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This booklet is designed for health workers in the developing countries of the Western Pacific Region of the World Health Organization. Its purpose is to assist them in their task of promoting better health among older people.

Health promotion involves a range of strategies. These strategies are discussed at length in the accompanying booklet *Ageing and health: A health promotion approach for developing countries*. One important part of any health promotion strategy involves building healthier settings and making healthy choices easier for individuals. This approach to health promotion includes working for better health systems, advocating for legislation that supports health, and building health-supporting environments and communities. The second part of an effective health promotion strategy involves empowering individuals to adopt healthy behaviours. Part of empowering individuals is improving their health literacy so that they can make healthier choices. The purpose of this publication, therefore, is to provide health workers with materials they can use to help improve the health literacy of older people in developing nations.

Developed and developing countries alike are facing a growing epidemic of noncommunicable diseases, the effects of which are especially evident among the increasing population of older people in all countries. Many of the noncommunicable diseases that are common among older people have been called lifestyle diseases. The risks of developing many of these diseases are greatly increased by lifestyle behaviours such as smoking, poor diet, lack of exercise, obesity and excessive use of alcohol and other substances. If men and women can be encouraged to adopt healthier lifestyles, and if the settings in which they live enable and support them in their efforts, better health will follow.

However, older people (or any age group for that matter) cannot be expected to develop healthier lifestyles if they are unaware of the way in which lifestyle is linked with the diseases of later life. Furthermore, it is not enough simply to tell people to improve their diet, stop smoking or exercise more without helping them to learn how to go about improving their diet, stop smoking or engage in age-appropriate exercise.

The purpose of this booklet, therefore, is to assist health workers in their tasks of:

- helping older people understand more about the nature of the diseases of later life;
- helping older people learn how lifestyle factors contribute to their risk of developing many of these diseases and disorders;
- providing practical tips to help older people go about reducing their risk of developing these diseases and disorders; and
- providing practical tips for people who suffer from these diseases, or for their carers, to help them manage better, maintain as much independence as possible, and maximize their quality of life.

An important part of the booklet is made up of practical tips relating to common diseases and disorders of later life. These tips are meant to serve as a template to be adapted to local circumstances, and the ideas provided will need to be developed and modified according to the specific circumstances and cultures in which they are used. Most of the tips and suggestions are designed to enable older people themselves to take control of some of the fac-
It is hoped that health workers will be able to use the ideas in the booklet to help older people, their families and carers to take charge of their own health and to live a fuller and more independent life. However, it must be stressed that better health cannot rely solely on better health education and health literacy. Health education must go hand-in-hand with ensuring that the conditions in which people live, and their access to resources, enable them to adopt healthy behaviours.
Healthy Ageing
Ageing and Health

In the past, the most common health problems were diseases that people caught - the infectious diseases that spread rapidly and killed large numbers of people or caused widespread illness. Although great advances have been made in controlling these diseases with mass vaccination programmes and by improving the quality of water supplies, providing better sanitation and drainage, and by draining swamps, infectious diseases are still a problem, with diseases such as malaria, tuberculosis and HIV/AIDS still causing many deaths. However, in recent years new types of health problems have become far more common in the majority of countries throughout the world.

Non-infectious, or noncommunicable diseases are now becoming the main cause of death in many countries and are affecting the quality of people’s lives. Non-infectious diseases include:

- heart diseases;
- cancers;
- strokes that attack the brain;
- dementias that affects memory and thinking;
- injuries;
- loss of hearing and sight;
- diabetes;
- joint problems caused by arthritis;
- bone diseases that cause bones to break easily; and
- mental diseases, such as depression.

These are diseases that affect older people much more than younger people. As people live longer, these types of diseases are becoming the major causes of death and disability.

Are Diseases a Natural Part of Aging

The older people are, the more likely they are to develop noncommunicable diseases. This has made many people think that they are, therefore, a natural and inevitable part of ageing – that there is nothing that can be done about them. This belief is largely mistaken. There are two main reasons why these diseases are mainly found among older people.

1. Growing older does contribute to some diseases. Some parts of the body inevitably suffer wear and tear and there are some physical and chemical changes in the body that occur naturally as people grow older.

2. Many of these diseases, however, are substantially due to the way people live their lives. They result from a lifetime of doing things that gradually result in these diseases.

The second point is particularly important. If the way people live their lives is placing them at a higher risk of developing diseases such as heart disease, cancer and diabetes, then there is a chance that these diseases can be prevented by people changing the way they live.

Scientists have found that five aspects of modern lifestyles are major causes of modern diseases. They have found the following factors to be particularly important:

- poor diet;
- being overweight;
Healthy Ageing

- getting insufficient exercise;
- smoking tobacco; and
- drinking too much alcohol.

These findings mean that there is a great deal that can be done to improve health. The good news is that health can be improved without having to rely solely on doctors, hospitals and medicines. If people change these aspects of their behaviour, they can substantially reduce their risk of contracting lifestyle diseases. By changing living habits, younger and older people alike can live longer and healthier lives.

Quality and Quantity of Life

When considering health in later life, some people think mainly about how long they expect to live. Scientists and health workers too have sometimes focused solely on how to extend life expectancy. However, when working out how to help people live longer, it is also important to concentrate on helping them to live better. If people are to live longer, it is important that their extra years of life are of as high a quality as possible – that those extra years are not just extra years of pain and dependence. As far as possible, the extra years of life should be ones that older people can enjoy and live independently, and during which they are treated with dignity.

This means that, as well as extending life expectancy, efforts must be directed towards extending the period for which people can live a healthy life. There is plenty of room to improve the quality of life for older people and this can be done by changing the way in which their earlier years are lived. If people adopt healthy lifestyles early in life, they are much more likely to avoid the diseases that can make their later years of life difficult, painful and miserable.

When to Make Lifestyle Changes

It is never too late for people to improve their lifestyle. Stopping smoking, drinking less, getting to the right weight, eating better food and exercising more will all make people feel better at almost any point in their lives. These lifestyle changes are frequently recommended for people who have already developed diseases, and they can slow or stop the progress of a disease, or at least make it easier to cope with health problems.

However, it is much better to make these lifestyle changes before diseases and disabilities develop. The really important point about the main diseases of later life is that people do not catch them like they catch infectious diseases, such as malaria. Instead, people gradually grow these diseases. They are the result of a lifetime of unhealthy behaviour. The earlier people stop subjecting their bodies to poisons (tobacco, alcohol, high concentrations of fat, salt, etc.) and the more they use their body by exercising it, the healthier they will remain.

While it is never too late for people to change the way they live, it is also never too early to develop a healthy lifestyle. The earlier, the better. In fact there are things that parents should do even before their children are born, and when they are children and teenagers, that can make a big difference to health in later life. For example, a mother smoking or drinking alcohol during pregnancy has a lifelong effect on her child. Overeating and poor diet in the teenage years can lead to obesity and diabetes. Lack of calcium in the growing years can produce weak bones in old age.

The best way to remain healthy in later life is to adopt a healthy lifestyle throughout life. It is better by far if people do not leave the changes that can prevent a disease until after
they already have the disease. Changing lifestyles early in life will, not only add years to a person’s life, but will add quality life to those extra years.

Health: Whose Responsibility?

Good health requires the efforts of many people at different levels of society. These include:

1. **Governments and society in general**: If older people are to remain healthy, the environment in which they live must help them keep healthy. While individuals can take certain steps themselves to keep healthy, there are things over which they have no control. If the air is polluted with poisonous chemicals or food is poisoned with insecticides, it is difficult for an older person to stay healthy. If the only food that is available or affordable is unhealthy food or the lack of food labelling makes it impossible to know whether the food contains unhealthy ingredients, it is difficult to expect individuals to remain healthy. If the environment is noisy or the workplace unsafe, hearing as well as muscles and joints will be damaged, regardless of the lifestyle changes that people make. If the neighbourhood is unsafe or is filled with tobacco smoke, or if tobacco promotion ensures that young people smoke, we can hardly expect that older people will remain healthy.

2. **Communities**: Communities and local governments have a wider responsibility to help people to help themselves. Health workers must be available, and hospitals and medication are required to assist with the health care of older people. The health of older people has to be given some priority so that there is money available to assist them. Older people also need access to housing that helps them to stay healthy. They need to be able to obtain healthy food locally and to be able to get out in the community safely. Opportunities to mix with other people locally are vital, since becoming isolated is known to lead to poorer health.

3. **Health workers**: Even where individuals do all that they can to look after themselves, they will still need to receive help from health professionals. Health professionals can provide valuable health advice on how to prevent illness, diagnose disease in its early stages and provide support and treatment to either cure or control the progress of the disease.

4. **Older people**: Good health for older people requires that individuals actively try to look after their own health. There are changes that individuals can make and steps they can take to help them enjoy a healthier old age. Later in this publication practical tips are provided to help older people in the task of helping themselves.

Healthy ageing requires the combined efforts of individuals themselves, the work of health professionals, the support of the community and the actions of governments. Healthy ageing is most likely when individuals develop healthy lifestyles early in life; where they have
the support of health workers; and where they live in an environment that supports, rather than undermines, the efforts they make to look after their own health.

Types of Health

Health involves a healthy body and a healthy mind. As well as working to keep bodies physically fit and healthy, there is also a need to attend to psychological, or mental health.

Physical health affects psychological health and psychological health affects physical well-being. Efforts directed towards healthy ageing must make sure that both aspects of health are looked after.

Physical health

Physical health includes freedom from diseases and physical disabilities. Among older people the most common physical health concerns are: (1) heart diseases; (2) brain diseases; (3) lung diseases; (4) joint and muscle diseases; (5) diseases of the senses; (6) bone disease; and (7) cancer.

Heart Diseases

There are many forms of heart disease common among older people. The most common form of heart disease is called coronary heart disease. This form of heart disease is due to the narrowing of the blood vessels leading to the heart. These blood vessels become narrowed due to a build-up of fatty deposits (called plaques) inside the blood vessels. This build-up in the blood vessels is caused by a high-fat diet, smoking and high blood pressure. The build-up stops enough blood getting to the heart muscle and starves it of oxygen. This results in a pain in the heart called angina.

When the blood vessels supplying blood to the heart become completely blocked, no blood gets to parts of the heart muscle and that part of the heart is damaged, which can result in death. This is called a heart attack.

The heart muscle pumps blood through the body. If it is damaged through one means or another, it pumps less efficiently and cannot empty its load of blood with every beat. This can result in a build-up of fluids in the lower legs and in the lungs, which in turn makes it difficult to breathe. The failure of the heart to pump properly is called congestive heart failure. The loss of pumping efficiency can be due to damage caused by narrowed or blocked blood vessels leading to the heart or to other heart damage.

Brain Diseases

Stroke: a stroke occurs when a blood vessel in the brain either becomes blocked or bursts. This kills parts of the brain and affects behaviour controlled by the damaged part of the brain.

Dementia: There are many different forms of dementia, but they all involve damage to the brain. The causes of the brain damage differ between the different types of dementia. The exact type of brain damage can also differ with the different type of dementia. The two main types of dementia among older people are Alzheimer’s disease and vascular dementia (or multi-infarct dementia – MID). Alzheimer’s disease is a disease of the brain that leads to memory loss, confusion, difficulty in communicating and personality changes. Its exact cause is unknown. Vascular dementia is brain damage caused by a series of mini-strokes. These mini-strokes occur because of blockages
in the smaller blood vessels in the brain. These blockages are due to the same factors that narrow or block blood vessels leading to the heart.

*Parkinson’s disease* is a disease of the brain that mainly affects the ability to control muscle movements. It can also lead to dementia problems with memory and communication.

**LUNG DISEASES**

Two common lung diseases, *emphysema* and *chronic obstructive pulmonary disease*, both prevent the lungs from filling properly with fresh air. As a result, the lungs cannot transfer sufficient oxygen to the blood to feed the cells and organs throughout the body. Breathing and any exertion is difficult because the body has insufficient oxygen to work efficiently. The major cause of these lung diseases is smoking and pollution in the environment or workplace.

**JOINT AND MUSCLE DISEASES**

Many older people suffer diseases of the joints. Many of these joint diseases are a form of arthritis. The most common forms of arthritis among older people are *osteoarthritis* and inflammatory forms of arthritis. Osteoarthritis occurs when the cartilage that cushions the bones in the joints becomes worn or damaged. This results in restricted and painful movement in the joints. Inflammatory arthritis occurs when the soft tissue in the joints becomes inflamed, which in turn causes restricted movement and pain. The most common forms of inflammatory arthritis are *rheumatoid arthritis* and *gout*.

As people grow older their muscles lose some of their strength. This in turn can make it more difficult to maintain balance and prevent falls. Falls among older people are a major cause of disability.

**DISEASES OF THE SENSES**

*Cataracts* are a disease in the lens of the eye that prevents light penetrating into the eye properly. Without light people cannot see. Sight can be restored by simple surgery that replaces the diseased eye lens with a plastic lens.

*Glaucoma* is an eye disease that initially causes the loss of side vision but, if left untreated, causes complete and permanent blindness.

*Age-related macular degeneration* is another common eye disease that results in the gradual but permanent loss of central vision. It does not lead to total blindness.

*Hearing loss* involves the gradual and progressive loss of hearing. It may result in partial or total deafness.

*Tinnitus* is an ear disease that results in constant or intermittent ringing (or other noises) in the ears.

**BONE DISEASE**

As people age, their bones become less dense and this makes them weaker and more likely to break easily. Where this loss of bone strength and density is severe, a person suffers from *osteoporosis*. This disease, which is much more common among women than men, is largely due to a lack of calcium in the diet in a person’s growing years.

**CANCER**

*Breast cancer* is the most common cancer in older women. It involves the growth of tumours in the breast.

*Cervical cancer* is another common cancer among women, Cervical cancer is the growth of a tumor on a woman’s cervix.

*Prostate cancer* is a very common form of male cancer that is usually slow growing. Many older men have prostate cancer which does not cause them to die, but there are some forms of prostate cancer that can develop rapidly and lead to early death.

**OTHER DISEASES**

*Urinary incontinence* is the inability to control urine flow. This inability can be due to a variety of factors, but weakness in particular muscles that stem the flow of urine is a common cause.

*Diabetes* is a very widespread disease that results in high levels of sugar in the blood. High blood sugar results from the malfunctioning of other organs that either produce or use sugar. The resulting high blood sugar affects many other organs in the body and increases the risk of developing many other diseases.

*High blood pressure* is a condition where blood is pumped through the body at a higher-than-normal pressure. The main cause of high blood pressure (also called *hypertension*) is unknown. High blood pressure makes the effects of other diseases (e.g. heart diseases and
strokes) more serious. Hypertension also increases the risk of heart disease and stroke.

**Mental health**
As well as physical diseases, there are a number of diseases in later life that affect mental well-being. The *dementias* described above could be called mental diseases since they affect the way the brain works.

*Depression* is probably more common among older people than is often thought. In fact, it is probably the most common mental health problem found among older people. Depression frequently occurs at the same time as some form of physical disease and is confused as part of that disease. Depression can profoundly affect the quality of life for older people and their ability to deal with or recover from various physical ailments.

### Who Gets These Diseases?

While many diseases are age-related and are much more common among older people, this does not mean that ageing is a stage of life where everyone has one disease or another. Many older people enjoy good health and spend most of their later lives healthy. While most older people will have some signs of particular diseases, not all are affected in the same way. For example, most older people will have some sign of narrowing of their arteries or have some hearing loss. However, the extent to which people suffer from these problems varies widely. While natural ageing will contribute to some diseases, most of these diseases are not a natural or inevitable part of growing older. A variety of factors influence who gets these diseases.

