

Eat Well for Life

Nutrition for the well older person



Health
Central Coast
Local Health District

Eat well for life!

As you get older don't think eating well doesn't matter. It does! Calorie* (Energy) needs may reduce but many vitamin and mineral needs remain the same. The need for some nutrients actually increases, such as protein, calcium and Vitamin D.

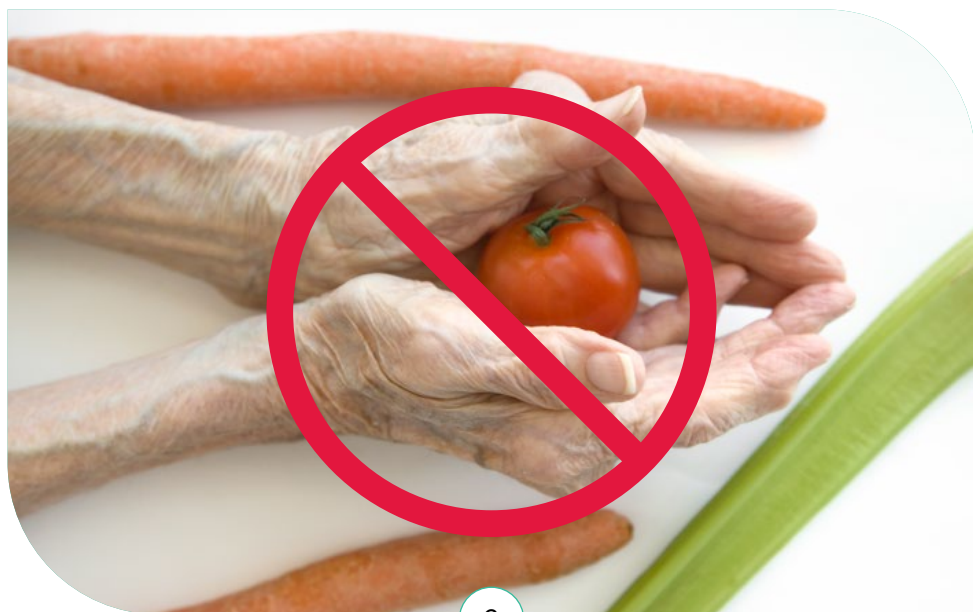
Good nutrition helps maximise health, vitality and energy.

Good nutrition is a positive for quality of life.

Good nutrition will help you maintain muscle mass and strength, bone strength, resistance to infections and independence.

Nutrition guidelines change as you age. What may have been sound nutritional advice when you were young may no longer apply.

** 1 calorie = 4.2 kilojoules*



Variety is important

Good nutrition means eating a variety of foods from the following groups:

- Bread, cereals, rice, pasta and noodles
- Vegetables including legumes
- Fruit
- Milk, yoghurt and cheese
- Meat, fish, poultry, eggs, nuts and legumes

Variety not only means choosing foods from each food group, it also means choosing a variety of foods from within each group as different foods provide different nutrients e.g.

- Citrus fruits are rich in vitamin C while bananas are an excellent source of potassium.
- Spinach and other green leafy vegetables contain folate which is a B vitamin, capsicum contains vitamin C.
- Red meat contains more iron than chicken and fish.
- Oily fish contains more Omega-3 polyunsaturated fatty acids (for heart health) than red meat and chicken. Sardines, mackerel, salmon, trout, and mullet are rich in omega-3 fats.
- Sunflower, safflower, corn and soybean oils contain omega-6 polyunsaturated fats.
- Canola, avocado and olive oil contain monounsaturated fats.
- Eggs provide excellent quality protein and most other vitamins and minerals. (Though the iron in eggs is poorly absorbed).

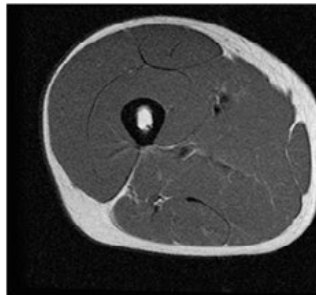
The importance of protein

The amount of protein required daily is higher for older people compared to younger people. Loss of muscle and frailty has been linked to diets that are low in protein.

