The Physical Examination

The traditional consultation with a health practitioner follows a sequence of:

• Establishing a data base (The history taking and physical examination)
• Interpretation of the data
• Differential diagnosis
• Further investigations to add to the data
• Final diagnosis
• Management

In the Corporate Wellness or preventative health scenario, the process is different. This is because the goal of the assessment is different. When you visit your family physician, he/she assesses you for a problem or a disease. When you visit a MedicAlliance clinic, we assess your health and your risk factors for disease. It is a subtle but crucial difference. A wellness assessment follows a sequence of:

• Establishing a data base (The history taking and physical examination)
• Further investigations to add to the data
• Interpretation of the data
• Diagnosis and risk assessment
• Risk Management

Your medical history is detailed and mostly covered in your questionnaire. This gives us a valuable insight into your past and present health status and lifestyle and enables the medical team to assess your risk factors for disease in later years.

The physical examination differs from a typical examination in that the aim is not just to find disease, but to assess the health of all your systems, and to document any abnormalities that may compromise your health in any way.

The medical examination follows a top to toe or a system-by-system approach. This ensures all health parameters and systems are examined. Taking your blood pressure and measuring your pulse normally start the cardiovascular examination. This gives the doctor information with regard to your circulation. To further assess your peripheral circulation, all your pulses are palpated and your major arteries are auscultated. This is to ensure there is no narrowing in any of the arteries. The heart itself is then examined for size and enlargement of the chambers, it is then auscultated to assess your hearts rhythm and function of the valves. The chest is examined to assess your respiratory system. Breath sounds, air entry and abnormal sounds are documented and changes may indicate lung disease.

The abdomen is normally examined next. This includes assessing the size of the liver and spleen, bowel sounds and areas of tenderness. Hernias may also be excluded during this part of the examination.

The nervous system examination includes tests to assess your muscular tone and strength. Your sensation and reflexes are also tested. Specific tests are conducted to assess your cranial nerve and cerebellar functions.

The musculoskeletal (Muscle and Bone) system is examined to assess muscle, joint and bone abnormalities such as arthritis and tendinoses. The skin is examined to screen for abnormal moles (naevi) and skin diseases. The skin can be an important indicator of immune function as many of the opportunistic infections affect the skin. In addition, the lymphatic system is checked to exclude signs of underlying infection or disease.

The genital examination is normally the final part of the examination; its depth is dependent upon your age and your risk factors for disease of these systems. Prostate and Breast Cancer are two of the most common cancers in the Western world. Both are treatable successfully with early detection. Thus, although mildly uncomfortable these tests are very important.

After the examination is completed, the physician uses the information gained, together with your medical history and special investigations to complete your health profile. This profile together with any specific problems noted will form the cornerstone of your consultation with the physician and will provide you with a valuable insight into your health and lifestyle practices.
Blood Tests Explained

General
Your blood test results are reported as numerical values with units and a reference range. The reference ranges are those results considered to be normal for an average, healthy population and are age and sex dependent. Your results are reported with a reference range appropriate to your age and sex. Values that are outside of the reference are represented with an asterisk. The fact that a value is outside of the reference range does not necessarily mean that there is anything clinically wrong with you. Many healthy people have values that fall outside of reference ranges without ever having a health problem. You should read the comment in your accompanying letter to determine whether the doctor thinks that your blood test results are significant clinically. The notes below explain, briefly what each of the tests looks at.

Haematology
Haemoglobin – is the oxygen carrying pigment in the blood. Low levels of haemoglobin indicate anaemia.

White Cells (lymphocytes, neutrophils, monocytes, eosinophils, basophils) - these are the immune system cells in the blood. They help to fight infection. Raised levels may indicate viral or bacterial infection. In some cases, stress can reduce levels of lymphocytes and monocytes.

PCV (Packed cell volume), MCV (Mean cell volume), MCH (Mean cell haemoglobin), MCHC (Mean corpuscular haemoglobin concentration), RDW (Red cell distribution width) - these results help to identify the number, size, shape and oxygen carrying capacity of the red blood cells. They help us decide about the cause of anaemia.

Platelets - these cells are involved in blood clotting.

ESR (Erythrocyte sedimentation rate) - a non-specific measurement that can indicate inflammation, infection or involvement in disease. It will never indicate a specific illness but is a useful indicator.

Biochemistry
Urea and Creatinine - the main bi-products of metabolism urea and creatinine are excreted by the kidneys into the urine. Abnormally high levels may indicate problems with the kidneys.

Bilirubin - measures the amount of bile pigment in your blood due to the breakdown of red blood cells by the liver. High levels may indicate some liver or biliary system problems.

Alkaline Phosphatase - this is a liver enzyme. Raised levels can indicate liver disease or in some cases bone disorders.

Aspartate Transferase (AST), Alanine Transferase (ALT) and Gamma GT (GGT) - these are all liver enzymes released into the blood by the normal turnover of liver cells. Increased levels indicate a higher than normal turnover of liver cells. This may be due to hepatitis, excessive alcohol consumption or the actions of some drugs.

Albumin - is manufactured by the liver and circulates as a blood protein indicating the nutritional state of the body and the liver’s ability to make essential substances. Albumin levels are taken into account when calculating the levels of other substances e.g. calcium.

Globulin - blood proteins including antibodies and other immune substances.

Uric Acid - Raised levels of uric acid are present in gout. Eating excessive amounts of shellfish can also increase uric acid levels. Certain drugs and alcohol can affect uric acid metabolism.

Glucose - high glucose levels in the blood may indicate diabetes. Further confirmatory tests would be indicated.

Cholesterol, Triglycerides, HDL (High Density Lipoprotein) Cholesterol, LDL (Low Density Lipoprotein) Cholesterol – lipids that are found in the blood stream. HDL cholesterol is the good cholesterol that transports cholesterol away from the tissue and LDL cholesterol the bad cholesterol that transports cholesterol to the tissue for deposition. Raised lipid levels are one of the risk factors for coronary heart disease.
Tips for a Healthy Lifestyle

1. Include a variety of different foods in your diet.
2. Take regular meals with complex carbohydrate e.g. potatoes, rice, pasta, cous cous, bulgar wheat, wholemeal/granary bread.
3. Increase intake of fibre rich foods such as wholegrain cereals, whole-wheat pasta, legumes and pulses (lentils).
4. Reduce intake of fat of animal origins (saturated fat) to a minimum.
5. Increase the intake and general usage of vegetable fats (i.e. unsaturated fat) via the use of sunflower, rapeseed and olive oil.
6. Avoid fatty foods and use salt in moderation, (i.e. a pinch of salt in cooking and none at the table).
7. Increase consumption of fish especially oily fish to at least 2 - 3 times per week.
8. If you drink, drink sensibly i.e. no more than 14 units for women, and 21 units for men per week - remember red wine is the better choice.
9. Drink plenty of fluid (water is best) up to 2 litres (6 - 8 glasses per day).
10. Take regular exercise, e.g. brisk walking for 20 minutes 3 times per week.
11. Avoid sugary foods and drinks or do not take them too often.
12. Eat the right quantities to be a healthy weight.
13. Avoid or cut down on cigarette smoking.
Coronary Risk Factors

Blood pressure
High blood pressure has been recognised as a contributing factor in increasing the risk of a coronary incident. The general rule is that the lower the blood pressure the less risk of developing heart disease or stroke. Blood pressure can be raised by several medical conditions but also by worry, stress and being overweight. It is recommended that you have your blood pressure checked regularly to ensure that it is within acceptable limits, especially if there is a family history of high blood pressure. You can help maintain healthy blood pressure by ensuring that you are not overweight, keeping your salt intake to a minimum, reducing stress and setting aside relaxation time and by taking regular exercise.

Cholesterol
Increased lipid levels are often implicated in coronary heart disease. Cholesterol is one of those lipids. It is divided into good cholesterol (HDL – high density lipoprotein) and bad cholesterol (LDL – low density lipoprotein). Increased levels of LDL can be a serious risk factor in coronary heart disease. HDL cholesterol is thought to protect the heart. HDL and LDL levels can be influenced by age, gender, genetics but most importantly diet and exercise.

The aim is not just to have a total cholesterol level within normal limits but to make sure that this is composed of the correct ratio of HDL to LDL. There are numerous ways to increase HDL while lowering LDL including reducing dietary levels of saturated fat (found in meat and most dairy produce like milk and hard cheese), and taking regular exercise.

Exercise
Exercise has a positive effect on coronary risk not just for it’s direct benefits, but also because of its effect on the other risk factors. Exercise helps reduce total cholesterol levels while increasing the proportion of HDL levels. Exercise can also help to reduce blood pressure and improve cardiovascular function. Used in conjunction with a healthy and nutritious diet the calorie burning nature of exercise can play a major part in weight control and reduction.

For exercise to be effective it should be taken at least 3 times a week for not less than 20 minutes at a stretch. Brisk walking, swimming and tennis and other aerobic exercise are very good as they strengthen the heart and lungs.

Smoking
Evidence collected from around the world shows that smoking is a major cardiac risk factor as well as the main cause of lung cancer. The message is: BREAK THE HABIT NOW AND STOP SMOKING.

Weight
It is medically important to be at your optimal or ideal weight for your age and sex. Being overweight will ultimately affect your heart and general health. A well planned and balanced diet, with a variety of nourishing foods will provide not only the proteins, carbohydrates and appropriate fats needed but also the essential vitamins, minerals and fibre to help keep you healthy, and assist in maintaining your ideal weight.
A decade ago cholesterol was an unfamiliar term outside of the medical profession. Today, most health conscious people know that a high blood cholesterol level is unhealthy, but as the role of cholesterol is a complex issue, many have questions. The information that follows explains the relationship between cholesterol and health in easily understandable terms, so that you can use the information to help protect your health.

What Is Cholesterol?
Cholesterol, a waxy fat-like chemical, is an essential component of certain hormones, body structures, and digestive acids. The amount of cholesterol required to perform these bodily functions is manufactured internally by the liver.

Saturated fat tends to increase blood cholesterol. Foods high in saturated fat include:

- Fatty Meats
- Whole-Milk products
- Hydrogenated vegetable oil
- Coconut oil
- Palm kernel oil
- Palm oil
- Cocoa
- Butter

They are commonly found in commercial baked goods, processed foods, and non-dairy creamers.

Though products made with such ingredients may be labelled “Cholesterol Free” or “Made With 100 Percent Vegetable Oil,” consumers should be aware that the presence of saturated fat may adversely affect blood cholesterol.

Cholesterol is also found naturally in certain foods such as:

- Red meat (particularly liver and other organ meats).
- Whole-milk products
- Egg yolks

Egg yolks, (the whites are cholesterol-free), pack the highest concentration of cholesterol of any food. The yolk from one Grade A egg contains 71 per cent of a person’s recommended daily cholesterol intake, which is 300 milligrams per day. Some shellfish-lobster, crab and shrimp—are also high in cholesterol; however, they are also very low in saturated fat.

Cholesterol conscious shoppers should read product labels and purchase items that are made with polyunsaturated oil (safflower, sunflower, corn, soybean, and canola) or mono-unsaturated oil (olive, peanut, and canola oils). Both polyunsaturated and mono-unsaturated fats tend to lower blood cholesterol.

Saturated fat should account for not more than 10 per cent of total fat intake. Total fat intake should account for not more than 30 per cent of total caloric intake. Currently, the average person gets 37 per cent of calories from fat, of which 13 per cent are saturated.

Why Do I Need To Be Concerned About Cholesterol?
If the cells are given more cholesterol than they can use, they have no way to get rid of the excess. The unused cholesterol can form deposits in the coronary arteries, restricting blood flow to the heart. This condition, known arteriosclerosis, is the leading cause of coronary heart disease. (Other heart disease risk factors include heredity, diabetes mellitus, male sex, obesity, high blood pressure, cigarette smoking, and sedentary lifestyle.) Reducing a high cholesterol level can reduce the chance of dying of a heart attack or stroke in people who have coronary diseases as well as in individuals who have no evidence of heart disease. Therefore, evidence indicates that monitoring whole cholesterol is in the interest of everyone.

What's The Difference Between “Good” And “Bad” Cholesterol?
These terms are sometimes used to describe high-density lipoprotein (HDL) and low-density lipoprotein (LDL), which are types of protein molecules that carry cholesterol throughout the body. LDL is called “bad” because it deposits cholesterol in the coronary arteries which causes hardening (hardening of the arteries is called Atherosclerosis) thereby increasing the risk of coronary heart disease. HDL is deemed “good” because it removes cholesterol from blood circulation, actually decreasing the risk. A diet high in saturated fat and cholesterol is believed to reduce the clearance of LDL from the blood, while obesity and excess calories stimulate over production of LDL. The ratio of HDL to total cholesterol is very important.
The ratio should be less than 4. This can be achieved by increasing the level of HDL or lowering the level of LDL. Dietary measures may reduce LDL, however, they may also reduce HDL. In order to prevent this it is important to exercise. Exercise not only reduces the levels of LDL but also increases HDL. The most effective and beneficial way of improving your lipid profile is a combination of exercise and diet.

What Are Triglycerides?
Triglycerides are a type of fat that is transported throughout the body by very low-density lipoproteins (LDL cholesterol), are used by the body as energy. The liver manufactures triglycerides and converts some into cholesterol. Saturated, polyunsaturated, and monounsaturated fats are all types of triglycerides.

How Can Triglycerides Affect Health?
A persistently high concentration of triglycerides in the blood may add to the risk of coronary heart disease, especially if the cholesterol is elevated or other coronary heart disease risk factors are present.

How Are Levels Of Cholesterol And Triglycerides Measured?
Levels are determined by testing a small sample of blood in a laboratory. The analysis can be often done using a small desktop analyser.

Interpretation of Results
In general, 5.0 mmol (millimoles) of cholesterol per litre of blood (mmol/l) or lower is considered a desirable result.

| Total cholesterol | 3.0 - 5.0 mmol/l |
| HDL | 0.8 - 2.2 mmol/l |
| LDL | 3.37 mmol/l or under |
| Triglycerides | 0.2 - 1.7 mmol/l |
| Glucose | 3.3 - 11 mmol/l |
| Ratio T.Chol/HDL | Less than 4 |
Your skin is a vital part of your body. It is also the largest organ in your body and contributes 16% of your total body weight. Your skin has many functions, it protects important organs, helps regulate temperature and assists in prevention of infection, not to mention all of the aesthetic qualities we attribute to it.

Unlike other body organs, the skin is on the front line so to speak. There are no protective covers for the skin and, over a life time, the skin will suffer everyday wear and tear and often more substantial damage.

Age, sun, chemicals and diet all influence the health of our skin. The following information outlines a few helpful hints to maintaining healthy skin.

The Sun
UV A rays go through the skin to the dermal or second layer. Here collagen, which gives your skin toughness and strength, and elastin, which imparts elasticity, can be found. Repeated sun exposure can therefore lead to dry tough and wrinkly skin at an earlier age than we would expect. UVB light can burn our skin. It takes several days for melanin, the pigment in your skin that prevents you from burning to have an effect. It is therefore crucial to gradually build up your exposure to the sun. Avoid the midday sun and wear a good sunscreen suitable to your skin type. Most recent research shows that sun burnt skin, especially in young children, can significantly raise the incidence of skin cancer later in life.

Skin Cancer
The incidence of skin cancer has increased dramatically in recent years. There are two main types of cancer, malignant melanoma and non-melanoma.

Malignant melanoma is rare, but on the increase. The incidence is rising by 7% per year and doubling every decade. It is twice as common in women.

Early malignant melanoma is a curable disease. Non melanoma is much more common, with approximately 30,000 cases occurring each year.

The key to prevention of skin damage and cancer is to look after your skin. If you notice any unusual moles, particularly if they:
- Itch
- Are irregular in shape
- Have a crust or bleed
Show them to your GP.

Use a good skin moisturiser and try and avoid the use of soap if you have a dry sensitive skin. You can buy soap and perfume free skin cleansers from all leading supermarkets.

When using any chemicals at home or at work check the instructions on the label for any skin precautions you should take. For example household bleach is a common skin irritant which can cause contact dermatitis.

To maintain skin health eat a balanced diet with plenty of fresh fruit and vegetables. Drink plenty of water and try not to drink too much tea, coffee or alcohol. Make sure that you have regular exercise, try and avoid lots of stressful situations and take time to relax.
Skin Safety

The Government has set a target to halt the increase of skin cancer cases by the year 2005. Four out of every five cases of skin cancer are preventable.

Skin Cancer

Malignant Melanoma: this is the most dangerous form of skin cancer. It can spread rapidly, but if caught and treated early the chances of survival are good.
- There are over 4,000 new cases every year.
- The number of new cases has more than doubled since 1974.
- There are over 1,500 deaths every year from malignant melanoma.
- It is about 60% more common in women than men.
- Skin cancer affects young adults as well as older people.

Melanomas are most common among sun-sensitive people who spend most of the year indoors and then take a fortnight’s holiday in the sun.

Non-melanoma: this is a far more common form of skin cancer than melanoma, and generally less dangerous and nearly always curable.
- There are around 36,000 new cases every year.
- The number of new cases has almost doubled since 1974.
- There are almost 500 deaths every year.
- It affects men and women equally.
- It is usually found in the over 60s.