### Social position

Scientists have learned that the risk of contracting various types of lifestyle disease is linked to a person’s social and economic position. People higher up the social and economic ladder are less at risk for most of these diseases than those lower down. People who are better off financially get ill less than those who struggle or live in poverty. This is because people who live in poverty:

- are less able to afford healthy food;
- are less able to obtain good health care;
- live in less healthy environments;
- have jobs that damage their health;
- have poorer housing which makes it harder to remain healthy; and

<table>
<thead>
<tr>
<th>Condition for men or women?</th>
<th>Prevalence is higher/is earlier for</th>
<th>Age at onset</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes mellitus</td>
<td>Similar</td>
<td>Similar</td>
</tr>
<tr>
<td>Congestive heart disease</td>
<td>Much higher for men</td>
<td>Men</td>
</tr>
<tr>
<td>Colon cancer</td>
<td>Men</td>
<td>Men</td>
</tr>
<tr>
<td>Cervical cancer</td>
<td>Exclusive to women</td>
<td>Men</td>
</tr>
<tr>
<td>Prostate cancer</td>
<td>Exclusive to men</td>
<td>Men</td>
</tr>
<tr>
<td>Dementia</td>
<td>Women</td>
<td>Men</td>
</tr>
<tr>
<td>Parkinson's disease</td>
<td>Men in some places</td>
<td>Similar</td>
</tr>
<tr>
<td>Glaucoma</td>
<td>Much higher for women</td>
<td>Women</td>
</tr>
<tr>
<td>Cataract</td>
<td>Women</td>
<td>Men</td>
</tr>
<tr>
<td>Heart attack</td>
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<td>Angina</td>
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<tr>
<td>Stroke</td>
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<td>Men</td>
</tr>
<tr>
<td>Chronic obstructive pulmonary disease</td>
<td>Men</td>
<td>Men</td>
</tr>
<tr>
<td>Rheumatoid arthritis</td>
<td>Much higher for women</td>
<td>Women</td>
</tr>
<tr>
<td>Osteoarthritis (hip)</td>
<td>Much higher for men</td>
<td>Men</td>
</tr>
<tr>
<td>Osteoarthritis (knee)</td>
<td>Much higher for women</td>
<td>Women</td>
</tr>
<tr>
<td>Suicide</td>
<td>Men</td>
<td>Men</td>
</tr>
</tbody>
</table>

feel less confident about their ability to do something about their health.

This means that one way of helping older people enjoy better health is to reduce the poverty in which many live.

**Family history**

Many diseases run in families. This means that the same disease occurs in each generation and among relatives. This is because some people have an inherited biological tendency towards contracting the disease. Heart disease, glaucoma, diabetes, strokes, some cancers, osteoporosis, hearing loss and high blood pressure are examples of diseases where the risk of contracting the disease is partly inherited. However, although certain diseases run in families, there is nothing certain or inevitable about developing or not developing them. People with a family history of a disease can remain free of it, while other people with no family history of the disease develop it. Family history is just one contributing factor that makes some people more exposed to the risk of the disease. Lifestyle and other factors can intervene and neutralize the effect of family history.

**Race and ethnic background**

In a similar way as family history affects the risk of developing a disease, so can race and ethnic background. For example, the chance of developing diabetes, glaucoma, high blood pressure and various cancers partly depends on race and ethnicity. It is not always clear whether the different risks of developing these diseases is because of biological differences between races or because of their different lifestyles, diet, etc.

**Gender**

A person’s risk of contracting many of the diseases of later life depends partly on whether they are male or female. This is obvious for diseases such as prostate cancer and breast cancer. However, there are also gender differences for other diseases (see Figure 1). Women are more likely than men to develop depression, osteoporosis and osteoarthritis. Men, however, are more at risk of heart diseases, gout and high blood pressure. Some of these differences are due to hormonal differences between men and women, but cultural and lifestyle factors (e.g. men smoke and drink more than women) may lead to other gender differences in health risk.

**Lifestyle**

There is not a great deal that individuals can do about social position, gender, family history or race. However, they can do something about the way they live their lives – their diet, their exercise habits, their weight, whether they smoke and the amount of alcohol they drink. Some of the diseases of later life are not preventable by changing lifestyle. For example, Alzheimer’s disease and Parkinson’s disease do not seem to be due to lifestyle factors and there is little that can be done to prevent them. If a person contracts these diseases, the best that can be done is to develop lifestyle methods of managing them. However, other diseases leave substantial room for individuals to do something about them. If they develop healthy habits early enough in life, they can reduce their risk of developing these diseases considerably. Even if these diseases are not prevented, healthy lifestyles may still delay their onset and can help control their progress and their effect on a person’s life.
Lifestyle Changes and Healthy Ageing

People can do a great deal to influence their individual risk of developing many of the diseases of later life by paying careful attention to five lifestyle factors: diet, exercise, weight, smoking and alcohol use. Throughout the Western Pacific Region, in recent years, many people have been adopting unhealthy diets, doing less exercise, becoming seriously overweight, smoking and drinking too much alcohol. These behaviours have contributed to an increase in the diseases of later life. These five lifestyle factors affect a number of diseases. By adopting a healthier lifestyle, the risks of a whole range of diseases can be reduced.

Diet and Nutrition

A good diet makes people feel better about themselves and gives them more energy, as well as reducing their chances of developing the diseases of later life. As countries rapidly develop economically, diets and lifestyles change considerably and overnutrition often adds to, and eventually replaces, undernutrition. The major dietary problems of many people throughout the world now include:

- Excessive fat intake. The fat in animal foods, especially meat and dairy products, is mostly saturated fat, while the oil from plants and fish is mostly unsaturated fat (palm and coconut oil are the exceptions because they are high in saturated fat). Since saturated fats can increase the risk of cardiovascular disease, only a small amount of foods containing saturated fats should be eaten. Fish and plant food can improve health because of their unsaturated fats and a number of other nutritional benefits.

  Saturated fats lead to an increase in one type of cholesterol (called LDL cholesterol) in the body. This form of cholesterol is linked with increased risk of cardiovascular disease. The basic rule is to minimize the amount of saturated fat in the diet.

  Trans fatty acids have been linked to heart disease. These may be found in margarines and other spreadable oil products. The intake of trans fatty acids can be limited by checking the labels of these prod-
PRACTICAL TIPS
DIET AND NUTRITION

- **Eat a balanced diet.** There are six food groups (see Figure 2):
  - **Group 1:** Bread, cereal rice and pasta, preferably wholegrain [limiting the amounts of potatoes and white rice (especially if not parboiled as this is absorbed in a similar way as sugars)];
  - **Group 2:** Fruits;
  - **Group 3:** Vegetables;
  - **Group 4:** Meat, poultry, fish, dried beans, eggs and nuts;
  - **Group 5:** Milk, yoghurt and cheese;
  - **Group 6:** Fats, oils and sugars.

  The secret to a good diet is a balance that ensures that the necessary vitamins and minerals provided by each food group are obtained.

  Extreme, crash and fad diets should be avoided.

- **Reduce saturated fats and oils.** As far as possible, animal fats should be reduced. This can be achieved partly by following some simple measures:
  - Minimize butter, use lean meat, avoid chicken skin, change to low-fat milk, reduce takeaways and limit cakes and biscuits.
  - Avoid fried, fatty and sugary foods.
  - Check the labels when buying cooking ingredients or processed food to see whether they are high in animal fats (saturated fat) or trans fatty acids.
  - Avoid fried food – grilling or baking is better as it allows fat to drain away.
  - Cut fat off meat and remove skin from chicken before cooking.
  - Eat fewer cakes, pies, biscuits and pastry since these usually contain high levels of animal fats, as well as sugar.
  - Use vegetable oils rather than animal fats, but limit the use of coconut oil and palm oil as they are high in saturated fat.
  - Use olive oil since it contains mostly unsaturated fats and it lowers LDL cholesterol. Soybeans and canola oil also lower LDL cholesterol.
  - Use lower-fat dairy products (milk, cheese).
  - Eat at least 1-2 servings of fish per week since it is low in saturated fat and high in unsaturated fats that protect from heart disease.

- **Eat fruits and vegetables.**
  - Purchase fresh fruits and vegetables.
  - Eat fruit rather than drinking fruit juice.
  - Eat at least two portions of fruit and three portions of vegetables every day.

- **Reduce salt intake.** Bread is often the biggest source of salt (in Western countries anyway) but it may be difficult to tell which are the higher and lower salt breads without food labels. The following can help to reduce salt intake:
  - Do not add salt when cooking or on meals when they are served.
  - Check the salt content of processed foods on labels and buy low-salt alternatives where available.
  - Avoid cooked takeaway foods that are high in salt.
  - Limit the amount of canned foods eaten since these are often high in salt.
  - Limit the amount of cured meats that are eaten as these contain high levels of salt.
  - Limit the use of soy sauce.
  - Use herbs and spices rather than salt to add flavour to food.

- **Reduce the amount of sugar consumed.**
  - Minimize the amount of sweet food eaten.
  - Avoid (or limit the amount of) sugar in food and drinks.
  - Limit consumption of soft drinks.

- **Include plenty of calcium in the diet throughout life.** Ensuring that calcium-rich foods are eaten is a particularly important way for women to avoid bone diseases such as osteoporosis. To improve calcium levels:
  - Use dairy products, since these are a good source of calcium. However, limit the consumption of animal fats. Low-fat dairy products should be used - these still contain calcium.
  - Use low-fat soy milk and other soy products.
  - Eat canned fish with soft bones, such as sardines, anchovies and salmon.
  - Eat plenty of dark-green leafy vegetables.

Continued next page
PRACTICAL TIPS
DIET AND NUTRITION continued

- **Eat high-fibre foods.** Foods that are high in fibre are generally good and should be included in a healthy diet. Such foods are also a good way of filling up without putting on too much weight. Do the following to increase the amount of fibre in the diet:
  - Eat whole grains, fruits, vegetables, beans, nuts and seeds. Processed grains, such as white rice or white bread, do not contain much fibre.
  - Leave the skin on vegetables and fruit where possible.
  - Eat fruit whole rather than as fruit juice.
  - Add beans to soups, stews and salads.
- **Further information on diet:**
  - [http://www.who.int/hpr/global.strategy.shtml](http://www.who.int/hpr/global.strategy.shtml)

Exercise helps maintain good health for a number of reasons. Exercise:
- helps control weight;
- improves emotional well-being and relieves stress;
- improves blood circulation;
- increases energy levels;
- helps with sleeping;
- lowers blood pressure;
- increases flexibility;
- improves balance and thus reduces the danger of falls;
- lowers blood-sugar levels and thus helps control diabetes;
- improves bone density and strength and helps prevent osteoporosis.

As a result, exercise is a valuable part of preventing coronary artery disease, high blood pressure, osteoporosis, poor mental health and diabetes.

**Types of exercise:**
There are four main types of exercise: endurance exercises; strength exercises; balance exercises; and flexibility exercises.

**Endurance exercises:** These exercises improve breathing and the heart rate and, therefore, improve the health of the heart, lungs and blood circulation. By improving endurance, people are more able to do everyday tasks themselves and thus remain independent longer. Better endurance can also delay or prevent diseases such as diabetes, heart disease and stroke.

**Strength exercises:** These exercises strengthen muscles and can, therefore, help older people live independently longer. They
Endurance exercises: Some general guidelines for endurance exercise are:

- Take up exercises such as walking, cycling or swimming. These all strengthen the heart, lungs and blood circulation.
- When trying to build up endurance, it is important to build up gradually. A person who has been inactive may begin with five minutes a day and gradually build up to about 30 minutes a day.
- The 30 minutes of exercise a day may be broken into smaller periods of, say, 10 minutes at a time.
- As the exercise becomes easier, the difficulty can be increased a little at a time. Walking might be done a little faster, a little longer or up gentle hills.
- It is important for older people to make sure that they drink plenty of water when exercising. As they get older, some people do not drink, even when they need to.

Endurance exercises should be undertaken when the weather is neither too hot nor too cold.

Strength exercises: As they grow older, most people lose up to 40% of their muscle tissue and thus lose strength. Moderate strength exercises can help a great deal in overcoming some of the effects of this loss of muscle strength. Most strength exercises involve lifting or pushing weights of some type. Some guidelines to build up muscle strength though lifting weights are:

- Weights do not need to be heavy – starting with a weight of between one-half to one kilogram is a good beginning.
- Simple weights, such as a bottle filled with sand or water, or a small bag filled with beans, can be sufficient.
- Pulling or stretching resistance bands (these are thick rubbery bands) is another way of doing strength-building exercises.
- While the weights do not need to be heavy, they should be gradually increased as muscle strength returns. To build strength the muscle needs to be challenged a little. However, heavy weights should be avoided as they can cause injuries.
- Strengthening exercises should involve between 8-15 repetitions in a row, a rest and then another set of 8-15 repetitions.

Stretching exercises:

- Stretching exercises should be done three times a day at the beginning in order to develop flexibility. Once the flexibility has been regained one or two times each day should maintain flexibility.
- Each stretching exercise should be done between 3 to 5 times at each session.
- Stretching is best done after other exercise when muscles are warm and easily stretched.
- Bouncing, jerking movements while stretching should be avoided. Stretches should be slow, gradual and even.
- Stretching to the point where the stretch is painful should be avoided as this will cause damage. If the muscle or joint is painful during the stretch it is an indication that the stretch is too severe.
- Each stretch should be held for about 20 seconds.

Balance exercises:

- Falls can be a serious problem for some older people and can cause injuries that can take away their independence. Balance exercises can reduce the risk of falls.

Each main muscle group should be exercised twice a week.

Specific exercises for each muscle group are described at:

Stretching exercises:

- Stretching exercises can help give greater freedom of movement, which can promote greater independence. On their own, stretching exercises do not improve endurance or strength. Some general guidelines regarding stretching are:
  - Each stretching exercise should be done between 3 to 5 times at each session.

Balance exercises: or particular exercises that help with balance see:
Flexibility exercises: Flexibility exercises are stretching exercises designed to keep muscles flexible. They can help prevent some injuries and help injuries heal more quickly than they would otherwise.

Many people do less exercise as they get older and are concerned that exercise may make certain conditions, such as sore joints, worse or make heart problems dangerous. However, most people can benefit from exercise, even if they are suffering from one of the diseases or disorders that are more common in later life. However, care must be taken regarding when and how much exercise is taken. Before beginning a programme of vigorous exercises, it is important to check these matters with a doctor.

Some people avoid beginning to exercise when they are older because they think it will be too hard. However, even small amounts of exercise can help. The secret with any exercise is to:
- begin slowly;
- increase the amount of exercise gradually;
- do it regularly;
- do not overdo the level of exercise. Stop if any symptoms such as chest pain, excessive breathlessness or tiredness develop.

Other people are reluctant to do exercises, either because they do not like doing specific exercise programmes, or because they feel silly doing so. An alternative is for people to remain active – to build exercise into the normal routines of their daily life. This might be achieved by everyday activities such as walking, instead of driving or taking public transport, or walking part of the way, using the stairs and carrying items.

Weight

Overweight and obesity have become major problems throughout the world and contribute to many of the diseases of later life. Overweight is not due just to eating too much food, but to eating food that is very energy-dense (high in fat and sugar) and doing too little exercise. Obesity is an important factor in the following diseases of later life.
- heart disease;
- stroke and the mini-strokes involved in vascular dementia;
- diabetes;
- heart disease;
- stroke and the mini-strokes involved in vascular dementia;
- diabetes;
- heart disease;
- stroke and the mini-strokes involved in vascular dementia;
- diabetes;

PRACTICAL TIPS

WEIGHT

As people get older they often become less active and, therefore, use up less energy. Unless they eat less to compensate for their reduced activity, they will put on weight and possibly become obese. Controlling weight, therefore, requires: eating a balanced diet, with adequate energy intake, which is rich in vitamins and minerals, and avoiding fad and extreme diets; and exercising sufficiently and maintaining a physically active lifestyle. The guidelines and tips above can help in this regard.

As with all the lifestyle factors discussed here, the earlier in life healthy types of behaviour are developed the better. Thus, an important part of guarding against obesity in later life is ensuring that children and adolescents do not become overweight. In addition to the diet and exercise tips outlined above:
- Avoid extreme (or “crash”) diets.
- Eat small meals regularly.
- Eat slowly and chew food slowly rather than gulping food.
- Eat foods that are filling but that are low in fat and calories (e.g. high-fibre foods).
- Be realistic about weight-loss goals – aim for slow and moderate weight loss.

Leading experts recommend that most overweight individuals should try to lose 5%-10% of body weight. An overweight person who loses 5%-10% of their body weight and keeps it off will experience improvements in their physical health, quality of life, energy level, physical mobility, general mood and self-confidence. Long-term weight loss is most likely to succeed where people change their general lifestyle, rather than go on sudden, unsustainable diets or exercise programmes.
- high blood pressure;
- arthritis – especially in the knees; and
- breast cancer.

Body weight is the result of the difference between how much energy (measured as calories or joules) is consumed and how much is used up by physical activity. If people consume more energy than their bodies use, the excess energy is converted to fat for possible use at some future time. If energy intake is always greater than consumption, a person will keep putting on weight.

### PRACTICAL TIPS

#### SMOKING

Stopping smoking usually involves four stages: making the decision to quit; setting a date to quit and choosing a quit plan (e.g. stopping suddenly, reducing gradually); dealing with withdrawal; and maintenance or staying smoke-free.