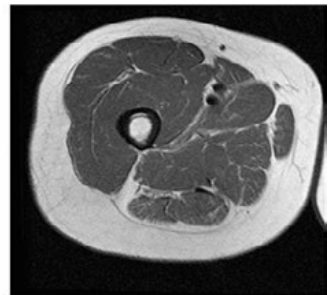
As we age we lose muscle mass. On average, there is a loss of about 1% of muscle mass every year from about age 30. This results in a gradual decline muscle strength and is a major contributor to loss of independence. As the process is gradual, it may go unnoticed until there is an inability to carry out activities of daily living. (Refer to clinical frailty scale- opposite)

Having enough protein in the diet will help to minimise muscle loss. Resistance training exercise will also help to reduce muscle loss and increase muscle strength.

Fig 1 Cross section of the thigh at age 25 and 63. Muscle is the dark area



Age 25



Age 63

Foods that are rich in protein include meat, chicken (and other poultry) eggs, fish (and other seafood), milk, cheese, custard, yoghurt, nuts, peanut butter, seeds (sesame, pumpkin), legumes (chick peas, butter beans, baked beans etc.), soy products, meal replacement bars and meal replacement drinks. Breads and cereals contain much less protein than meat. Fruit and vegetables contain even less.

The important thing is to aim to eat three meals a day with each providing about 25 grams of protein. A large egg or 30 grams of meat or 200ml milk each provide about 7 grams of protein.

Grazing or “picking” at small amounts of protein containing foods throughout the day will not provide the same benefit when it comes to retaining muscle mass. This means that protein-rich food should be included in each of the three main meals (breakfast, lunch and tea).

Identify where you are on the clinical frailty scale.

Clinical Frailty Scale



1 Very Fit – People who are robust, active, energetic and motivated. These people commonly exercise regularly. They are among the fittest for their age.



7 Severely Frail – Completely dependent for personal care, from whatever cause (physical or cognitive). Even so, they seem stable and not at high risk of dying (within ~ 6 months).



2 Well – People who have no active disease symptoms but are less fit than category 1. Often, they exercise or are very active occasionally, e.g. seasonally.



8 Very Severely Frail – Completely dependent, approaching the end of life. Typically, they could not recover even from a minor illness.



3 Managing Well – People whose medical problems are well controlled, but are not regularly active beyond routine walking.



9 Terminally Ill – Approaching the end of life. This category applies to people with a life expectancy <6 months, who are not otherwise evidently frail.



4 Vulnerable – While not dependent on others for daily help, often symptoms limit activities. A common complaint is being “slowed up”, and/or being tired during the day.



5 Mildly Frail – These people often have more evident slowing, and need help in high order IADLs (finances, transportation, heavy housework, medications). Typically, mild frailty progressively impairs shopping and walking outside alone, meal preparation and housework.

Scoring frailty in people with dementia

The degree of frailty corresponds to the degree of dementia. Common **symptoms in mild dementia** include forgetting the details of a recent event, though still remembering the event itself, repeating the same question/story and social withdrawal.

In **moderate dementia**, recent memory is very impaired, even though they seemingly can remember their past life events well. They can do personal care with prompting.

In **severe dementia**, they cannot do personal care without help.

* IADLs = Activities of daily living



6 Moderately Frail – People need help with all outside activities and with keeping house. Inside, they often have problems with stairs and need help with bathing and might need minimal assistance (cuing, standby) with dressing.

The importance of Vitamin D

Vitamin D helps calcium absorption.

Insufficient vitamin D over a long time contributes to bone frailty.

Adequate vitamin D can help reduce bone fractures and benefit muscle strength.

It is difficult to get enough vitamin D from food alone.

A small amount is found in fatty fish e.g. sardines, liver, eggs, butter and fortified margarine.

Sunlight is important for making vitamin D in the skin.

Expose face, hands and arms or legs to sun for at least 10 – 15 minutes a day. People with dark skin need more time in the sun for vitamin D benefits. Avoid the sun in the hottest part of the day, except in winter.

Sunlight through a window won't be effective as the glass filters out the ultraviolet B rays. Also most broad spectrum sun screen blocks out ultraviolet B rays.

With increasing age there is a reduction in the ability of the skin to make vitamin D. If you have very little exposure to the sun or are house bound you may need a vitamin D supplement. Always discuss this with your doctor.



Calcium

Having enough calcium can help reduce calcium loss from bones. This is important for both men and women. Dairy foods such as cheese, yoghurt, custard and milk (fresh, powdered, long life/UHT, evaporated) provide protein, fat, carbohydrate, vitamins and minerals, especially calcium.