Non-melanomas are thought to be related to overall lifetime exposure to the sun, which is why they occur mainly in elderly people.

Don’t have too much of a good thing. The sun isn’t to be feared, just respected. Be kind to your skin, when you are at home or abroad. Protect young children, they have especially vulnerable skin and should always be protected by using shade or covering up and applying a high factor sunscreen on bare skin. Babies should never be left in direct sunlight. Avoid the midday sun, if you do have to go out, cover up with loose-fitting, tightly-woven clothing and a wide-brimmed hat.

Looking out for Symptoms

It is not unusual to have some moles or freckles, but watch out for any moles that change shape or colour, become bigger, itchy or inflamed, that weep or bleed. These may be symptoms of skin cancer and should be checked by your doctor.

Sunrays

Sunlight contains bands of ultraviolet or UV radiation. Scientists believe that two of these bands – UVA and UVB – can damage our skin in slightly different ways. In the short term, UVB causes sunburn, in the long term, it is associated with skin cancer. Both UVA and UVB can cause premature ageing of the skin. The signs of this include wrinkling, sagging, dryness and blemishes.

It used to be thought that UVA was safer than UVB, but it is now believed that both can lead to the development of skin cancer.

Remember the following factors affect the intensity of UV radiation.
- Time of day - the sun’s rays are most intense around midday.
- Time of year – levels of UVB are usually highest during the summer months.
- Latitude – the closer you are to the equator, the stronger the sun’s rays.
- Altitude – the intensity of UV radiation increases the higher you are.
- Weather – UV is at its strongest under a cloudless sky, but remember you can still burn on a cloudy day.

The Ozone Layer

All the evidence suggests that the increase in rates of skin cancer over the past 40 years is due to our sunbathing habits, not to ozone depletion. It is possible that depletion of the ozone layer could produce an increase in the number of those affected by skin cancer, but UV levels are constantly monitored in the UK and there is no sign of any longer term increase yet.

Sun Beds

Sun beds emit mainly UVA and some UVB radiation so excessive use may lead to skin cancer. Skin specialists now recommend not using sun beds to top up a tan. Today’s wide choice of ‘fake tan’ products offer are a much safer alternative to achieving that healthy glow.

Taking Care in the Sun

Burnt skin does not protect against burning in the future and it doesn’t help you tan more quickly, just more painfully. Even if burnt skin heals, some permanent damage may remain. Sunburn, like long-term overexposure, leads to greater risk of skin cancer in later life.
Clothing is the best sunscreen. More tightly-woven cloth is better at blocking the sun’s rays. Don’t forget sunglasses to protect your eyes (preferably labelled with the British Standard BS2724:1987). A wide brimmed hat will help shade your nose and ears, the most common sites for skin cancer.

During the hours around midday the sun is at it’s highest point in the sky. The sun’s rays have least distance to travel through the atmosphere and so it takes the shortest time to burn.

Choosing a Sunscreen

Choose a sunscreen with a Sun Protection Factor (SPF) of 15 or above. Spread it liberally, taking particular care to cover rarely exposed parts of the body. Pay attention to the ears, lips and bald patches.

Remember to reapply sunscreen often, especially after swimming. But don’t rely on a sunscreen alone to protect your skin – you should still limit the length of time you spend in the sun. If your skin is naturally brown or black, you are less at risk than those with lighter skins, but you still might want to choose a sunscreen with a high SPF.

Who is at Risk?

Some people are more at risk of skin cancer than other people. The more sun-sensitive you are, the more protection you need. Also at greater risk of skin cancer are babies and small children, and those who fit any of the following categories:

- Burn easily
- Have had skin cancer in the past
- History of severe sunburn, especially if in childhood
- Have a large number of freckles or moles

Not only sunbathers are at risk. Those who work outdoors or participate in outdoor sports are also at risk.

Experts believe the increase in both types of skin cancer could be reduced if we took more care of our skin.
Alcohol: The Facts

Alcohol is something to be enjoyed and that poses no health risk when consumed in moderation. It is important to know where the benefits end and risks begin. The daily benchmarks for adult men and women are a guide to how much you can drink without putting your health at risk. They apply whether you drink every day, once or twice a week, or occasionally. The benchmarks are not targets to drink up to. There are times and circumstances when it is best not to drink at all. Some individuals may find that even levels under the benchmarks are too much for their own body to metabolise comfortably.

Facts About Alcohol

All alcoholic drinks contain pure alcohol in varying quantities. The strength of alcohol drinks is shown by a number, which may be preceded by the word alcohol or the abbreviated ‘Alc’, followed by % vol. This is known as the alcohol by volume (ABV). Remember, drinks poured at home are often more generous than pub measures so you may underestimate the number of units you drink. Alcohol is absorbed into your bloodstream within a few minutes and is carried to all parts of the body including the brain. The amount of alcohol in your body, your blood alcohol concentration (BAC), depends on many factors including how much you have drunk and your size and weight. If you are smaller and lighter you will have more alcohol per kilo. A full stomach can delay the time for alcohol to be absorbed. Stronger drinks like spirits, and fizzy drinks like champagne or sparkling cider, are absorbed more quickly. It is difficult to know how much alcohol is in your bloodstream at any one time or what effect it will have. The drink-drive limit cannot accurately be converted into a number of units. The only way to be sure that you’re safe is not to drink at all if you are going to drive.

Processing Alcohol

A healthy liver takes about one hour to break down and remove one unit of alcohol. So if you drink two pints of ordinary strength beer or half a bottle of wine (four units) at lunchtime, there will still be alcohol in your bloodstream three hours later. If you drink heavily in the evening, you may still be over the legal drink-driving limit the next morning. Only time can remove alcohol from your bloodstream; black coffee, cold showers and fresh air won’t sober you up.

The Health Benefits

People who regularly drink small amounts of alcohol tend to live longer than people who don’t drink at all. The main reason is that a small amount of alcohol gives protection against coronary heart disease. Alcohol influences the amount of cholesterol carried in the blood stream and also makes it less likely that clots will form. It seems that you cannot build up protection from coronary heart disease when you are young. The protective effect is only significant when people reach a stage of life when they are at risk of coronary heart disease. For men, this is over the age of 40, and for woman it is after the menopause. The major part of the health benefit can be obtained at levels as low as one unit a day, with the maximum advantage lying between one and two units of alcohol a day. No additional benefit comes from drinking more than two units a day.

The Risks

Everyone takes risks at some time or other and we generally weigh up the risks before deciding whether something is worth doing. People sometimes dismiss the idea that they need to think about how much they drink. Regularly drinking too much increases the risk of long-term damage to your health.

Raised blood pressure is a very common condition, especially amongst older people. As blood pressure rises so does the risk of ill health, in particular coronary heart disease and some kinds of stroke. Drinking alcohol raises blood pressure. In general, the more you drink, the more your blood pressure will go up. Regularly drinking more than the daily benchmarks also increases your risk of liver damage, cirrhosis of the liver, and cancers of the mouth and throat. Some studies have suggested a slight association between alcohol consumption and breast cancer but this is still uncertain. The risk of mouth and throat cancer is higher if you drink heavily and also smoke. People who drink very heavily may develop psychological and emotional problems, including depression.
Pregnancy

Women who are pregnant, or planning a pregnancy, should take special care. Drinking alcohol may reduce fertility and the ability to conceive as well as directly affecting the developing baby in the womb.

When a pregnant woman drinks, alcohol passes to the baby through the placenta. Excessive drinking can affect the baby's health and weight at birth, and getting drunk is particularly risky. Women trying to become pregnant or at any stage of pregnancy should avoid getting drunk and drink no more than one or two units once or twice a week.

Medication

Many drugs and medications do not combine well with alcohol. Some combinations could even be fatal. You should read the label carefully and, if you are unsure, ask your pharmacist or doctor.

Medical Conditions

People with conditions that may be affected by alcohol (including high blood pressure) should take care as drinking can increase the risk of serious illness. If you are unsure, consult your doctor.

Daily Benchmark Guide

Men: If you regularly drink 4 or more units a day, there is an increasing risk to health.

Women: If you regularly drink 3 or more units a day, there is an increasing risk to health.

Examples of the Number of Units in Different Drinks

<table>
<thead>
<tr>
<th>Liquor</th>
<th>Volume</th>
<th>% ABV</th>
<th>Number of Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wine</td>
<td>125 ml</td>
<td>11-12%</td>
<td>1.5 units</td>
</tr>
<tr>
<td></td>
<td>175 ml</td>
<td>11-12%</td>
<td>2 units</td>
</tr>
<tr>
<td></td>
<td>75 cl</td>
<td>9-10%</td>
<td>6.8 - 7.5 units</td>
</tr>
<tr>
<td>Beer, lager, cider</td>
<td>330 ml</td>
<td>4-5%</td>
<td>1.5 units 2 units</td>
</tr>
<tr>
<td></td>
<td>440 ml</td>
<td>8-9%</td>
<td>3.5 - 4.0 units</td>
</tr>
<tr>
<td>Low alcohol beer/lager</td>
<td>440 ml</td>
<td>1.2%</td>
<td>0.5 units</td>
</tr>
<tr>
<td>Spirits</td>
<td>25 ml</td>
<td>40%</td>
<td>1 unit</td>
</tr>
<tr>
<td>Alcopops/ready mixed drinks</td>
<td>25 ml</td>
<td>4-6%</td>
<td>1.3 - 2 units</td>
</tr>
<tr>
<td></td>
<td>200 ml</td>
<td>13.5%</td>
<td>2.7 units</td>
</tr>
</tbody>
</table>

To calculate the exact number of units, multiply the volume of the drink (in ml) by the % abv and divide it by 1000. For example the number of units in a 330 ml bottle of lager with a 5% abv is: 330 x 5 = 1650 / 1000 = 1.7 units.

System Overload

Large amounts of alcohol drunk in one session can put a strain on your liver and other parts of your body. Drinking alcohol can make you dehydrated; one reason people feel hung over after drinking too much. After heavy drinking you should avoid alcohol for the next 48 hours to give your body tissue time to recover. Drink plenty of non-alcoholic fluids.

Finding It Hard To Stop

Sometimes people feel their drinking is getting out of control. If you are concerned about your drinking you should seek help from your doctor or a specialist agency. Signs that you might need help are finding that you drink more for the same effect or drink first thing in the morning. Help in reducing alcohol intake can be sought from Drinkline (0800 917 8282) or Alcoholics Anonymous (01904 644026).
How you sit at your desk and where you position your PC are crucial for good performance and comfort. Incorrect posture and poor positioning of your PC can lead to unnecessary eye and musculoskeletal strain.

Are you sitting comfortably?
• Always sit so that you have both feet flat on the floor. If this is not possible you should adjust your chair or get a footrest. Avoid sitting at your desk with one leg crossed over the other. This will put unnecessary strain on your spine and also put uneven pressure on the deep veins in the back of the leg which can lead to clot formation.
• Both your hips should be squared to the front and angled forwards.
• Your shoulders should be relaxed and also be squared to the front.
• Ensure that your neck and jaw muscles are relaxed. When looking at the PC people often have a tendency to crane their necks forward.
• Ensure that your forearms are parallel to your desk or keyboard.
• Don’t work on the PC and cradle the phone on your neck at the same time. This will lead to neck strain.
• Ensure that your PC is about 65 cms (26 inches) away from you.
• Always make sure that the screen is directly in front of you and not to one side.
• Make sure that the tilt of the screen is correct for your neck. If the monitor is angled too far up or down this can cause neck strain.
• Never have your PC facing a window, this will cause unnecessary glare on your screen.
• When your PC is turned off, ensure that there are no lights shining on the monitor causing unnecessary glare and that the monitor screen is clean.
• If you are working from a document, use a document holder next to the screen, on your leading eye side.
• Ensure that you have good background lighting and that if you are working from a document, it is well illuminated.
• If possible, work in the same size font as your document copy.
• Take a regular break away from your screen. Five minutes every hour is adequate.
• Have a regular eyesight test.
**Smoking: The Facts**

**The Benefits of Stopping Smoking**
Quitting smoking is the greatest single step smokers can take to improve their health. When the daily assault of nicotine, carbon monoxide, tar and other poisons has stopped, the body begins to repair the damage. Body systems start to return to normal, resulting in the following benefits, many of which can be experienced within a few weeks:

- Breathing improves
- Improved ability to cope with sudden exertion loss of smoker’s cough and reduction in phlegm
- Sense of taste and smell improves
- Hair, skin and breath no longer smell of tobacco smoke
- The natural decline in lung efficiency slows down to a rate similar to non-smokers
- Reduction in risk of smoking related diseases
- Feeling good about themselves for having stopped

Stopping smoking increases the chances of living a longer and healthier life. After about 15 years, an ex smoker’s relative risk of getting lung cancer is only slightly greater than that of someone who has never smoked. Similarly, their relative risk of a heart attack is reduced almost to the same risk level of someone who has never smoked.

**Smoking Related Diseases**
There are many serious and often fatal diseases caused by smoking, the most common of which are:

- Coronary heart disease
- Cancer of the lung
- Chronic bronchitis, emphysema and other lung diseases

**Heart and circulatory**
- Coronary heart disease
- Arteriosclerosis – the build-up of fatty deposits and loss of elasticity in the artery walls which can lead to a range of diseases including strokes, peripheral vascular disease and gangrene, and aortic and other aneurysms.
- Buerger’s diseases, which can also lead to gangrene.

**Cancers**
- Lung
- Mouth, nose and throat
- Larynx
- Oesophagus
- Pancreas
- Bladder
- Stomach
- Leukaemia
- Kidney

**Respiratory**
- Chronic bronchitis, emphysema and other lung diseases
- Recurrent infections in the airways
- Damage and loss of efficiency in the lungs

**Other disorders**
- Peptic ulcers (these are ulcers in the stomach and duodenum) – increase both in incidence and the time they take to heal
- Tobacco amblyopia (defective vision)
- Effects on fertility

Smoking can also increase the incidence and severity of everyday complaints which people often do not realise are related to their smoking such as coughing, sneezing and shortness of breath when they exert themselves.

For men and women who smoke, the risks from coronary heart disease, lung cancer, chronic bronchitis and emphysema and other smoking-related lung diseases are similar. However, women who smoke also increase their risk of the following:

- Spontaneous abortion and other problems during pregnancy
- Low birth-weight babies
- Perinatal mortality
- Menopause two to three years early
- Heart attack and stroke if they also use oral contraception (both are ten times more likely among smokers using oral contraceptives than among non-smokers not using them).
- Increased risk of developing osteoporosis

**Stopping Smoking**
For free support and advice about stopping smoking call Quitline on 0800 002200. It is a free national help line, staffed by fully trained stop smoking counsellors who will listen to you, and give sympathetic and helpful advice. Even if you have already stopped you can ring them for support. If you would like to talk to someone face-to-face, you may wish to talk to your GP or talk to your pharmacist who will be able to give you general advice on stopping smoking as well as advice about Nicotine Replacement Therapy.
Today our lives are never ending jigsaws of stressful events or at least so we think. The reality is that at least three quarters of what we find stressful is not caused by stress but by our fear of stress. As we find ourselves expecting to encounter stress so we ultimately encounter it.

What Is Stress?
In its basic state stress is the pressure that we encounter in everyday life. For example a car driver may spend up to 6 months of their lives sitting at traffic lights. We may spend more than a decade of our lives looking for things. Put this way, everyone experiences stress. The difference is in how we handle stress.

In some instances stress can be positive. It can give us the edge for important events and spur us on to solve problems and overcome hurdles. Stress can be challenging and can be the motivator to achieving goals. This sort of stress is often short lived, however, and it is when stress becomes long term that we begin to feel tired, irritable, angry, frustrated and depressed. When this level of stress is reached it can lead to emotional problems and even physical illness.

Stress varies for different people and arises from comparing the demands made on us with how we think we can cope. If these don’t match then we may feel tense and will experience a stress response, which is our bodies attempt to cope.

Stress takes on many forms for many people. Causes of undue stress can be threats, change in circumstances or environment, extreme or unusual demands on your time and emotional and relationship issues. Not all stressful events appear to be unpleasant, e.g. holidays, weddings or celebrations, moving house, changing job, and not all stresses are large events. Accumulation of daily “hassles” can be as troublesome as one larger life event. Stress is therefore an interaction between, you, your circumstances and your view of things.

Too Little Stress
Here there is insufficient challenge to achieve a sense of personal accomplishment. Skills are under utilised and lack of stimulation leads to boredom, resulting in a lack of purpose.

Optimum Stress
Life is balanced, despite ups and downs it is manageable. Job satisfaction and a sense of achievement enable you to cruise through daily work, pleasantly tired at the end of the day.

Too Much Stress
There is a constant feeling of having too much to do every day. Despite emotional and physical exhaustion the person is unable to take time off to rest and play. They are in permanent overdrive but not achieving the results expected.

Burnout
If effects are continued the person might develop chronic neurotic tendencies or one of several psychosomatic illnesses. Excessive stress may show up in drinking or smoking too much, or reliance on tranquilisers. Accidents may occur at work or at home, as the individual is likely to be preoccupied with unresolved tensions. Sometimes they may become withdrawn. Appropriate steps need to be taken to prevent this imbalance and thus prevent mental or physical tragedies, If effects are continued, despite exhaustion, they are likely to have a mental or physical breakdown. Severe depression or coronary heart attack are examples of such breakdowns.

