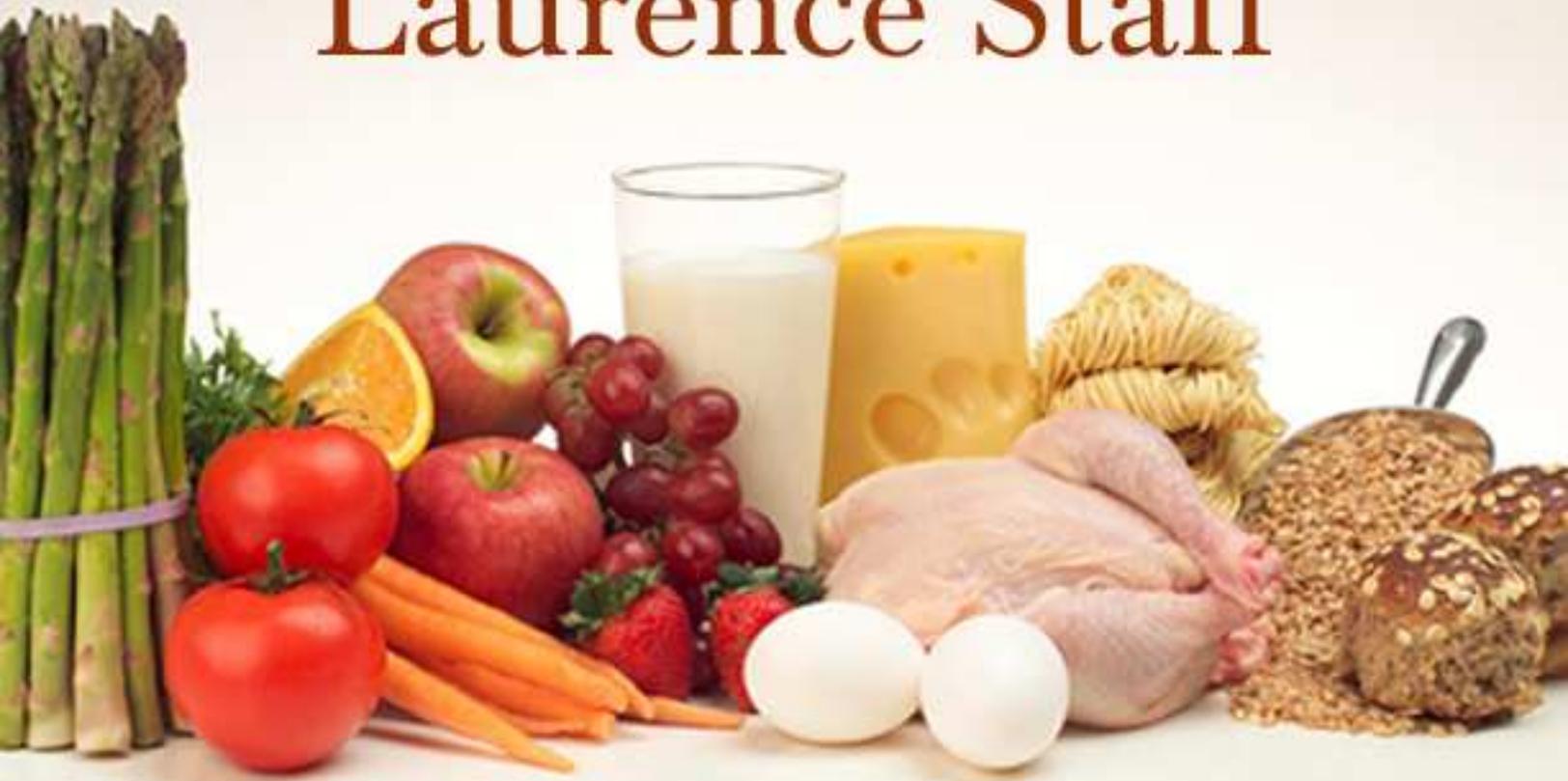


Laurence Staff



THE
NUTRITION DIET
AND
RECIPE BOOK

www.happyhealthy24.com

THE NUTRITION DIET AND RECIPE BOOK

YOUR BODY NEEDS FOOD – THE RIGHT FOOD



TABLE OF CONTENTS

Preface

CHAPTER 1 - NUTRITION

CHAPTER 2 - THE DIGESTIVE SYSTEM

CHAPTER 3 - THE CIRCULATORY SYSTEM

CHAPTER 4 - STARTING THE NUTRITION DIET

CHAPTER 5 - FOOD

CHAPTER 6 - DIETARY NEEDS

CHAPTER 7 - TYPES OF FOOD

CHAPTER 8 - PROBLEMS WITH FOOD

CHAPTER 9 - THE HEALTHY DIET

CHAPTER 10 - LOSING WEIGHT

CHAPTER 11 - EATING WITHOUT WORRY

CHAPTER 12 - HOW TO SURVIVE CHANGING YOUR DIET

CHAPTER 13.- VITAMIN AND MINERAL SUPPLEMENTS

CHAPTER 14 - NUTRIENT ROBBERS AND KILLERS

CHAPTER 15 - NUTRITION DIET SUMMARY

CHAPTER 16.- FOOD AND RECIPE TIPS

CHAPTER 17 - SOUPS AND STOCKS

CHAPTER 18.- MAIN COURSES AND SALADS

ANNEXES

ANNEX 1. Nutrition and Aches and Pains

ANNEX 2. Nutrition and Old Age

ANNEX 3. Nutrition and Stress

ANNEX 4 Nutrient Information

THE NUTRITION DIET AND RECIPE BOOK

Preface

Nutrition is the most important part of any diet. Our bodies need nutrients (Vitamins and Minerals) to function, to maintain itself and to be healthy. These nutrients come from the food we eat so it goes without saying that we need healthy nutritious food.

I have written this book with that in mind and hope it will get you thinking about what you eat. With The Nutrition Diet you don't have to count calories, worry about low fat, low carb, high carb, etc, things that can all make dieting a pain. It is a diet with straightforward healthy food.

The book covers nutrition, digestion, diet etc which I hope is in a simple to understand way . Also included are tips on how to make your diet more varied and nutritious. Then there are lots of easy healthy recipes to help you get the nutrition you need.

At the end are useful annexes including how nutrition is important for three of the most common problems in today's modern world - aches and pains, stress and old age.

I have tried to keep things simple without too much technical detail. There are plenty of more technical books but this book is meant to stress the importance of nutrition in a way that anyone can understand and realise how important nutrition really is.

CHAPTER 1. NUTRITION