Try to have three serves of calcium rich food each day. A serve is a cup of milk (250ml), or a small tub of yoghurt or a cup of custard or 35 grams (two slices) of cheese.



Reduced fat or skim milk still have their calcium and protein content. Cottage cheese, ricotta cheese and cream cheese contain less calcium than hard low fat cheeses or regular cheese. Reduced fat dairy products will lower your intake of saturated and trans fats. Note that, while butter and cream are dairy foods, they do not contain significant amounts of calcium and are high in saturated fat.

For people who are lactose intolerant, low lactose milk or soy milk fortified with at least 100mg of calcium per 100mL, is a suitable alternative to cow's milk.

The suitability of oat, rice, almond, quinoa 'milk' etc. will depend on their calcium content. They should contain at least 100mg calcium per 100mls. These 'milks' are much lower in other nutrients such as protein compared to soy or cow's milk.

Three meals a day

Regularly missing meals may mean that not enough food is being eaten to provide all the nutrients your body needs.

Meals don't have to be a major production. Easy meals ideas include:

- Hearty soup (canned or homemade) and toast. Finish with fruit and a glass of milk.
- Toasted cheese and meat (ham, cooked chicken) sandwich. Fruit and custard for dessert (canned fruit and bought custard are fine).
- Baked beans on toast. Have fruit and yoghurt for dessert.
- Scrambled egg on toast. Follow with fresh fruit and a glass of milk.

Occasionally why not enjoy

- Frozen meals from the supermarket
- Home delivered meals
- Barbequed chicken. Have with bread and a salad
- Eating out

SNACKS are important for people who prefer small frequent meals or who have a poor appetite. Good choices include sandwiches, toast, muffins, scones, pikelets, crumpets, fruit bread and buns, cheese, yoghurt, hearty soup, baked beans, breakfast cereal and fruit smoothies.

Fruit and vegetables (including legumes)

Fruits and vegetables are rich sources of micronutrients (phytochemicals and an array of vitamins and minerals) and are low in calories. Their intake is associated with lower risk for heart disease. However, their relationship with cancer prevention is less clear.



Having two pieces of fruit each day is recommended. Fresh is great but canned, dried or frozen are also good choices. Fruit juice lacks fibre so fresh fruit is preferable.

Having four or five different vegetables each day would be ideal.

Vegetables include legumes (e.g. baked beans, three or four bean mix, butter beans, lentils) and salad vegetables. Vegetables can be fresh, frozen or canned.

Legumes are inexpensive, rich in protein and a good source of fibre and iron. Most are available raw and canned. Canned legumes are cheap and easy to use. Uncooked red lentils can be added to dishes such as soups, stews or casseroles.

Choose wholegrain, vitamin and mineral enriched and high fibre cereal products

Grains and grain based foods such as bread and pasta provide carbohydrates, calories, fibre, B group vitamins, iron, magnesium, zinc, phosphorus and vitamin E.

Best to choose cereal and cereal products that are:

- High fibre
- Nutrient dense (lots of vitamins and minerals)
e.g. fortified breads and breakfast cereals
- Wholegrain
- Low Glycaemic Index (GI) (See opposite page)



Choose carbohydrate foods (carbs) with a low Glycaemic Index

Glycaemic Index (GI) refers to rate at which carbohydrate foods (starches and sugars) are digested and converted to glucose. Carbohydrate foods that are digested quickly are said to have a high GI while carbohydrate foods that are digested slowly, are said to have a low GI. We need to swap high GI carbohydrate for low GI where possible.

Low GI carbohydrate foods satisfy hunger for longer and help people with diabetes maintain a desirable blood glucose level. Some wholegrain products have a low GI particularly those with plenty of grains and seeds.

Factors That Influence a Food's Glycaemic Index

1. Sweetness is not an indicator of GI. GI varies according to the type of sugar. Glucose has a higher GI than sucrose. Sucrose has a higher GI than lactose or fructose.
2. The more a starchy food is processed the greater the likelihood the GI will be higher.
3. Higher soluble fibre and/or fat content tends to lower the GI
4. The presence of acid e.g. vinegar, lemon juice will lower the GI.

Regularly eating meals that contain lots of high GI carbohydrates can lead to high insulin levels and this can lead to insulin resistance. Insulin resistance increases the risk of developing type 2 diabetes.