- **Setting a quit date and choosing a method of quitting:** Once a person has decided to quit smoking, they should set a particular date when they will actually stop. Although there is no one right way to quit, the most usual method is to stop suddenly. Reducing the number of cigarettes gradually is generally less effective than the firm, unambiguous act of stopping smoking. Once a Quit Day has been selected it is good to tell others about it so that they can support the decision.

  - The American Cancer Society advises that, on the Quit Day, the smoker should do the following:
    - Do not smoke at all.
    - Throw out all cigarettes, lighters, ashtrays, etc.
    - Keep active by walking or doing some other form of exercise.
    - Drink lots of water and juices.
    - Use nicotine replacement (if that is the chosen method of dealing with withdrawal symptoms).
    - Avoid high-risk situations where the urge to smoke is strong.
    - Avoid or reduce alcohol intake.
    - Use the four “As” (avoid, alter, alternatives, activities) to deal with tough situations (described in more detail later).

- **Dealing with withdrawal:** Smoking is part of a way of life for smokers and is linked, in the smoker’s mind, with particular activities and situations. Part of quitting is breaking the link between these activities and smoking. For example, smoking and relaxing are closely linked for many smokers. Smoking is often associated with drinking coffee or alcohol. Alternatively many smokers automatically light up when they are stressed. Thus the automatic response is to want to smoke when relaxing, drinking alcohol or coffee, or when stressed. Part of quitting is to replace smoking with an alternative in those situations where the habit has been to smoke. The American Cancer Society suggests the following approaches to this type of situation:

  - While giving up smoking, avoid people and places where the temptation is to smoke.
  - Alter habits that are associated with smoking. Instead of drinking coffee, switch to juice, or use alternatives to cigarettes, such as gum and sweets, instead of lighting up.
  - Keep active by exercising or do things that keep the hands busy and help distract from the urge to smoke.

- **Remaining smoke-free:** Once a person has quit smoking, the urge to smoke can occur months or years later. In such situations, the ex-smoker can respond as follows to the urge to smoke:

  - Review all the reasons they quit in the first place.
  - Avoid having just one cigarette. Persevere and the sudden urge will go away.

Further information can be obtained from:
- [http://www.cancer.org/docroot/PED/content/PED_10_13X_Quitting_Smoking.asp](http://www.cancer.org/docroot/PED/content/PED_10_13X_Quitting_Smoking.asp)
- [http://www.lungusa.org/tobacco/quitting_smoke.html](http://www.lungusa.org/tobacco/quitting_smoke.html)
is that, as soon as a person stops smoking, the body begins to repair itself and the risk of smoking-related diseases begins to drop. While damage caused by smoking will not be completely undone, there are still benefits to older people quitting. Within about 10 to 15 years of stopping smoking, the risk of contracting many smoking-related diseases is not too much higher for the former smoker than for a lifelong non-smoker.

While there are strong health reasons for stopping smoking, it is quite another thing for people to be able to quit. The fact is that the nicotine found in tobacco is a highly addictive drug – as addictive as heroin or cocaine. When smokers inhale tobacco smoke, the nicotine is absorbed throughout the body and creates pleasurable feelings that make the smoker want to smoke more. The body adapts to nicotine in the blood and develops a tolerance for the drug, which leads to the need to smoke more to get the same pleasurable feelings.

Stopping smoking requires that:

- the person stops relying on smoking for pleasurable feelings; and
- the body adapts to no longer having nicotine present.

Neither of these changes is easy. Even when people want to give up smoking, they will normally find it difficult to do so. Programmes have been developed to assist people in this difficult task, but there is no single method that works for everyone. Different ways of quitting are effective for different people.

When giving up smoking, a person will suffer from withdrawal symptoms – from not having the nicotine drug in the body. Common withdrawal symptoms are:

- depression;
- feelings of frustration and anger;
- irritability;
- sleeping difficulties;
- difficulty concentrating;
- restlessness;
- headache;
- tiredness; and
- increased appetite.

### Alcohol

Drinking beyond a specified amount contributes to a number of later life diseases. **Men should not drink more than two drinks per day. Women should not drink more than one drink per day.** Drinking more than this amount is linked to the following diseases and their management.

- liver disease;
- stomach ulcers;
- gout;
- depression;
- osteoporosis;
- heart disease;
- breast cancer;
- diabetes; and
- high blood pressure.

People who cannot control their drinking should stop drinking altogether. People who drink more than is good for their health should cut down to the amounts stated above.
Healthy Ageing

Social Activities

As well as being affected by diet and exercise, health at all ages is influenced by social relationships. People who become socially isolated—who rarely go out, do not join in the community, have few friends or do not see much of their family—are less healthy. Sometimes they see less of other people because their health makes it harder to get out or they feel embarrassed about their disabilities. But not mixing with others also makes health worse.

Getting out and keeping involved with other people is an important way of keeping healthy in the first place. It creates a sense of belonging and being part of something bigger. Mixing with other people of a similar age, at a similar stage of life or perhaps with similar health concerns can help people realize that they are not alone. The support gained from others can be important in recovering from illness. Simply knowing that others care helps.

Being part of family groups and the wider community provides the opportunity to feel valued and to make a contribution. Being able to help others, give a helping hand and feel needed all improve the way people feel about themselves. People who feel good about them-
PRACTICAL TIPS
SOCIAL ACTIVITIES

Social contacts and links can be improved by doing the following:

- Get out of the house and meet other people.
- Join community groups.
- Invite people home.
- Arrange regular times for getting together with friends and family members.
- Make the time with other people pleasant for them so that they will want to keep up the contact.
- Find activities that involve doing things for other people.
- Go for walks in places where there is a good chance of meeting other people.
- Keep up regular contact with family members.
- Be friendly towards neighbours.

People who keep to themselves end up eating less well, getting less exercise and drinking more alcohol. Isolated older people get more depressed and are much more likely to commit suicide.
Healthy Ageing
The purpose of these outlines is to provide health workers with information to assist with improving the capacity of older people to take control of their health. They are designed to enable older people to make their own decisions and to take actions to promote their own health in later life.

Alzheimer’s Disease

What is Alzheimer’s disease?
Alzheimer’s disease is a disease of the brain that causes dementia – it affects the part of the brain that controls thought and language. This leads to memory loss, difficulties in thinking, and problems in understanding other people and communicating.

Who gets Alzheimer’s disease?
Alzheimer’s is not a natural part of ageing but does mainly occur among older people. Although it sometimes affects people in their thirties and forties, it is mainly found among people over the age of 60. About 3% of people aged 65-75 suffer from Alzheimer’s, but 25% of those aged over 85 suffer from the disease. On average, people with Alzheimer’s live for about eight years after contracting the disease.

Causes
Scientists do not know what causes Alzheimer’s disease, although there does seem to be some tendency for it to run in families.

Symptoms
Alzheimer’s is a progressive disease. It starts off with just a few symptoms, but these symptoms get progressively more serious over the course of the disease.

People in the early stages of Alzheimer’s will find themselves becoming more forgetful – especially about very recent events. In the beginning, this will happen only occasionally, but it will become more frequent and more severe. Early on, an Alzheimer’s sufferer will find that they cannot remember how to do some familiar tasks. As their memory gets less reliable, they can become confused and unsure of where they are. This can result in them wandering off and getting lost.

Language abilities will decline as Alzheimer’s disease progresses. As the disease develops, sufferers will find it increasingly difficult to express themselves clearly and to understand what others are trying to say, and will find reading and writing increasingly difficult. Those in contact with a person suffering from Alzheimer’s disease will begin to notice some personality changes, such as the sufferer becoming more anxious, more aggressive or more suspicious of other people.

The following symptoms may indicate that a person is developing Alzheimer’s disease. Of course, any single symptom may be a sign of something else, but an older person who experiences many of these symptoms should see a doctor.
memory loss where the person frequently forgets things and becomes confused – even at home;
- difficulty performing familiar tasks;
- forgetting simple words or frequently using the wrong words (The person developing Alzheimer’s disease will find it hard to express ideas simply or clearly, or to follow fairly simple ideas or instructions.);
- becoming mixed-up and confused about where they are and what time of day it is – even when in familiar places;
- finding that abstract tasks such as simple arithmetic – adding or subtracting – become very difficult;
- constantly misplacing things;
- rapid mood swings for no obvious reason (The person developing Alzheimer’s disease may be calm and happy one moment and very anxious or depressed the next, or suddenly become very angry or fearful.);
- things that were once enjoyed and interesting become boring (The Alzheimer’s disease sufferer may lose interest in things and find that they can’t be bothered doing things they once enjoyed.);
- loss of judgement about what to do and when to do it (A person developing Alzheimer’s disease may begin to dress inappropriately for an occasion or say the wrong things in company.).

**Treatment**

There is no known cure for Alzheimer’s disease. However, some actions can make things a little easier.

**NON-MEDICAL TREATMENTS:**

*Family education and counselling:* It can help to talk to people who know about Alzheimer’s and who can tell both the person developing Alzheimer’s disease and those close to them what to expect. Knowing what to expect and knowing that mood and other changes are due to the disease can make things a bit easier. As Alzheimer’s progresses, the sufferer will need help from others to do some things. Those people will need to know about Alzheimer’s disease and what to expect.

*Modifying the environment:* Loud or sud-

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**PRACTICAL TIPS**

**ALZHEIMER’S DISEASE**

The effects of Alzheimer’s disease will steadily grow as time passes. Things that were once easily achieved will become more difficult. Making decisions, remembering, learning new things and communication will all get more difficult. The suggestions below are designed to help the person developing Alzheimer’s disease to manage these changes a little better.

**Memory tips for the person developing Alzheimer’s disease:** Some of the problems caused by the loss of memory that is part of Alzheimer’s disease can be reduced by the following actions:
- Use a daily diary as a reminder for appointments and daily tasks.
- Keep a notebook in which to write down things to do.
- Keep a book with a list of people’s names, their phone numbers and memory joggers about the people.
- Try to establish a routine that other people know about so they can help remind you or know where to locate you.
- Use an alarm clock as a reminder.
- Have a friend call to remind you about appointments, mealtimes, etc.
- Label cupboards and drawers with words or pictures that describe their contents.
- Organize things in the home so that there is a set and obvious place for important things.

**Communicating:** Alzheimer’s disease makes it more difficult to express ideas and to be understood. Doing the following can help the person with the disease:
- Relax and speak slowly.
- Think through what you want to say.
- Ask other people to speak slowly or repeat themselves.
- Find a quiet place for conversations.

**Structure the day:** The following actions can help the person developing Alzheimer’s disease:
- Write down the things you want to do in the day.
- Have an established routine for each day.
- Take time doing things.

Continued next page
Try to relax to avoid getting frustrated when familiar tasks seem difficult.

Ask for help when you need it.

Finding the way around: The person developing Alzheimer’s disease may find that they get lost on occasions – even in places with which they are familiar. Encouraging the person with Alzheimer’s to do the following can help to avoid this:

Write down in a book what you are going out for.

Write down where you intend to go.

Ask for help if you become confused.

Always carry some identification with phone numbers to contact in case you become confused or get lost.

Coping with feelings: Alzheimer’s can cause many feelings to surface. This is hardly surprising and these feelings cannot be ignored. In addition to feelings of anxiety, sadness or anger, the person with Alzheimer’s disease may feel very frustrated, guilty, embarrassed or very lonely.

Medication can help manage some of these feelings, but the person developing Alzheimer’s should also try non-medical approaches such as the following:

Join a support group to talk with others who have Alzheimer’s.

Do things you enjoy.

Spend time with family and friends.

Tell others how you are feeling.

Living alone: Since Alzheimer’s is more common among older people, many people may be living on their own when the symptoms begin. It is important, therefore, to take some steps in the early stages of the disease to help manage better as the symptoms progress. These steps include:

Make arrangements for help with meals and housework. Although this help may not be needed immediately, it is sensible to make sure that arrangements are in place for the time when the need arises.

Leave house keys with a trusted neighbour, family member or someone nearby.

Arrange for help with transport.

Develop a daily routine.

Arrange for people to drop by regularly or to keep up regular contact.

Ensure that any medications are monitored.

Have a trusted person check things around the house.

Arrange for someone to help with household management tasks (bills, etc.).

Arrange for a trusted person to have the authority to deal with financial and legal matters. At a certain point, however, Alzheimer’s disease will progress to the point where sufferers can no longer live alone. Arrangements must, therefore, be made in the early stages of the disease to prepare for this time.

den noises may begin to upset and confuse the person developing Alzheimer’s disease. Some people with Alzheimer’s find that dim lighting makes them uneasy and anxious. Before Alzheimer’s develops too far, it is wise to try to do something about those things that unduly upset the sufferer.

Planning activities: Keeping active can help the person with Alzheimer’s disease. It is good, in the early stages of the disease, if a routine can be established, as this can help control anxiety and depression. A routine can help (but not solve) some forgetfulness and confusion.

MEDICINES:

Medication can play a role in managing Alzheimer’s disease.

Some medications can help halt the progress of the disease for some time, but they cannot cure it.
Medications can help control symptoms, such as agitation, anxiety, anger, depression or feelings of suspicion about others. Other medications can help moderate memory loss, but they cannot overcome memory problems.

Breast Cancer

What is breast cancer?
Breast cancer is the most common form of cancer among women. It occurs when cancerous cells in the breast form a tumour. These cancerous cells might remain only in the breast or may spread to other parts of the body and lead to cancerous growths in these parts. Left untreated, breast cancer is fatal. Breast cancer cannot be prevented, but early detection increases the chance of successful treatment.

Who gets breast cancer?
The main risk factors in developing breast cancer are:

- **Age**: Although women can develop breast cancer at any age, it is rare among women younger than 30. Most breast cancers occur in women over the age of 50.

- **Family history**: The risk of developing breast cancer is higher if a woman’s mother or sisters have had breast cancer, as it seems to run in families.

Other factors that increase the risk of breast cancer are:
- **Alcohol**: Drinking two or more units of alcohol each day;
- **Weight**: Being overweight increases the risk.
- **Having the following characteristics** also increases the risk slightly:
  - beginning to menstruate at age 11 or younger;
  - not having children or having a first child when 30 or older;
  - not breast feeding.

Causes
The body is made up of millions of tiny cells. These cells regularly die and are replaced by new cells in a controlled way. Sometimes the body’s normal control over the production of new cells does not work properly and too many cells are produced. When this happens, these extra cells form a growth called a tumour. This tumour can invade and destroy good, healthy cells nearby and this can cause serious damage to the body and eventually death. The cancerous cells that form a tumour can also be transported to other parts of the body and these cells can invade parts of the body well away from the place where the original problem started.

The reason why some cells lose their ability to properly regulate the way they grow and reproduce is not always clear. The reasons seem to differ for cells in different parts of the body.

Symptoms
Early breast cancer usually has no symptoms. As the cancer develops a woman might have one of these symptoms:

- an unusual lump in the breast;
- the skin near where the cancer is developing turns coarse and wrinkled;
- a discharge from the nipple.

Prevention and treatment
There is no sure way of preventing breast cancer. Reducing risk factors will help, but will certainly not eliminate the risk of developing breast cancer.

The earlier breast cancer is detected, the more successfully it can be treated. Most breast cancers are detected by women who watch out for the tell-tale signs or by a breast X-ray (called a mammogram).

The best way of reducing the danger from breast cancer is to regularly check the breast for lumps;

The failure to remove a cancerous breast tumour will eventually result in death.

**Surgery**: The first step is to remove the lump so that it can be tested to see what form

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**PRACTICAL TIPS**

**BREAST CANCER**

- The earlier breast cancer is detected the more successfully it can be treated.
- Talk with other people who have been through the same experiences.
- Regularly check breasts for lumps.
of lump it is. Not all lumps are cancers that invade the body. Tests are used to check if the lump is cancerous and, if so, to see if it has spread and how far developed the cancer is.

Once the nature and spread of the cancer are known, several different types of surgery may follow:
- removal of the cancerous lump and glands in the armpit;
- removal of the lump and part of the breast surrounding the lump and glands in the armpit;
- complete removal of the breast and possibly the surrounding muscle tissue.

Additional treatments: In addition to surgery, the woman with breast cancer will often need to have either:
- radiation therapy: This involves a series of X-ray type treatments over a period of five to six weeks; and/or
- chemotherapy, which involves taking a variety of medications.

The purpose of both these therapies is to make sure that any remaining cancerous cells are killed.

Cataract

What are cataracts?
Cataracts are a disease of the lens part of the eye which can lead to blindness. A cloudy area develops in the eye which stops the light getting into the eyeball. Without light the eye cannot see. There are different types of cataracts, but age-related cataracts are the most common type.

