for more health benefits and less waste. Choose wholegrains (barley, quinoa, brown rice, polenta and millet) over cereal products (bread, pasta and rice). | Choose wholegrain cereal options that have no or minimal amounts of added sugars (not more than 5g of sugar per 100g of product). Choose products with a high fibre content (6g per 100g of product). |
| 1 ladle of homemade vegetable soup (minestra), legume-based soup or any other vegetable soup. | Try to eat one raw salad each day. Avoid overcooking vegetables. Aim to include different deep-coloured vegetables with different texture, for increased health benefits. Aim to include different green vegetables for increased health benefits. Try to eat mostly local and seasonal vegetables. | People on blood thinning medication (e.g. Warfarin), need to seek medical advice on the amount of green leafy (kale) and cruciferous (cauliflower) vegetables they can consume. |

| Food | Servings per day | Serving size |
|--------------------------------|------------------|---|
| | | 1 small bowl fruit salad. |
| | | ½ medium (150g) fruit such as apple, pear, orange, peach, nectarine, grapefruit. |
| Fruit | 2-3 | 2 small thinly cut slices or 1 large thin slice (15cm) of watermelon or melon. |
| | | 1 small (15cm) banana. |
| | | • 1 fresh fig. |
| | | Plant proteins - legumes, nuts and seeds* |
| Legumes, nuts, seeds, fish, | 3 | 140g legumes such as beans, peas, chickpeas lentils, split peas, soybeans. |
| poultry, eggs | | 1 handful of nuts (almonds, walnuts). |
| | | 2 tablespoons of seeds (chia seeds). |
| and lean meat | | 1 handful of peanuts. |
| | | 1 glass (250ml) low fat milk. |
| | | 1 tub (150ml) low fat plain yoghurt or kefir. |
| Low fat milk and | 2 | • 30g ricotta. |
| milk products | 2 | 30g fresh cheeselet (gbejna). |
| | | 1 thumb size (30g) lower fat cheese such as mozzarella, dried cheeselet (gbejna). |
| | | * Nuts and seeds, to be consumed with breakfast and as a snack. |

| Serving size | Tips | Notes |
|--|--|--|
| 1 small (80g) fruit such as kiwi, plum, mandarin, clementine, prickly pears. 3 very small (3cm) fruit such as loquats, kumquats and small bambinella pears. 1 small bowl of grapes, pomegranates, strawberries, mulberries, blueberries, raspberries and cranberries. | Eat mostly local and seasonal fruits. For more health benefits: include one serving of berries (fresh or frozen) at least twice a week and include other different fruit. Distribute your fruit throughout the day especially for people with diabetes. Steamed or baked apples may be more inviting for some people with poor appetites. | Before eating grapefruit and cranberries, seek medical advice. These fruits contain substances that interact with certain medicines. |
| Fish, poultry, eggs and lean meat 100g (raw weight) fish: up to twice a week. 100g (raw weight) poultry such as chicken and turkey: up to twice a week. 1 egg: up to 4 eggs a week. 90g (raw weight) lean red meat such as beef and pork: up to once a week. Processed meats: to be avoided or limited. | Include legumes at least once daily. Include more sustainable fish in your diet, such as fresh anchovy, Atlantic bonito, Atlantic mackerel, bogue, comber, dolphin fish, garfish, horse mackerel, mullet, painted comber, pompano, saddled seabream, sardines, skipjack, tuna and squid. Aim for at least two servings of fish a week, one of which is an oily fish, such as sardines. | These are in line with the WHO health recommendations to eat less red meat and avoid or limit processed meats to reduce the risk for hypertension and certain cancers. |
| | Avoid butter and cream. These are not nutrient rich. Choose fermented milk products for more health benefits e.g. kefir and yoghurt. Choose lower fat milk products without added sugars. Avoid high fat and processed cheeses. | For those who consume non-milk alternatives, always choose non-milk alternative products that are 'unsweetened' and 'fortified' particularly with vitamin B ¹² , vitamin D ³ and calcium. |

| Food | Servings per day | Serving size |
|------------------|------------------|---|
| Healthy fats | 1 | 1 tbsp - olives (rinsed). 10ml extra-virgin olive oil, used in salad dressings. 1-2 tbsp(s) ground flaxseeds/linseeds or chia seeds. ½ an avocado. |
| Herbs and spices | 1 or more | 1 tsp of dried herbs or 4 tsps of fresh herbs. ¼ tsp (to taste) of spices. |



| Serving size | Tips | Notes |
|--|---|---|
| 1 tbsp nut butters or seed butters, made from 100% nuts or seeds - may be suitable for older people with poor appetites. | Always read labels on food products to check which fats are present and the quantity per 100g. Use the shopping guide card (see pages 8-9) to check labels whether food products contain added sugars and salts and by how much. Avoid partially hydrogenated oils also known as trans fats, mostly found in commercial foods such as fried or baked goods, processed snack foods and margarine. | Nuts and seeds are high in energy and nutrients but are a good source of protein and dietary fibre, which can help older people with a higher energy/protein requirements or poor appetites to maintain a healthy weight. |
| Include herbs and spices with breakfast, other meals and snacks. | Use a variety of herbs and spices to enhance the flavour of food instead of salt or sugar. Daily salt intake should be limited to not more than 5g per day; and our intake of free sugars should be limited to not more than 25g per day. Replace sugar with cinnamon, ginger, nutmeg, or cloves. Replace salt with parsley, celery, rosemary, curry, turmeric, all spice, red chilli flakes, dill, marjoram, chives, or mint. | Products containing the word 'seasoning' usually contain added salt. |