Positive Effects Of Stress
Stress is extremely valuable under certain circumstances, such as sports, public speaking, examinations and general efficiency at home and at work. Many people need challenges in their lives and would be unhappy without it. The stress response is designed to prepare, and so it should be of relatively short duration. Control is the key, since without it, it becomes negative in nature and effect.

Examples of positive stress:
- Feeling confident of overcoming a challenge
- Feeling exhilarated and invigorated by a competitive sport
- Getting a waited for promotion
Negative Effects Of Stress
If the effects of stress are allowed to remain in the body or are uncontrollably strong, the effects become detrimental. The negative effects show up in three ways in particular:

Affects On Health
• Heart - Angina, disturbances of heart rate and rhythm
• Brain - many mental and emotional problems e.g. anxiety and depression
• Lungs - asthmatics often find their condition worsens when subjected to stress
• Digestive tract disease - includes gastritis, stomach and duodenal ulcers, ulcerative colitis and irritable colon
• Reproductive organs - stress related problems include menstrual disorders, such as absence of periods in women, and loss of libido
• Muscles - various minor muscle twitches and nervous tics become more noticeable when the individual is under stress
• Skin - outbreaks of skin problems such as eczema and psoriasis
• Hair - some forms of baldness, among them alopecia, linked to high forms of stress

Mental Symptoms
• Loss of interest in life
• Indecision
• Feeling of worthlessness/failure
• Loss of sense of humour
• Feelings of loneliness
• Inability to concentrate
• Fear of the future
• Feeling others are against you
• No longer able to be sociable
• Fear of becoming ill
• Depression
• Starting new tasks before ending others

Physical Symptoms
• Inability to relax and sit still
• High blood pressure
• Frequent crying
• Nail biting and fidgeting
• Reduced appetite
• Diarrhoea
• Constipation
• Indigestion
• Unexplained breathlessness
• Nervous twitches, cramps etc
• Excessive sweating
• Feeling of constant tiredness
• Frequent headaches
• Nausea
• Palpitations
• Butterflies in the stomach

What Can I Do To Avoid Negative Stress?
A good way to start is to list all the things that cause you stress. Learn to recognise your stress triggers.

When you get caught up in a stress situation use it as a cue to relax. When the traffic is making you tense, do the opposite - give your arms and neck a stretch.

Take jobs in order of importance, take control and have a positive action plan. You are most under stress when you are not in control of a situation.

• Dump it
• Delegate it
• Do it

Avoid doing more than one thing at a time and set realistic goals.

Reorganise the day/week to include things you enjoy doing. These should be as much a priority as your work commitments.

How much exercise do you get? Gentle rhythmic cycling, jogging or swimming are ideal ways of reducing the tension caused by stress. They help release pent up energy and will encourage a deep refreshing sleep.

Learn to live one day at a time, and not to worry about things that “may” happen.
Also learn to accept the things that you cannot change. Avoid artificial means of reducing stress, such as alcohol, coffee and cigarettes.

Affects On Energy And Performance Levels
Reduced concentration, increased forgetfulness, poor judgement, prone to feelings of tiredness, etc.

Unsuitable behaviour
Abusive behaviour, short temper, poor eating and drinking habits, more frequent mistakes, less flexibility, etc.

These negative symptoms of stress can be recognised in a number of ways:

Avoid stress producing situations if possible, keep out of noisy places, crowded conditions and heavy traffic, etc.

Instead of talking at other people, try having conversations with them and listen to what they say.

Over lunch and dinner, eat more slowly, savour your food.

Personality factors
There is evidence that certain types of people (Type A) are particularly susceptible to the development of negative stress, depending upon their personality or behaviour traits.

Type A behaviour characteristics
• Intensely ambitious
• Hard driving
• Competitive
• Sustained drive for achievement
• Impatient with a keen sense of urgency
• Constantly preoccupied with occupational deadlines
• Impatience
• Anxious/Restlessness/Tension
• Rapid movements - usually walks, talks, and eats fast
• Low self-worth/esteem

Type B behaviour characteristics

Absence of all habits and traits of Type A person
• Does not make unrealistic commitments
• Plays for fun and relaxation, not in order to display superiority
• Able to relax without guilt
• Co-operates with others
• Flexible, can either be follower or a leader depending on the situation
• Not afraid to make mistakes
• Takes a break when fatigued
• Not devastated by criticism
What is the difference between veins and arteries?

The heart pumps blood through the arteries to all parts of the body - the vital organs, the head, arms and legs. The blood is then spread through tiny vessels called capillaries which form a network. Later it is returned in increasingly large vessels - veins - which complete the circulation of blood back to the heart.

The arteries are rather thick and elastic and their size constantly changes due to the fluctuating pressure that varies with the heartbeat.

The veins, on the other hand, have very thin walls and have no elastic fibres. They are therefore unable to contract and push the blood flow onwards. The veins are completely dependent on the functions of the surrounding muscles and the valves inside the veins helping the blood to flow in the right direction towards the heart.

What are varicose veins?

Varicose veins are permanently dilated (widened) and twisted veins. Although this can occur in any part of the body, it usually develops in the legs. Veins contain one-way valves every few inches to help the blood return to the heart against gravity. If these valves leak, then the increased pressure prevents the blood from draining properly. The valves may leak and fail because of previous vein disease, e.g: thrombophlebitis, pressure on the veins in the pelvis from pregnancy or other causes of raised pressure within the abdomen.

Varicose veins come on with advancing age and are often no great inconvenience apart from being unsightly.

Who develops varicose veins?

The risk of developing varicose veins increases with:
- pregnancy
- a family history of the condition
- an occupation that involves prolonged periods of standing
- menstruation - the symptoms worsen before and during menstruation

How do I tell if I am developing varicose veins?

- Heaviness and tiredness in the legs particularly after standing
- They appear as enlarged, snake-like, blue veins and are most easily seen under the skin while standing
- They are most commonly seen in the back of the calf or on the inside of the leg between the ankle and the groin
- There may be a creeping sensation across the skin and possibly night-time cramps in the legs
- The legs may become swollen, sore and painful as the condition progresses. This is due to incomplete blood circulation (oedema or accumulation of fluid in the legs)

When do I seek help?

Help should be sought when varicose veins cause irritation during the day; if fluid accumulates in the legs; if working standing up causes discomfort; or the legs become agitated at night (and sleep is interrupted).

In these cases consult a doctor about the possibility of receiving treatment.

How are varicose veins treated?

- Frequent rest periods with the legs elevated
- In mild cases, lightweight elastic compression stockings should ease the discomfort but they will not remove the varicose veins
- A loss of weight, if obesity is a problem
- The injection of a sclerosing solution into the vein will close it
- If the conditions becomes more serious and the whole leg is affected by varicose veins, a complete removal of the vein from ankle to groin may be necessary (ligation and stripping)

If the varicose veins are allowed to worsen there is a risk of developing:
- phlebitis (inflammation of the wall of the vein)
- eczema
- leg ulcers
- deep vein thrombosis (DVT).

To avoid these complications, an operation may be required.
Surgery will be offered if there is:

- pain
- phlebitis (inflammation of the wall of the vein)
- skin changes, e.g. chronic eczema or recurrent ulceration leading to scarring and tightening of the skin
- for cosmetic improvement, small, localised 'spider veins' (idiopathic telangiectases) which may be extensive can be treated with injections using a needle with a very fine bore. Several treatments may be required before a satisfactory resolution is achieved.

Laser treatment can also be effective for these small veins.

**Can varicose veins develop in places other than the legs?**

Varicose veins can develop, for example, in the oesophagus (gullet or food pipe), pelvis, uterus (womb), vagina and rectum (back passage). Haemorrhoids (piles) can be regarded as varicose veins around the anus.

The majority of people with varicose veins manage by using simple conservative treatment measures.

Varicose veins are not a disease in themselves although they can cause daily irritation and worry. People with this problem should consult their GP to discuss whether treatment is necessary.
What is Bowel Cancer?

Bowel is the general term for the long muscular tube that starts at the bottom of the stomach and ends at the anus. The first part of the bowel is involved with the digestion of food and is known as the ‘small bowel’ because the tube is narrower here. The ‘large bowel’ follows the small bowel and in a healthy person, the main part of the large bowel (colon) is responsible mostly for absorbing water from the faeces. The last part of the large bowel is known as the rectum, which leads to the anus. Bowel (colorectal) cancer is cancer of the colon or rectum, and it arises from the cells that line the bowel. The small bowel is strikingly free from cancer risk, and almost all bowel cancers arise in the large bowel. About 6 per cent of the population in Western countries develop bowel cancer at some time during their lives, making this the second commonest cause of cancer-related death. However, it is curable in 40-50 per cent of cases, usually by surgery.

The cancer develops when one of the cells in the colon develops a series of changes (mutations) in some of the genes that control how the cell divides and survives. As a result, the cell divides uncontrollably to form a clump of malignant (cancerous) cells. Initially, these cell changes commonly produce a polyp (a clump of abnormal cells the size of a pea on the end of a stalk of normal cells) called an adenoma.

At this stage, an adenoma is still pre-cancerous (a stage at which it may or may not become cancer), and probably only about 5 per cent of the polyps progress further to become life-threatening cancers.

The polyp enlarges very slowly, probably over about 10 years, up to between 1cm and about 5cm in diameter. The abnormal cells first invade the stalk of the polyp, then the underlying tissue of the colon to which the stalk is attached. This invasion indicates that cancer has developed. The patient will then usually have symptoms, which can include bleeding from the ulcerated tip of the cancer and diarrhoea caused by disturbance in the muscle activity of the colon or to obstruction. The risk of invasive cancer becomes appreciable once the polyp diameter has exceeded 1cm.

The average age when bowel cancer is first discovered is 65, and it becomes increasingly common with advancing age. Very occasionally, it may affect much younger adults from the age of 20. The rates do not differ strikingly between the sexes, although men are slightly more prone to developing rectal cancer and women to developing cancer of the caecum. This is the point where the appendix is attached.

The appendix itself is rarely the site of cancer, although it can be the site of a much rarer tumour called a ‘carcinoid’. Previous appendicectomy (removal of the appendix) seems to have no effect on the subsequent risk of bowel cancer.

What causes bowel cancer?

No cancers are fully understood, but bowel cancer is better understood than most. About 90 per cent of the risk for bowel cancer is thought to be due to dietary factors, with the other 10 per cent due to genetic (inherited) factors.

Dietary factors

Dietary factors that increase bowel cancer risk are not yet clearly defined. Populations with a high-fibre intake tend to have a low risk of bowel cancer. However, the results of studies in which people, usually those who have already developed polyps, have been given high-fibre diets are disappointing. It now seems as though the beneficial effect of fibre is not simply due to its mechanical effect on helping the bowel to regularly pass faeces. Evidence suggests that vegetable fibre is more protective that cereal fibre. Recent studies have also shown that specific chemicals in vegetables, for example the isothiocyanates, which give brassicas (cabbage, broccoli, brussel sprouts, cauliflower) their characteristic pungent taste, might be especially protective against cancer. A high intake of calories and obesity are both risk factors for bowel cancer and a high intake of red meat is also linked with increased risk.

The best available approaches for a low risk of developing bowel cancer are:

- a diet high in green vegetables, particularly cabbage, broccoli, brussel sprouts or cauliflower
- a diet low in red meat, in particular, avoid burnt meat, which contains cancer-promoting chemicals called cyclic amines
- keeping to a normal body weight and taking regular exercise

Although still controversial, it seems that taking aspirin regularly (300mg per day or more ie one standard tablet) reduces the risk by about 50 per cent. However, prolonged use of aspirin carries a risk of intestinal ulceration and bleeding, so whether the benefits would outweigh the risks is unclear at present.

Genetic factors

Approximately 10 per cent of bowel cancers have a strong genetic factor. Patients with ulcerative colitis or Crohn’s disease of the colon (conditions that together affect about 1 in 800 of the population in Western countries) have about a five-fold increased risk of bowel cancer. The risk is greater if the colitis (colon inflammation) seen in both conditions affects the whole colon, and if it has been present for more than ten years.

What are the symptoms of bowel cancer?

Because early cancers often cause no symptoms, screening of symptom-free individuals is being considered. About 85
per cent of people with bowel cancer are currently not diagnosed until the cancer has penetrated through the bowel wall or spread to lymph nodes or elsewhere. Cure is nevertheless still possible. The earliest symptom is often bleeding from the back passage. Later changes include loss of the normal form of bowel motions sometimes followed by diarrhoea. Constipation can also occur. If the growth starts to block the bowel then colicky lower abdominal pain (ie coming in waves each of which lasts for a few minutes) can develop. If the bowel becomes completely obstructed, severe abdominal pain and vomiting occurs, followed by complete constipation. This obstruction is a surgical emergency requiring immediate admission to hospital, since the bowel is at risk of becoming gangrenous if the obstruction is not relieved. In the proximal colon, the lumen (the space inside) is larger (about 4 or 5cm in diameter) and less likely to become obstructed. Cancers of this part of the colon, including the caecum, tend to show themselves very subtly as iron-deficiency anaemia, due to loss of small amounts of blood over a long period of time. The anaemia can lead to symptoms of pallor, shortness of breath or simply tiredness. Cancers of the rectum typically cause rectal bleeding, which can easily be mistaken for bleeding haemorrhoids (piles). Other symptoms include the feeling that you haven’t fully emptied your bowel accompanied by a need to frequently empty the bowel. Loss of appetite and weight loss tend to be late features in bowel cancer.

How is bowel cancer diagnosed?
The doctor might feel a cancer of the rectum by inserting a gloved finger into the rectum. The diagnosis should usually be confirmed by biopsy in which a small (2mm diameter) sample of tissue is taken painlessly with forceps inserted through a small tube (a proctoscope or sigmoidoscope). To spot cancers further along the colon, the doctor will use either a flexible sigmoidoscope (to see the part of the colon nearest the rectum, including the sigmoid [bendy] colon on the left side of the abdomen) or a colonoscope (to see the whole colon, including the part on the right side of the abdomen). Colonoscopy is usually performed using intravenous sedation and takes about 30 minutes. Flexible sigmoidoscopy takes about ten minutes and can usually be done without sedation.

Alternatively, a barium enema examination may be used to look at the whole colon. In this test, a liquid suspension of barium sulphate, which shows up on X-rays, is poured into the rectum through a narrow tube inserted through the anus. Usually a small balloon is then inflated in the rectum to pump in a small amount of air. The procedure takes about 30 minutes.

The need for screening is different if you have a strong family history of bowel cancer. In individuals who have a first-degree relative (eg a parent, brother, sister or child) who developed colorectal cancer before the age of 45, the life-time risk for colorectal cancer is 1 in 10. What other conditions might cause similar symptoms? This depends on the symptoms.

Rectal bleeding
It is extremely common to notice a few spots of blood on the toilet paper after passing stools. If there is no blood in the toilet bowl, this is most likely to be due to minor damage to a blood vessel in the skin of the anus. If it persists, the problem requires investigation to exclude significant disease of the anus.

Blood in the toilet bowl that is separate from the faeces and is bright red is commonly due to bleeding from haemorrhoids (piles). However, this sort of bleeding cannot be distinguished from bleeding due to a rectal cancer without further investigation.

Blood that is mixed in with the stool is more likely to have a worrying cause but benign (non-cancerous) possibilities include bleeding from diverticular disease or from colitis.

Diarrhoea or other change in bowel habit
Diarrhoea that has only been present for a few days, or even up to three weeks, is most commonly due to infection ie gastroenteritis. Diarrhoea that carries on for longer than three weeks is rarely due to infection and requires urgent investigation.

Benign causes include:
• colitis, an inflammation of the colon (eg ulcerative colitis or Crohn’s colitis).
• diverticulitis, an inflammation of the little pea-sized pouches that can develop in the wall of the bowel, in which case the diarrhoea may be bloody.
• lactose intolerance.
• irritable bowel syndrome (IBS) in which case the diarrhoea may be watery and not bloody. Irritable bowel syndrome mimics some of the symptoms of bowel cancer including colicky abdominal pain and diarrhoea. However, the diarrhoea is always non-bloody, the symptoms are intermittent and IBS typically starts in the adolescent or young adult at an age when bowel cancer is very rare.

Anaemia
Iron deficiency anaemia indicates that someone has been losing small amounts of blood over a long time. Causes include heavy menstruation (periods), coeliac disease (gluten intolerance), oesophagitis (inflammation of the gullet), Crohn’s disease and cancer of the stomach. Iron deficiency because of lack of iron in the diet is an uncommon cause, except in adolescents with a poor diet.
Abdominal pain
Bowel cancer may cause lower abdominal pain that is typically colicky. Similar pain occurs in irritable bowel syndrome, but is often associated with diarrhoea that alternates with formed or even constipated stools, whereas bowel disturbance in bowel cancer is usually more persistent. Irritable bowel syndrome may be triggered by stress or by an episode of infectious gastroenteritis. It most commonly presents in adolescents or young adults at an age when bowel cancer is rare. Crohn's disease, a form of inflammatory bowel disease, can also present with colicky pains with or without diarrhoea. Diagnosis is usually based on barium radiology or colonoscopy when it can be readily distinguished from cancer. Crohn's disease commonly affects the small intestine, a part of the bowel that is exceptionally rarely the site of cancer. Pain at the very lowest part of the abdomen (suprapubic pain) can indicate a bladder problem such as cystitis, and pain low down to the right or left in a woman can indicate disease of the ovaries. Urine testing and pelvic ultrasound examination are usually done if these are possible alternative diagnoses.