Who gets cataracts?
People can develop age-related cataracts in their forties or fifties, but these cataracts are normally small and do not affect vision. Most cataracts occur in people over the age of 60 and it is these that affect vision most.

Causes
The lens in the eye is made up mainly of two materials – water and protein. These are arranged in the eye so that light can get through. As some people age, the protein can clump together and go cloudy. Scientists are not certain what causes this change in the eye, but they think that smoking and diabetes are involved. It could also be due to the long-term effect of the sun on the eyes.

Symptoms
- At first, lights appear very bright and glaring – especially at night.
- Colours appear faded and washed out.
- As the cataract develops, reading becomes more difficult.
- People with well developed cataracts will feel that they are trying to look through a waterfall – very clouded and blurred.

Prevention and treatment
Three protective actions are to:
- protect the eyes from the sun;
- avoid smoking;
- prevent or control diabetes;

If the cataract is not causing much trouble, new glasses or brighter lights may be sufficient treatment. Surgery is the only solution for cataracts that have developed to the stage that they cause blindness. These operations have a good success rate at restoring sight.

Congestive Heart Failure (CHF)

What is CHF?
The heart is a muscle that pumps blood throughout the body. Congestive heart failure occurs when the heart cannot perform this normal function. There are many possible reasons, but the most common is damage to the heart resulting from narrowing or blockage of the blood vessels leading to it. When the heart cannot pump blood efficiently, fluids can build up in the lungs and lower legs.

CHF can be mild or very severe. A person with mild or even moderate CHF should be able to manage the disease successfully with diet, exercise, other lifestyle changes and some medication. A person who makes the neces-
sary changes should be able to live a relatively normal life. However, severe CHF may require surgery and can be more disabling.

Who gets CHF?
- CHF is mainly found among older people.
- It is common among people who have had a heart attack, have heart disease or have high blood pressure. These conditions damage parts of the heart so that it pumps less efficiently. People who are liable to have heart attacks, high blood pressure or narrowing of the arteries are all more likely to develop CHF.
- CHF tends to run in families and is more likely as people grow older if they are overweight, smoke, have little exercise and drink too much alcohol.
- People who have diabetes or kidney disease are more likely to develop CHF.

Causes
Congestive heart failure is the end result of many different heart diseases. The most common causes are:
- damage to the heart from heart attack(s); and
- high blood pressure. When a person has high blood pressure the heart has to work harder to pump blood into the body against pressure. This extra work damages the heart and results in the heart pumping more weakly.

Symptoms
Symptoms include:
- sudden weight gain due to fluid retention in legs and feet;
- swollen legs, ankles and feet;
- swollen (distended) neck veins;
- shortness of breath doing what were previously simple tasks;
- tiring very easily (because not enough oxygen is being supplied to the body);
- sleeping difficulties because the CHF sufferer cannot lie down for long without feeling that they will choke (This is due to fluid build up in the lungs.);
- persistent cough and mucus due to fluid build up in lungs; and
- dizziness.

Prevention and treatment
Since congestive heart failure is the end result of other heart diseases, the only prevention is to prevent these other diseases. Later discussions of coronary heart disease and high blood pressure provide information about how to prevent these conditions.

Surgery: The treatment for CHF depends on the cause of the problem. Where the problem is a leaking heart valve, surgery can replace the valve. To prevent further heart attacks or heart damage, surgery can be used to re-

PRACTICAL TIPS
CONGESTIVE HEART FAILURE
- When going to bed, place pillows behind your back and sleep so that the chest is at about a 45° angle, rather than flat.
- Avoid extremes of heat and cold, which make the heart work harder.
- Exercise, but obtain medical advice before commencing. Walking, jogging, playing tennis or cycling, may all be appropriate and possible pending medical advice.
- Lose weight to reduce the strain on the heart (see coronary heart disease for tips).
- Tobacco and alcohol:
  - Stop smoking altogether.
  - Drink no more than one (women) or two (men) drinks a day.
pair or bypass damaged blood vessels that carry blood to the heart. The most dramatic treatment for a damaged heart is to replace the whole heart.

However, in most cases where congestive heart failure symptoms have already developed, the only feasible treatment is to manage the symptoms with medication and lifestyle changes.

**Medication:** Various medications can be used. These are designed to:
- take the strain off the heart;
- strengthen the heartbeat or;
- help eliminate excess fluid from the body.

**Lifestyle:** The risks of CHF can be reduced by:
- achieving the correct body weight;
- eating a diet that is low in fat;
- not smoking;
- having no more than one drink of alcohol per day;
- relaxing; and
- getting plenty of sleep and rest to take the strain of the heart.

**Coronary Heart Disease**

*What is coronary heart disease?*

The heart is a muscle. Like all muscles, it must be fed by oxygen and nutrients from the blood. A person whose heart cannot get enough oxygen from the blood will normally feel a pain in the chest, left arm or shoulder. This pain is called *angina*.

The main reason that the heart cannot get enough oxygen is because the arteries bringing the blood to the heart have become clogged and this limits the amount of blood they can carry. Where the supply of blood from a particular artery leading to the heart is cut off entirely, the person will have a *heart attack*. The part of the heart without its oxygen dies and the heart muscle is damaged. The heart will, therefore, no longer work as well as it did before (see congestive heart failure).

Normally a complete blockage to the heart is due to a blood clot getting stuck in arteries leading to the heart. This is much more likely to happen if the arteries are already clogged or are hardened and cannot stretch. A blockage in the arteries is caused by a build up of fatty substances inside the arteries.

*Who gets coronary heart disease?*

Fatty deposits from cholesterol (called plaques) begin to build up on artery walls from early in life. The speed at which they build up depends on a person’s family history and on the amount of animal fats consumed. By the time people reach 45 or 50, there is a fair chance that their arteries are blocked enough to put them at risk of coronary heart disease. However, people do not normally have heart attacks until they are in their mid to late sixties, and most people who die of a heart attack are 65 or older.

Men are more at risk of coronary heart disease but, as people grow older, the risk becomes more similar for men and women. On average, men develop coronary heart disease about 10 years earlier than women.

People are certainly more likely to have coronary heart disease the older they are. This is not because coronary heart disease is a natural part of growing older, but because people consume more animal fats over a lifetime and the build-up from a lifetime of fat consumption means that the arteries become more blocked as time goes on.

Heart disease is a common cause of death among older people. While it was once much more common in developed countries, it is now a very common cause of death in developing countries. This change is largely because of changing habits and diets and increased physical inactivity.
Healthy Ageing

Causes
Family history makes a difference. A person with a family history of coronary heart disease has a greater risk of developing it too. This may be partly because of common lifestyle habits within families, but is mainly because of genetic factors. There is nothing that can be done about changing one’s family history, but there are many things that can still be done to reduce the risk of heart disease. A person with a family history of heart disease should be especially careful to take these preventive measures.

The direct causes of coronary heart disease are blocked arteries leading to the heart muscle. There are a number of things that produce blocked and hardened arteries:
- too much animal fat in food (blocks arteries);
- high blood pressure (hardens and thickens artery walls);
- too little exercise;
- smoking (hardens the arteries and encourages a build-up of fat in the arteries);
- being overweight (increases the chance of developing high blood cholesterol and high blood pressure); and
- diabetes.

Symptoms
Angina: Angina occurs if the heart needs more oxygen than it can get. When people exercise, their hearts need more oxygen, so angina can occur when exercising. Common symptoms of angina are:
- severe pain and tightness in the chest;
- the pain can spread to the left arm, neck and jaw;
- the pain often occurs with exercise, when eating a meal or during the night;
- the pain that comes with exercise normally stops when resting;
- the pain may feel like indigestion;
- heaviness or tightness in the arms or wrists – mainly on the left side;
- feeling especially tired and short of breath.

Heart attack: Angina attacks are a sign that not enough blood is getting through to the heart. Angina pain is not a heart attack, but does indicate the presence of the underlying conditions that make a heart attack more likely. If angina attacks begin to occur more frequently or become more severe, it may indicate that a heart attack may occur in the near future. The classic signs of a heart attack are:
- feeling an uncomfortable pressure or a squeezing feeling in the middle of the chest that lasts for more than a few minutes or goes away and comes back;
- the pain may spread to the left shoulder and left arm or neck;
- as well as feeling uncomfortable in the chest, feeling light-headed, experiencing shortness of breath, sweating and feeling nauseous or faint.

Any one of these could be a sign of a heart attack. A person suffering from these symptoms should get medical help immediately. Getting to hospital quickly can prevent death and immediate treatment can prevent damage to the heart muscle.

Prevention and treatment
Exercise and fitness: Keeping fit helps prevent hardening of the arteries and, therefore,
cuts down the risk of heart disease. Exercise also helps control weight – another important factor in preventing heart disease. Everyone should accumulate at least 30 minutes of moderate exercise daily.

**Diet:** Use diet control to:
- help control weight (and thus reduce blood pressure);
- reduce the amount of cholesterol in the blood;
- reduce the amount of salt in the diet and thus help control high blood pressure;
- reduce fat in the diet, especially animal fat;
- eat plenty of fruits and vegetables.

**Smoking:** Smoking is a major risk factor in heart disease. Stopping smoking reduces the risk of heart disease.

**Alcohol:** Moderate consumption of alcohol (one or two drinks a day) seems to lower the risk of heart disease. Scientists are not sure why, but think that it may be due partly to the anti-clotting effects of alcohol. However, it is not recommended that non-drinkers start drinking alcohol.

High alcohol consumption is bad for the heart. It raises the fat levels in the blood, causes high blood pressure and increases weight.

**Medical:**
*T tests are available in clinics to test blood pressure and cholesterol.

**Medications** are available to:
- prevent blood clotting (Blood-thinning medications, which must be managed by a doctor, can reduce the chance of blood forming clots in arteries. It is better to try to keep the arteries clear. Aspirin is one such type of medication.);
- reduce blood pressure;
- help widen arteries;
- slow the heart and make it pump more efficiently.

**Surgery** is available to reduce the blockages in the arteries leading to the heart. The main types of surgery are:
- opening up the blocked artery by inserting an object in the blocked section of the artery to stretch it open;
- by-pass surgery – inserting a new artery to by-pass the blocked or damaged section of the old artery.

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**Dental Health Problems**

**What dental health problems do older people have?**

Dental health problems are among the most common health problems among older people. The ‘normal’ problems are:
- tooth decay;
- gum disease;
- dry mouth (xerostomia).

About 20% of older people have a dry mouth as they are less able to produce saliva. A person with a constantly dry mouth will find it harder to chew, eat and swallow. A dry mouth also increases the danger of tooth decay, since saliva is not washing away the harmful acids in the mouth. Dry mouth can also result in a sore throat and a dry and sore nose, and may make it difficult to speak.

**Causes**

**Tooth decay** is largely affected by the food people eat and the care they take of their teeth. Many foods create acids in the mouth and this acid attacks the tooth coating and causes decay. The acids are produced by eating food with sugar and starches (from bread and cereals). Cleaning teeth properly after eating can stop these attacks, but snacking throughout the day without brushing the teeth will result in tooth decay.

**PRACTICAL TIPS**

**DENTAL HEALTH PROBLEMS**

To avoid or reduce gum disease:
- Clean teeth regularly.
- Eat foods such as fruit, vegetables and dairy products between meals. These foods do not create dangerous acids.

To reduce chewing difficulties:
- Cook foods with finely cut ingredients.
- Dice or mince meat before cooking.
- Use ripe fruit and well cooked vegetables so that they are soft and moist.

To manage dry mouth:
- Sip water throughout the day.
- Chew gum or suck something hard to stimulate saliva production.
- Cook foods with moisteners added.
- Sip water (or something else) when eating. This helps with chewing and swallowing.
- Cook moist foods (e.g. soups, stews, moist vegetables).
**Gum disease** is caused by the same acidic substances that cause tooth decay. The acid causes the gums to pull away from the teeth and this allows germs to breed in the gaps and cause infection. This can cause tooth loss.

**Dry mouth** is frequently a side-effect of other medical problems and medications.

**Symptoms**

**Gum disease:**
- gums bleed when brushing teeth;
- red, swollen or tender gums;
- gums pulling away from the teeth;
- puss between the teeth and gums;
- bad breath that doesn’t go away;
- loose teeth;
- a change in the way the teeth fit together when biting.

**Prevention and treatment**

**Tooth decay** is best prevented by regular cleaning, eating foods with less sugar and starch (or cleaning immediately after eating sweet or starchy food) and having regular dental checkups.

**Gum disease:** In the early stages gums become sore, red and swollen. At this stage gum disease can be prevented by regular and careful brushing with a soft tooth brush.

**Dry mouth** may be treated by checking on the effect of other medications being taken. Otherwise the main treatment is to stimulate saliva production or to sip fluids regularly (see tips).

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**Depression**

**What is depression?**

Depression is a medical condition that affects a person’s emotional well-being. A person suffering from depression feels extremely sad and dejected, has a deep sense of emptiness, and feels a loss of self-worth. These feelings can lead to self-destructive behaviour, despair and hopelessness.

**Depression comes in three main forms:**

**Depressed mood:** This form of depression is signalled by a mood that is dominated by feelings of sadness, gloominess or emptiness, and possibly a lack of energy. This mood may be temporary following a distressing event or it may continue over the long term.

**Long-term, low-grade depression:**

**(dysthymia):** Those suffering from this form of depression will have suffered from a depressed mood for at least two years, have a lack of energy and a poor appetite, and have trouble sleeping. Low self-esteem and hopelessness are part of this form of depression.

**Major depression:** The symptoms are more severe than with low-grade depression and will have persisted for at least two weeks. A person with major depression will have disturbed sleep and appetite, will lack energy, and have the feelings associated with other types of depression. As well as all the other feelings, the person will also have feelings of guilt and despair. Major depression makes people feel very distressed and when severe will lead to thoughts about or attempts to commit suicide.

**Who gets depressed?**

Anyone can suffer from depression, although it is most commonly diagnosed among people in their twenties. Depression is also common among older people, but is almost certainly not diagnosed as often as it should be, since not all doctors are experienced in detecting depression in older people. Because depression often accompanies other health problems, some doctors confuse elderly depression with the accompanying disease. Women are diagnosed with depression more often than men.

**Causes**

**Life events:** Depression among older people tends to accompany other life events such as:
- loss of a spouse or close friend;
- chronic pain or illness;
- difficulty getting around;
- frustration due to memory loss;
- difficulty adapting to the dramatic changes that can occur in later life, including moving out of one’s home.

**Other diseases:** Depression may be part of another disorder. Depression can often accompany diseases such as Alzheimer’s disease, hypertension, heart disease, stroke, diabetes and cancer. This does not mean that the depression is not real depression. It is real and it requires treatment.

**Medication:** Taking medication for another condition can trigger depression. Depres-
Depression is linked to imbalances in brain chemistry so medication can disturb this balance. Medication for Parkinson’s disease, arthritis, high blood pressure, heart problems and hormone disorders appear to be linked to the onset of depression in some people. Too much alcohol can also lead to depression.

**Genes:** Depression tends to run in families. People with relatives who have suffered from depression have a greater risk of developing it at some point in their lives.

**Symptoms**
A depressed person will have a number of the following symptoms. Some of these symptoms can indicate different problems, but a person experiencing a number of these should get some help.
- irritability;
- temper and agitation;
- feelings of worthlessness or sadness;
- loss of interest or pleasure in daily activities;
- loss of appetite and/or unintentional weight loss;
- sleeping difficulties such as:
  - waking up through the night and finding it hard to get back to sleep;
  - waking up early in the morning;
  - sleeping too much;
- fatigue;
- difficulty concentrating;
- memory difficulties;
- abnormal thoughts;
- excessive or inappropriate guilt;
- thoughts about death and suicide;
- plans to commit suicide or actual suicide attempts;
- excessive concern about bodily aches and pains.

**Treatment**
Depression can be treated successfully. Rather than simply putting up with depression and hoping that it will go away or thinking that it is just a normal part of ageing, help should be sought. Depression will not just disappear on its own. It can be treated and the person seeking help will feel a great deal better for having done so. Feeling depressed does not mean that the person is crazy, or is ‘past it’. People of all ages get depressed.

**Medication and therapy:** The most effective treatment for major depression is a combination of psychological therapy and medication. One treatment without the other is much less likely to have long-term effects. Most people respond well to this combination of treatments. Although depression may recur afterwards, it can be treated again successfully.

Some new and effective medications (called SSRIs) can be very effective in helping treat depression, and generally have few side-effects. However, they can make people a little less steady on their feet, so special care must be taken to avoid falls.