The shopper's guide



| | | Dri | nks | | |
|----------|---------------|-----------------|--|---|--|
| | 2020 | •• | ••• | | |
| | Drinks | Great choice | Fair choice | Poor choice | |
| 6 2 60 7 | | per 100mls | per 100mls | per 100mls | |
| | | Water | Other beverages eg. flavoured water | Energy drinks Alcoholic drinks Sugar sweetened beverages | |
| | Sugar | 0g | 2.5g or less | 20g or more | |
| | Fats | 0g | 1.5g or less | 1.5g or more | |
| | Saturated fat | 0g | 0.75g or less | 0.75g or more | |

line with the Dietary Guidelines - the Mediterranean way

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Examples of healthy snacks

Snacks

A snack is a small amount of food eaten between meals. They should not replace meals. Some older people may need to consume healthy snacks to meet their energy, protein, and other nutrient requirements for good health especially when appetite is poor. Others may need to consume healthy snacks to control cravings.

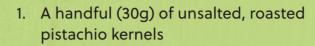
1. A small bowl (100g) of blueberries

- 2. A bowl (160g) of strawberries
- 3. A medium portion (85g) of broccoli, seasoned with sesame seeds and ginger
- 4. 2 small fruit kebabs (100g)
- ½ red bell pepper (85g) served with 1 tbsp (30g) of guacamole
- 6. 1 medium (162g) orange
- 7. 1 small apple (120g)
- 8. 1 small banana (127g)
- 9. 2 slices (260g) of a fresh melon
- 10. 125g of 0% fat, plain Greek yoghurt mixed with ½ tsp ground cinnamon
- 11. A medium portion (85g) of steamed broccoli + 1 tbsp (35g) ricotta
- 12. 125g of 0% fat plain Greek yoghurt mixed with 40g fresh fruit
- 13. 17g of dark chocolate (70-84% cocoa)

Less than 100 calories

- 1. 1 small pear (115g) lightly covered with 2 tbsps (30g) ricotta
- 2. A hard-boiled egg + raw side salad garnished with a drizzle of extra virgin olive oil + vinegar
- 3. Cherry tomatoes (70g), basil leaves (10g) and mozzarella (35g) balls
- 4. 30g of air-popped popcorn
- 5. 2 small fruit kebabs (100g) served with 50g ricotta
- 2 tbsps hummus with fresh vegetable sticks (carrots 30g) + coloured bell peppers (30g)
- 1 small (120g) apple (sliced) + 1 heaped tsp (15g) peanut butter (made from 100% peanuts)

Between 100-200 calories



- 2. A bowl (160g) of strawberries dipped in dark chocolate (70%) (22g)
- 125g 0% fat, Greek plain yoghurt, 1 tbsp ground flaxseeds, ½ tsp cinnamon, 1 apple (cubed) and 7g (70%) dark chocolate
- 4. 1 tbsp (30g) hummus with wholemeal pita bread (45g)
- 40g wholemeal traditional Maltese galletti, 30g peppered cheeselet (gbejna) and 6 cherry tomatoes
- 6. A small handful (30g) of roasted almonds with skin
- 7. A small handful (30g) of walnut kernels
- A hard boiled egg + 1 medium wholemeal toasted bread + raw side salad (with a little extra virgin olive oil + vinegar)

CAUTION: Be mindful that nuts, roasted chickpeas and popcorn can be a choking hazard.

Between 200-300 calories

Fluids

As people age, their sense of thirst declines but their body still requires plenty of fluids to regulate body temperature, transport nutrients, add bulk, aid digestion, eliminate toxins, and lubricate joints. Meals should always be accompanied by fluids such as water or low fat/ low salt soups and broth. Older adults should drink fluids when eating snacks such as water or water infused with fresh fruit. herbs or spices; unsweetened decaffeinated teas (including herbal) or decaffeinated coffee and lower fat milk. On average, older adults should drink about 1½ to 2 litres of fluids per day.



It is important, especially on hot days, for older adults to consume more cold drinks even if they do not feel thirsty, to prevent dehydration, mental confusion, and heat exhaustion. Older adults are advised to seek medical advice about fluid intake if they suffer from certain medical conditions particularly heart and kidney conditions.

Beverage ideas

Water

Infused water (unsweetened)

Ginger and tumeric tea (unsweetened)

Decaffeinated green tea (unsweetened)

Other herbal tea (unsweetened)

Golden tumeric latte (milk, tumeric, pepper, ginger, cinnamon) (unsweetened)



How to create a healthy, balanced lunch or dinner?

A healthy lunch or dinner can be easily prepared based on the 'plate method'. A 23cm plate is suitable for older people.