What can your doctor do?
You should see your doctor promptly if you have: persistent rectal bleeding, a change in bowel habit (persistent diarrhoea or constipation that is unusual for you), recurring abdominal pains or unexplained tiredness.

Your doctor will probably feel your abdomen and perform an internal rectal examination using a gloved finger. He or she might also send off blood tests, especially a full blood count to check for anaemia. Occasionally, the doctor's practice might be equipped for sigmoidoscopy.

Unless your symptoms are considered low risk for cancer (perhaps because of a combination of your youth and the lack of recurrence or persistence of symptoms), you are likely to be referred to your district hospital. You will usually be seen either by a physician who specialises in bowel diseases (a gastroenterologist) or by a surgeon with a gastroenterological practice. In either case, the procedures they use to make a diagnosis are likely to be the same. They will consist of some form of endoscopic examination (either sigmoidoscopy or colonoscopy), often followed by a barium enema radiological examination. Fortunately, bowel cancers are fairly slowly growing; estimates are that it takes about 10 years on average for a small polyp to develop into an invasive cancer. Nevertheless, even if your symptoms and age do not put you into the category of people needing to be seen within two weeks, a delay of more than about two months should be regarded as unacceptable.

What can you do yourself?
Prevention and early diagnosis.
Ensure a regular daily intake of green vegetables, particularly brassicas (cabbage, broccoli, sprouts or cauliflower). Do not eat red meat (beef and lamb) more than about once per week. Keep your weight normal and take regular exercise.

See your doctor to discuss screening if you have a first-degree relative who has developed bowel cancer before the age of 45, or if you have two or more first-degree relatives who have developed bowel cancer.

See your doctor promptly if you notice rectal bleeding (other than very occasional spotting on the paper only), diarrhoea that persists for more than a week, recurring lower abdominal pain or persistent tiredness or shortness of breath.

What can your doctor do?
Once the diagnosis of bowel cancer has been made, the first treatment is usually surgical removal of the cancerous tumour under general anaesthetic. If the cancer is in the rectum, the operation will usually be accompanied by radiotherapy (by external beam irradiation) to reduce the risk of tumours reappearing in the same area. The radiotherapy may sometimes be given first, followed a few months later by the surgery. For cancer of the colon, radiotherapy is not routinely used, but if examination of cells from the removed cancer shows that the cancer has spread to lymph glands, then some form of chemotherapy will normally be given. Chemotherapy is very likely to cause side effects, including nausea and hair loss, but the nausea can usually be well controlled by drugs.

In any form of bowel surgery, the patient is normally warned that the surgeon might have to create a colostomy stoma (opening of the bowel onto the abdomen that is covered by a bag). This might be a temporary measure to divert faeces from the site of the bowel that has been repaired after removal of the tumour.

If the tumour is very low down in the rectum, then the primary operation will include cutting out and closing the anus (abdomino-perineal resection) so the stoma will be permanent. Fortunately, modern stoma accessories are excellent, and colostomies are generally well managed and odour free. In most cases, a bowel cancer higher up the colon can be surgically removed and the bowel repaired without the need for a colostomy.
Despite recent campaigns to educate women regarding their risk of developing cardiac disease, there is still a general misconception that heart disease is a only a significant problem for men. Furthermore, most women believe that breast cancer is a bigger medical threat to them than heart disease.

Statistics show that:

Women who have heart attacks fare far worse than men. 1 in every 5 women dies every year from coronary artery disease (CAD), whereas 1 in 28 women die from breast cancer.

Oestrogen (a sex hormone) helps to prevent heart disease. Woman have higher levels of oestrogen than men and may therefore think that they are immune to heart disease. Oestrogen:

- protects the cardiovascular system during a woman’s reproductive years.
- relaxes the blood vessels, thereby having an influence on lowering the blood pressure.
- lowers cholesterol by boosting the HDL (good) cholesterol levels but lowering LDL (bad cholesterol).

These positive effects of oestrogen only act during the years prior to women reaching menopause, which is normally around 55 years of age. After menopause, women and men have an equal chance of developing cardiac disease.

Risk Factors for Heart Disease

It is imperative that women are educated about their risk factors for heart disease. There are some risk factors that you cannot change. They are:

- Age: Men over the age of 45 years and women over the age of 55 years are at risk of developing heart disease.
- Gender: Men have a higher risk of developing heart disease, however after the age of 55 women are affected as often as men.
- Family history: If any member of your immediate family has heart disease or died from heart disease before the age of 55, there is a likelihood that you are at risk of developing heart disease.

The good news is that there are risk factors that you can change in order to help to reduce your risk of developing heart disease.

- Smoking: Smokers are at twice the risk for developing CAD than non-smokers. Furthermore, smokers have a very high risk of developing other chronic diseases such as chronic obstructive pulmonary disease and lung cancer.
- Obesity: An increased body mass and body fat places one at risk for developing CAD and Type 2 diabetes.
- High blood pressure: High blood pressure puts more “wear and tear” on the lining of arteries, predisposing them to arteriosclerosis (formation of plaque in the arteries).
- High cholesterol: Both men and women are at greater risk of heart disease and stroke when cholesterol levels are elevated.
- Diabetes mellitus: Diabetes is more prevalent in women than in men. Like other risk factors, adult-onset of diabetes is often associated with obesity. Uncontrolled blood sugar (glucose) levels (the hallmark of diabetes) seriously increases the risk of heart disease, kidney disease and stroke.
- Physical inactivity: Regular exercise is important in preventing heart and blood vessel disease. Exercise also helps control other risk factors for coronary artery disease such as high blood cholesterol, obesity, hypertension and stress.

An additional risk factor for women is the use of oral contraceptives. Although birth control pills have been associated with certain benefits such as a reduced risk of certain cancers, their use has also been linked to an increased risk of heart attack. They may contribute to the formation of blood clots that could potentially clog an artery and trigger a heart attack.

Why women’s heart attacks are more fatal

After the age of 55 years, women are as likely as men to have a heart attack. They are also more likely to die after their first heart attack. A number of possible reasons have been suggested for this finding, including:

- Heart disease is typically not diagnosed in women until after menopause, that is when they are in their late 50’s or 60’s. This is about 10-15 years later than in men. The result is that women often present with additional medical conditions or chronic diseases of lifestyle such as diabetes mellitus and high blood pressure which may make the treatment of their heart attack more complicated and interfering with recovery.
Women tend to present with signs and symptoms that are not characteristic of classic heart attacks. Approximately 35% of heart attacks in women may go unnoticed by women themselves as well as by physicians as physicians have a harder time diagnosing a heart attack in a woman due to this “atypical” presentation.

Common warning signs of a heart attack are the following:

- Chest pain or discomfort that is unrelieved by rest, and can spread down the arm or jaw.
- Shortness of breath
- Abnormally weak and/or fast pulse
- Feeling faint or dizzy
- Sweating, often heavy and often cold
- Nausea or upset stomach

Sudden chest pain, the classic symptom of a heart attack, can also be caused by a variety of other medical conditions such as oesophageal reflux. While these conditions affect both men and women equally, research has found that women complain of these more often and are therefore more likely to rather report a feeling of severe heartburn in the upper abdomen or pain in the breast. This makes it difficult for them to recognise that they are having a heart attack and they may delay seeking medical attention. A delay of a few hours can be fatal as medical treatment such as clot-busting medications are only effective if you receive them within 4 to 6 hours of the onset of symptoms.

Physiologically and anatomically, women have smaller coronary arteries than men and this makes surgical procedures more difficult. Women also seem to have different clotting mechanisms to men and this results in a higher risk of bleeding following surgery.

What about Hormone Replacement Therapy (HRT)?

At present, there is no conclusive evidence that HRT can prevent CAD or reduce repeat heart attacks. It has been suggested that HRT has an overall good effect on the lining of the arteries or blood vessels of the heart. However, this type of therapy also carries some known risks such as the development of dangerous blood clots. Each woman has a unique set of risks and therefore the benefits need to be assessed before HRT is used.

Treating heart disease in women

Prevention is certainly better than cure. By managing and reducing your risk factors, you can prevent or delay the development of the disease. It is important that you are in touch with your body so as to recognise the warning signs of a potential cardiac event. After an event it is essential that you seek medical attention and engage in a comprehensive multi-faceted rehabilitation programme which includes dietary intervention, stress management advice and exercise training.

It is every woman’s responsibility to take control of their heart health, to be able to make informed decisions about their future and to enjoy a long, healthy life.
What is the cervix?
The cervix is the lower part of the womb or uterus and is commonly referred to as the 'neck of the womb'.

The cervix plays an important role in maintaining a normal pregnancy. In non-pregnant women, the cervix has no obvious function although it may be important to the enjoyment of sex in some women. If you squat or stand with one leg on a chair and put one or two fingers into your vagina, you will be able to feel the smooth, rounded cervix at the top of your vagina.

What is cervical cancer?
Cervical cancer is the sixth most common cancer in women in the UK.

It is important to be clear about what is and what is not cervical cancer. Women should have a cervical smear test, often known as a Pap smear test, performed on a regular basis in order to detect the cell changes that come before cancer. It takes many years for the early cell changes that can be detected on a cervical smear to become cancer and in many cases the changes can go away by themselves. The vast majority of abnormal smear test results do not indicate that the woman has cancer. It is by diagnosing and treating these pre-cancerous changes (also called CIN) that the development of actual cancer can be prevented. Cancer of the cervix is a life-threatening condition of which there are two types called squamous cell cancer and adenocarcinoma. Cervical smear tests aim to detect the early changes of squamous cell cancer. If it is detected in the early stages, cervical cancer can be treated and cured with surgery or radiotherapy.

What are the symptoms of cervical cancer?
Pre-cancerous changes of the cervix (CIN), which can be detected with a cervical smear test, do not give any symptoms. While some actual cancers of the cervix do not give rise to symptoms, most cause the woman to experience bleeding between her periods or after sex.

How is cervical cancer diagnosed?
It can only be diagnosed through a biopsy of the cervix. This is usually performed at the time of an internal examination called a colposcopy.

How is cervical cancer treated?
If cervical cancer is diagnosed the treatment options will be discussed. The treatment will depend upon whether the cancer has spread to involve other tissues in the pelvis or if it only involves the cervix.

Most women's treatment will include a type of hysterectomy called a radical hysterectomy or Wertheim’s hysterectomy. This type of operation is only carried out by specially trained gynaecologists.

Radiotherapy may also form part of the treatment and is aimed at destroying tumour cells that the gynaecologist cannot see. The cure rate for cervical cancer depends upon whether or not it has spread beyond the cervix.

The cervix can be inspected in a gynaecological examination and tests can be taken at regular intervals to decrease the risk of cervical cancer.
Breast Awareness

Know what is normal for you
Breast awareness means getting to know your own breasts and finding out what is normal for you. Every woman’s breasts are unique – size and shape vary considerably from woman to woman. Some women naturally have one breast larger than the other.

Normal breasts feel different at different times of the month. For example, many women have lumpy and tender breasts just before their period. Normal breasts will also feel different during pregnancy and breast-feeding. After the menopause, breasts may feel softer and less lumpy.

Look and feel
Being breast aware will help you to become familiar with the way your breasts look and feel and will help you to know what is normal for you. Your doctor, practice nurse or staff at your local family planning clinic can provide practical support and advice on how to become breast aware.

There is no right way to look and feel for changes in your breasts. It is important that you choose a method you are comfortable with. From time, to time, look and feel your breasts to check that there is no change from what is normal for you. This will help you recognise any unusual changes.

Changes to look for
• Is there a change in size or shape that you have not noticed before? For example, does one breast seem to have become smaller or larger?
• Are either of the nipples pulled in or pointing in a new direction? (some women’s nipples are naturally inverted).
• Is there any discharge? Is it blood stained? (some women may always produce a little clear or milky fluid that is normal for them).
• Is there a rash or swelling on or around the nipple?
• Are there any changes in the outline of the breast?
• Is there an obvious bulge or lump?
• Is there any thickening of the skin?
• Is there any puckering or dimpling of the skin?
• Does the skin have an ‘orange peel’ look?
• Are there any veins that stand out more than usual?

Changes to feel for
• A lump in either breast or armpit
• A lumpy area or thickening anywhere in the breast
• Enlarged glands under either armpit
• Swelling of the upper arm
• Any persistent pain or sense of discomfort that is new to you

Try not to squeeze or prod your breasts but keep your fingers together and use the flat of the fingers. Feel the breast gently but firmly by moving your fingers over the whole breast. Remember your breast is pear shaped with the point of the pear going into the armpit, so feel every part of the breast, including up towards the collarbone, into the armpit and behind the nipple.

Report changes promptly
Most breast lumps are harmless and can be easily treated and most changes in the breast are not cancer. Professional advice can be sought from your doctor or practice nurse or your local family planning or well woman clinic. If you notice a change, you will not be wasting anyone’s time by seeing a doctor or nurse.

Breast screening facts
Women aged 50 years or over are entitled to a free mammogram every 3 years. If you are aged between 50-64 years and registered with a doctor, your local breast screening service will automatically send you an invitation every 3 years.

If you are 65 years or over you will not be automatically invited for screening. However, you can be screened free if you request it by contacting your local breast screening service, or talk to your doctor or practice nurse.
If you are under 50 years, you will not receive an invitation for breast screening. However, if you are worried about any breast problem, contact your doctor who will refer you for a specialist opinion if necessary.

Sources of support and information

**Breast Cancer Care**
Kiln House
210 New Kings Road
London
SW6 4NZ
Help line 0808 800 6000

[www.breastcancercare.org.uk](http://www.breastcancercare.org.uk)
This is a national organisation offering free help, information and support to women with breast cancer or other breast related problems.

**CancerLink**
11-21 Northdown Street
London
N1 9BN
Helpline 0808 800 0000

CancerLink provides confidential support and information to people with cancer, their families, friends and health professionals working with them.

**Cancer BACUP**
3 Bath Place
Rivington Street
London
EC2A 3JR
Helpline 0808 800 1234

[www.cancerbacup.org.uk](http://www.cancerbacup.org.uk)
Cancer nurses provide information and emotional support by telephone or letter. A one-to-one counselling service is also available.
Osteoporosis

Bone is a living tissue that is constantly being renewed (formed) and destroyed (resorption) in a process called turnover. This cycle of formation and resorption ensures the maintenance of healthy bone. Special cells called OSTEOCLASTS assist in bone resorption or destruction.

OSTEOBLASTS form new bone. When the new bone is formed it is coated with minerals, lining cells and a protein called collagen. The complete process from resorption to formation takes about 100 days.

As a by-product of the process of destruction or resorption, a substance known as a ‘bone marker’, is released and excreted in the urine. The more bone marker that is excreted, the higher the resorption of bone tissue.

Measuring the quantity of bone marker can be used as an indicator of bone loss. As more bone is destroyed then the bone marker in the urine increases.

Osteoporosis is a disease where the bones become brittle due to low bone density and high deterioration of bone tissue. Both men and women can suffer from osteoporosis, (although the disease is more prevalent in women), and are susceptible to fractures of the hip, spine and wrist. The disease can strike at any age. It is a known fact that certain risk factors contribute to the development of osteoporosis such as:

- Smoking
- Post menopausal women
- Small bone structured people
- Excessive alcohol intake
- Low dietary calcium
- People who constantly diet
- History of osteoporosis in the immediate family
- Low oestrogen in women
- Low testosterone in men
- Use of steroid medication

Certain diseases also cause excessive bone loss such as cancers and renal failure. Osteoporosis is a disease that can be prevented and treated given early detection. To reach optimal peak bone mass and continue building new bone tissue as you get older, there are several factors you should consider.

Calcium

An inadequate supply of calcium over a lifetime is thought to play a significant role in contributing to the development of osteoporosis. National nutrition studies show that many people consume less than half the required intake of calcium recommended to build and maintain healthy bone.

Good sources of calcium are: yoghurt, milk, cheese, ice cream, dark green leafy vegetables such as broccoli and spinach, sardines and salmon, orange juice, cereals and breads.

Vitamin D

Vitamin D is necessary for effective absorption of calcium. It also helps deposit calcium in your bones and teeth. Your body makes Vitamin D from two sources, sunlight and to a lesser extent from food. Just 10-15 minutes of direct sunlight three times a week stimulates adequate production of Vitamin D. Milk is routinely fortified with Vitamin D and two cups of milk per day meet the recommended daily intake. Other sources of Vitamin D are margarine, fortified breakfast cereals and fatty fish such as mackerel and herring as well as butter and eggs.
Protein
It is important to eat adequate but not excessive amounts of protein. Keep portion sizes of meat, poultry or fish to about 5-6 ounces per day. A diet too high in protein can result in increased excretion of calcium in the urine. Balance your diet by taking food sources rich in calcium and by keeping the amount of protein reasonable.