Where depression is linked to other medications, or to non-prescription drugs or alcohol, a doctor will need to sort out the whole set of medications. Reducing alcohol consumption can help contain depression.

**Exercise:** Taking a regular walk can make people feel better about themselves, help control anxiety and help with depression.

**PRACTICAL TIPS DEPRESSION**
Depression can be prevented or helped by doing the following:
- Seek help.
- Keep strictly to medication instructions if using medication for depression.
- Exercise regularly.
- Eat well and do enjoyable things.
- Get out and mix with other people.
- Talk to a therapist to isolate the things that might be producing the depression.
- Attend to other illnesses as these may be producing the depression.
- Be persistent.
Social support: Milder forms of depression can be alleviated by dealing with some of the related problems. Where depression follows loss, depression can lift after grieving. Getting involved with others and improving relationships with other people can help lift some of the sense of loneliness and lack of self-worth associated with depression.

Diabetes

What is diabetes?
There are two main types of diabetes – Type 1 and Type 2. Type 2 diabetes is the type normally found among older people.

Diabetes Type 2 is a rapidly growing disease throughout the world and is particularly serious because it increases the risk of developing a wide variety of other serious diseases.

Causes
The cells in the body must be fed with the correct cell food. Sugar is an important cell food. Sugar is extracted from food by the body and is absorbed into the blood. The blood transports this sugar to all parts of the body where it is absorbed by the cells.

A substance called insulin enables the cells to absorb the sugar from the blood. Most people naturally produce the insulin they need. Diabetes occurs when:
- the body does not produce the insulin or;
- the cells cannot respond properly to the insulin, in which case they cannot absorb the sugar they require to remain healthy.

The result is that the body is starved of its fuel and the blood contains far too much sugar. High blood sugar can cause its own problems.

Type 2 diabetes is due mainly to the second cause – the inability of the cells to absorb the sugar, rather than a shortage of insulin. For some reason, being overweight makes this type of diabetes occur more frequently and earlier than would otherwise be the case.

Why does diabetes matter?
Diabetes affects almost all parts of the body. It leads to the starvation of cells throughout the body. In addition, the blood that contains high levels of sugar goes to all parts of the body, so any part of the body that is sensitive to high blood sugar is affected. High blood sugar can result in damage to the large and small blood vessels, nerve damage and increased risk of infections.

Damage to large blood vessels:
Where diabetes damages the arteries:
- it leads to the development of heart disease;
- in the neck it can lead to a stroke;
- in the brain it can lead to mini-strokes and vascular dementia;
- in the legs it leads to poor circulation in the feet and can lead to gangrene and leg amputation.

Damage to small blood vessels:
- in the eye it can result in bleeding and other damage that leads to blindness;
- in the kidneys it can prevent the kidneys filtering out poisons from the blood. If the kidneys do not work properly, the person will die unless their blood can be filtered artificially.

Nerve damage can lead to:
- lack of feeling in the feet, which in turn can lead to sores and ulcers developing and becoming infected;
- sexual dysfunction;
- difficulty with bladder control (see urinary incontinence).

Infection: A person with diabetes is more likely to develop infections such as:
- thrush;
- pneumonia; and
- skin infections.

Who gets diabetes?
- Diabetes Type 2 is the most common form of diabetes – about 90% to 95% of people with diabetes have Type 2.
- It usually develops in people who are over the age of 40, but is most common among those aged 55 or more.
- Most people with diabetes Type 2 are overweight. Changes in diet in the developing world have led to a sharp increase in the number of overweight adults and children.
- Rates of diabetes vary between races and ethnic groups.

Symptoms
One of the problems with Type 2 diabetes is that many people show no symptoms. This means that a great deal of damage can be done
PRACTICAL TIPS
DIABETES

To lose weight:
- Avoid crash diets (Instead, eat less of the foods usually eaten.);
- Limit the amount of fat in food.
- Aim for a reasonable weight loss goal of between 5-10% of body weight.
- Follow the diet tips below.
- Have small servings and eat slowly.
- Follow an exercise programme (see tips below).

Diet:
- Do not skip meals.
- Eat fruits and vegetables.
- Eat foods that include starch (e.g. noodles, rice, cereals, corn, potatoes).
- Eat wholegrain or natural cereals rather than refined products.
- Eat small amounts of protein (meat, fish, eggs, nuts).
- Use only low-fat dairy food.
- Minimize the amount of sugar.
- Minimize the amount of fat.
- Avoid fried food and food cooked in oil.
- Avoid food to which oil or butter has been added.
- Use food and drinks with artificial sweeteners.
- Steam vegetables, rice and other foods, rather than frying.
- Stir fry or grill meat.
- Limit the amount of salt consumed (including soy sauce, MSG).

Exercise:
- Accumulate 30 minutes of moderate exercise every day.
- Start slowly – especially after a period of inactivity. Check with a doctor about what kinds of exercise are safe. Add 30 minutes of vigorous exercise two or three times a week after a while.
- Drink plenty of water.
- Build exercise into daily routines. Walk where possible.
- Exercise with a friend to help maintain motivation.
- Pick an enjoyable exercise.
- Vary the exercise to avoid becoming bored.
- Start slowly and build up gradually.
- Do some exercises that exercise the heart and lungs (e.g. walking, jogging, cycling).
- Include some strength exercises.
- Check blood-sugar levels before and after exercising.
- It is best to exercise 1-3 hours after a meal. This will result in fewest problems with low blood sugar due to exercise.
- Be prepared for low blood sugar. Exercise burns sugar and can result in too little blood sugar. Always have a snack on hand in case the blood-sugar level drops too low.

Other tips:
- Check feet daily to look for sores, cuts, etc. Any lack of feeling in the feet that goes unattended can become serious.
- Do not smoke. Smoking increases the risk of many of the diseases that are also caused by diabetes.
- A person with diabetes who controls his blood sugar can afford to drink some alcohol, but this should be kept to low levels. Alcohol should be avoided when blood sugar is not under control.

More information:
Exercise tips

Nutrition tips
http://familydoctor.org/handouts/349.html
before they become aware of having diabetes. It makes sense, therefore, to be tested annually for diabetes Type 2. If it is detected, a lot of things can be done to help control the damage that it can cause.

The following symptoms are the most common signs of diabetes:
- increased thirst;
- frequent urination -especially at night;
- extreme tiredness;
- weight loss;
- blurred vision;
- genital itching or regular episodes of thrush;
- frequent infections;
- slow healing of wounds or sores;
- losing feeling in the feet or having tingling feet.

Prevention and treatment
The risk of developing diabetes can be reduced. The main ways of preventing Type 2 diabetes are:
- exercising regularly;
- keeping to the correct weight;
- keeping to a diet that is not high in sugar and fat;
- monitoring blood-sugar levels.

It is not possible to eliminate the risk of diabetes altogether as there seem to be genetic factors which affect the risk.

Once diabetes has developed it cannot be cured. However, a lot of things can be done to control it and thus reduce its dangers.

Early detection: Diabetes can be detected by testing for the amount of sugar in the body. A first test can be to test for sugar in the urine, but a more certain test is to test the amount of sugar in the blood. Very simple, do-it-yourself tests are available. A reliable diagnosis of diabetes should only be made by a physician.

High blood sugar: Type 2 diabetes is the result of cells being unable to absorb sugar from the blood. Scientists are not exactly sure of the reasons for this. The treatment for Type 2 diabetes (and the method of preventing it) is to:
- help the cells absorb sugar;
- control the amount of sugar in the blood.

Exercise helps prevent and control diabetes because:
- muscle use burns sugar (Exercise, therefore, extracts sugar from the blood to use in the muscles and lowers sugar levels);
- it helps cells absorb sugar;
- it makes insulin work more effectively;
- it improves the circulation of the blood and helps reduce the effect of narrowed arteries; and
- it reduces weight and, therefore, reduces insulin resistance caused by being overweight.

Diet can reduce the sugar in the blood. To do this it is important to limit foods that contain:
- sugar (to control weight and blood-sugar levels); and
- fat (to control weight).

Medication: When exercise and diet do not lower sugar levels enough, medication will be needed to:
- control the level at which sugar is released into the blood;
- increase the ability of cells to absorb sugar.

Reduce risk factors: Diabetes increases the risk of many diseases. A person who develops diabetes must also pay careful attention to other factors that may lead to those diseases. Since diabetes increases the risk of such diseases as heart disease or stroke, it is important to reduce other risk factors that lead to those diseases. For example, smoking is a known risk factor in heart disease and stroke. To reduce the increased risk of these diseases caused by diabetes, it is even more critical than usual to reduce the risk of heart disease and stroke by stopping smoking.

Emphysema
What is emphysema?
Emphysema is a type of lung disease that restricts or obstructs breathing. Lungs act as an exchange station for the blood. They supply the blood with the oxygen that is necessary for life and extract unwanted carbon dioxide from the blood. These exchanges take place in the lung in tiny air sacs called alveoli.

People with emphysema have suffered irreversible lung damage because these air sacs have been damaged and cannot perform their function. This means that people with this lung damage cannot get enough oxygen into their
blood or extract carbon dioxide from their blood properly. This results in shortness of breath during exercise and eventually even when resting.

Who gets emphysema?
Smoking is the single most important cause of emphysema. Smokers are about 10 times more likely than non-smokers to develop the disease. People who are exposed to air pollution and irritating fumes and dusts in their workplace or general environment are also more likely than others to develop emphysema.

Causes
Inhaling materials into the lungs that destroy the tiny air sacs causes emphysema. Tobacco smoke and fumes and dusts are the main materials that destroy these air sacs.

Symptoms
- shortness of breath - the feeling of not being able to get enough air;
- coughing and wheezing.

Prevention and treatment
Prevention is far more effective than treatment. To radically reduce the risk of emphysema a person should:
- avoid smoking; and
- avoid inhaling fumes and dusts.

Treatments for emphysema are limited. The damage to the lungs cannot be reversed. The main ways in which people with emphysema manage their disease is by:
- using supplemental oxygen when the lungs cannot absorb enough oxygen from the air.
- improving the efficiency of breathing with lung exercises:
- using medications to help soothe the delicate lining on the air passages;
- undergoing surgery. Lung transplants can be used to replace damaged lungs. However, this option is not widely available and carries a substantial risk.

Falls
Why are falls a problem?
Falls are a major health concern for older people as they can lead to disability, dependence and premature death. Falls are a particular problem for many older people because old bones are:
- more brittle and much more likely to break – even with a minor fall;
- less likely to mend.

What causes falls?
There are a lot of things that can be done to prevent falls (see below) but it is useful to know the general sorts of things that lead to falls among older people. With these in mind, people can think about the way their homes are organized and the way they do things. Attention to these matters can help reduce the risk of having a fall.

The main reasons why falls become more common as people grow older are:
- The balance sensing mechanism in the ears becomes less efficient so it becomes more difficult to regain balance.
- Gradual deterioration in eyesight and eye disease can lead to tripping over objects, and tripping on stairs and elsewhere. As the eyesight deteriorates and more light is needed, or as side vision fails, small things are simply not seen.
- Arthritis leads to stiff and sore joints, which can add to the risk of falls.
- Since Parkinson’s disease interferes with coordination and balance, a person with that disease will need to take special care to avoid falls.
- Loss of muscle strength makes it more difficult to recover once a person gets into an awkward situation.
PRACTICAL TIPS

FALLS

The risk of falls can be reduced by doing the following:

- Have regular eye and ear checks.
- Get up slowly. Standing up suddenly can lead to a sudden drop in blood pressure and cause dizziness.
- Check carefully the effect of new medication on balance.
- Do not skip meals as this can lead to dizziness.
- Use a cane or walker to help maintain balance on uneven ground or slippery surfaces.
- Wear strong, low-heeled shoes with non-slip soles.
- Exercise regularly to improve coordination and strength.
- Rearrange furniture so that there are clear pathways within the home.
- Ensure that there are no loose mats or electrical cords to trip over.
- Mark the top and bottom steps very clearly. Use bright tape on these stairs.
- Install handrails in difficult spots in the home (toilet, bathroom, bedroom).
- Light stairs well and use handrails.
- Install non-slip material on steps.
- Ensure that there are lights that can be turned on when entering a room.
- Place a light near the bed to avoid having to stumble around in the dark.
- Leave lights on at night if necessary.
- Avoid using shelves that are difficult to reach.
- Never stand on a chair to reach things.
- Wipe up spills immediately.
- Take care with pets as they can get underfoot and cause falls.
- Keep a flashlight with good batteries where it can be easily found.
- Raise the height of seats, toilets and the bed.

- Reaction time slows and this makes it harder to recover from tripping, etc.
- Alcohol, even small amounts, can interfere with balance, reaction time and steadiness.
- Medication can cause people to lose their balance or become dizzy and light-headed.

Foot Problems

What are the main foot problems?

Foot problems are common and can have a big effect on the life of an older person. Foot problems can affect a person’s ability to walk and get around. This can mean that the older person becomes less active, becomes more isolated and develops diseases associated with insufficient exercise and social contact. Foot care is an important part of staying healthy in later life.

Feet are a complicated part of the body. They contain 52 bones – about a quarter of all the bones in the body. There are hundreds of possible foot problems and some of the most common ones are linked to other diseases, such as gout, arthritis, diabetes, narrowed blood vessels and nerve diseases.

Common foot problems are corns, toenail problems, bunions, collapsed foot arches, and toe and joint problems.

Who has these foot problems?

Foot pain is far more common among women than men – especially among women who wear...
Causes
In general, foot problems are not inherited. Many of the problems are due to wear and tear over a lifetime and a lack of proper foot care. Common causes of foot pain include:
- ill-fitting shoes or shoes with high heels or pointed toes;
- fractures in foot bones (This is a common problem of foot pain among people with osteoporosis as this disease results in very weak bones that break easily.);
- arthritis;
- circulation problems related to diabetes and narrowed blood vessels;
- being overweight, as this puts much more stress on the feet;
- nerve damage (e.g. from diabetes);
- gout;
- bunions;
- ingrown toenails; and
- fallen foot arches.

Prevention and treatment
The best method of preventing foot pain is to avoid or treat the diseases that cause foot pain (e.g. arthritis, diabetes). In addition, some foot problems can be prevented by:
- taking care to wear shoes that fit well;
- avoiding shoes with high heels or pointed toes;
- clipping toenails correctly;
- avoiding cuts to the feet;
- exercising regularly;
- trying to keep the blood circulating as well as possible so that it gets to the feet and helps keep them healthy.
Glaucoma

What is glaucoma?
Glaucoma is one of the main causes of blindness among older people. The eyes continually have fluid flowing in and out. This fluid feeds the eye and helps keep it alive. This fluid also ‘fills out’ the eye with the right amount of pressure (like filling up a balloon with water). If the fluid cannot drain out but new fluid still enters the eyeball, the pressure in the eye will keep building up. This pressure build-up damages the main nerve in the eye and stops a person from seeing properly. In due course this causes blindness.

Who gets glaucoma?
The risk of developing glaucoma increases as people get older. About 2% of people aged 40-50 have glaucoma, but about 8% of people over 70 have it.

A person is more likely to develop glaucoma if they have a family history of the disease. Some races are also more likely to develop glaucoma. For example, in America, African Americans are far more likely to develop glaucoma than white Americans.

Glaucoma is also more likely among people who:
- have had any eye injury;
- are very near-sighted (can only see things that are very close).

Causes
Glaucoma occurs when fluid cannot drain from the eye. Scientists do not know why this drainage problem develops.

Symptoms
- In its early stages the person with glaucoma will not notice any effects.
- As glaucoma develops there will be a loss of side vision. Looking ahead will be fine, but the sufferer will begin to bump into things more when they are on the side.
- As glaucoma progresses the loss of side vision will increase and increasingly the sufferer will feel like they are looking through a tunnel. Eventually all vision will be lost.

Prevention and treatment
Once sight has been lost from glaucoma there is nothing that can be done about it. Glaucoma damages the main nerve in the eye and this nerve damage is permanent. Thus nerve damage must be prevented before it goes too far.

There are three main ways to stop glaucoma progressing to blindness, but people must know that they have got the disease if it is to be treated. The only way of knowing if a person has the early stages of glaucoma is for an eye doctor to perform an eye check.

Where the early signs of glaucoma are detected, further damage can be prevented by:
- **Eye drops**: These help the eye drain the extra fluid out, thus reducing the pressure in the eye.
- **Medicine**: This reduces the amount of eye fluid the body produces and thus stops the pressure building up so much.
- **Surgery**: There are two types of surgery.