The first step then is a healthy diet but that is not always straightforward. Outside factors interfere with the quality or quantity of vitamins and minerals in food, however healthy the food. For example anti-acid tablets prevent absorption of Vitamin A and B complex vitamins. Foods grown on heavily cultivated soils using artificial fertilisers and pesticides are often deficient in minerals as well as being contaminated. Then our lifestyles, such as stress can interfere with absorption of nutrients. Prescription medicines often do the same. There are plenty of examples of all these problems and we will discuss this further later.

What appears a healthy diet may not actually be good enough to provide all the nutrients, vitamins and minerals needed to feed our bodies and cells. But with a little understanding of how it all works and why and awareness of what is happening, a healthy diet can be achieved. This is what I hope will be provided in the following chapters.

I will be taking you through the various processes of the body (easily understood, I hope) - including digestion and circulation etc. Every cell in our body and all the body systems and parts need nutrients and they have to come from the food we eat. The food we eat is important and even more important is the nutrient content of that food. Our bodies need food. But if it is the wrong food or too much processed food our bodies will rebel - we become sick and/or overweight. Then being overweight can bring its own health problems such as diabetes and heart disease.

To avoid the problems caused by poor nutrition we need vitamins and minerals plus water. Our bodies are made up of over 60% water so water has its own part to play and is as important as food.

We need the right vitamins and minerals and the right amounts. These vitamins and minerals, or nutrients, should come from the food we eat. So you see why our diet and the type of food we eat is important and needs a little thought put in to it. Nutrition and food go hand in hand and should be thought of together.

If our bodies, cells, organs, etc don't get the right nutrients they get sick or damaged leading to a breakdown in health and then illness and, yes overweight as well. It is as simple as that; though the workings of our body processes are far from simple. However don't be put off, I intend to keep things simple.

It is both complicated yet simple. The processes are scientific and studied by scientists and experts to understand how it all works. But actually following a healthy diet and lifestyle can be easy.