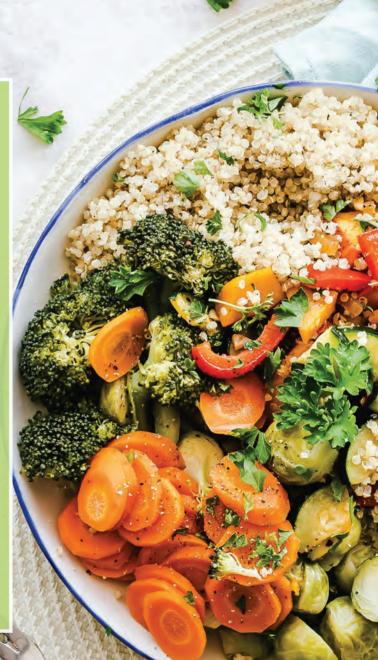
Half of the plate should consist of several servings of non-starchy vegetables of different colours and texture. They provide a variety of nutrients, antioxidants and dietary fibre that help us to stay healthy. The vegetables could be fresh or frozen though seasonal and local vegetables reduce environmental impact.

Frozen vegetables also provide good nutrition quality. It is advisable to buy them free from salt and fat especially partially hydrogenated fats, also known as trans fats.

A quarter of the plate should consist of complex carbohydrates such as brown rice, quinoa, oats and barley, wholemeal pasta, or starchy vegetables such as sweetcorn, peas, potatoes, or sweet potatoes. These will provide long-lasting energy, vitamins and dietary fibre.

The other quarter of plate should consist of foods such as beans, chickpeas, peas, lentils, nuts, fish, eggs or poultry as a good source of protein and other nutrients to keep their body strong and healthy. Red meat should be limited to no more than one serving a week.

Using this plate method as a guide, will provide meals with a variety of nutrients, dietary fibre and antioxidants that help to prevent heart disease and certain cancers, manage weight, avoid constipation and feed the good gut bacteria which help older adults to remain healthy.



1 serving of complex carbohydrates

2 servings of non-starchy vegetables

1 serving of protein



Cooking methods

Use of cooking methods such as steaming, boiling, poaching and stewing instead of frying helps to avoid addition of extra fats.

Stir frying with broth or a little extra virgin olive oil is acceptable. This quick cooking method will also keep many vitamins, minerals and antioxidants in food.

Cooking tips

- Use a sharp knife to easily cut vegetables. This lessens the strain on one's wrist and fingers.
- Use homemade broth (vegetables, poultry or bone) in food preparation. Commercial stocks (powders or cubes) are often high in salt.
- Use water with added herbs and spices, fresh lemon or citrus juice.
- Use small amounts of extra virgin olive oil in salad dressings.
- The best cooking methods use little or no added salt, sugars and fats like butter, margarine, or high fat cheese.
- Grow your own herbs to have them handy and stock up on an array of spices.
- Salt does not need to be added.
 Use herbs and spices to enhance the flavour of foods.



Examples of a breakfast, lunch and dinner

Breakfast

Choose one

- 150g 0% fat, Greek plain yoghurt with 1 small banana (slices) topped with crushed walnuts (2 halves).
- 150g 0% fat, plain yoghurt, 1 apple (sliced) and 1 teaspoon of peanut butter (made from 100% peanuts).
- Watermelon salad 2 slices of watermelon, a third of an avocado and a handful of berries; topped with a tablespoon of crushed almonds or ground flaxseeds (1 tbsp).
- Overnight oats 30g oats with strawberries (a handful) and a teaspoon of sunflower/sesame seeds.
- 30g of unsweetened wholegrain cereal with lower fat milk and fresh/frozen berries or fruit (a handful).
- Wholemeal toasted bread (1-2 slices) with scrambled eggs (2 eggs, with no added oil or butter) and mushrooms (80g).
- Wholemeal Maltese bread (1 slice) with spinach omelette (2 eggs) filled with a mix of bell peppers, tomatoes and onions (80g or more).





Lunch

Choose one

- Lentils (140g) and curried vegetables (200g cooked weight) with brown rice (50g raw weight).
- Roasted chicken (100g raw weight) with fresh vegetable salad (160g) and a wholemeal bun (small).
- Stir-fried vegetables and lentils (220g cooked weight) with quinoa (50g raw weight).
- Mixed bean, sweetcorn, peas, tomatoes, onions, served with a rucola salad (200g) and cheeselet (ġbejna) shavings (10g).
- Chickpea soup (2 ladles) with 1 slice of toasted wholemeal Maltese bread.
- Baked fish (100g raw weight), Mediterranean salad with tomatoes, cucumber, red onion, olives, capers, parsley (160g) with an extra virgin olive oil/vinegar-based dressing and 1 wholemeal pita bread.
- Grilled vegetables (160g) with a mixed bean dip (140g).

Dinner

Choose one

- Baked salmon (100g raw weight) with leafy greens and tomato salad (160g) and green beans (140g).
- Grilled vegetables, black beans and tomato sauce (230g cooked weight) with brown rice (50g raw weight).
- Carrot and lentil soup (2 ladles) with 1 slice of toasted wholemeal Maltese bread.
- 1 wholemeal pita bread stuffed with cooked chicken (85g) and a leafy greens, cucumber and tomatoes salad (160g).
- Wholemeal pasta (80g raw weight) with a tomato sauce (tomatoes, onions, peas and garlic) (160g); and a fish fillet (100g).
- Stewed meat (90g raw weight) with steamed broccoli (80g raw weight), carrots (50g raw weight) green beans (140g) with an extra virgin olive oil/vinegar-based dressing and cooked sweet potato (80g raw weight).
- Vegetarian spinach lasagne (200g) (wholemeal/spinach lasagne pasta, cottage cheese sauce with cooked carrots, bell peppers, courgettes, onions and spinach, tomato sauce and breadcrumbs (instead of mozzarella).