Low calorie diets
Chronic dieting and low calorie diets may be too low in calcium. In addition canned drinks that contain phosphorus can increase calcium loss. Weight loss diets should be supervised by a health care professional.

Lifestyle and exercise
Smoking and excessive alcohol consumption increase the risk of osteoporosis and calcium depletion. Inactivity and a sedentary lifestyle will also increase the risk. Increased exercise, especially load bearing exercise such as moderate weight training, will increase bone mass. Jogging, swimming and cycling can also reduce bone loss and increase mass. The benefit of exercise on bone mass lasts only as long as you make it part of your lifestyle. Always consult a fitness specialist for the best program to suit you.

What if my test shows I am at risk of osteoporosis?
If the test shows that you are at risk then you should seek medical advice as well as implementing the above.

Treatment
Hormone replacement therapy (HRT) has been shown to reduce bone loss, increase bone density in both the spine and hip and also reduce the risk of hip and spinal fractures in postmenopausal women. HRT is most commonly administered by tablet or skin patch and is effective even if started after the age of 70. HRT relieves menopause symptoms and has been shown to have beneficial effects on both skeleton and heart. HRT is recommended for both treatment and prevention of osteoporosis.
Pre-Menstrual Syndrome (PMS)

What is PMS?
PMS is a symptom or a collection of symptoms that occur regularly in relation to the menstrual cycle. The symptoms usually begin approximately 10 days before the onset of the monthly period and resolve when it arrives, or shortly afterwards.

Incidence Causes and Risk Factors

- PMS can affect 70-90% of women at some stage during their childbearing years. Of these, up to 30-40% have PMS symptoms severe enough to interfere with their lifestyle. A further 10% have disabling symptoms.
- The exact cause of PMS has not been identified. It may be related to social, cultural, biological and physiological factors. The following factors may be involved:
  - PMS may be triggered by hormonal changes. It tends to begin at puberty, after pregnancy, after starting birth control pills, after hormone related surgery e.g. hysterectomy and tubal ligation, or around the onset of menopause.
  - Heredity appears to be a factor, although specific symptoms may differ between sisters, mothers and daughters.
  - There often appears to be a period of increased activity before PMS symptoms worsen/start. At this time the woman may clean the house, function with little sleep and feel euphoric. This is then followed by PMS symptoms.

Characteristics of PMS
The most common complaints are headaches and fatigue. Symptoms may vary from month to month. Some months may be symptom free.

Symptoms of PMS are grouped into four main categories, described originally in 1931 by an American neurologist.

A Anxiety: irritable, crying without reason, verbally, sometimes physically abusive. Almost a Jekyll-Hyde personality

D Depression: confused, clumsy, forgetful, withdrawn, fearful, paranoid, suicidal thoughts and rarely suicidal actions

C Cravings: food cravings, usually for sweets and chocolate, dairy products, including cheese, on occasions alcohol or food in general.

H - Heaviness or headache: fluid retention leading to headache, breast tenderness, abdominal bloating and weight gain.

What can you do to improve PMS symptoms?
This depends on your individual symptoms and their severity. As a general rule you should seek to:

Reduce
- Salt
- Sugar
- Caffeine
- Alcohol
- Stress

Increase
- Water
- Lean Protein
- Fresh fruit & vegetables
- Whole wheat bread
- Cereal & pasta

Smoking (preferably stop)

You should also learn more about your symptoms by looking at their pattern of occurrence and severity during the month. You can then aim to treat reoccurring symptoms appropriately. One or more of the following treatments may helpful. You should discuss them with your GP first.

Diet
To help reduce headache, bloating, fatigue, tension and depression.

Eat six small meals at regular intervals, high in complex carbohydrates (bread, pasta, rice, potato) and low in sugar. This will help to maintain a steady blood sugar level, avoiding energy highs and lows. Eat plenty of fresh fruit and vegetables and watch your dairy food intake.

Substantially reduce and in some circumstances eliminate, caffeine (found in coffee, chocolate, cola etc), alcohol, salt, saturated fat and sugar.

Exercise
Is helpful for PMS because it helps relieve negative stress and tension and stimulates hormones such as serotonin, which help you to feel good. Regular aerobic exercise (walking, swimming, cycling etc.), three times a week for about twenty minutes at a time, will also strengthen your hearts & lungs. Consult your GP if you have never taken any exercise, or if it is a long time since you have done so.

Vitamin Supplements

The following may be recommended, individually or in a combination, to reduce irritability, fluid retention, joint aches, breast tenderness, anxiety, depression and fatigue. Vitamin B6, B complex, Calcium, Magnesium and evening primrose oil capsules. Remember always to consult your GP before taking any medication.

Self-treatment can be harmful.
Candida

Yeast infections are the most common type of vaginal infections. Other names for this are Monila, Candida or fungus infection. Vaginal yeast infections result from the overgrowth of Candida albicans which is normally present in harmless amounts in the vagina, the digestive tract and the mouth. Some women rarely have a yeast infection. Others have them regularly.

Who is at risk?
Most people who develop problems as a result of Candida are women over the age of 50. However, anyone at any age can suffer the symptoms of a Candida infection.

What can trigger an infection?
• Hormonal changes that come with pregnancy or even before monthly periods.
• Taking hormones or birth control pills.
• Taking antibiotics, especially “broad spectrum” ones.
• Taking steroid medicines such as prednisone.
• Having elevated blood sugar such as found in uncontrolled diabetes.
• Vaginal intercourse especially with inadequate lubrication.
• Douching.

Symptoms can range from mild to severe. They include:
• Itching and irritation and redness around the external genitalia.
• A thick, white discharge that looks like cottage cheese and may smell like yeast.
• Burning and/or pain when you urinate or have sex.

To help prevent yeast infections:
• Practice good hygiene.
• Wash regularly to clean the inside folds of the vulva where germs are likely to grow.
• Dry the vaginal area thoroughly after you shower or bathe.
• Wipe from front to back after using the toilet.
• Wear all-cotton underpants and panty hose with cotton crotches.
• Don’t wear slacks and shorts that are tight in the crotch and thighs or other tight fitting clothing such as panty girdles.
• Change underwear and workout clothes right away after exercising.
• Use unscented tampons or sanitary pads and change tampons and sanitary pads frequently.
• Don’t use bath oils, bubble baths, feminine hygiene sprays, perfumed or deodorant soaps.
• Don’t sit around in a wet bathing suit.
• Shower after you swim in a pool to remove the chlorine from your skin. Dry the vaginal area thoroughly.
• If you tend to get yeast infections whenever you take an antibiotic, ask your doctor to prescribe a vaginal anti-fungal agent as well, or use an over-the-counter one.
• Eat well and include food products such as yoghurt that contain live cultures of “lactobacillus acidophilus”.
• Get plenty of rest to make it easier for your body to fight infections.

Treatments for Vaginal Yeast Infections are:
• Vaginal creams or suppositories that get rid of the Candida overgrowth. These can be obtained from your pharmacy. They should be inserted before you go to bed.
• Oral medicines; Diflucan, (a pill taken once per episode of infection); Sporanox, Nystatin or Nizoral.

Oral medicines are used for chronic yeast infections.
• Gentian violet, a purple-coloured solution applied to the vaginal area.

It is important to make sure that you have the right problem diagnosed. A burning sensation could be a symptom of a urinary tract infection caused by bacteria which requires an antibiotic. Antibiotics will not help a yeast infection. They make them worse. Avoid foods that contain yeast and high carbohydrates.
Prostate Disease

As men age, they often accept poor stream, frequent urination and incomplete emptying as part of the aging process, these symptoms may indicate there is a prostate problem. Prostate problems are common after the age of 50 and most can be successfully treated without harming sexual function.

The Prostate Gland

The prostate gland is part of the male reproductive system. It is situated below the bladder in front of the rectum. It is a small chestnut shaped gland, consisting of smooth muscle, fibrous tissue and glands. It surrounds the urethra and this is why urinary symptoms are common with prostate disease.

Diagnosing Prostate Disease

Prostate disease is diagnosed from a suggestive history of urinary symptoms and family history. The digital rectal examination (DRE) allows the physician to feel the size and consistency of the prostate. It also enables the doctor to feel for lumps. A DRE should be part of the annual physical check up in all males over the age of 50 and in those with a strong family history of prostate cancer or prostate symptoms. The serum Prostate Specific Antigen (PSA) test is a blood test, which screens for prostate disease. PSA is a protein produced by the prostate that may be elevated with aging, in cancer, prostatic enlargement or infection. If the PSA is raised a further blood test may be done to differentiate between Free PSA and Bound PSA. This helps determine the cause of the raised PSA. If indicated a Prostatic ultrasound can differentiate abnormal areas within the prostate and a biopsy may be taken from the prostate via the rectum to gather cells for examination. Isotope bone scans and X-Rays are used to look for bony spread if cancer has been diagnosed.

Signs and Symptoms of Prostate Disease

Prostate disease normally exhibits no symptoms, but most commonly the symptoms are symptoms of blockage or irritation.

Blockage – Symptoms are: weak stream of urine; hesitancy or straining to pass urine; a feeling of incomplete urination or post urination dribble.

Irritation – Symptoms are feelings of being unable to control urination, frequent passing of water and frequent nocturnal urination.

Prostate Cancer

Prostate cancer tends to occur in men over the age of 70. It is rare under the age of 50. It is the second most lethal cancer and accounts for one in ten deaths in developed countries. Prostate cancer cause is unknown but it is thought to be a combination of hormonal and genetic factors. It is more prevalent in the black population and there is a strong family link. Recently there is increasing evidence that prostate cancer is related to lifestyle factors, specifically inactivity and diets high in saturated fats.

Prostate cancer varies from benign to a fast growing and aggressive tumour. It is often asymptomatic and not detectable on digital rectal examination and this is why regular screening together with a PSA is so important.

Cancer cells cause symptoms due to pressure on surrounding structures and invasion into other areas such as bone.

Treatment depends on the stage of the cancer (tumour size and spread), the grade of the cancer speed of growth and your age and general health. In elderly patients with slow growing tumours confined to the prostate, close observation may be advocated. Patients with an aggressive tumour, surgery or radiation may be the treatment of choice. Hormone treatments may also be used, especially when the tumour is locally advanced or has spread outside the prostate.

Benign Prostatic Hypertrophy (BPH)

This is enlargement of the prostate related to aging. As a man ages, the cells of the prostate tend to multiply, causing the gland to increase in size. This only becomes a problem when the prostate starts to compress the urethra, causing difficulty in urination. The occurrence of detectable BPH increases from 10% under 30 to over 50% over 60. Once again factors implicated in BPH are lifestyle and hormone related.

Treatment involves drugs which act on the prostate by either relaxing the muscles of the prostate or shrink the prostate via hormonal effects. Surgical treatment involves a procedure called trans urethral resection of the prostate (TURP). In this procedure the prostate is resected from within via the urethra.

Other forms of treatment are laser or heat therapy and stenting of the urethra to keep it open.
Although BPH is common, surgical management is not usually indicated, and the symptoms of BPH can be successfully managed by medical means.

Prostatitis is inflammation of the prostate. It may present as an acute infection with symptoms of fever, chills, pain in the lower back and between the legs, and possibly painful urination and/or ejaculation.

Prostatitis may be acute or chronic and is treated with antibiotics. Muscle relaxants to reduce pressure and hot baths are also useful to reduce symptoms. Chronic prostatitis often clears up of its own accord.

Prostate problems are common in men over fifty, if you experience any changes in the way you normally urinate or in the appearance of your urine, consult your doctor. It may be your prostate.
Impotence and Erectile Dysfunction

What is impotence?
Impotence or erectile dysfunction (ED) means not being able to get a good enough erection to have intercourse. Temporary impotence is very common indeed, particularly in younger men, and especially when they are either anxious, or have had too much to drink.

If you're having erection problems, bear these points in mind:

• the most common cause of temporary impotence is just anxiety - not some serious disease!
• impotence can be helped by medication, sex counselling, mechanical aids, or - very occasionally - surgical treatment.
• impotence may be a symptom of another, as yet undiagnosed, disease requiring treatment; the most common of these is diabetes.

What causes impotence?
An erection happens when blood is pumped into your penis - and stays there - making it stiff and hard. All sorts of things may affect this complex process.

Psychological causes

• Anxiousness about whether you can 'perform' will almost certainly make it impossible to get an erection.
• Problems in a relationship may affect potency.
• Impotence may be caused by depression.
• Bereavement: recent loss of a loved one is notorious for causing impotence.
• Tiredness.
• Stress.
• Hang-ups - for instance, guilt about sex.
• Unresolved gay feelings.
• Having an unattractive partner.

Physical causes

• Problems with the chemical mechanism that makes erections happen - very common in older men.
• Vascular (blood vessel) disorders. Patients with arteriosclerosis, other heart or vascular diseases and high blood pressure are at greater risk of developing impotence.
• Excessive drainage of blood from the penis through the veins (venous leak) - uncommon.
• Diabetes often creates erection difficulties.
• Smoking increases the risk of developing arteriosclerosis and, therefore, of suffering from impotence.
• Side effects from certain drugs, such as some blood pressure (BP) treatments, some antidepressants and some ulcer healing drugs; BP drugs, in particular, do this very frequently.
• Side effects of non-prescribed drugs (tobacco, alcohol, cocaine and others).
• Nervous system diseases - uncommon.
• Major surgery, eg prostate surgery or other abdominal operations.
• Hormonal abnormalities - rare.

What to do if you've got potency problems
If you're having difficulty in getting erections, you should definitely see a doctor for assessment.

We strongly advise you not to go to high-priced clinics, where men in white coats pretend to be doctors while they extract large sums of money from you!

Really, it's best to start with your own GP. But if you don't feel you can face your doctor, other doctors can be found at:

• family planning clinics.
• genitourinary medicine (GUM) clinics.
• clinics recommended by the Institute of Psychosexual Medicine, the Impotence Association, or the British Association For Sexual and Relationship Therapy (BASRT).
• Brook Advisory Centres (for young people only).

Assessing your case
Whichever doctor you go to, he or she should carefully assess you, by:

• talking with you
• examining you
• doing any necessary tests - e.g. for diabetes.

There are also mechanical aids.

• Pubic ring: a rubber or bakelite ring that is put around the base of the penis. It is claimed to be effective for men who can't maintain an erection for very long.
• Vacuum pump: a tight-fitting cylinder, in which low pressure can be created, is placed over the penis. The resulting suction gives an erection. Unfortunately, the penis tends to look blue in colour, and feels cold to the touch.

Finally, there are surgical treatments.
• Splinting: this treatment involves the insertion of a flexible synthetic or metal rod (prosthesis) into the penis to cause a mechanical erection. There are several different types of prosthesis. It is important to realise that this treatment cannot be reversed without more surgery, so it will not normally be used unless other methods have failed.
• Sealing a vein leak: unfortunately, this is not always very effective.

It's also important to note that whatever form of treatment a man receives, sex counselling may be required. In cases that are entirely due to psychological causes, counselling alone can cure the problem.

But even in the other methods, counselling is often necessary as a supplement to the main treatment.

Who can receive treatment on the NHS?
The NHS has a limited budget for drug therapy and the government has declared that only certain patients can receive treatment on the NHS. The three main groups who qualify for NHS prescriptions are:
• men with the following conditions: diabetes, prostate cancer, severe pelvic injury, kidney failure, multiple sclerosis, spina bifida, Parkinson's disease, poliomyelitis, spinal cord injury, single gene neurological disease, or those who have had prostate or radical pelvic surgery. men who are severely 'distressed' as a result of impotence - this is rarely allowed. Men who were diagnosed as suffering from impotence and who were receiving treatment on the NHS on or before 14 September 1998.
• The availability of surgical treatment varies in different parts of the country, For more information contact one of the agencies listed below.

Further help
Brook Advisory Centres. Helpline: 08000 185023. This service is only for young people who are 25 and under.
Relate: 01788 573241. Low-cost psychosexual counselling available nationwide.
British Association For Sexual and Relationship Therapy. An association of highly trained private counsellors/therapists. Email for more details: info@basrt.org.uk.
Institute of Psychosexual Medicine. An association of private therapists who are also medically qualified doctors. Website: www.ipm.org.
Although rare, cancer of the testis (testicle) is the most common cause of cancer in young men in the UK. The exact cause is unknown but it seems to be getting more common. However, if caught early enough it is one of the easiest cancers to treat and cure. As this cancer is most common in men between the ages of 20-40, regular self checking of the testes is recommended in this age group. This is especially true of brothers of people with testicular cancer as they have a higher than normal chance of developing this form of cancer.

It is best if men become familiar with how their testes normally feel as any changes would then be easier to detect. The best time to examine them is after a bath or shower when relaxed. A good examination every couple of weeks or so is a sensible routine.

It is normal for one testis to be slightly bigger than the other and one to hang slightly lower than the other. Everyone is slightly different. The testes themselves feel like smooth, soft balls inside the baggy scrotum. At the top and to the back of the testis is attached the epididymis. This feels like an attached soft swelling (this stores the sperm). This is sometimes quite tender if pressed. Leading from this is the spermatic cord feeling like a soft, narrow tube, which passes up into the groin (this carries the sperm). Sometimes people confuse the normal epididymis or spermatic cord with an abnormal lump.