We eat 2 or 3 meals a day, snack in between, go for a coffee (and a cake), have a drink and crisps or peanuts, buy a mars bar, a bag of chips, have takeaways. All 'normal' activities. But how often do we give any thought to what we are doing. Maybe after Christmas when we are stuffed full of food and drink or when we decide to diet - yet again. Unsuccessfully as well or why would another diet be necessary.

But we should be thinking more about our food and diet. Food is not just something we shovel into our mouths out of habit or craving. Food is necessary to provide the nutrition we need throughout our life, especially at vulnerable times such as growing up, during pregnancy, during menopause and during old age. It is also necessary for health and maintaining good health and helping achieve better health and provide support during periods of poor health.

Why is food important? Our bodies are made up of millions of cells which form our whole being - tissue, bone, blood, organs, etc. They all need food and the right food. We should not be eating to please ourselves but to provide all these cells with the nutrients they need to live, work, repair and multiply. They all need nourishing and feeding.

I want to tell you of my own non scientific theory of why we overeat. Well here it is. **YOUR BODY NEEDS FOOD.** Our body is telling us it needs nutrients not just any old food.

That is why we get hungry. Not because you fancy a burger or some crisps, but because your body is telling you it needs nutrients. If you then respond to the hunger signals by

eating pie and chips your body will still need nutrients. It will soon send out more hunger signals and if you have more pie and chips, all you get is overweight.

If however you have a mixed salad and fruit or even pie and lots of vegetables your body gets a variety of nutrients and is satisfied.

(NOTE: I said this theory was my own and I did think of it without any prompting. But since I started to write this book, the theory has been found to have a basis in fact. During research into nutrient deficiency and disease by the professor of chemistry at the University of California nutritional deficiencies were found to be a cause of obesity. Mice with micronutrient deficiencies rapidly became fat - they ate more food in search of essential nutrients that their bodies needed. So poor nutrition can affect weight and obesity.)

I am not advocating no junk food or chocolate or alcohol completely. The book is meant to be realistic and I want you to benefit from it and not think it is just for the fanatic. I am not saying never have pie and chips. We are all human and it can be tasty, but the pie and chips should be an occasional treat within The Nutrition Diet. If we eat the right sort of foods, providing enough nutrients, vitamins and minerals and water we shouldn't need to keep dieting. So read on and find out what The Nutrition Diet is really all about and how you can easily follow it and benefit for a lifetime of good health.

CHAPTER 2. THE DIGESTIVE SYSTEM

The Digestive System is the process of simplifying the food we eat into a form that is suitable for absorption into the body. Made possible by the physical and chemical breakdown of foods into substances that can pass into the bloodstream to be distributed round the body's cells.

The nutrient material produced from the digestive process is used to provide the raw materials for the manufacture of new cells (which is going on all the time), hormones and enzymes. Certain minerals such as salts can be absorbed directly into the circulation.

Foods - fats, carbohydrates and proteins and fluids are processed by the digestive organs and broken down so that nutrients can be absorbed and circulated around the body. Any food residue not digested is solidified and eliminated from the body in the form of faeces.

The digestive system is made up of the alimentary canal, some related organs and various digestive processes which take place in the canal to prepare the food we eat for absorption into the body.

Don't forget - Your Body Needs Food! and to get the food (nutrients) it needs the food has to be broken down and processed. Hence the importance of a healthy digestive system.

The alimentary canal or tract begins in the mouth and passes through the pharynx, oesophagus, stomach, small intestine, large intestine and finally the rectum and anal canal. It is basically a food processor about 9 metres (30 feet) long. The related organs mentioned include salivary glands, pancreas and liver and the biliary tract.

The digestive system has four main functions:

- Ingestion (taking in food)
- Digestion (the mechanical breakdown of food by chewing and chemical breakdown by enzymes produced by the glands in the digestive system)
- Absorption (the substances produced from digested food passing into the blood and lymph capillaries for circulation round the body.)
- Elimination (food substances not digested and absorbed but excreted as faeces)

As we have already said, everything is interrelated so there is also the need for a good circulation system alongside a good digestive system.

Digestion has two stages - mastication (chewing) and chemical (by enzymes present in the glands of the digestive system.)

Mastication is important and food should be chewed properly and thoroughly to make things easier for the chemical process to work. Generally we don't chew our food enough. A large lump of steak swallowed whole is obviously going to take more processing.