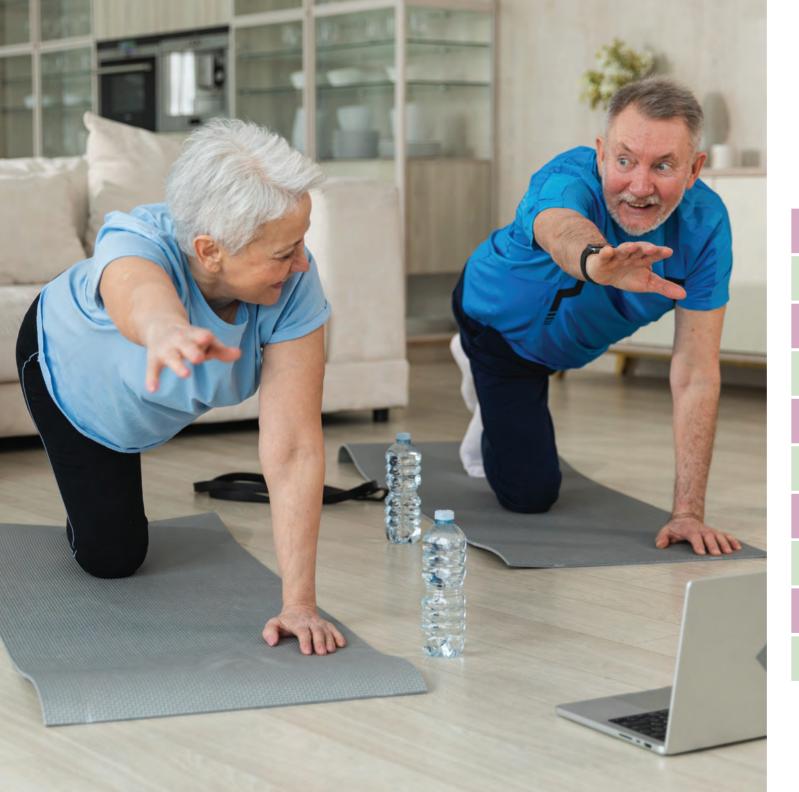


Physical activity

Older people are encouraged to stay active due to the health benefits associated with physical activity. Physical activity need not be strenuous to achieve health benefits. In fact, older adults can obtain significant health benefits with a moderate amount of physical activity, preferably daily. A balance of aerobic activities such as walking and swimming, muscle-strengthening, and balance exercises can help to reduce the risk of developing chronic diseases and also helps in the management of those conditions. Physical activity improves the ability to carry out daily activities and live independently.







Benefits gained through regular physical activity

| Better sleep quality |
|--|
| Improved respiratory function |
| Chronic disease management |
| Enhanced mobility and flexibility |
| Mental wellbeing and cognitive function |
| Weight management and prevention of falls |
| Bone and muscle health and osteoporosis prevention |
| Social connection and community integration |

Improved digestive health

Improved cardiovascular health

How much exercise do older people need?

Adults who are over 65 years of age are advised to carry out at least 150-300 minutes of moderate intensity aerobic physical activity or 75-150 minutes of vigorous intensity aerobic physical activity per week.

During a moderate intensity activity, talking is possible but with some difficulty, while during a vigorous intensity activity, not more than a few words can be said without taking a breath.

As part of their weekly physical activity, older adults should do muscle strengthening activities of moderate intensity twice a week, involving all major muscle groups.



Exercises that involve more balance, coordination and strength should be undertaken three times a week to enhance functional capacity and to prevent falls.





| Levels of intensity for exercise | Duration (minutes per week) | Examples of exercises | Talk difficulty |
|--|--------------------------------|--|------------------------------|
| Moderate intensity | 150-300 | Brisk walking, swimming, cycling, pilates, resistance band training and dancing | Possible with difficulty |
| Vigorous intensity | 75-150 | Fast swimming, zumba, stairs, weight training, aerobics and running | Not more than a few words |

Choose your exercises depending on your 'intensity' ability

- Older adults should be as active as their health condition allow. Choose activities that are safe, attainable, and enjoyable for your general health condition.
- Check with your medical doctor regarding your intensity ability if you are unsure or afraid of how to start.
- Always ensure safety first. Stay close to a sturdy surface and hold onto for balance, if necessary.
- To see some examples of simple physical exercises follow pages 36 till 51.



Other lifestyle factors affecting health

People worldwide are living longer. Yet ageing often brings about both physical and lifestyle changes. Learning how or why these changes occur and different ways to manage them will help to maintain our overall wellbeing even in the later years of our life. As people age, there is a tendency towards less physical activity. Additionally, some people may eat more because of a change in routine or boredom; others may experience a loss in their appetite due to biological or mental health problems.

Adopting good habits such as healthy eating, remaining physically active and getting plenty of sleep and rest, can help to avoid weight gain and remain as healthy as possible.