**What to look for:**
- Any change in size or weight of a testis.
- Any abnormal lumps, swellings or tender spots.

**Possible Abnormalities**
Most abnormalities of the testes are not cancer. For example, fluid collections, infections and harmless cysts are common and treatable. Cancer of the testis normally starts as a small, abnormal hard lump on the testes, felt away from the normal soft lump of the epididymis.

**What if I find a lump?**
Report it to your GP. Doctors are used to examining testes and will be able to advise if the abnormality is serious or not.

**What if it is cancer?**
Treatment of testicular cancer is commonly effective. In more than 90% of people there is a complete cure. However, the earlier it is detected the easier it is to treat. 50% of patients consult their doctor after the cancer has spread, which makes treatment more difficult. Often this is because of unfounded fears or just hoping it will go away.
Balanced Meal Ideas

Breakfasts
(Fresh Fruit is always a nutritious addition)
• Grapefruit, whole-wheat toast, with Marmite, mashed banana, peanut butter, sugar free jam.
• Oatcakes or rice cakes with Marmite, sesame spread, smearing of honey, cottage cheese.
• Fresh fruit or dried fruit with low fat yoghurt, a sprinkling of seeds (sunflower, sesame, pumpkin or linseed are especially good) and chopped nuts.
• Diluted, unsweetened fruit juice, porridge made with water or skimmed milk and sweetened with dried fruit (raisins, sultanas) or a little honey.
• Grilled mushrooms, tomatoes or baked beans on toast.
• Boiled or poached eggs with wholemeal toast or crispbread.
• Wholegrain unsweetened cereal: Weetabix, Shredded Wheat, All Bran, bran flakes, Special K, Common Sense, Fruit & Fibre, puffed wheat, muesli, grape nuts, semi skimmed milk.

Lunches
(Add a piece of fruit instead of a pudding)
• Sandwiches using wholemeal bread, pitta, rice or oatcakes or Ryvita. Ideas for fillings or toppings:
  • Marmite and cottage cheese (try a variety with added peppers or tuna for taste).
  • Tuna (in brine). Flavour with Quark or low fat yoghurt mixed with a little low fat mayonnaise, cucumber.
  • Sardines, drained well, with tomato and pepper.
  • Grated carrot, apple and a little Brie cheese.
  • Diced chicken, halved grapes, and yoghurt dressing as above.
• Humus and salad.
• Coleslaw made with grated carrot, onion, cabbage and yoghurt dressing.
• Prawns, yoghurt dressing and salad. Tuna mixed with red kidney beans and a dash of (hot!) Tabasco.
• Grated lower fat cheeses (Ricotta, Brie, Edam, Gouda, and Goat’s cheeses.) with tomato.
• Baked potatoes in their skins, with one of the fillings above and salad.
• Homemade soups using vegetables, fish, pulses or chicken made creamy with a little low fat yoghurt. Serve with a slice of wholemeal bread or roll.
• Salads made with tuna, salmon, cottage cheese, Edam, Brie, seeds, nuts, beans and vegetables of your choice. Courgettes, cauliflower, etc. can be blanched and marinated in a dressing of yoghurt, lemon and garlic.
• Baked beans, mushrooms, poached eggs or tomatoes on toast.

Main Meals
Preferably grill, bake or stir-fry with olive oil and a teaspoon of water. Restrict frying and roasting.
Fresh fish, grilled or baked with baked potato, salad or vegetables. Add tomato based sauces and chopped herbs.
Grilled chicken kebabs with green peppers onion, etc. Serve with brown rice, large mixed salad and mustard sauce. Mix low fat yoghurt with mustard. Mustard sauce can also be used to top foil baked fish.
Stir-fry with fish or chicken, bean sprouts, cashew nuts and any other vegetables. Add (good quality) sesame oil just before serving with soy sauce and rice or egg noodles.
Baked casserole chicken dishes in a wine stock sauce (the alcohol will burn off) with lots of garlic, onions and mushrooms. Serve with brown rice or baked potato and fresh vegetables.
Ratatouille with brown pasta. Add beans to make a main meal or serve with baked fish or chicken.
Brown pasta with tuna, onion and tomato sauce, plus side salad.
Main course salads e.g. using pasta, brown rice, kidney beans, avocado, chopped egg, nuts, seeds, pine kernels, diced chicken, tuna or sardines, together with as many vegetables as desired.
Stuffed peppers, courgettes or aubergines. For fillings mix brown rice, cooked fish or chicken or cashews or pine nuts. Add garlic, softened onion or mushrooms and top with mustard sauce or Quark. Bake in oven with tomato sauce.
Spaghetti and bean “bake”. Layer cooked spaghetti, haricot or butter beans, and cover with home-made tomato sauce. Top with oat germ, sesame seeds and grated Edam. Bake in the oven until crisp. Vegetable risotto with brown rice, onion, red pepper, and few cashew nuts. Serve with a large salad.
Baked Salmon parcels topped with spring onions, herbs and lime juice, or add watercress and fromage frais sauce when cooked.

Serve with new potatoes and fresh vegetables.

**Puddings**
Chopped fresh or dried fruit with Quark, Fromage frais or Greek Yoghurt, stewed fruit with a dash of liqueur. Add yoghurt to make a light mousse.

Fruit “Fools” made with Greek yoghurt not cream and sweetened with a little honey. Baked apples stuffed with raisins and sultanas.
Low Cholesterol Diet

Lowering the Blood Cholesterol Level
Heart disease remains the commonest form of death and disability. In the UK it is mainly due to social factors such as excessive cigarette smoking, physical inactivity and eating habits, which elevate the cholesterol level in the blood. Outlined below are the dietary principles, which will reduce the blood cholesterol levels. They form the basis of a healthy diet for the whole family but should be followed more carefully if you have a raised blood cholesterol.

Meat, Fish, Poultry, Eggs
Have up to 6 oz (cooked) a day of lean meat, chicken or turkey (without skin), veal, fish, scallops, oysters, mussels, crab or lobster. Limit egg yolks to two a week. Soy protein meat substitutes and egg whites may be used as desired. Grilling or frying in recommended oil are preferable. When roasting, place meat on a rack to allow the fat to drain. Avoid fatty meat, sausage, goose and duck (which are high in saturated fat), and liver, kidney, heart, brains, sweetbreads, shrimp, prawns and fish roe (which are rich in cholesterol). A 2 oz serving of liver may be substituted for one egg yolk. Also avoid commercially fried food and canned or frozen meat products containing gravy or sauces.

Dairy Products
Use skimmed milk; low fat yogurt, skimmed milk cheese and cottage cheese as desired. Restrict other cheeses to 1 oz a week. Avoid whole milk, condensed milk, cream, butter, non-dairy coffee creamers, commercial whipped topping and ice cream.

Fats and Oils
Choose margarine rich in polyunsaturated fat. Sunflower oil, corn oil and soybean oil for cooking and salad dressings. Avoid hard cooking fats and regular margarine.

Vegetables and Fruits
All vegetables and fruits are allowed. Limit avocado to one per week.

Breads, cakes, cereals
Whole wheat, white, brown and rye bread are low in fat; also rye or wheat crispbread and matzo. All cereals are permitted, including grain products such as rice, macaroni, semolina and flour. Bake at home using skimmed milk, egg white and allowed fat. Avoid commercial cakes, biscuits (other than those above), buns and pastries.

Sweets
Sugar, jam, honey, syrup, boiled sweets, marshmallow, and hard peppermints are permitted. Choose sorbet or meringues for dessert. Avoid all other sweets such as chocolate, toffee and fudge.

Miscellaneous
Olives, pickles and most nuts are acceptable.

Dining Out
Chinese and fish restaurants are ideal, but avoid deep-fried food and creamy sauces, and ask for fish to be prepared without butter. Elsewhere, regard all fat-containing items as likely to be rich in saturated fat. Select clear soup or salad; follow with grilled fish, poultry or lean meat and vegetables prepared without fat. End with a sorbet or fruit. Balance an enforced dietary lapse with extra care for the next day or so, and enjoy your wine - it’s harmless in moderation.
Low Cholesterol Diet

Dietary intervention should form an integral part of the management of high cholesterol. These guidelines apply to adults and children over the age of two years and it is recommended that persons with dyslipidaemia (but without coronary heart disease (CHD)) receive dietary treatment for at least three to six months before drug treatment is introduced.

A moderate fat intake of 25–30% of total energy intake is generally recommended as it is more palatable which will ensure better compliance with the dietary recommendations. There are two types of fat, saturated fat and unsaturated fat. Foods containing saturated fat include animal products such as meat, butter, hard margarine, cream, and dairy products. Saturated plant fats are also found in coconut and palm kernel oil. These foods will increase plasma cholesterol concentrations and should be reduced if hypercholesterolaemia is diagnosed. Try to substitute saturated fat with poly- and mono-unsaturated fats.

Unsaturated fats include mono-unsaturated fatty acids (MUFA) found in olive or canola oils, margarines and avocado pear. These are regarded as cholesterol lowering only when they replace saturated fat in the diet. Polyunsaturated fatty acids (PUFA) are another form of unsaturated fat, however their intake should be moderated as large amounts may lower HDL-Cholesterol.

Most studies show an elevation of blood cholesterol levels with an increase in dietary cholesterol intake. However, this response varies in individuals as it is influenced by many factors. It is recommended that dietary cholesterol intake be restricted to 100 - 300 mg/day depending on the level of dietary restriction.

Dietary cholesterol is only found in foods of animal origin. Meat products, especially organ meats, dairy products, egg yolks (contain about 280 mg of cholesterol each) and shellfish and seafood such as prawns, shrimps and calamari are high in cholesterol.

Individuals with dyslipidemia should be encouraged to read food labels and where possible to choose foods that are low in fat, saturated fat, hydrogenated plant fats and cholesterol and high in fibre.

A moderate intake of alcohol may protect against CHD but high intakes increase risk. One to two drinks of alcohol per day show a protective effect for CHD morbidity and mortality. Non-alcoholic (polyphenols) in red wine have a potent antioxidant, however no more 2-3 units of alcohol for men and 1-2 for women is recommended. One unit is equal to a 120 ml glass of wine, 25 ml tot of spirits or 360 ml can of beer.

The association between coffee intake and CHD is not due to the caffeine content, but two lipid-rich fractions (cafeol and kahweol), which have a cholesterol-raising effect. These lipid-rich fractions do not pass through filter paper and are therefore not found in filter coffee, but are found in unfiltered coffees such as boiled Turkish/Greek and cafetiére (French press) coffee.

Chronic consumption of five or more cups of these types of coffee is not recommended for people with elevated cholesterol levels.
Weight Management

Management of obesity and the sustained weight loss of 5-10% of body mass in overweight people has been found to significantly reduce risks of various diseases such as diabetes and cancer. When weight is decreased slowly, it is more likely to come from stored body fat, rather than fat-free tissue, and is therefore less likely to be regained. Focus on healthy and sustainable lifestyle choices which promote regular physical activity and healthy low-fat eating. Exercise has an important role to play in facilitating long-term weight maintenance. Regular physical activity, as little as 3 times per week, accumulating up to 30 min of activity over a prolonged period of time also results in significant improvements in body fat content, intra-abdominal fat and health risk profiles.

Dietary changes are critical with any weight management programme. Kilojoules (or calories) are contained in all foods, but the main contribution comes from the macronutrients: carbohydrates, protein and fat. Protein and carbohydrates (providing 17 kJ/g [4 kcal]) are less energy dense than fats (providing 38 kJ/g [9 kcal]). Fat digestion is also more efficient than that of protein or carbohydrate and therefore fat is stored more easily in the body. A variety of foods from the various food groups, should be incorporated in the diet in the appropriate amounts. Grains (rice, cereals, breads, pasta), fruits and vegetables should form the basis of the diet with moderate portions of lean proteins (meats, fish, dairy products and protein alternatives such as soya) and minimal quantities of fats. The ideal daily menu should comprise 50-60 percent of calories from carbohydrates, about 15 percent from protein and 20-30 percent of calories from fat. An energy intake below 5000-6000 kJs (1200-1500 calories) is inappropriate and undesirable as vitamin and mineral shortfalls will occur. Recognising and cutting out fat from diets is an important strategy for weight management. The energy cost to digest and store carbohydrates amounts to approximately 23% of the ingested carbohydrate energy. Furthermore, carbohydrate is not readily turned into fat but used as a preferential fuel source. Carbohydrate-rich foods provide bulk, fibre and little fat and therefore promote satiety. Vegetables and fruit are especially rich in vitamins, minerals, phytoneutrients. Soluble fibre specifically may have a role in glycaemic control preventing dips in blood sugar levels that stimulates appetite. Foods high in refined sugar should be limited as an unnecessary source of energy, although small amounts (up to 25 grams a day, spread throughout the day) can be included for palatability. To increase the fibre content in your diet:

- Add lentils to white or brown rice.
- Oats or oat bran acts as a binding (hamburger patties, meatballs) or thickening (soups, stews) agent.
- Vegetables, salads or fruit should be included at every meal.
- Beans or lentils added to soups and stews.
- A mixture of white and whole wheat flours for baking.
- Fresh or stewed fruit as a dessert.

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- Fresh or stewed fruit as a dessert.

Alcohol intake should be limited if weight loss is the objective. 2-3 units of alcohol for men and 1-2 for women is recommended. One unit is equal to a 120 ml glass of wine, 25 ml tot of spirits or 360 ml can of beer.
If you are thinking of becoming a vegetarian or vegan or if you already are so, you need to plan your diet very carefully, to ensure good nutrition to maintain health. This is particularly true for teenagers, pregnant and breast feeding women.

Being vegetarian or vegan does not simply mean just eating vegetables. If you are unsure as to whether you are following a healthy vegetarian diet, invest in a good book on the subject and / or consult a dietician.

The following information should help as a brief introduction to healthy eating as a vegetarian or vegan.

**Proteins**

These are the body’s “building blocks”. Protein is essential for healthy growth.

- Eggs (5-7 eggs may be eaten per week)
- Milk (cows or fortified soya milk)
- Cheese, Yoghurt, Tofu
- Nuts, Quorn
- Cereals, Grains, Seeds
- Pulses (beans, lentils, peas)

If you are a vegan, these are a valuable source of protein. Have at least two portions daily. There are various types of pulses available from health food shops and supermarkets.

They can be bought either:

- Dried- they should be soaked overnight and boiled for at least ten minutes, then simmered until tender (lentils do not require soaking)
- Canned and ready for use

Furthermore if you do not eat eggs, milk or cheese then certain protein foods are then best eaten together.

To give the best balance of protein combine a pulse or nut with a cereal or grain. For example:

- Baked beans on toast
- Lentil bolognaise and pasta
- Chilli beans and rice
- Peanut butter sandwiches

Fast foods often do not contain protein. Check the list of ingredients.

- Eat less cakes and pastries
- Spread margarine thinly
Calcium: Are You Getting Enough?

Calcium Providers

The main sources of calcium are dairy products, certain tinned fish, bread, breakfast cereals, green leafy vegetables and nuts.

It is virtually impossible to get enough calcium if you are not having some dairy products at least once or twice a day.

If for some reason you cannot, or will not, have dairy products daily then it is important to ensure that you discuss whether you need calcium supplements.

Most people do not have enough fish. This is a shame because there is a lot of evidence suggesting that having fish in place of meat would be very beneficial in protecting against heart disease. The extra bonus is choosing pilchards or sardines regularly, i.e. once or twice in a week, will also boost your calcium intake and so protect your bones too.

Remember your calcium target is at least 800 to 1000 milligrams per day.

### Food

<table>
<thead>
<tr>
<th>Food</th>
<th>Milligrams per stated serving</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dairy Products</strong></td>
<td></td>
</tr>
<tr>
<td>1 pt Skimmed Milk</td>
<td>675</td>
</tr>
<tr>
<td>1 pt Semi Skimmed Milk</td>
<td>675</td>
</tr>
<tr>
<td>1 pt Whole Milk</td>
<td>650</td>
</tr>
<tr>
<td>1 pt Calcium enriched milk</td>
<td>800-950</td>
</tr>
<tr>
<td>1 small (150g) pot Yoghurt – most types</td>
<td>275</td>
</tr>
<tr>
<td>1-oz cheese – most hard cheeses</td>
<td>225</td>
</tr>
<tr>
<td>1/2 oz (1 heaped TBS) Parmesan</td>
<td>200</td>
</tr>
<tr>
<td>1 small pot (100g) Cottage cheese</td>
<td>75</td>
</tr>
<tr>
<td>1 small pot (100g) Fromage Frais plain/fruit</td>
<td>80-100</td>
</tr>
<tr>
<td>1 small scoop (50g) Ice Cream – most flavours</td>
<td>60</td>
</tr>
<tr>
<td><strong>Fish</strong></td>
<td></td>
</tr>
<tr>
<td>1 small can (100-120g) Pilchards/Sardines</td>
<td>300–400</td>
</tr>
<tr>
<td>Bread and Cereals</td>
<td></td>
</tr>
<tr>
<td>2 large medium slices bread – white</td>
<td>75</td>
</tr>
<tr>
<td>2 large medium slices bread – wholemeal/granary</td>
<td>40</td>
</tr>
<tr>
<td>Average bowl breakfast cereals – most types</td>
<td>20–40</td>
</tr>
<tr>
<td>Average bowl muesli – Alpen type</td>
<td>60</td>
</tr>
<tr>
<td>Vegetables and nuts</td>
<td></td>
</tr>
<tr>
<td>Large helping cooked beans/green vegetable</td>
<td>50-100</td>
</tr>
<tr>
<td>1 small pkt (50g) Nuts – most types</td>
<td>30-100</td>
</tr>
</tbody>
</table>

**Calcium**

Calcium is needed for the growth of teeth and bones. If you drink one pint of cow’s milk or fortified soya milk, then you will have an adequate calcium intake.