PRACTICAL TIPS
GLAUCOMA
- Older people in a risk group for glaucoma (e.g. over 40 and have a family history) should have an eye doctor check for glaucoma each year.
- Older people not in a risk group should have their eyes tested every two years.
One type makes a new opening so that the fluid can drain. The other type uses lasers to help the fluid drain.

**Hearing Disorders**

**What are the main hearing disorders?**

The two most common hearing disorders that develop as people grow older are:

**Hearing loss (presbycusis):** This is the most common type of hearing loss among older people. It is linked to changes in the inner ear and gets more serious as people get older. It develops more quickly in some people than in others.

**Ringing in the ears (tinnitus):** This is hearing a ringing or roaring in the ear, even though there is no actual noise. Sometimes, instead of hearing ringing, the person with tinnitus might hear sizzling, buzzing, or humming noises. Tinnitus is linked to a range of hearing disorders. A person with ringing in the ears might have the ringing all the time, it might come and go, or it might stop altogether – it will depend partly on the particular cause.

For some people, the constant noise can be quite intrusive and affect their emotional well-being. It can affect concentration, make people very sensitive to noise, and can cause them to feel that no-one understands what they have to put up with. People who become very sensitive to sound and noise may start to avoid situations where noise is likely to occur and begin to withdraw from other people.

**Who develops hearing disorders?**

**Hearing loss** generally begins between the ages of 40-50. About one-third of people aged 65 and 75 years, and around one-half of those aged over 75, have some hearing loss. Hearing loss tends to run in families.

**Ringing in the ears:** The risk of developing tinnitus increases as people get older. This is because of age-related deterioration of a number of parts of the ear and because of the effects of a lifetime of exposure to noise.

**Causes**

**Hearing loss:**

- Being exposed to too much loud noise can cause damage in later life.

- The loss of hearing is due to the hair cells in the ear becoming old and brittle, or destroyed. It seems that this is part of normal ageing and that there is little that can be done to prevent it.

**Ringing in the ears:**

- Although scientists are unsure why the particular sounds of tinnitus develop, they know that tinnitus is often due to deterioration in the fine nerve endings in the ear. This is a common cause among older people. A common cause of this damage is exposure to loud or constant noises.

- Tinnitus noises can also be linked to other ear problems such as wax in the ear, ear or sinus infections, or other ear diseases.

- Sometimes the long-term use of some medications (e.g. too much aspirin, quinine, antibiotics) can result in ringing sounds in the ear.

**Symptoms**

**Hearing loss:**

- difficulty hearing in general, particularly at higher frequencies;

- trouble hearing when there is background noise (e.g. when other people are talking);
Healthy Ageing

Healthy Ageing

Some hearing loss seems to be a normal part of ageing. The best way of preventing or delaying hearing loss is to limit exposure to loud noises throughout life. This can be assisted by:

- turning down the volume of music, etc.;
- using ear muffs and ear plugs when in noisy environments.

Hearing loss: Hearing aids can help reduce the effects of hearing loss. Hearing aids have a microphone that picks up sounds and a small amplifier to make sounds louder for the person wearing the hearing aid. However, hearing aids are expensive and need to be selected to suit the particular hearing problem.

Ringing in the ears: If the cause of the ringing can be found (e.g. ear wax, ear infection), the ringing can be treated by dealing with this cause. However, the cause cannot always be found or repaired. Where the ringing is due to age-related damage to the ear and the fine hairs and nerves in the ear, there is nothing that can prevent the problem.

There are some things that can reduce the risk of developing tinnitus, but the risk cannot be eliminated altogether. The following things can help reduce the risk of getting tinnitus and help to manage its effects:

- avoiding loud sounds and noises;
- controlling blood pressure;
- avoiding nerve stimulants such as coffee, cola (caffeine) and tobacco;
- reducing anxiety;
- getting sufficient rest; and
- exercising.

Apart from managing tinnitus in these ways, the two main ways of dealing with ringing that will not go away are:

- using medications that can help manage the stress that is associated with tinnitus (Stress seems to make the ringing sounds more noticeable and more irritating.);
- masking the ringing with another sound (see below).

High Blood Pressure

What is High Blood Pressure?

Another name for high blood pressure is hypertension. The heart pumps blood to all parts of the body through the arteries. When blood is pumped through the arteries it will naturally meet some resistance. The amount of re-
sistance can be calculated by measuring the pressure of the blood against the artery walls. If the blood meets too much resistance (e.g. arteries are blocked), the blood is forced harder against the walls of the arteries. It is like turning on a tap to a blocked hose – the pressure builds up in the hose. When the blood is pushing too hard against the artery walls, the person has high blood pressure.

What is the problem with high blood pressure?

**Burst blood vessels:** The high pressure on artery walls can weaken them. This can produce a bulge in the weak spot (called an aneurysm). This can burst and lead to death. A burst blood vessel in the brain is a stroke. A burst blood vessel in the eye can cause blindness.

**Blocked blood vessels:** High blood pressure can cause thickening of the muscle on the artery wall making it less flexible. The resulting damage and blockage to arteries can lead to a number of serious health problems. High blood pressure can lead to damage in the arteries:

- leading to the heart - causing angina and heart attacks;
- leading to the neck – possibly causing a stroke;
- in the brain – possibly causing stroke and vascular dementia;
- in the leg – causing poor circulation and possibly cell death and;
- leading to and in the kidney – causing kidney disease and failure.

Who gets high blood pressure?

The risk of high blood pressure is greater among people whose parents suffered from high blood pressure.

Men develop high blood pressure at a younger age than women. However, from the age of about 60 onwards more women than men develop high blood pressure.

Causes

The exact reasons for high blood pressure are not clear. However, there are clear factors that place a person at more risk of developing high blood pressure. These are:

- smoking;
- drinking too much alcohol;
- being overweight;
- eating salt regularly; and
- getting too little exercise.

Symptoms

- High blood pressure develops slowly and without outward symptoms. For this reason it is sometimes called the ‘silent killer’.
- Some people with high blood pressure have a lot of headaches.

Testing

The only way to be sure about whether a person has high blood pressure is to test the pressure. This is simple, painless and quick. Regular checking is worthwhile since there are no other ways to be certain whether the ‘silent killer’ is developing.
Healthy Ageing

Prevention and treatment Steps can be taken to reduce the risk of developing high blood pressure, but even these precautions do not get rid of the risk altogether. Once high blood pressure has developed, there is usually no cure. However, its effects can be controlled to stop it getting worse. These steps involve people making changes for the rest of their lives. Medication can also be used.

To reduce salt intake:
- Do not add salt when cooking.
- Use spices rather than salt to add flavour.
- Avoid takeaway foods as these usually have a lot of salt.
- Check the amount of salt in processed foods.
- Avoid MSG.
- Avoid soy sauce;
- Avoid baking powder.

To reduce fat intake:
- Do not fry foods.
- Avoid deep-fried takeaway foods.
- Eat more fruits and vegetables.

Exercise more: The best exercises for people suffering from high blood pressure are those that increase the heartbeat and blood circulation. These exercises include walking, jogging, cycling, and swimming. Muscle-building exercises should be undertaken with care, since they may increase blood pressure.

Medication: Medication is available that can:
- slow the heart down and thus reduce the load on the heart;
- relax the muscle walls of the arteries and thus let the blood get through more easily;
- stop the arteries from narrowing; and
- reduce the amount of fluid in the body, which in turn can reduce blood pressure.

Macular Degeneration

What is macular degeneration? Macular degeneration is an eye disease that damages the part of the eye that enables people to see straight ahead and see fine detail. The main form of this disease is called the 'dry form'. It develops slowly and leads to the loss of central vision, but not to complete blindness. Sufferers can continue to live productive and independent lives.

Who develops macular degeneration?
While macular degeneration can develop among people in their forties, it is more common among those in their fifties or older. The risk of developing the disease grows as people grow older. By the age of 75 about 15% of people have macular degeneration.

Causes
Scientists are not sure what causes macular degeneration. However the risk seems to be linked to:
- family history (Macular degeneration seems to run in families);
- damage caused by the ultraviolet light from the sun;
- high blood pressure (People with high blood pressure are more prone to macular degeneration);
- smoking; and
- poor diet.

Symptoms
The telltale signs of macular degeneration are:
- vision gradually becomes fuzzy;
- straight lines appear wavy;
- some things that are straight ahead cannot be seen; and
- colours seem to fade.

Prevention and treatment Lack of knowledge about what causes macular degeneration has made it difficult to find

- eating less animal fat;
- stopping smoking;
- losing weight;
- eating less sugar; and
- exercising more.

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PRACTICAL TIPS
HIGH BLOOD PRESSURE

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- stopping smoking;
- losing weight;
- eating less sugar; and
- exercising more.
PRACTICAL TIPS
MACULAR DEGENERATION

Some things can be done to decrease the risk of macular degeneration:
- Wear sunglasses that block out ultraviolet light from the sun.
- Wear a wide-brimmed hat when outside to protect the eyes from the sun.
- Use brighter light and magnifying aids to help see fine detail.
- Eat the following foods to increase zinc intake:
  - high-protein foods;
  - beef, pork and lamb, which contain more zinc than fish;
  - the dark meat of chicken, which has more zinc than the light meat;
  - peanuts, peanut butter and legumes;
  - green, leafy vegetables and yellow vegetables such as carrots, sweet potatoes and winter squash.

out how to prevent it. However, there are precautions that should be taken. These include:
- having regular checkups with an eye doctor;
- protecting the eyes from ultraviolet sunlight;
- wearing a hat outside;
- reducing high blood pressure to healthy levels; and
- stopping smoking.

Osteoarthritis

What is osteoarthritis?

There are over 100 types of arthritis. Only the most common form — osteoarthritis — is discussed here (see also rheumatoid arthritis).

Osteoarthritis is a disease that affects the bone joints. It develops over a long period of time and generally keeps getting a little worse. Osteoarthritis can affect any joint in the body, but is more likely to develop in the hands and those joints that carry weight — the knees, back, hips and feet. Joints that have been injured earlier in life are also more likely to develop osteoarthritis.

Who gets osteoarthritis?

People can get osteoarthritis from about age 45 onwards but it is much more common in people aged over 65. In some countries, about half of all people aged over 65 have osteoarthritis to some extent. Women are more likely than men to develop the disease. Overweight people are more at risk of osteoarthritis — especially in those joints that have to carry the extra weight.

Causes

Scientists are not sure what causes osteoarthritis. However, they no longer think that it is just a natural part of ageing caused by wear and tear.

Osteoarthritis is linked to the breakdown of cartilage in the joints. Cartilage is a flexible, tough cushion between the bones in the joints that stop the bones grinding together when a person moves. Cartilage breaks down naturally and regrows over time. In people with osteoarthritis the cartilage breaks down faster than it regrows, which eventually leaves little or no cartilage to cushion the movement between the bones. Scientists do not know why this happens.

Symptoms

Osteoarthritis will normally begin with pain in just one joint, but may then develop in others. The pain can vary from mild to severe. Other signs of osteoarthritis are:
- swelling and stiffness in a joint, particularly after using it;
- bony lumps in the fingers;
- joints becoming less flexible and painful when used;
- sore joints when the weather changes; and
- redness or warmth in a joint.

**Fingers:** Bony knobs develop on the top part of the finger. Early on these are painful. After a couple of years the pain goes, but so does the flexibility in the fingers.

**Back:** The cartilage disks between the bones in the back deteriorate and pain and stiffness develop.

**Weight-bearing joints:** Knees, hips and feet bear a person’s weight. In overweight people there is extra strain on these joints and this adds to the stress on the cartilage. This results in pain and swelling in these joints — especially the knees.
Prevention and treatment
A number of steps can be taken to reduce the chance of developing osteoarthritis. These include:

- keeping to the correct weight;
- avoiding repetitive joint use;
- strengthening the muscles around the joint with weight exercises;
- trying to avoid injuring the joint;
- exercising joints to keep them flexible.

If osteoarthritis develops, exercise, medication and surgery can be used to try to manage the pain and the limits it creates.

**Exercise:** Apart from making the osteoarthritis sufferer feel better overall, daily exercise that gets the joints moving and strengthens the surrounding muscles can help reduce pain and stiffness. However, such exercise must be balanced with rest.

**Hot and cold baths,** or treating a sore joint with a hot or cold pack, can reduce pain and swelling.

**Losing weight** can take some of the strain off the affected joints.

**Medicines** can be used to control the pain and reduce inflammation in the joints.

**Surgery** is sometimes the only solution for disabling joint pain.

**Osteoporosis**

What is osteoporosis?
Osteoporosis is a bone disease that makes bones very likely to break easily. The bones of a person with osteoporosis become porous, thin and weak. Even very mild stress can cause the bones to snap. The bones that are most in danger of breaking are those in the hip, back and wrist. For a person with osteoporosis, any fall can be very damaging.

Who is prone to osteoporosis?

- Women are much more likely than men to develop osteoporosis. About half of women aged over 50 have a bone that breaks because of osteoporosis, compared to about 12% of men over 50.
- Caucasian and Asian women are twice as likely to develop osteoporosis than African-American women.
- Osteoporosis runs in families, but whether or not a family member develops osteoporosis will depend partly on their lifestyle and what steps they have taken to stop it developing (see below).
- People with small, slender bones are at greater risk of developing osteoporosis.

**Causes**
Bone tissue is constantly breaking down and rebuilding itself. About every three months, old bone tissue is replaced by new tissue. Up to the age of about 30, the body produces new bone tissue faster than the old tissue dies, so bones become denser and stronger. Childhood and...
PRACTICAL TIPS
OSTEOPOROSIS

These tips are designed to help avoid developing osteoporosis. The earlier in life these steps are taken the better. However, it is never too late to start.

Diet: To improve bone mass:
- Eat foods that are high in calcium (e.g. low-fat dairy products, green leafy vegetables such as broccoli).
- Drink milk and orange juice for calcium.
- Use soy products (milk, soy nuts, tofu) which seem to make up for the loss of oestrogen in women after menopause.
- Eat cereals, as these can provide calcium and vitamin D.
- Use calcium and vitamin D supplements.
- Take care not to eat large amounts of meat as this reduces the body’s ability to absorb calcium from food.

Exercise: To improve bone strength and density:
- Engage in weight-bearing exercises such as walking, running, dancing or playing tennis. As people grow older, walking may be best, as it avoids jarring on what may be weakened bones. However, some people say that some jarring is best for building bone strength.
- Do back-strengthening exercises to improve back muscles and improve posture. Poor posture can increase the pressure on bones in the back and increase the risk of greater damage.
- Use strengthening exercises to strengthen the bones and muscles in the arms and upper back.

Avoid exercises that include a risk of falling (e.g. cycling, skiing).

Other: Other ways of reducing the risk of developing osteoporosis include:
- Avoid too much alcohol (no more than two drinks a day).
- Do not smoke, since smoking reduces oestrogen production and the body’s ability to absorb calcium.
- Get out in the direct sun for 10 to 15 minutes every day. This helps the body manufacture enough vitamin D.

If osteoporosis has already developed:
As well as the tips above, the following may help osteoporosis sufferers manage the disease and maintain their independence.

Maintain good posture:
- Keeping the head high, chin in, shoulders back and the lower spine arched reduces the stress on the spine.
- When sitting, a small cushion in the small of the back will help support the back and reduce pressure on the spine, as well as helping maintain good posture.
- When reading, care should be taken to avoid hunching the back.
- When lifting, bending at the knees rather than at the waist will help reduce strain on bones in the back. Lifting is best achieved by straightening the legs and keeping the upper back straight.

Prevent falls: Since falls can be very dangerous for the osteoporosis sufferer it is important to prevent them. The risk of falling can be reduced by the following:
- Wear low-heeled shoes with non-slip soles.
- Make sure the house is uncluttered and free of small objects on which to trip.
- Remove slippery floor rugs.
- Use handrails in difficult places where there is a danger of falling.
- Go up and down steps carefully, one step at a time and using the handrails.
- Avoid carrying large loads and avoid having both hands full when walking.
- Make sure that the house is well lit.
the teenage years are particularly important times for building up bones. From the mid-thirties this reverses – bone tissue dies a little more quickly than new bone tissue develops. Among women, the rate of bone loss speeds up to about 3% to 5% each year for a number of years after menopause, before slowing down to about 1% per year. At around 60, this rate of loss slows but does not stop. Older women may lose 35%-50% of their bone mass, and men 20%-35%.

If people can grow a lot of bone before the age of 30, they have an advantage, because they will have more in store for later life. If they can reduce the rate at which they lose bone density, they will reduce the risk of developing osteoporosis. Fortunately there are things that can be done to both grow bone more quickly when young and to slow the rate of bone tissue loss when older.