Physical changes

The nutrients necessary as we grow older

It is important that older people consume a balanced Mediterranean diet that includes nutritious foods such as wholegrains, legumes, coloured and green leafy vegetables, mushrooms, berries, citrus and other fruit.

It is essential to obtain all the necessary nutrients to meet their needs, to avoid muscle wasting, build muscle strength, maintain bone density and mental alertness, whilst maintaining good health. Important nutrients among older people include adequate amount of protein, vitamins such as folic acid, vitamin A, Vitamin D, vitamin B¹² and minerals such as calcium and iron. Vitamin B¹² is found in foods such as wholegrains, fish, lean meat, and fortified dairy and non-dairy products. Vitamin D may also be an important nutrient in older adults when they are not exposed to regular sunlight.



Older people experience a slower digestion that makes it harder for the body to process and absorb nutrients. Consuming plenty of vegetables and fruit can help to improve digestion, reduce the risk of constipation, stomach and intestinal problems.

Other important nutrients such as dietary fibre, omega-3 fats and antioxidants are also necessary as they reduce inflammation and boost immunity. These can be found in foods such as fatty fish (mackerel and sardines), dark green leafy (kale, spinach, rucola) and cruciferous (broccoli, cauliflower) vegetables, nuts and seeds, berries, green decaffeinated tea, yoghurt (low fat, unsweetened), herbs and spices (ginger, turmeric with pepper).

A general practitioner or a dietitian can offer professional health advice should supplementation of the above nutrients be necessary.

Cravings for salt, sugar, and fatty foods

'Bitter' and 'salty' tastes are the taste senses that are weakened in older adults. This often leads to adding large amounts of salt to food during cooking or at the table. A high salt intake increases the risk for high blood pressure and kidney problems, among others. Herbs and spices can be used to add flavour and good taste to food without adding salt. In addition, herbs and spices are full of antioxidants and phytochemicals and these are known to have positive effects on human health, such as reducing the risk for heart disease and certain cancers. At the same time, some medicines or health problems tend to increase cravings for fatty and sugary foods among older people.



Fat intake should be kept to one's daily allowance (refer to guidelines on page 6) for healthy fats and avoid foods with added cream and greasy foods. Likewise, it is important to be aware when one's sugar intake has become excessive. Many Maltese eat more than the daily recommended amount of 'free sugars' of 25g per day. It is advisable to slowly cut down on sugar added to tea and coffee and eventually also learn how to add sweetness to dishes using spices and fruits. One's daily allowance of fruit is a health source of sweet-tasting food. To safeguard against these cravings, herbs and spices can be used to add flavour and taste to food without added calories and/or salt. Exercising regularly can also help with controlling food cravings in general, and particularly useful for those trying to manage or reduce their weight.

Chewing and swallowing food

Some older people have trouble in chewing and swallowing foods. It is important to visit a dentist to identify any problems with teeth or gums or ill-fitting dentures. At times, food texture modification is needed to aid with chewing and swallowing food. There are different levels of food textures. These include foods that are soft, minced, mashed, and pureed. The type of food modification is chosen to meet the specific needs of the older people. A speech language pathologist in liaison with a dietitian can help in this regard.

Undernutrition

It is important to know the signs of undernutrition to prevent them.

Signs of undernutrition

| Fatigue | Smaller food portion sizes |
|---------------------------------------|----------------------------|
| Depression | Unintentional weight loss |
| Not finishing meals | Poor appetite |
| Recurring infections | Frailty |
| Digestive, lung and heart problems | Anaemia |



If you notice any of these signs of undernutrition, the best step is first to seek a doctor's advice, who may be able to diagnose an underlying condition or alter a medication that may be contributing to the problem. The doctor can also provide a referral to a dietitian, who can design an appropriate eating plan for malnourished older adults.

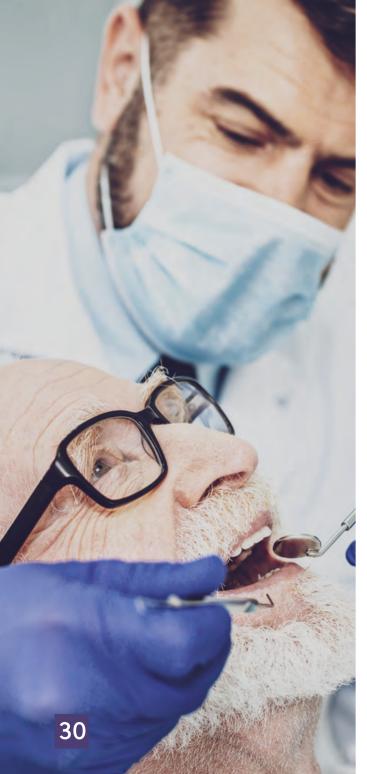




Simple tips to prevent undernutrition in older people

| Prepare meals and snacks rich in | Adding calories without adding too |
|---|---|
| nutrients. For example, a chicken and | much volume. For example, add |
| vegetable soup instead of chicken | milk and dairy alternatives instead |
| broth, casseroles, stews, shepherd's | of water to dishes and entrees; and |
| pie and stuffed vegetables are other | add some nut or seed butter when |
| good meal ideas. | serving meals or snacks. |
| Opt for several small meals and snacks | Avoid filling up on non-nutritious |
| rather than a few large meals; also | foods or drinks such as sweets, |
| nclude a variety of foods from every food | soft drinks and highly sweetened |
| group emphasising different colours. | fruit drinks. |
| Add appeal through new foods. For example, preparing lentil pasta with tomato sauce, or mashed sweet potatoes. | Use herbs and spices to add flavour to food in view of the diminished sense of taste and smell. |
| Make meals enjoyable and a social | Talk with a doctor or a dietitian |
| event by inviting family members | with regards to making use |
| or friends for dinner or going out | of nutrition supplements as |
| for a meal or snack with others. | necessary. |