Alternatively substitute 1/3-pint milk for:
- 1 carton of yoghurt or
- 1 oz hard cheese or
- 2 oz tofu

If you do not have a daily intake of calcium from the food above, then take a calcium supplement or ensure a good calcium intake from:
- Pulses, nuts, cereals, pasta, bread, sesame seeds and soya bean flour.

**Iron**

Is required to make healthy blood. Iron from non-meat sources is poorly absorbed, Vitamin C helps absorb iron, so include some fresh fruit, fruit juice or vegetables at each meal. It is important to ensure a good intake from other foods:
- Pulses, wholegrains (e.g. whole meal bread)
- Fortified breakfast cereals e.g. Branflakes
- Dried fruit
- Dark green vegetables
- Cocoa powder, carrot, curry powder
- Eggs (if eaten)

**B Vitamins**

Wholegrain cereals
- Beans, wheatgerm
- Green vegetables
- Yeast extract e.g. Marmite
- Milk or eggs (if eaten)

Vitamin B12 is only found in foods from animal sources. If milk, eggs or cheese are eaten, then an adequate intake of Vitamin B12 will be supplied. On a vegan diet, a supplement should be taken:
- Certain foods are fortified with Vitamin B12 e.g. breakfast cereals such as grape nuts and branflakes.
- Some Soya milks contain Vitamin B12. Try to include these in your diet.

**Healthy eating**

Even though you do not drink milk, you may still be eating too much fat. To reduce your dietary fat intake:
- Choose semi-skimmed milk instead of whole milk
- Choose low fat cheese e.g. Edam or cottage cheese.
- Limit hard cheese to 2 oz per meal
- Eat less fried food and reduce the amount of oil in cooking. (Use sunflower or corn oil sparingly)
- Grill or bake food
**Insomnia**

Do we need the same amount of sleep throughout our lives?
We spend a great deal of our lives sleeping. Infants sleep practically 24 hours a day. Small children take frequent naps. Youngsters and teenagers should sleep about eight or nine hours each night, while adults can make do with seven to eight hours, sometimes less. Many elderly people need less still, perhaps five to six hours, and also tend to be lighter sleepers.

Why do elderly people sleep less?
Elderly people may not need to, or be able to sleep as much as younger people. This could be because they lead a relatively inactive lifestyle, or they may also be getting more sleep during the day.

What is insomnia?
The term insomnia refers to an inability to fall asleep or to remain asleep for an adequate length of time. This causes virtually permanent tiredness which badly affects your daily life. This said, it is important to stress that virtually everybody has problems sleeping at some time or other. Stress, depression and worry are well known causes of insomnia. Illness is another possible cause, especially if there is pain or discomfort.

What can relieve insomnia?
There are lots of effective medicines on the market to help you sleep. However, it is a good idea to try to use these as little as possible in case your body becomes dependent on them. Herbal and complementary medicines may also help relieve periods of disturbed sleep.

What precautions should you take when using sleeping pills?
As mentioned above, it is important not to use sleeping pills too often. This is because your body becomes dependent on the medication, and eventually you will find it very difficult to stop taking the tablets. You may also need to take more and more to achieve the desired effect because your body becomes tolerant. They may also leave you feeling drowsy and lethargic in the morning.

Good advice for people with insomnia
- Exercise often helps you sleep, but avoid exercising shortly before you go to bed.
- Try not to eat large meals before bedtime.
- Drinking alcohol may also disturb your night's sleep, though a small night-cap can help you to fall asleep in the first place.
- Cut down on drinks containing caffeine (coffee, tea, cocoa, and colas), especially late at night.
- Avoid stimulants (tea, coffee), alcohol and heavy meals 3–4 hours before bedtime. A glass of milk or Horlicks can help.
- Make sure you have a comfortable bed. The bedroom itself should be well-ventilated and cool and as dark and quiet as possible.
- Don't go to bed until you feel tired.
- Sex just before bedtime can both promote and impede sleep. Men generally sleep well after sex, whereas women tend to liven up.
- If you do not fall asleep within 30 minutes, get up and do some ironing, watch TV or read. Go to bed again when sleepy.
- Learn a relaxation technique to help reduce anxiety, such as using a relaxation tape, yoga, meditation twice daily.
- Avoid daytime naps, as this makes it hard to sleep at night.
- Use your bed for sleeping and sexual activity only. Do not read, watch TV, study or eat in bed.
- Try not to do your thinking or worrying in bed. Set some time aside during the day to think about your problems.
- Go to bed and get up at the same time each day.
- Have a quiet evening routine. A hot bath can help.
- Avoid the regular use of sleeping tablets wherever possible, as they make it harder in the long run to do it alone.
- Read a book until you feel dozy. Get up again if you are not able to sleep within half an hour. Sit down, read the paper, listen to some music and go back to bed half an hour later.
- Get up at the same time every morning. Set the alarm and get out of bed quickly, even if you have had a late or sleepless night. This way, at the end of the day you'll probably feel tired and sleepy at just the right time. If you do this for a sufficient number of days, you will successfully adjust your inner clock and get tired when you need to.
- For long trips by bus or plane, it might be worth taking a sleeping pill if you expect to have problems sleeping. This should be a fast-working pill with a limited effect for about five or six hours. You will need to consult your GP to get a prescription.
Most people can overcome their insomnia by following the advice above. If this isn't the case, consult your GP.
Deep Vein Thrombosis (DVT) Screen

There is growing evidence that people who undertake long-haul travel or are immobile for long periods are at risk of developing Deep Vein Thrombosis (DVT) in the deep vein system of the lower leg. The condition is potentially fatal, is often without symptoms and is difficult to diagnose by external examination. Recent reports suggest as many as one in ten long-haul travellers are at risk and last year over 30,000 suffered from DVT, many cases proving fatal.

The risk of DVT is known to increase in circumstances of low cabin pressure, dehydration, extended immobility (more than 4 hours) and altered sleep patterns (jet lag). Factors that increase risk include:

- A genetic mutation that predisposes 10% of Caucasians to inherited thrombosis
- Old age and circulatory disease
- A family history of DVT
- Frequent long-haul flights, long distance driving and periods of immobility
- The contraceptive pill increases 3-fold the risk of women developing DVT
- Men over 45
- Factor V Leiden defect found in 5% of the population

Pre-travel DVT screening helps assess risk of developing DVT, prompting, where appropriate, a referral to a haematologist for preventive treatment.

Screening is not suitable for high risk patients, who already require the pre-travel care of a haematologist. This category includes patients with clotting disorders, a known malignancy or severe varicose veins, diabetics or patients who have had recent surgery or a stroke.

Screening is also not suitable for moderate risk patients, who should seek medical advice before long-haul travel. This group includes pregnant women.

The MedicAlliance Pre-Travel DVT Screen identifies potential clotting and genetic abnormalities that predispose the patient to DVT and includes:

- Full blood count
- Anticardiolipin antibody test
- Factor V Leiden test
- Factor II Gene mutation test
- Advice and information on DVT and its prevention

The DVT Screen requires a blood sample, which is then sent for laboratory analysis. Please contact MedicAlliance on 01296 711006 should you wish to arrange a DVT screen.
What Is Migrane?
Migraine is the most common neurological condition in the developed world. It affects 10% of the U.K. population and is more prevalent than diabetes, epilepsy and asthma combined.

Migraine is more than just a headache. It can be a debilitating condition which has a considerable impact on the quality of life of sufferers and their families. Attacks can be completely disabling forcing the sufferer to abandon everyday activities for up to 3 days. Even in symptom-free periods sufferers may live in fear of the next attack.

If you have two or more of the following symptoms during an attack it is probable that you are suffering from migraine:

- Neurological disturbances lasting around 15 - 60 minutes which normally occur before the headache begins; most commonly visual disturbances including blind spots, flashing lights or zig zag patterns;
- Confusion, inability to concentrate, problems with articulation or co-ordination, or tingling, pins and needles or numbness on the affected side. These symptoms, known as aura are most often identified with migraine but in fact only about 10-15% of sufferers experience them. Migraine with aura was formerly known as Classic Migraine.

Although some people experience aura symptoms only, the attack normally proceeds after a short interval in the same way as migraine without aura, formerly called Common Migraine, with some or all of the following symptoms:

- Intense throbbing headache, often on one side of the head only
- Nausea and/or vomiting and/or diarrhoea
- Increased sensitivity to light (photophobia)
- Increased sensitivity to sounds (phonophobia)
- Increased sensitivity to smells (osmophobia)

You may also experience stiffness of the neck and shoulders, tingling or stiffness in the limbs, an inability to concentrate, difficulty in speaking or in rare cases paralysis or loss of consciousness.

A general rule of thumb is that if a headache and/or other associated symptoms prevents you from continuing with normal daily activities it could be a migraine.

Although headache is the most obvious event during a migraine some migraineurs start to feel "strange" a day or so before the attack begins. These strange feelings, known as the prodrome, are the first signs of the attack and can include cravings for certain foods, excitability, hyperactivity, tiredness, yawning or a change of mood.

Migraine attacks normally last between 4 and 72 hours and sufferers are usually symptom free between attacks.

Migraine - The Facts
Causes
Each person is different but there are some "trigger" factors which are commonly involved:

- Tiredness
- Physical exhaustion
- Stress
- Climatic change
- Hormones, eg the "time of the month" in women
- Foods, eg caffeine, cheeses, chocolate, red wine

Treatment and Prevention

- Note down your attacks in a diary and try to spot any common triggering factors, and avoid them if possible
- Try avoiding any food which seems implicated and at a later stage take a small trial dose of the food again to see whether it genuinely is involved
- At the first symptom of an attack take a pain killer e.g.aspirin or paracetamol, even if this means waking yourself up when you notice symptoms while half asleep in the early hours of the morning. (Often by getting up time it is too late to abort the attack.)
• Most people find that it helps to lie down in a darkened room, in fact there may be little else you are able to do. In some instances migraine follows a period of rushing around overstretching yourself, and it might be looked on as the body’s way of slowing you down

• Sometimes bathing your head in cold water or using a cold compress on the forehead is helpful

• There are some over the counter preparations which contain a pain killer and a medication which stops nausea and vomiting (anti-emetic). These are often even more effective than the pain killer alone as migraine is associated with poor absorption from the stomach and a tendency for food and drink to stay in the stomach much longer than usual (prior to being sick)

• Your doctor may prescribe something along the lines of the above, or possibly one of the more modern specific antimigraine treatments, which work on one of the chemical pathways in the brain

• If the attacks are frequent and disruptive, then the doctor may prescribe a drug to be taken daily as a preventative

• Sometimes relaxation and meditation techniques may be helpful as may some of the complementary therapies

For further information you can contact the following organisations.

**Migraine Action Association**
Unit 6,
Oakley Hay Lodge Business Park,
Great Folds Road,
Great Oakley,
Northants
NN18 9AS
Tel: 01536 461333
Fax: 01536 461444
e-mail: info@migraine.org.uk
Cancer Marker Tests

Cancer markers are blood investigations carried out in a specialist laboratory. They are proteins produced by various organs of the body and are often shown to be increased in cancer. There are several markers and the following list comprises of the markers used by MedicAlliance in the cancer marker screen.

**Carcinoembryonic Antigen (CEA)**

Carcinoembryonic antigen (CEA) is a substance produced during the development of a foetus. Normally the production of CEA stops before birth, and CEA usually is not found in the blood of healthy adults. However, CEA may be found in the blood of people who are heavy smokers or who have some types of cancer, especially cancers of the pancreas, large intestine (colon and rectum), breast, or lung. Some other diseases may also raise CEA levels. The test for CEA is not used to diagnose cancer, but it can be a valuable tool to help determine how widespread cancer is and to monitor the success of cancer treatment.

**Why It Is Done**

- Determine how widespread cancer is for some types of the disease, especially cancer of the pancreas or large intestine (colon and rectum). This is called staging.
- Monitor the success of treatment for some types of cancer. If cancer surgery is done, CEA levels may be measured both before and after surgery to evaluate both the success of the operation and the person’s chances of recovery.
- Determine whether cancer has returned after successful treatment. This can be especially useful for cancer of the colon and rectum (colorectal cancer).
- High levels of carcinoembryonic antigen (CEA) may indicate the presence of some types of cancer, such as cancer of the large intestine (colon and rectum), lung, pancreas, breast, ovary, and possibly others. A CEA level between 5 ng/mL and 10 ng/mL is borderline. A level higher than 20 ng/mL is highly suggestive of cancer. Blood levels of CEA are also frequently increased in people with cirrhosis, pancreatitis, kidney failure, inflammatory bowel disease, COPD, or obstructed bile ducts. Chronic heavy smoking may also raise blood CEA levels.

**CA12-5 (Ovaries, uterus and fallopian tubes)**

A tumor marker is a substance that can be detected in the blood or other body fluids that researchers have identified as having a correlation to the presence of particular types of cancer. CA12-5, a substance found in very low levels in the human body, has become a widely used tumor marker for gynaecological cancers.

Most often CA12-5 is measured in women with those cancers involving the ovaries, uterus, and fallopian tubes.

CA12-5 tests are one of a series of indicators that may be used by your doctor to determine if you have cancer, and if it is progressing or not. Others may include your family history, a pelvic exam, sonogram and/or MRIs.

**How are levels of CA12-5 determined?**

A blood sample is taken and analysed. Results are usually available within a few days.

**What is a normal CA12-5 level?**

Usually CA12-5 levels range between 1-35 u/ml, but can vary. It is important that you discuss your CA12-5 level with your physician to fully understand how to interpret your own results.

**What if my CA12-5 level is elevated? Does it mean I definitely have cancer?**

No. If your CA12-5 level is found to be elevated your doctor will need to rule out other conditions as possible causes. Conditions that can have an impact on CA12-5 levels include menstruation, pregnancy, ovarian cysts, and peritonitis, (an infection of the lining of the abdomen). In fact, abnormal or elevated CA12-5 levels may be detected in a small percentage of healthy individuals and patients with nonmalignant conditions. Nonetheless, an increased level of CA12-5 may be present 3 to 4 months before a malignant tumor can be detected by other means, therefore, the CA12-5 test is an important cancer screening device for women considered at increased risk of developing cancer of the reproductive system.
If my CA12-5 count is low, does that rule out cancer?

Unfortunately, normal levels of CA12-5 do not definitively rule out the presence or recurrence of cancer.

Again, it is a combination of tests, observations and feedback that will help your doctor diagnose your condition.

Will my CA12-5 count tell me if my treatment is working?

CA12-5 counts can be particularly important once a cancer diagnosis is made, to help determine the effectiveness of treatment. Declining levels of CA12-5 often represent a positive response to treatment while increasing levels denotes a poor response, but not always. Dependent on the individual being tested, CA12-5 results can be used by a doctor to continually monitor and improve treatment options.

How frequently should my CA12-5 levels be evaluated?

The frequency of CA12-5 monitoring during or after cancer treatment will be influenced by the type of cancer, size of the tumor(s), type of treatment, and the patient's baseline CA12-5 level. Your doctor should discuss this with you.

CA 15-3

This marker is raised above normal in 80% of women with breast cancer. The test is useful to predict the recurrence of the disease, or to evaluate treatment.

CA 19-9

A protein related to certain blood group antigens, has been shown to be elevated in the blood of some patients with gastrointestinal tumors. CA 19-9, as a tumor marker, is helpful in post-treatment monitoring to determine the success of therapy or the development of recurrence of disease. CA 19-9 has been reported as positive in 70% to 80% of pancreatic carcinomas, 50% to 60% of gastric cancers, 60% of hepatobiliary cancer, 30% of colorectal cancer, and few lung, breast or prostate cancers. Serum levels may differentiate pancreatic cancer from pancreatitis.

If you would like to have the test please call MedicAlliance on 01296 711006.
Exercise Guidelines

Although some people have genetically inherited high total cholesterol levels, the majority of hypercholesterolaemics can do something constructive to lower their total cholesterol levels.

These levels have often increased due to poor lifestyle habits and diets full of saturated fat and cholesterol. Lowering of total cholesterol levels can be done by combining dietary and exercise interventions.

It is advisable to always start with the conservative management of this disease and if they then prove to be ineffective, specific lipid-lowering medications are available to also assist in decreasing total cholesterol levels. All intervention strategies are aimed at lowering the LDL (low density lipoprotein) and raising the HDL (high density lipoprotein) profiles.