Exercise, calcium and vitamin D all play an important part in the growth of bones. The less calcium, vitamin D and exercise a person has, the less bone tissue will be grown and the faster it will decline with ageing.

Hormones also play an important role in the loss of bone strength. This is why women have a higher risk of developing osteoporosis. After menopause, women produce less of the hormone oestrogen, and this leads to an acceleration of bone tissue loss.

Other factors can also contribute to osteoporosis. These include:

- smoking;
- drinking too much alcohol, which stops the body absorbing calcium;
- taking long-term asthma medications;
- taking medications used for thyroid disease;
- rheumatoid arthritis; and
- kidney disease.

Symptoms
Osteoporosis may go unnoticed until a bone breaks very easily. However, the following symptoms may be evident:

- back pain;
- neck pain;
- stooping;
- shrinking. Low bone density means that bones will compress and the person will become shorter. A person who shrinks by one inch or more may have osteoporosis.

Prevention and treatment
One way of reducing the chances of developing osteoporosis is to build up as much bone tissue as possible before the age of 30, so that there is more bone tissue in reserve for later in life. This can be done by getting plenty of exercise that puts weight on the bones (e.g. walking, running, dancing, tennis), having foods and drinks that are rich in calcium, and getting plenty of vitamin D (sunlight).

The rate at which bone tissue is lost can be slowed down after the mid-thirties by the same means – exercise, calcium and vitamin D.

For women, the decline in oestrogen after menopause accelerates the rate at which bone tissue declines. One way to reduce the rate of bone tissue loss is to reduce the effect of oestrogen loss at this point by using oestrogen replacements or increasing the amount of bone-building exercise and calcium. Other medications are also produced to increase bone density.

Parkinson’s Disease
What is Parkinson’s disease?
Parkinson’s disease is a disease that affects the part of the brain that controls movement. When Parkinson’s disease develops, the brain cells fail to produce enough of a chemical called dopamine. The lack of dopamine causes nerve cells in part of the brain to ‘fire’ uncontrollably. This results in loss of control over body movements. Parkinson’s disease lasts for a long time and gets progressively more severe as less and less dopamine is produced by the brain. Although there are treatments that can control some of the symptoms for a time, there is no cure.

Who suffers from Parkinson’s disease?
The disease has been around for thousands of years but was named in 1817 by an English doctor called James Parkinson. Men contract Parkinson’s disease a little more often than women. About 90% of sufferers are 60 or older. The chances of contracting Parkinson’s disease increase when people reach their seventies and eighties. Parkinson’s disease is found throughout the world in all social classes and ethnic groups.
Causes
The direct cause of the main symptom of Parkinson’s disease is a lack of dopamine production in the brain. There have been many theories about why some people stop producing dopamine. Until recently it was widely thought that environmental factors caused the loss of dopamine-producing brain cells. However, the most recent research indicates that genetic factors are important in making some people more subject to Parkinson’s disease.

Symptoms
The symptoms and progress of Parkinson’s disease can vary, but the following four symptoms are the most common.

Tremor: This is possibly the first sign that the person developing Parkinson’s disease will experience. A tremor in the hand is most common. This will probably first be experienced when resting and will, at first, probably only affect one side of the body.

Slow movements: Body movements unpredictably slow down (bradykinesia) or some limbs will simply not move at all (akinesia). Parkinson’s disease sufferers can be doing something one moment and then suddenly, and without warning, find that their bodies will not do what they want them to. When these attacks occur, tasks that could normally be done in minutes (e.g. washing, dressing) may take hours.

Rigidity: Whenever a person makes any movement, two sets of muscles are involved. One muscle becomes active while an opposing muscle relaxes. This combination of the two muscles gives the ability to make smooth and controlled movements. When a person has Parkinson’s disease, the messages from the brain fail to coordinate the movements of both sets of muscles. Muscles that should relax remain rigid. If someone with the disease tries to move, say, his arm or leg, it will move in a jerky, ratchet-like fashion rather than smoothly.

Posture, balance and walking: The lack of muscle control affects balance. This in turn may cause the Parkinson’s disease sufferer to stoop or to lean backwards, which, in turn, can increase the chances of falling. Some people with Parkinson’s disease move with small, quick, shuffling steps as though they are trying to avoid falling.

As well as these ‘normal’ symptoms other things may happen.

Depression: Depression accompanies many diseases that last a long time and steadily get worse. Depression may even develop before the other symptoms of Parkinson’s disease. Some of the medications for Parkinson’s disease may produce depression, but antidepressant medication can control these feelings.

Emotional and memory difficulties: People suffering from Parkinson’s disease may stop wanting to go out and meet other people or participate in social situations. This may be because they are worried about how they will manage or because they feel embarrassed about not being able to control their movements. As Parkinson’s disease develops, a person’s memory may begin to fail and thinking may slow. However, reasoning abilities should remain intact.

Speech: There is a 50/50 chance of Parkinson’s disease sufferers developing changes to their speech. It is common for people with Parkinson’s disease to speak very softly, making it difficult to hear. Speech can become slurred or very fast, or may become very flat or expressionless.

Urinary and bowel problems: Because muscles do not always respond as they should, urinary difficulties can develop. People developing Parkinson’s disease can find that they cannot control when they urinate (incontinence) or that they cannot urinate when they want. Equally, Parkinson’s disease sufferers may become constipated as their intestinal muscles work too slowly.

Chewing and swallowing: These two activities involve muscle control and may cause problems – especially in the more advanced stages of Parkinson’s disease. Swallowing involves automatic muscle activity but, if the muscles do not behave as they are meant to, swallowing may become difficult or impossible.

Treatment
Parkinson’s disease cannot be cured and will progressively become more severe. People with Parkinson’s disease may only be mildly affected for the first few years and require no treatment in this time. However, the disease is progressive and the symptoms will become more severe. Treatment or management will be required eventually.
PRACTICAL TIPS
PARKINSON’S DISEASE

There are no magic solutions to Parkinson’s disease. The challenge for people with Parkinson’s disease is to manage their symptoms as well as they can.

**Diet:**
- There is no evidence that diet will do anything to help with Parkinson’s disease. Nevertheless, a healthy diet can help a person feel better in other ways and this can help in coping with some of the frustration and other feelings that are experienced with Parkinson’s disease.
- Because swallowing can be slow and food moves slowly through the intestine, it is best to have only a small amount of food at a time.
- Drinking plenty of water can help. As people get older their sense of thirst may not always be a reliable guide as to when to drink. Furthermore, Parkinson’s disease drugs can dry a person out. Unless water is deliberately drunk frequently, the person with Parkinson’s disease risks becoming dehydrated.

**Memory loss:**  
See Alzheimer’s disease

**Incontinence:**  
See Urinary incontinence

**Avoiding falls** (also see Falls): The following can be done to reduce the risk of falls:
- Make sure that the house is uncluttered and the floor is clear of small objects and loose rugs that could cause tripping.
- Install rails in parts of the house where falls are more likely.
- Install rails to help get up and down and out of bed and chairs or off toilets.
- Stand with the feet apart as this reduces the danger of falling.

**Dressing:**  
Dressing can be difficult because it requires a lot of movement, and bending and stiffness can make this more difficult. Dressing can be made more manageable by doing the following:
- Wear loose fitting clothes or clothes with stretchy material.
- Avoid fasteners (buttons, zips, etc.). If fasteners are required, chunky zips, rings on zipper tabs and Velcro can help.
- Wear slip-on shoes and use a long-handled shoe-horn to get shoes on without bending.
- Place clothes in the order in which they are to be put on.
- Take plenty of time to dress.

**Kitchen:**  
Do the following to make kitchen tasks more manageable:
- Keep commonly used things within easy reach.
- Use flexible straws to help drink without spilling.
- Place non-slip materials under plates to stop slipping.
- Use spoons to help with eating.

**Walking:**  
Since walking becomes more difficult as Parkinson’s disease develops, it can be helpful to do the following:
- Use a cane to help avoid falling or tripping.
- Use other walking aids when walking with a cane becomes too difficult.
- Install handrails on stairs or steps.
- Go up and down steps slowly, taking only one step at a time.
- Avoid carrying things in both hands while walking, as this makes it harder to remain balanced.
- Swing both arms freely but gently when walking. This improves balance and the rhythm helps reduce tiredness from walking.

**Speech:**

*Soft voice:* To reduce the difficulties of the very soft voice that often accompanies Parkinson’s disease:
- Take plenty of breaths when talking.
- Take a new breath for each word or phrase.
- ‘Push’ words out.

*Slurred speech:* To reduce slurring of speech:
- Concentrate on each word and be very deliberate with the formation of each word.
- Be conscious of the lips and tongue.
- Exaggerate speech movements of the tongue and lips.
- Use short sentences.

*Rapid speech:* To reduce the tendency to rapid speech:
- Be very deliberate about pronouncing each word.
- Try to speak in a rhythm with a word or syllable for each beat.

**Swallowing:**  
The changes in the muscles that affect speech also affect eating and swallowing. Common eating and swallowing problems can be greatly reduced by changing what is eaten and how it is eaten.

*How food is eaten:* To assist swallowing:
- Sit upright.

Continued next page
**Medicines:** Since Parkinson’s disease symptoms are due to the failure of the brain to produce dopamine, doctors prescribe a drug called levodopa. This helps with jerky movements and rigidity, but will not stop or slow the progress of the disease. Levodopa works by stimulating dopamine production in the remaining healthy, dopamine-producing cells but, since the drug does not stop the remaining healthy dopamine-producing cells from dying, its effect declines over time.

**Exercise:** Since muscle movements are affected by Parkinson’s disease, exercises may help to strengthen underused muscles. Exercises can also improve balance and help with an awkward walking gait. Special exercises can help with any difficulties speaking and swallowing.

**Prostate Diseases**

**What are the main prostate diseases?**
The prostate is a male organ about the size of a walnut. It is located just below the bladder and surrounds the tube from the bladder to the penis. The prostate produces fluid for semen.

Men develop two main prostate diseases:

- **Prostate cancer:** This is normally a slow growing cancer and it may be 20 years between the time when a cancerous cell is present and the symptoms of prostate cancer develop. Many men who develop prostate cancer do not die of the disease.

- **Enlarged prostate:** (called benign prostatic hyperplasia, or BPH). The prostate gland begins to grow in all men from about the age of 40 onwards. It grows more quickly in some men than in others. Where it grows relatively quickly it leads to the symptoms of an enlarged prostate. It is a very common problem and is neither cancerous nor fatal.

**Who develops prostate diseases?**

**Prostate cancer:** The older a man is the more likely he is to have some signs of prostate cancer. By the age of 75 years, 50%–75% of men have cancerous prostate cells. However, most of these cancerous cells do not develop into active, growing cancers with symptoms. About 15% of men develop prostate cancer, although this varies between countries and races. Prostate cancer tends to run in families and is less common in countries that have low-fat diets.

**Enlarged prostate:** Enlarged prostates become more common after the age of 40. Approximately 50% of all males aged 50-60 and 90% of those aged 80 or more have this disease to some extent.

**Symptoms**

**Prostate cancer:** There are no symptoms in the early stages.
Enlarged prostate: The enlarged prostate presses on the bladder and the tube from the bladder to the penis. Only 30% of men suffer the symptoms of an enlarged prostate which are:

- pain in the groin or lower back;
- a weak urinary stream;
- difficulty starting urination;
- frequent urination;
- urgency (difficulty postponing urination);
- awakening frequently at night to urinate;
- interruption of the stream (stopping and starting);
- pain or burning on urination.

Prevention and treatment
Prostate cancer: Only about 50% of the men who develop prostate cancer develop significant symptoms (about 8% of men) and only about 3% die of the disease.

Since prostate cancer is much more common among people with high-fat diets, it may help to have a low-fat diet. However, there is no evidence that changing from a high-fat to a low-fat diet makes any difference.

Where the cancer is not developing nothing is done. Where the cancer is developing, the decision to treat the cancer with surgery, radiotherapy or chemotherapy will depend on how quickly the cancer is growing and the age of the person.

Enlarged prostate: There are three main ways of dealing with an enlarged prostate.

- Wait: Frequently the best thing to do is simply wait to see whether the symptoms get worse. Often they do not get worse and the disease is managed by working out ways of dealing with the symptoms.
- Medication: Medications are available to relax the muscles in the bladder. This can help with urination. Medications are also available that can shrink the size of the enlarged prostate. A herbal remedy based on saw palmetto berries has been shown to be reasonably effective.
- Surgery: Where an enlarged prostate causes significant problems that cannot be managed by other means, a variety of surgical methods can be used to improve urine flow.

Rheumatoid Arthritis

What is rheumatoid arthritis?
Rheumatoid arthritis is one of many different types of arthritis and is the second most common type after osteoarthritis. It can affect any joint, with wrists, ankles, hands and feet being the most often affected. However, rheumatoid arthritis can also affect the elbows, shoulders, hips, knees, neck and jaw.

Affected joints ache and throb and make it very difficult to perform even simple tasks. The signs of rheumatoid arthritis can come and go over time.

When suffering from rheumatoid arthritis the soft tissue in the joints becomes inflamed. Over time this can damage cartilage, bone and muscles at the joint, and may even destroy the joint.

Who gets rheumatoid arthritis?
Women are three times more likely than men to develop rheumatoid arthritis.

The disease seems to run in families. However, a family history does not mean that people will certainly develop rheumatoid arthritis – it just means that they are at greater risk than other people.

Rheumatoid arthritis usually develops in middle age before the age of 50. However, both children and those older than 50 can develop the disease. Attacks become more frequent as people grow older.
Causes
Rheumatoid arthritis involves an inflammation in the bone joints. Scientists do not know what causes this inflammation, but some believe that it may be started by a virus or bacteria.

Symptoms
The typical symptoms of rheumatoid arthritis are:
- pain and swelling in the smaller joints of the hands and feet;
- aching or stiffness in the joints and muscles, especially after sleep or resting;
- restricted movement in the affected joints;
- loss of strength in muscles attached to the affected joints;
- tiredness – especially when rheumatoid arthritis is most active; and
- deformity of the joints as time goes on.

Prevention and treatment
There is no cure for rheumatoid arthritis and no known way of preventing people from developing it. The only thing sufferers can do is to manage the disease as well as they can. There are a number of ways of doing this.

**Exercise:** Exercise can help keep muscles strong and maintain movement and flexibility in the joints. It also helps control weight, helps with sleep and can make the sufferer feel better overall. Gentle exercises, such as walking or exercising in water, are useful. It is important to undertake exercises that involve a slow, steady rhythm, rather than jerking or bouncing. The rheumatoid arthritis sufferer should take care not to exercise the joints when they are especially tender or inflamed. When the joints are at their worst, rest is best. (Also see exercise tips for osteoarthritis.)

**Weight control:** Too much weight stresses the joints. This can add to the pain and the damage to joints that are already under stress from rheumatoid arthritis.

**Diet:** While a healthy diet can make a person with rheumatoid arthritis feel better and can help control weight, there is no special diet that helps control joint inflammation.

**Heat and cold:** A hot shower or bath can help ease the pain in joints and muscles and increase the blood flow to affected parts of the body. Heat packs on the affected parts of the body can do the same thing. Cold packs (a bag of ice wrapped in cloth) can help dull pain.

**Relaxation for pain management:**
Relaxation methods can help control the pain from rheumatoid arthritis. The limitations and pain caused by the disease can also result in emotional stress and depression. Relaxation and stress management methods can help to manage these feelings better.

**Joint care:** Sometimes, immobilizing a joint for a short while to stop any movement (especially hands and wrists) can help when a rheumatoid arthritis attack is at its worst. Other devices, such as grab-bars to help sufferers get out of chairs or out of bed, can help put less strain on the joints.
Medication: A variety of medications are used to control arthritic pain and to control and reduce inflammation in the joints. However, these medications do not cure rheumatoid arthritis.

Surgery: Surgery may be used to replace badly damaged and painful joints and to repair damaged muscles around affected joints.

Stroke

What is a stroke?
A stroke is a brain attack that results in the death of part of the brain because the blood supply to that part of the brain is interrupted. Lack of blood means that the brain cells lack the oxygen and nutrients they require to stay alive.

There are two different types of stroke:

- **Blockage of blood vessels caused by a blood clot in the brain.** This is called an ischemic stroke and is the type that occurs in about 80% of people who have a stroke. The blockage can be due to the build up of fatty deposits in the blood vessels in the brain or to a clot forming elsewhere in the body and travelling to the brain.