⁶Eat plant-based foods more frequently, such as raw or cooked vegetables and fruit⁹



Good oral health

Changes occur in the mouth as we get older. Poor oral health might also contribute to heart problems, diabetes, stroke and respiratory problems.

The most common oral health problems among older people

| Mouth ulcers | Gum disease | Root decay and hypersensitivity | Dry mouth |
|---------------|-------------|---------------------------------|----------------|
| Altered taste | III-fitting | Oral | Tooth |
| | dentures | infections | discolouration |

As gums tend to recede with age, the roots of the teeth become exposed. This makes teeth more sensitive and more prone to decay. Treatment recommendations include the use of fluoride mouthwashes and toothpastes for sensitive teeth. Older adults are also more likely to suffer from a dry mouth. If your mouth is dry, sip water frequently, and use non-foaming toothpaste or toothpaste especially intended for dry mouth. Chewing sugar-free gum helps stimulate saliva in the mouth and there are also saliva substitute products available. The dentist can better indicate what is best to suit one's needs.

Tips to keep a healthy mouth

Reduce your daily sugar intake.

Brush teeth and gums at least twice a day for two minutes especially before you sleep. Toothbrush adaptors can be used to enhance grip and facilitate brushing when there is arthritis of the hand. Nowadays an electric toothbrush or else a 'super brush', (which brushes all tooth surfaces at the same time) can be used.

Remove and clean any dentures daily.

Visit the dentist regularly even if you only have dentures. It is especially important to attend for a dental check-up before starting any medication for bone density problems.

Even older adults can enjoy a healthy mouth!





Lifestyle changes

Cooking on a budget

Revised budgeting and planning may be necessary due to reduced financial income and to ensure continued enjoyment of life with healthy food. By simply cutting out junk and highly processed foods and adapting dishes using more seasonal and local produce, one can enjoy healthier and better-quality food that tastes great. In addition, vegetables and herbs can be grown to have them always available. Learning to cook and getting creative in meal making is a way to relax, enjoy oneself, and to eat healthily on a budget.

Acquiring new cooking skills and new recipe ideas can boost someone's self-esteem and self-confidence in taking care of his/her own health. Contact the nutrition helpline (on **8007 3307**) for further information or to get a free copy of any of our healthy recipe books.

Living with arthritis

Along with usual medications, eating a nutritious diet and regular physical activity have clearly an important role in helping to manage the severity and symptoms of arthritis. Meals consisting of mostly plant-based whole foods such as lentil, brown rice curry; sesame, ginger broccoli and beans; or wholegrain pasta, chickpea and tomato sauce, are known to guard against inflammation. These foods taste delicious yet contribute towards a better heart and immune system. Engaging in regular physical activity as indicated by physiotherapists, can reduce arthritic pain and improve physical function among arthritis sufferers.



Social and mental wellbeing

It can be easy to 'not eat' or 'to overeat' if we are feeling emotional, moody, sad or lonely. Such behaviours can lead to problems of undernutrition and overeating respectively. Some individuals may experience anxiety, fatigue and depression. Meal planning and going to the market to shop for food, offers opportunities to stay mentally, physically active and to socialise. Sharing healthy meals can be an effective antidote to overcoming loneliness and reduce symptoms of depression.

Alcohol

Our bodies are less efficient in coping with the ill-effects of alcohol as we grow. Limiting alcohol consumption is important in view of the negative consequences of alcohol. These may include dehydration (if not sufficient fluids are consumed), high blood pressure, heart disease, increased risks of accidents, repeated falls, memory problems and a reduced brain function. Alcohol should not be consumed when taking medications. This becomes more dangerous in older adults. People who have never consumed alcohol are not encouraged to start drinking when they grow older since the 'cons' for alcohol far outweigh its 'pros'. If you or your loved one is overconsuming alcohol, or is suffering from an alcohol addiction, help is available. You can contact your own family doctor or SEDQA (on **2388 5110**), or the Alcoholics Anonymous (AA) helpline by Caritas (Malta) (on **2123 9264**).

Tobacco

Smoking continues to damage the body even in older age, causing cancer, heart and lung disease. People smoking tobacco or using vapes should make every effort to quit or reduce use. Second hand smoke also known as passive smoking is also harmful. For support in quitting or reducing smoking, please contact the smoking Quitline (on **8007 3333**).



Examples of simple exercises

Single limb stance





It is best to start off with a simple balance exercise for older adults. Stand behind a steady, solid chair (not one with wheels), and hold on to the back of it. Lift up your right foot and balance on your left foot. Hold that position for as long as you can (about 30-60 seconds), then switch feet.