Numerous studies have shown that together, diet and exercise result in favourable cholesterol levels: namely an increase in HDL and a decrease in LDL. The exercise programme should focus on frequency and duration of exercise to begin with: basically one is aiming to instill a consistent routine of.

Although generally it is sufficient to exercise 3 times a week, obese patients may need to exercise more often to show any real results. Duration of training should be between 20 and 30 minutes of aerobic exercise. Once this has been done with a relatively low intensity exercise, the intensity can be increased to anything up to 80% of the maximum heart rate.

Once the aerobic base has been accomplished and patients begin to see the benefits of a regular exercise programme in terms of weight loss and cholesterol levels, the programme can be broadened to include strength and flexibility training too. Not only will this help muscle toning, it will also allay boredom and help compliance which is often the greatest obstacle to exercise.
Exercise Guide for People With Osteoporosis

Introduction

Osteoporosis, also known as “brittle bone disease”, is a silent disease which develops gradually and makes bones fragile. Exercise has shown to slow down this destructive process and even to reverse the damage in some cases. Exercise should include regular weight-bearing and resistance exercise to improve bone mineral density. Weight-bearing exercise, such as walking, light jogging, rowing and stepping will stimulate the bone growth. Other activities that should be included are activities that improve strength, flexibility, and coordination.

These may indirectly decrease the incidence of osteoporotic fractures by lessening the likelihood of the person falling. Resistance exercise will increase strength and muscle mass which will in turn help to protect the skeleton. Swimming and cycling are examples of exercises that are non-weight bearing. Although they will improve muscular strength and endurance, they do not provide enough impact to stimulate bone generation.

Aquatic fitness classes or water aerobics should provide enough stimuli if they include rebound movements such as jogging, jumping, hopping and “scissors”. The water level should not be too deep but should be at chest height or slightly below.

Specific recommendations

Weight training programmes are recommended and initially the number of load cycles should be relatively low such as one set of 5-8 exercises). The emphasis should be on lower body development. Intensity is individual but 1-3 sets at 10-15 repetition maximum (RM) is appropriate for initial levels. This can gradually progress to 3-4 sets at 6-10 RM. Frequency of training should be a minimum of 2-3 days per week.

The following exercise principles need to be kept in mind: specificity, overload, reversibility and initial bone density mineral values:

- Specificity: the impact of the training should be at the bone site of interest since loading seems to have a localised effect. If the bones of the lower limbs are stressed during physical activity such as jumping or running, the bones of the upper limbs will not benefit unless they are also stressed with specific exercises.
- Overload: For a bone to improve its density and strength, the exercise stress must exceed normal levels or be “overloaded”.
- Reversibility: The beneficial effects of an exercise programme on the skeleton will be rapidly lost if the exercise is stopped.
- Initial values: Individuals with low bone mineral density will have the greatest potential to gain from increased mechanical loading. Each person also has an individual genetic ceiling that limits the gains in bone mass. As this ceiling is approached the gains in bone mass will slow and plateau.

In addition to exercise, other lifestyle behaviours may need attention such as smoking habits and dietary intakes of caffeine, alcohol, protein, and salt. Exercise environments or situations which place an osteoporotic patient at risk of falling should be avoided at all costs. If in doubt or if you require a specialised and personal exercise programme, contact your nearest physiotherapist. Remember that the time course of a trabecular (bone) remodelling cycle is approximately 3-4 months. About 9 months to 1 year follow-up is required to detect significant change in bone mass. An increase in bone mass greater than 1% is significant, especially given that the average rate of loss is 0.5-1% per year!

Keep exercising for healthy bones.
Exercise Guidelines

Hypertension is often referred to as the ‘silent killer’ because it can remain undetected for years with no symptoms whatsoever. Despite this, there are several non-pharmacological lifestyle parameters which can be implemented to help lower high blood pressure before medications are prescribed.

Apart from decreasing salt intake, controlling alcohol and smoking and correcting diet, exercise is also a very beneficial tool which can be used to combat hypertension. A study conducted on 15,000 alumni showed that those who were inactive had a 1/3 greater risk of developing hypertension. Exercise not only has benefits in terms of hypertension, it also affects the other risk factors for cardiac disease such as obesity and high cholesterol. However, it is not only important to know that exercise can do something positive to decrease high blood pressure, it is also crucial to know what type of exercise is best.

A broad aerobic training programme is necessary to begin with. This should consist of 30 minutes of exercise, 3 times a week at an intensity of 50-70% of your maximum heart rate. Please note that if you have been previously inactive, you may need to start at a slower pace than this. It is also important to know that your systolic blood pressure (top reading) will rise during exercise and that the diastolic blood pressure (bottom reading) may remain the same or even drop. This is not a reason to worry. If you have any concerns, check with the exercise specialist or your doctor for advice. Remember to always monitor your blood pressure before, during and after exercise.

The question of whether hypertensive patients can do resistance training has been a contentious issue for a long time. Lately the general understanding is that resistance training poses no threat to hypertensive patients, as long as the correct technique is used. Often people tend to hold their breath when lifting weights. This is incorrect. You need to focus on exhaling as you exert yourself. If you do this, with the appropriate weight for your strength, resistance training will add a very beneficial component to your training.

Although exercise has a positive effect on hypertension, do not expect a miracle cure overnight. These changes take time and can only occur with consistent effort on your behalf. Despite this, it may still be necessary to have drug intervention. Your specialist will advise you on this and on the interaction of this medication with your exercise.
Exercise Guidelines

A common misconception amongst asthma sufferers has been that exercise is harmful for them and their condition. This misinformation and the fear associated with it has prevented many asthmatics from reaping the health rewards associated with a suitable exercise regime. The exact mechanism whereby exercise is purported to help asthma patients manage their disease is not known but exercise does cause a decrease in airway responsiveness so that the airways are less likely to over react to the allergen or known stimuli. One of the most beneficial advantages of exercise is the effect it has on decreasing absenteeism from either school or work through physical conditioning. Exercise in the long-term may also result in patients being able to decrease medication dosages.

Although exercise has been shown to be beneficial to asthmatics, it is not just a question of getting up and exercising as one wishes. Many asthmatics may suffer from what is referred to as ‘Exercise induced asthma (EIA)’. Generally these symptoms include a tightening of the chest, shortness of breath and wheezing. These symptoms can, however, be managed successfully by using a variety of tools which includes the use of a ‘refractory period’, correct pharmacotherapy and exercise guidelines for this population. By incorporating these management methods, one can ensure safe, healthy, symptom free and enjoyable exercise.

The refractory period is the time in which the bronchial narrowing and thus the symptoms of EIA are less severe, allowing asthma sufferers to exercise relatively symptom free. This refractory period is induced by a period of low intensity exercise carried out before the actual exercise session. This low intensity exercise triggers the EIA symptoms so that by the time one is exercising at the desired intensity, the symptoms are less and are controlled for a certain amount of time during which one can exercise freely.

Pharmacological agents include bronchodilators and inhaled beta-adrenergic agents. When inhaled approximately 10 to 15 minutes prior to exercise (the time depending on the exact medication) these medications begin taking effect when one is exercising and help to control the symptoms of asthma, again allowing one to exercise for a window period symptom free. One needs to discuss specific drug prescription with a medical specialist, especially as some of these drugs are banned in competitive sports.

There are also specific exercise guidelines for the asthmatic patient:

- Do not exercise if you are suffering from a viral infection or have just recovered from one
- Do not exercise in very hot or cold, dry conditions
- Do not exercise in areas where there is a high pollen count or pollution count (depending on your specific allergen)
- Do not exercise on days where your allergy is particularly bad
- Do not exercise if your lung function test result is less than desirable (as discussed with your doctor)
- Breathe through your nose as opposed to your mouth—your nose is a natural filter and humidifier which will ensure the air passing into your airways is warm and moist
- Make use of the refractory period
- Use a bronchodilator before exercise
- Use a hand-held peak flow meter to monitor lung function

Exercise prescription:

- Warm-up: This should include stretching and low-intensity exercise (this can form part of the routine to trigger the refractory period)
- Cardio-vascular exercise: 20-30 minutes at 60-85% of your maximum heart rate (calculated as 220 divided by your age), 3-4 times a week
- Swimming: is an excellent form of exercise for asthma patients
- Cool-down: - Stretching is an excellent way to cool-down and improve flexibility
Exercise Guidelines

Chronic obstructive pulmonary disease is the name given to a group of diseases which includes chronic bronchitis, emphysema and asthmatic bronchitis. All of these diseases share an obstruction to the airflow out of the lungs and 90% of them are due to smoking.

These diseases are not curable and the damage caused to the lungs is, for the main part, irreparable.

Treatment includes mainly smoking cessation and medication which aim to prevent further disintegration of lung function.

What is the point of exercise?

Indeed exercise does not and cannot aim to do much to help the state of the lungs but exercise does have a positive effect on the cardiovascular system which, when more trained, is then able to compensate somewhat for the impaired lung function.

Exercise may also result in decreased breathlessness in these patients as well as an increased ventilatory efficiency and improved muscle strength and flexibility.

Patients with COPD need to be aware that their exercise needs to be well controlled and monitored. One way of doing this is by measuring the oxygen saturation levels before, during and after exercise. A pulse oximeter will measure this and one needs to maintain an oxygen saturation of between 80 and 90%.

Patients must also realise that they must have realistic expectations for their exercise routine and cannot expect to start out doing 30 minutes of exercise.

The exercise needs to be taken very slowly and one needs to be very conservative. COPD patients should aim to do 5-10 minutes of either light walking or cycling. Slowly, as one’s body adjusts and becomes fitter, so one can increase the time of exercise and the intensity. After an aerobic baseline has been obtained, strength and flexibility exercises can be added to the programme.

Apart from the conventional form of exercise, COPD patients are advised to practice ‘pursed lip breathing’.

This is a form of breathing exercise which aims to minimise the collapse in the airways by slow and controlled exhalation. Here is a simple explanation of how this is done:

1. Breathe in through your nose.
2. Breathe out through pursed lips (form your lips as if you were blowing out a candle).
3. Do not force the air out, instead the outflow must be slow and controlled.
4. Aim to take twice the time to breathe out than you did to breathe in.

Do these exercises at least once daily. You will find that they become easier and you can control the breath for longer each time. This will not only assist your exercise but also help you in your daily activities, for example shopping, gardening.
Exercise Guide for People With Diabetes

Exercise Guidelines

People with both types of diabetes can benefit from exercise. The benefits include improved physical fitness and weight loss, cholesterol improvements, favourable blood pressure changes and improved psychological well-being.

Exercise has the same effect with diabetics as insulin in that it lowers the blood glucose levels. Thus one of the primary concerns with exercising diabetics is that they do not become hypoglycaemic (too little blood sugar). It is important for both type I and II diabetics to consult with their specialists in terms of exercise, medication and drug interaction.

If you are an insulin dependant diabetic you should avoid:

- exercising when your insulin is peaking or you may become hypoglycaemic (too little blood glucose)
- exercising in extreme heat or cold
- injecting the limbs you will be exercising

Remember to:

- Monitor your glucose levels before and after exercise (after exercise is especially important as this is the time when you are at risk of becoming hypoglycaemic)
- Exercise 60 minutes after a meal (when your glucose is at its highest)
- Ensure you are well hydrated throughout your exercise session
- Have the correct equipment, especially footwear
- Have some sweets with you in case your glucose levels drop suddenly
- Exercise with a friend who is aware of the signs of hypoglycaemia

If you are a non-insulin dependant diabetic, remember to:

- Drink adequate amounts of fluid
- Exercise about 30-minutes after a light meal
- Monitor your glucose levels as suggested by your doctor
- Ensure you have the correct footwear

Exercise prescription:

- Warm-up: 5-10 minutes of low intensity exercise, stretching
- Cardiovascular exercise: 20-30 minutes aerobic exercise at 60-70% maximum heart rate, 3 times a week
- Cool down: 5-10 minutes stretching
Exercise Guidelines and Cancer

Exercise Guidelines
Most likely, you have been affected by cancer - whether you personally have been diagnosed or whether a family member, a friend or a colleague has been diagnosed with a cancer. It is estimated that 1 in 4 of all people will be affected by a cancer diagnosis in their lifetime.

Cancer is not a single disease but a collection of diseases that have the common feature of inappropriate and rapid cell growth. These cells have the potential to spread to and affect other anatomical sites in the body.

The 5 main cancers that affect males are prostate, oesophageal, skin- squamous cell carcinoma (SCC), lung and colo-rectal. In females the highest incidence is in cervical, breast, skin - SCC, colo-rectal and oesophageal cancer.

In the USA the top two causes of cancer death are due to poor dietary habits and tobacco use.

Warning Signs of Cancer
It is vital to try and detect cancer as early as possible in order to try and prevent it from developing to advanced stages or spreading to secondary anatomical sites.

Watch and listen to your body for any of the warning signs of cancer. Take note of:

• Unusual bleeding or discharge
• Unexplained change in bladder or bowel habits
• Any sore that does not heal
• Unexplained indigestion or difficulty in swallowing
• Obvious change in a wart or mole
• Thickening or lump in breast or elsewhere
• Nagging cough or hoarseness
• Unexplained weight loss

Cancer Prevention:
“7 Rules for a Healthy Life”
The Harvard Center for Cancer Prevention lists the following “7 Rules for a Healthy Life” to help to try and prevent cancer:

• Do not smoke. It is a mystery why people continue this habit that has so many destructive effects on their health. Perhaps it is a combination of nicotine addiction and very clever, yet false, advertising by tobacco companies that link smoking to the “good life” rather than its harmful effects.

• Avoid weight gain. Being over fat can increase your risk of cancer, for example in over fat women there is a higher risk of colon and uterine cancer.

• Be physically active. In our busy, computer-based society, far more people are involved in sedentary desk jobs. Physical activity has been assigned a very low priority. Try to accumulate at least 30 minutes of physical activity on most days of the week. This can even be done in a few 10 minute bouts of physical activity. These can include gardening and household related work.

Increasing your physical activity levels, together with sensible eating, will help you to maintain a healthy body weight and prevent weight gain.

• Eat a healthy diet. Our busy lifestyles often result in us eating a lot of take-away or processed convenience foods that may be high in fat and sugars. Try to increase the amount of fruit, vegetables and whole grains in your diet. Also try to reduce the percentage of total calories in your diet that come from fat, to 20% or less.

• Limit your alcohol intake: Guidelines for moderate alcohol intake suggest no more than 3 drinks per day for men and 2 drinks per day for women. One drink is equivalent to half a beer or one glass (200 ml) of wine or a tot of spirits. The cancers that are affected by alcohol are mouth, oesophageal, colon, rectal and breast.

• Protect yourself from sexually-transmitted diseases.

• Protect yourself from the sun: The well known guidelines of covering up with hats, shirts and sunscreens and keeping out of direct sunlight between 10 am and 3 pm, are often ignored. Yet these simple things can help to prevent skin cancer and malignant melanoma.
Benefits of Exercise
Appropriate exercise for people with cancer is possible and is recommended. Physical activity can help to reduce fatigue, contribute to recuperation and improve quality of life, by increasing a person’s level of function and therefore their physical independence. Exercise promotes psychological and emotional wellbeing and helps to decrease depression and anxiety. It can also help to increase a person’s sense of their being in control. Exercise may also help to control nausea which is a common side-effect of chemotherapy. Exercise has also been shown to boost the immune system and assist fighting cancer. It is important to have a pre-exercise screening consultation with your doctor in order to obtain medical clearance for exercise. It is also recommended that your blood count be monitored regularly, depending on your current medical status, to determine whether it is safe for you to continue exercising.

Guidelines for Exercise
It is important to remember that each person is different. They have individual circumstances depending on factors such as their age, nature of their cancer and their present stage of treatment or recovery, so their exercise needs to be individualized and should be symptom-limited.

The following are general guidelines

• Many cancer patients can participate in some form of aerobic exercise. Something simple and inexpensive like regular walking can improve energy levels and self-esteem.

• Walking is generally encouraged for the those people who are sedentary and deconditioned. Most sedentary people will derive benefits by accumulating 30 minutes of physical activity such as daily walking, or even activities such as gardening or active household chores. You still obtain the same health benefits.

• You should start at an easy level and then gradually increase the duration of physical activity. If you have previously been inactive and are very deconditioned, then you need to start with short easy exercise bouts. One way to progress the duration and intensity of exercise is to increase the ratio of the time that you exercise and rest. You can start with an initial work/rest ratio of 1:1 progressing to 2:1. This means that you exercise, such as walking, for a minute, then you rest for a minute.

Increase the exercise time to 2 minutes and rest for a minute. Eventually you can exercise continuously for as 10-15 minutes or more if you are able to.

• If you are more physically able, you can start with a 5 or 10 minute walk once or twice a day. As you feel better and stronger you can gradually increase this time up to 30 minutes session and aim for three sessions per week. Cycling and Aqua exercise are other examples of easy aerobic exercise.

• If you have access to a gym facility, then ask the qualified staff for assistance and advice as to the types and level of exercise you can do.

• Other types of exercises include easy stretches to improve your flexibility and exercises that help to improve your muscle strength. As with the aerobic exercises, you could start off with a few stretches and exercises at an easy level and gradually progress as you improve your fitness.