- **Bursting of blood vessels** so that the blood bleeds into the brain rather than getting to the parts it is meant to reach. This is called a haemorrhagic stroke.

Who has strokes?
People of any age can have a stroke. However, the risk increases the older a person becomes. Every 10 years of life from age 55 onwards doubles the risk of a stroke, and about 65% of people who have strokes are at least 65 years old.

Men at all ages are more likely than women to experience a stroke, but women are more likely to die from a stroke. The risk of stroke differs in different racial groups. In America, black men are more at risk than white men. Chinese, Korean and Japanese people are more at risk than those from countries such as Australia or America.

A person with high cholesterol, diabetes, high blood pressure or heart disease is much more likely to have a stroke. Those who smoke and drink too much alcohol increase their risk even further.

Causes

**Blocked blood vessels:** High blood pressure and fatty deposits in the blood vessel walls (caused by cholesterol) increase the risk of blockages. Fatty deposits (plaques) build up on the lining of the blood vessels. These can break open inside the blood vessel and blood can clot around these areas. Once formed, this blood clot can break off and travel up the artery and lodge in the brain, where it blocks off any blood flow. The result is that either the blood will not get through or the blood vessel will break. When this happens a brain attack (a stroke) results.

**Burst blood vessels:** Blood vessels will burst in the brain for one of two reasons:
- the blood vessel wall is thin and weak; or
- the vessel has lost its elasticity and become hard and brittle and is, therefore, more likely to break than stretch when placed under pressure. High blood pressure is the most likely reason for blood vessels becoming hardened and brittle (see high blood pressure).

**Family history:** The chances of stroke increase where there is a family history of stroke.

Symptoms

The symptoms of a stroke appear suddenly and will vary depending on the part of the brain that is damaged. The stroke victim may die suddenly or may experience other symptoms. Common symptoms include sudden:

- paralysis, numbness or weakness of the face, arm or leg on one side of the body;
- trouble seeing in one or both eyes;
- confusion and mental damage;
- trouble speaking or understanding other people;
- loss of balance or coordination and dizziness;
- severe headache;
- depression and difficulty controlling emotions.

Prevention and treatment

While nothing can be done about family history, there are many things that can reduce the risk of suffering a stroke.

**Lifestyle changes:** The risk of a stroke can be reduced considerably by several lifestyle
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changes. The earlier in life these changes are made, the more the risk of a stroke is reduced. The four main lifestyle changes that reduce the risk of a stroke are:

- not smoking;
- eating food with less fat and cholesterol;
- losing weight; and
- exercising more.

**Medication:** Medication can reduce the risk of a stroke by:

- reducing blood pressure;
- thinning the blood so that it is less likely to clot.

**Therapy:** Once a person has had a stroke, the main task is to avoid further strokes. The tips below can help avoid a second stroke. However, these lifestyle changes will not undo the damage done by the first stroke.

The three most common forms of therapy after a stroke are:

- **Physiotherapy:** This is designed to help the stroke victim relearn how to use parts of the body that were affected by the stroke.
- **Occupational therapy:** this helps the stroke victim learn new ways of doing everyday activities, such as walking, dressing, cooking, swallowing and using the toilet, where the stroke has made these tasks difficult.
- **Speech therapy:** if the stroke has damaged speech, this form of therapy can help the victim to regain some speech.

**Urinary Incontinence**

What is urinary incontinence?

Urinary incontinence is the inability to control urination. This means that people suffering from urinary incontinence may urinate in their clothes, bed or in other awkward and embarrassing situations.

There are four main types of incontinence:

**Stress incontinence:** This is the most common type and results in urine leaking when exercising, lifting heavy objects, laughing, coughing or sneezing. It results from putting pressure on the bladder and/or weakening of the muscles that close off the urinary tract. There is a very good chance of being able to cure stress incontinence.
Urge incontinence: This occurs when a person cannot ‘hold on’ long enough to reach the toilet. The urge to urinate occurs suddenly and is very strong. This type of incontinence is often linked to other diseases such as Parkinson’s disease, stroke, diabetes and dementia. It may be a warning sign of bladder cancer and in men may be due to an enlarged prostate.

Overflow incontinence: This occurs when small amounts of urine leak from a full bladder.

Functional incontinence: This occurs due to difficulty reaching a toilet because of difficulties getting around (e.g. because of arthritis, Parkinson’s disease, etc.), rather than because of poor bladder control.

Who gets urinary incontinence?
Although incontinence can occur among younger people, it mainly occurs among older people. About 10% of people over 65 have some problems.

Causes
Incontinence is not due to ageing. Incontinence is normally a side-effect of other disorders. It can be due to:
- a side-effect of medication;
- nerve damage that affects bladder control (from stroke or surgery);
- a blocked urinary passage (from prostate disease);
- weak bladder and pelvic floor muscles (can be damaged by childbirth);
- constipation;
- infections;
- inability to move quickly because of the effects of stroke, Parkinson’s disease, arthritis, etc.;
- confusion from dementia;
- muscle weakness following surgery.

Treatment

Cures:
- Exercises can help strengthen the muscles around the bladder to prevent leakage.
- Surgery can be used to clear problems caused by blockages or to lift the bladder.
- Medication can be used to control bladder contractions or to relax the bladder.

Management:
- Absorbent underclothes can help with managing leakage.
- Drainage bags can be fitted.
- Surgical devices can be fitted to prevent urine escaping.

Vascular Dementia

What is vascular dementia?
There are many forms of dementia. This particular form is brought about by damage to the small blood vessels in the brain. Where these become blocked or burst they can starve parts of the brain of blood, which damages those parts and results in a small stroke. Vascular dementia, also known as multi-infarct dementia (MID), is the result of a series of these small strokes. Symptoms will vary depending on the part of the brain that is affected.

Who gets vascular dementia?
About 20% of people with dementia suffer from vascular dementia. It normally occurs in people aged between 60 and 75, and among men a little more often than women.

Causes
People are more likely to experience vascular dementia if they have high blood pressure and/or hardening of the arteries. High blood pressure causes arteries to harden and lose their elasticity, making them more liable to block when small blood clots enter.
Factors that cause high blood pressure and narrowing and hardening of the arteries all increase the risk of vascular dementia. The best way to avoid vascular dementia is, therefore, to steer clear of the risk factors of these conditions. This means controlling weight, reducing salt in the diet, getting sufficient exercise and stopping smoking. Damage to the blood vessels in the brain can be caused by any of the general factors that cause blood vessel damage in other parts of the body. These factors are:
- high levels of LDL cholesterol in the blood;
- high blood pressure;
- diabetes;
- smoking;
- family history of heart and stroke problems.

Symptoms
A person who develops vascular dementia probably will not notice much change at first, since each mini-stroke has only a small effect. The symptoms may develop slowly as the effects of each mini-stroke build up. Often vascular dementia progresses in steps. A person may remain quite stable for a while and then suddenly develop new symptoms because of another mini-stroke.

The symptoms will depend somewhat on where in the brain these mini-strokes occur. However, at least some of the following symptoms are likely:
- difficulty in remembering things – especially recent events;
- appearing confused to other people and finding that it is harder to follow what they are saying (People with vascular dementia may find it difficult to make themselves understood.);
- losing interest in doing anything much, including things that were once enjoyed;
- beginning to see or hear things that are not real (hallucinations) or beginning to believe things very strongly although they are not true (delusions);
- becoming depressed or having wild mood.

PRACTICAL TIPS
VASCULAR DEMENTIA

The following tips may help in dealing with some aspects of vascular dementia:

Legal: If vascular dementia appears to be developing, it is important for the sufferer to ensure that legal and financial matters are sorted out. It can save a great deal of difficulty later on if arrangements have been made to enable a trusted person to make legal, medical and financial decisions on behalf of the person who has vascular dementia.

Confusion: A person suffering from vascular dementia may do the following to reduce the chance of getting suddenly confused:
- Keep familiar things nearby.
- Leave a light on at night in case you wake up and become confused and disoriented.
- Write down the things to do for the day.
- Have an established routine for each day.
- Take time doing things.
- Trying to relax to avoid getting frustrated when familiar tasks are difficult.
- Ask for help when it is needed.

To reduce the problems of confusion when out of the home, the person suffering from vascular dementia can:
- Write down the purpose of the trip.
- Write down destinations and tasks.
- Ask for help in the event of becoming confused.
- Always carry some identification with phone numbers to contact in case of confusion or becoming lost.

Memory: In the earlier phases, people developing vascular dementia can do a number of things to help with the forgetfulness they are experiencing.
- Use a daily diary as a reminder for appointments and daily tasks.
- Keep a notebook all the time so that tasks can be written down.
- Keep a book with a list of people’s names, their phone numbers and memory joggers.
- Try to establish a routine that other people know about so they can help remind you or know where to locate you.
- Use an alarm clock as a reminder
- Have a friend call to remind you of appointments, mealtimes, etc.
- Label cupboards and drawers with words or pictures that describe their contents.
- Organize things in the home so that there is a set and obvious place for important things.
swings – laughing one moment and crying the next for no obvious reason (Vascular dementia sufferers may find themselves becoming very agitated);

- having epileptic fits or finding that part of the body is paralysed.

**Prevention and treatment**

The brain damage caused by vascular dementia cannot be undone. However, since vascular dementia is caused by blocked or hardened arteries in the brain and by high blood pressure, the risk of further damage can be reduced by lowering blood pressure and stopping further artery damage.

**Minimizing all risk factors:** Since vascular dementia is due to blood vessel damage that can result from a range of causes (high levels of LDL in the blood, high blood pressure, high blood sugars etc), each of these factors needs to be tackled to prevent the risk of vascular dementia.

**Permanent damage:** The brain damage caused by vascular dementia cannot be undone. Once the symptoms of vascular dementia have developed, the future is generally not promising. More often than not the condition will continue to deteriorate and further mini-strokes may follow. It is not uncommon to die from a major stroke, heart disease or pneumonia. The best treatment is prevention.

**Medication:** Low doses of aspirin and other such medications may help prevent further small strokes. Medications can also be given to:

- manage some of the symptoms of vascular dementia (These can control depression, agitation, hallucinations and delusions);
- reduce blood pressure;
- control blood-sugar levels.

**Diet:** Three basic dietary changes can reduce the risk of vascular dementia:

- reducing the amount of salt and MSG in the diet to control blood pressure (see high blood pressure);
- reducing the sugar in the diet to control the risk of diabetes and the resulting damage to blood vessels;
- reducing the amount of animal fat in the diet to reduce the chances of blood vessel blockages.

**Smoking:** Smoking is a major risk factor for any form of stroke.
Helping care for an older person can range from just helping out with a few tasks to full-time care. The experience of caring can vary from being rewarding to being very demanding and distressing and will differ depending on the type of illness the person has, the amount of care required and on how well the carer and the person being cared for get on together.

The tips listed here are general tips. They cannot possibly cover the full range of circumstances in which carers find themselves. However, there are three principles to help guide the way in which carers go about the task of caring. These are:

- Encourage and expect those being cared for to do things for themselves. People being cared for should be encouraged to be as independent as their condition allows.
- Carers must take care of themselves as well as caring for the other person. Unless carers look after themselves they will not be able to care for other people properly.
- Carers do not need to think that they have to do everything by themselves. Carers should try to spread the tasks and use resources provided by other family members, health workers and by other resources in the community.

Caring for Others

- Avoid the person being cared for becoming unnecessarily dependent. Carers should show those they care for how to do things or set up ways so that they can do tasks themselves. This may take longer in the short term but in the longer term it will benefit both the carer and the person in care.
- Try to learn about the illness to know what to expect and understand the symptoms and changes better.
- Learn signs of potential problems.

Safety: If the person being cared for has problems getting around there are a number of things that can help to prevent accidents:

- Install equipment such as rails and ramps and make other home alterations to make the home safer.
- Arrange furniture simply and consistently and keeping the environment uncluttered.
- Remove loose rugs and seal carpet edges that may be safety hazards.
- If the person in care needs to be lifted, the carer needs to learn how to:
  - move and lift a person without hurting him/herself;
  - help people to climb up and go down stairs;
  - push a wheelchair over kerbs and stairs.

Depression: Since depression often occurs alongside other illnesses, carers should be alert for signs of depression in those for whom they are providing care. If the person in care appears to be depressed it is important to:

- Provide support to the depressed person. This can be difficult since the help may be resisted and the person may withdraw. The carer should try to be understanding without being judgmental in feelings or behaviour.
- Keep a sharp eye out for any signs of suicidal intent. Suicide rates among older
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people are high and suicide attempts are frequently successful.

- Avoid trying to push someone from their depression by telling them to ‘snap out of it’ or by being cheerful. Depression is a biological condition.

**Dementia:** The memory loss, confusion and communication difficulties associated with dementia can make this a very demanding condition for the person suffering and for the carer. Some tips that can help are:

- Make sure that there are familiar objects and people around to help reduce confusion about where the demented person is.
- Keeping any schedule of activities simple.
- Help the person in care to keep up daily routines, physical activities and social contacts.
- Keep the person being cared for up-to-date about routine matters such as the time and date, where he/she lives, who is doing what, and what is going on around him/her.
- Control behaviour that becomes too agitated or aggressive. This is necessary for the safety of everyone. While this can be difficult, it may be helpful to encourage and reward appropriate or positive types of behaviour and ignore others.

- Pay attention to the symptoms of depression, hallucination or delusion. These can be treated with medication and this treatment makes a big difference to daily living for everyone.
- Assist with plans and diaries and check and remind about things that need to be done.
- Ensure that the person in care always carries identification, including name and address and an emergency contact number.
- Undertake some modifications to the home and equipment, such as installing automatic cut-offs for hot water jugs and other appliances.

**Parkinson’s disease:** When caring for a person with Parkinson’s disease the following tips may help the carer:

- Avoid rushing the person with Parkinson’s disease. While it may be quicker in the short term for the carer to do the simple tasks for the person with Parkinson’s disease, this can simply create longer-term dependence.
- Be aware that abilities and speed may vary at different times of day, depending on the effects of medication.
- Carers should learn about Parkinson’s disease so that they know what to expect. This can help ease the way as the person in care deteriorates.

**Eyesight problems:** When caring for a person with eyesight problems it is helpful to:

- Leave all items as they were left. If something has to be moved, tell the person where it has been moved to.
- Shut doors completely or leave them fully open. A half-open door is a hazard.
- Replace furniture exactly in the position it was found to avoid accidents and aid mobility. Power points, blinds and lights should also be left in the same position as they were found.

**Managing medication:** If the person in care takes medication, it is important that the carer fully understands what medication is meant to be taken and what it is for and that there is a good system in place for managing medicines. Carers should make sure that they know:
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- the name and purpose of each medication;
- the possible side-effects and what should be done if there are side-effects;
- how long the person in care should be taking the medicine;
- what to do if a dose is missed;
- whether the medicine might interfere with other medication being taken;
- whether anything (e.g. alcohol) should be avoided while using the medication.

**Working with health workers:** Health workers are an important part of the support system for people in care and their carers. Carers and health workers need to work together to ensure the best outcomes. Some tips that can assist the effective partnership of carers and health workers are:

- Know who are the health workers dealing with the person in care.
- Know how to contact the health worker(s) and make sure that they know how to contact the carer.
- Take notes when meeting with health workers. This can avoid forgetting or confusing the advice they offer.
- Keep a diary of the problems or symptoms of the person in care and a list of questions to ask the health worker.
- Ask for any printed material that may be of help.

**Caring for the Carer**

Caring can be both a rewarding and demanding task. As well as looking after the person in their care, carers must look after their own well-being. The demands of caring can build up over time and prevent the carer from providing adequate care. Part of caring for others is for carers to properly care for themselves. Different people will go about this in different ways but the following tips can help.

- Carers should avoid trying to do all the caring themselves. Use should be made of family and friends and any respite services to help ensure that the carer has regular and frequent breaks.

- Although people in care may be unable to leave their homes or find it difficult to move around, carers should ensure that they continue with other activities and maintain a social life.
- Although carers may feel guilty when they leave the house, or enjoy an activity without the person in their care, they should not let these feelings prevent such activities.
- Carers should look after their own health by:
  - getting daily exercise (A brisk walk or exercise to help get rid of stress whilst keeping flexible and fit.);
  - spending time out-of-doors;
  - having a healthy diet and regular meals;
  - relaxing;
  - getting enough rest and sleep (Tiredness can add considerably to the difficulty and stress of caring.).
- If carers find that caring responsibilities are getting them down it can be helpful to confide in someone, rather than just letting the feelings build up.