Walking heel to toe





This exercise makes your legs stronger, which enables you to walk without falling. Put your right foot in front of your left foot so that the heel of your right foot touches the top of the toes of your left foot. Move your left foot in front of your right, putting your weight on your heel. Then, shift your weight to your toes. Repeat the step with your left foot. Walk this way for 20 steps.

Rock the boat





Stand with your feet hip width apart, keeping your head level. Then, transfer your weight to your right foot and slowly lift your left leg off the ground. Hold that position for as long as possible (but no more than 30 seconds). Slowly put your foot back onto the ground, then transfer your weight to that foot. Slowly lift your opposite leg. Start by doing this exercise for balance five times per side, then work your way up to more repetitions.

Clock reach





Use a sturdy chair for this exercise. Imagine that you are standing in the centre of a clock. The number 12 is directly in front of you and the number 6 is directly behind you. Hold the chair with your left hand. Lift your right leg and extend your right arm so it is pointing to the number 12. Next, point your arm towards the number 3, and finally, point it behind you at the number 6. Bring your arm back to the number 3, and then to the number 12. Look straight ahead the whole time. Repeat this exercise twice per side.

Back leg raises





This exercise makes your bottom and your lower back stronger. Stand behind a sturdy chair. Slowly lift your right leg straight back – do not bend your knees or point your toes. Hold that position for one second, then gently bring your leg back down. Repeat this 10-15 times per leg.



Single limb stance with arm





This balance exercise improves physical coordination. Stand with your feet together and arms at your side next to a chair. Lift your left hand over your head. Then, slowly raise your left foot off the floor. Hold that position for ten seconds. Repeat the same action on the right side.

Side leg raise





Use a sturdy chair for this exercise to improve balance. Stand behind the chair with your feet slightly apart. Slowly lift your right leg to the side. Keep your back straight, your toe facing forward, and stare straight ahead. Lower your right leg slowly. Repeat this exercise 10 to 15 times per leg.

Wall push up





You only need a wall to do this strength training exercise. Stand an arm's length in front of a wall that does not have any paintings, decorations, windows or doors. Lean forward slightly and put your palms flat on the wall at the height and width of your shoulders. Keep your feet planted as you slowly bring your body towards the wall. Gently push yourself back so that your arms are straight. Do 20 repetitions.

Marching in place





Marching is a great balance exercise for seniors. If you need to hold onto something do this exercise in front of a counter. Standing straight, lift your right knee as high as you can. Lower it, then lift the left leg. Lift and lower your legs 20 times.



Toe lifts





This strength training exercise for seniors also improves balance. You will need a sturdy chair or a counter.

Stand straight and put your arms in front of you. Raise yourself up on your toes as high as you can go, then gently lower yourself. Do not lean too far forward on the chair or counter. Lift and lower yourself 20 times.

Sitting to standing

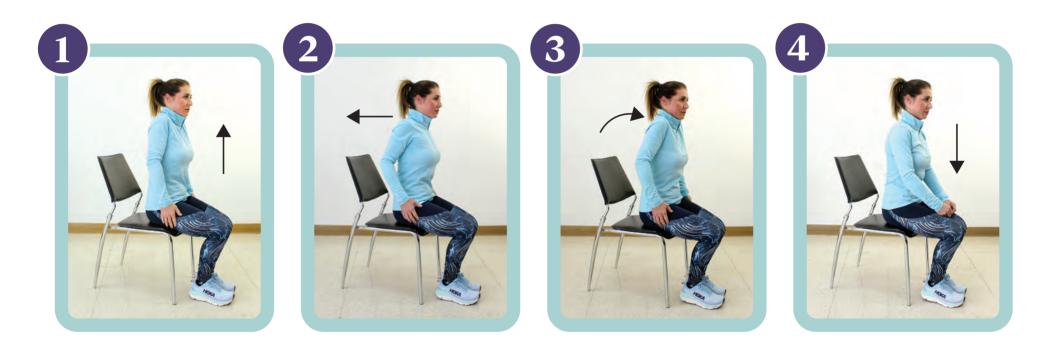




This exercise helps to strengthen the legs. Sit on a sturdy chair. Sit to stand and back to sitting slowly without using hands to push off the chair. Repeat 10 to 15 times.

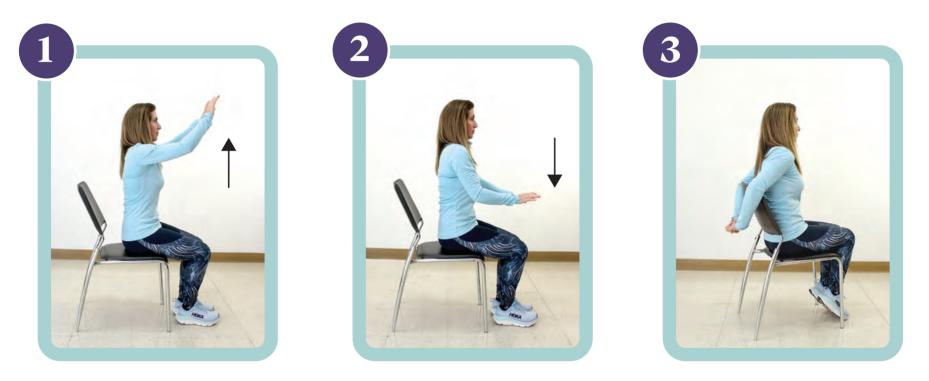


Shoulder rolls



You can do this exercise seated or standing. Rotate your shoulders gently up to the ceiling, then back and down. Next, do the same thing but roll them forwards and then down.