Eat a diet low in saturated fat and trans fatty acids

Have a diet low in saturated and trans fat as these are fats that increase the risk of heart disease, heart attack or stroke. Most saturated fats are animal origin fats. Coconut and palm oil are vegetable oils that contain large amounts of saturated fat. Butter and the fat on meat are high in saturated fat and also contain trans fats. Trans fats raise the level of bad LDL-cholesterol in the blood and lower the good HDL-cholesterol.

Australian soft margarines contain negligible (almost zero) trans fats.

Hard cheaper commercial margarines are more likely to contain trans fats. Trans fats are also commonly found in commercial biscuits, cakes and pastries and takeaways.

Saturated fats are solid at room temperature. Monounsaturated (e.g. canola oil) and polyunsaturated fats (e.g. sunflower) are liquid at room temperature.

Choose margarines that are poly or monounsaturated and have negligible levels of trans fatty acids.

Margarine with phytosterols may be useful for people concerned about their cholesterol levels.

The best way to lower intake of trans fats and saturated fats is to choose lean meats and low fat dairy products and reduce consumption of commercial cakes, pastries, biscuits and takeaways.

Omega-3 fatty acids are anti-inflammatory and cholesterol lowering. They are found in oily fish (e.g. salmon, trout and sardines), walnuts, canola oils and canola margarines. Eating oily fish at least twice a week would be good. Canned, fresh or frozen are all fine.

Heart Disease Risk

If poly or monounsaturated fats replace saturated fat or trans fats, heart disease risk goes down. The Mediterranean-type diet is moderate in total fat but rich in unsaturated fats. This is the basis for a heart-healthy diet. There is no benefit in following a 'low fat' diet. Remember poly's and mono's are fats that are beneficial.

There is no advantage in replacing saturated fat with carbohydrate (especially high glycaemic index carbohydrates). Heart disease risk is unchanged.

If you drink alcohol, limit your intake

Alcohol is a double edged sword. Whilst small amounts may be beneficial and may stimulate the appetite, excess carries problems. Alcohol interferes with some medications and make conditions such as high blood pressure and diabetes, worse as well as increasing the risk of falls.

While small amounts of alcohol may have a minor protective effect against heart disease, drinking any alcohol increases the risk of cancer.

When people age, the amount of alcohol that is safe to drink decreases, as the liver is less able to deal with alcohol. A safe amount is less for an older woman than an older man.

A rule of thumb for older people regarding alcohol would be:

- No more than 7 standard* serves a week
- No more than 2 standard serves on any given day
- Have at least 2 alcohol free days each week

**A standard serve is a middy of beer, glass of wine or a nip of spirits*

Use added sugars in moderation

Sugar does not cause diabetes. Overweight and obesity can cause type 2 diabetes. Sugar calories are no more fattening than calories from fat, protein, starch or alcohol. Overweight and obesity happen when calorie intake exceeds calorie usage. Hence sugar calories are not the only culprit. The degree of obesity determines the type 2 diabetes risk, not the amount of sugar in the diet.

Most people enjoy sweetness and a little added sugar should not be a problem. When there is a lot of added sugar or the consumption of foods containing lots of sugar, is excessive, poor nutrition may result. Foods with lots of sugar and very little else may be replacing more nutritious foods. Soft drinks are an example of a high sugar, low nutrition food.

Sugars are found naturally in many foods such as fruits, vegetables and dairy foods. Some foods that contain sugar (either naturally present sugar or added sugar) are rich in nutrients. Examples being fruit yoghurt, flavoured milk and some breakfast cereals. Some breakfast cereals contain quite a bit of sugar but are a good source of fibre, vitamins and minerals.

The GI of a food is probably more relevant than the actual amount of sugar in that food. Advice to just give up foods containing sugar could result in people cutting out foods that are important sources of essential nutrients and fibre. In other words, make sure you're not cutting nutritious foods from your diet e.g. fruit yoghurt, flavoured milk and some breakfast cereals.



Use salt sparingly

Sodium chloride is salt. Anything else that contains sodium such as sodium bicarbonate, mono sodium glutamate (MSG) will all go toward total salt intake.

Salt is essential for life but fresh food contains all the salt we need.

We get salt from:

- what is naturally in food
- what we add in the cooking
- what manufacturers add during processing
- what we add at the table

Three quarters of our salt intake comes from what is added during manufacturing. So even if you don't add salt to your cooking or at the table your diet can be high in salt.