The chemical process of digestion includes:

- secretion from the salivary glands
- gastric juices from the stomach
- Intestinal juice from the pancreas
- bile from the liver.

Quite a cocktail and again we see the importance of overall health with the pancreas and liver involved in the digestive process.

The food enters the mouth and is moistened and lubricated by saliva before swallowing which takes place in three stages to prepare the food for digestion by stomach and gastric juices.

Stomach and Gastric Juices: Organs associated with the stomach are the liver, pancreas, spleen, kidneys, adrenal glands, duodenum, colon and small intestine. All have their own nutritional requirements and their own part to play to function properly. Therefore all need to be in good working order.

The size of the stomach varies with the amount of food it contains. Muscle contraction churns and breaks down the chewed food and mixes it with gastric juices. Mixing with the gastric juices takes place gradually.

Gastric juices are secreted by the gastric glands and consist of water, salts, mucus secreted by glands on the stomach surface plus hydrochloric acid, intrinsic factor and enzymes.

The water liquifies food, the hydrochloric acid kills harmful microbes, acidifies the food and provides the acid environment needed for digestion by enzymes. Intrinsic factor is a protein compound which is needed for absorbing Vitamin B12 while mucus prevents injury to the stomach wall.

There is always a small amount of gastric juice in the stomach even when there is no food. Maximum levels of gastric juices are reached about 1 hour after a meal then drop back to the minimum level after 4 hours. Hence the advice to wait at least 4 hours between meals.

The juices start to flow before food reaches the stomach because of reflex action by the sight, smell and taste of food. As the partially digested food reaches the small intestine the release of gastric juices slows down and also slows down the emptying of the stomach.

Stomach Function: The stomach acts as a temporary reservoir for food, allowing digestion to take place. It produces gastric juices which start the digestive process. Muscular action mixes the food with the juices. The rate at which the digestion takes place and the stomach empties depends to a large extent on the type of food eaten.

A carbohydrate meal leaves the stomach in 2 or 3 hours, a protein meal takes longer and a meal containing high fat levels takes longer still. So you can see how too much food too soon, or the wrong sort of food, strains the system.

The Small Intestine: Leads into the Large Intestine. It is 5 metres long approximately and in the small intestine the chemical digestion of food is completed and most of the absorption of nutrients takes place in the small intestine. Secretion of intestinal juices

continues, digestion of carbohydrates, proteins and fats occurs as well as the absorption of nutrients.

The Large Intestine: or Colon is about 1.5 metres long. The rectum is a slightly dilated part of the colon leading into the anal canal. Though some water is absorbed in the small intestine, in the large intestine water continues to be absorbed to help with elimination. Mineral salts and vitamins are also further absorbed into the blood stream.

I could go into more technical details of the chemistry of digestion, the molecular breakdown of enzymes, the structure of everything from teeth to intestines etc, but this book is about better nutrition as diet not anatomy and physiology. There are plenty of more technical books and I just want to give you an idea of what is involved in achieving good nutrition without confusing you with science.

There are other organs important to the digestive process so a mention is worthwhile. The Pancreas, Liver and Gallbladder each have an important role to play.

The Liver is a large organ that processes absorbed nutrients, detoxifies harmful substances (there are plenty of those around now) and produces bile, a digestive fluid produced from the breakdown products of dietary fat and old red blood cells. The liver also produces proteins and stores some nutrients and vitamins.

The Pancreas secretes digestive enzymes that breakdown fats, proteins and carbohydrates. Sodium bicarbonate in the juices also helps neutralise stomach acid. Therefore better to have a healthy pancreas doing the work instead of taking bicarbonate of soda and anti-acid medication.

The Gallbladder is a small fig shaped bag lying under the liver, in which bile from the liver is stored. Bile is partly waste from the chemical process in the liver. It plays an important part in digestion of fats.

CHAPTER 3 - THE CIRCULATION SYSTEM

So already we see how every part of our body is interdependent on another and all need looking after and supplied with the correct nutrients to help function properly. As already mentioned these nutrients need to be circulated round the body to get to the parts that need them. Therefore as well as a healthy digestive system to process the foods into the required nutrients, we need a healthy circulatory system to get them round the body to organs, joints, brain, lungs, bone, etc.