Hand and finger exercises



The following exercises improve flexibility. In the first exercise, pretend there is a wall in front of you. Your fingers will climb the wall until they are above your head. While holding your arms above your head, wiggle your fingers for ten seconds. Then, walk them back down. During the second exercise, touch your hands while they are behind your back. Reach for your left hand while your right hand is behind your back. Hold that position for ten seconds, then try with your other arm.



Calf stretching





These stretches can be performed in sitting or standing. To do calf stretches while standing, find a wall with nothing on it. Stand facing the wall with your hands at eye level. Place your left leg behind your right leg. Keep your left heel on the floor and bend your right knee. Hold the stretch for 15 to 30 seconds. Repeat 2-4 times per leg. If you want to stretch your calves while sitting, you will need a towel. Sit on the floor with your legs straight. Put the towel around the sole of your right foot and hold both ends. Pull the towel towards you while keeping your knee straight and hold it for 15 to 30 seconds. Repeat the exercise 2-4 times per leg.

Seated rows





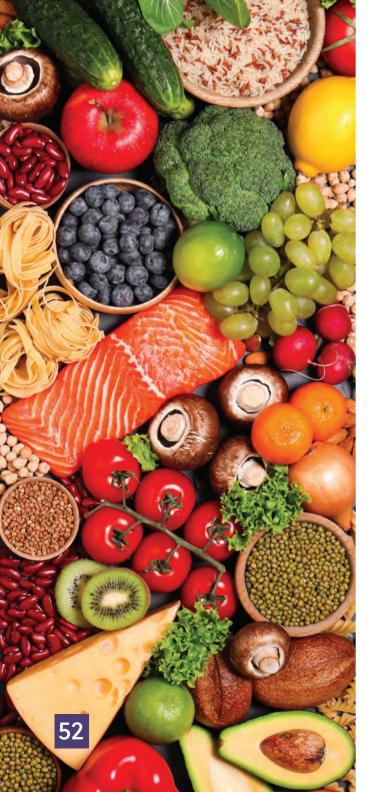
As we age, changes in our posture can lead to a rounded spine and back pain. This exercise will strengthen your chest and upper back muscles to help correct posture problems. Sit on the edge of the chair with your feet flat on the ground and with your arms out in front of you with elbows bent and thumbs pointing up towards the ceiling. Pull your elbows back, squeezing your shoulder blades together to target the upper back and chest muscles. Return to the starting position and repeat 8-10 times.

Calf raises





Seated calf raises will increase your leg strength and circulation. Sit tall in your chair with both feet planted on the floor, hip-distance apart. Look straight ahead and lift your right heel off the ground as high as you can keeping your toes planted. Lower your heel back to the floor and do these 10 more times on your right side. Repeat the same movement on your left side for 10 repetitions. Then lift both heels up at the same time and hold for 20 seconds. Repeat 10 times.



Making smart food and beverage healthy choices

Remain healthy by means of a well-balanced diet and regular physical activity

Being as active as possible will help with your appetite, good sleep and maintain muscle mass. Try to spend about 15 minutes outdoors especially in the winter months for fresh air and sunshine. Sunlight helps to boost vitamin D synthesis for healthy bones.

Follow a healthy eating pattern

Choose an eating pattern based on the Mediterranean Diet to maintain a healthy body weight, meet nutrient needs and lessen the risk for chronic diseases and cognitive decline.

Focus on variety, balance and amount

Follow the healthy plate guide: choose a variety of fresh or frozen whole foods with different colours and textures; balance (1 serving complex carbohydrates + 1 serving protein + 2 servings vegetables) and consume adequate amounts.

Limit added sugars, highly processed foods and avoid overeating

This helps reduce one's risk for high blood pressure, diabetes and other chronic diseases. Choose healthy drink choices: water, homemade unsweetened flavoured water (lemon water), lower fat milk, unsweetened tea (also herbal) or coffee.

Supporting healthy eating patterns of older people

Relatives, carers and friends of older people can ensure that their loved one(s) are consuming foods of high quality and unprocessed or minimally processed foods. They can help by their presence, offering emotional support and sharing mealtimes.

Services offered by the Health Promotion and Disease Prevention Directorate

| BOOT 3307 | Nutrition Helpline | 8007 3307 |
|--|--|-----------|
| QUIT LINE 8007 3333 | Quitline to stop smoking | 8007 3333 |
| Piż Tajjeb Tul Hajtek | Weight management programme | 8007 3307 |
| BU KONTROLLI Hillerehal mingbandu kurdizajoni kronika | 'Ħu Kontroll' programme | 2326 6000 |
| Build your Resilience | Mental health and resilience programme | 2326 6000 |

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These dietary and lifestyle guidelines for older people have been drafted by a multi-disciplinary group of experts with the aim of providing better advice to older people and their carers on how to eat and adopt a healthy lifestyle.