Foods that contribute a lot of salt to the diet are:

- preserved meats e.g. bacon, ham, corned beef, sausages, frankfurts, pies and sausage rolls
- savoury foods such as potato chips, salted nuts, salted biscuits, olives, gherkins, pickled vegetables
- canned and packet soups, yeast and meat extracts, salad dressings

Use processed foods sparingly and buy reduced or no added salt products where available. Replacing ordinary bread with low salt bread will help.

On labels, the sodium (Na) is usually in milligrams per 100g of food (mg/100g). Low salt food contains 120mg of sodium or less (i.e. less than 120mg/100g). Having a diet sufficiently low in salt may help to control high blood pressure.

Fluid intake

For the body to function properly, six to eight (250mls) cups of fluid a day is the usual guide. Water isn't the only source of fluid. Milk, jelly, custard, soup, tea, coffee, juice etc. all contribute to fluid intake.

Having enough fluid quenches thirst, prevents dehydration, eases burden on kidneys, helps prevent urinary tract infections and helps prevent constipation.

With age often comes a reduced sense of thirst. Having something to drink first thing in the morning and at each meal or snack time, is a good habit.

Restricting fluid intake to reduce the need to go to the toilet is likely to have the opposite effect. Concentrated urine irritates the bladder, increasing the need to go to the toilet.



Don't forget the exercise

Common to the older population is a decrease in muscle mass and strength. This is the result of a decline in the production of muscle tissue, and increased muscle wasting from inactivity or disease as well as age. This loss of muscle mass means older people have a harder time remaining physically active and gradually lose the ability to perform activities of daily living.

Being active (including muscle resistance exercise) helps improve the appetite and maintain muscle and bone strength. Thirty minutes of moderate exercise on most days of the week is recommended.

While all types of exercise are highly recommended, only strength training, otherwise known as resistance training, can improve age related loss of muscle mass. The benefits of this type of training include increased hip and thigh muscle strength. If a person can't get out of a chair without using their hands, then their hip and thigh muscles need strengthening. Strength training may be the preferred initial exercise. It enables people to participate more fully and safely in aerobic activities or simple tasks requiring transfers or mobility.



The Health Star Rating

What is the Health Star Rating?

The Health Star Rating is a front-of-pack labelling system that rates the overall nutritional profile of packaged food and assigns it a rating from ½ a star to 5 stars. It provides a quick, easy, standard way to compare similar packaged foods. The more stars, the healthier the choice.

What are the stars based on?

Packaged foods are given a star rating based on their nutritional profile. This includes:

Energy (kilojoules).

Risk nutrients – saturated fat, sodium (salt) and sugars.

Positive nutrients – dietary fibre, protein and fruits, vegetables, nuts and legume content.

The Health Star Rating system is voluntary. Fortunately there is a free App available for iPhone and Android devices which you can download. This app is called **‘Food Switch’**.

Once downloaded, use your phone or tablet’s camera to scan the barcode. This will automatically load the health star rating for that product and give you the health star ratings for other similar products.

If there are other similar products with a higher star rating, then choose one of these.

To download the Food Switch App that enables you to identify all product’s health star rating, go to

<https://www.bupa.com.au/foodswitch>



Safe food handling and storage

Some bacteria cause food poisoning if present in high enough numbers.

Bacteria need warmth, moisture and time to grow and multiply. Bacteria grow most readily in high risk foods. These include:

- Raw or cooked meats, chicken, fish and other seafood.
- Milk and milk products such as soft cheeses, mornays and milky desserts.
- Cooked rice and cooked pasta, especially if in creamy sauces.
- High risk foods also include processed foods that contain eggs, beans, nuts or other protein rich foods including quiche and soy bean products.

Breads, cakes and biscuits are not high risk unless they have cream or custard type filling.

Bacteria grow best at temperature between 5° and 60° celsius. This is known as the danger zone.

High risk foods should not be left in the danger zone for more than two hours.

Boiling high risk food that has been left in the danger zone for more than two hours will not make it safe to eat. Boiling will destroy the bacteria but not the toxins they produce.

High risk foods will still go 'off' if kept in the refrigerator for too long. After it has been three days in the refrigerator, it is wise to throw high risk food away.

Food containing high levels of harmful bacteria may not look or smell any different from safe food.



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