The Circulatory System consists of the heart and the network of arteries, veins and smaller blood vessels. Blood is pumped out from the heart continuously to carry oxygen and nutrients to all parts of the body. At the same time removing harmful waste products from tissues for disposal.

The other important part of the system is the Hepatic Portal System, where the blood from the stomach, spleen, intestines and pancreas drains into a number of veins which then merge into one large vein, the portal vein. This vein takes the blood to the liver, which absorbs and stores nutrients and removes toxins. So a healthy heart and liver are a must.

Like us, without oxygen all cells in the body would die. The oxygenated blood from the lungs circulates through the arteries into smaller and smaller vessels which connect with capillaries. The blood also transports nutrients and waste products, so we need healthy free flowing arteries (not blocked ones) and veins.

If our arteries are lined and blocked with cholesterol and other fatty deposits the nutrients our cells need find it hard to get through. Again an example of the interdependence of all the body's workings. Also blocked arteries are a cause of hypertension or high blood pressure. All avoidable with proper diet and lifestyle.

Whether it is the liver, stomach, heart, kidneys, pancreas, etc they all need caring for and maintaining as they are all part of the whole. Just like a car has a motor, steering system, cooling system, brakes, etc all dependent on each other to keep the car going.

The digestive system and circulatory system are not the only systems functioning and needing nutrients. Every cell, organ, bone, gland, skin, etc needs nutrients. The Endocrine System is another example of how everything in our bodies are connected.

It is a collection of hormone producing glands and cells situated in various parts of the body. They are all important to health, for instance the parathyroid gland produces a hormone that regulates blood calcium levels. The pancreas hormones regulate glucose levels in the blood. All affected by the diet and nutrition.

That is enough technical detail on the body. Obviously it is much more complex and technical than I have gone into here. Whole books can and are written on any part and can provide all the technical information you want. However this book is about diet and nutrition at a simple level for you to be healthy, lose weight if necessary and begin to understand the importance of good nutrition so you can make the decisions that will give you the desire to change your diet and lifestyle.

I only briefly covered these technical aspects to show how important nutritious food is to our wellbeing. So we will move on to the next part. Food. Remember - **YOUR BODY NEEDS FOOD.**

CHAPTER 4 - STARTING THE NUTRITION DIET

No doubt you are thinking "where's the diet?" All this reading and no action. So before we go any further here are a few things you can do now to start you on the way to The Nutrition Diet. Where necessary explanations on these points will come later in the book.

1. Don't eat potatoes with meat or fish. This is one of the things I personally found helped me with weight loss. I also feel better after such a meal which is based on the practice of not mixing carbohydrates and protein in the same meal. If you can't cut them out all together take half what you normally eat. You don't have to starve. Add

another vegetable to your dinner instead of potatoes. If you fancy potatoes have a baked potato with salad or stir fried vegetables or even baked beans . If interested you can find out more on this type of eating by looking up 'food combining for health'.

2. Cut out the snacks between meals and late at night. If you regularly have crisps or chocolate go without for a set period, 2 days, three days, whatever. Then maybe treat yourself if you are desperate. But go without again but for longer this time.
3. Use as much fresh fruit and vegetables as possible, picking the freshest and ripest. Buy organic if you can.
4. Try and eat a least half your fruit and vegetables raw. A lot of the vitamins and minerals in food are destroyed by cooking. One tip - make one meal a day a raw food meal.
5. Cut back on salt. Use herbs and spices for seasoning. If you must have salt, use Lo-Salt which is a healthier option.
6. Use as many different foods as possible in your diet. Variety is the spice of life and the more varied the diet the wider and more balanced the level of nutrients in the diet.
7. Reduce the amount of fat in your diet, especially saturated fats. Also avoid trans fatty acids which includes margarines, salad dressings, processed foods, etc.
8. Use olive oil for frying or try stir frying in a little water and/or lemon juice.
9. Reduce your consumption of meats, especially red meats. They are high in saturated fats. As well as that risk, any chemicals ,such as antibiotics, used in the rearing of the animals, and toxins are stored in the fatty tissues. Three or four meat meals a week is plenty if you eat meat. At the same time try to reduce the portion of meat as well. A portion about the size of the palm of your hand is plenty.
10. Eat more fish. But not fish and chips every night! though the occasional cod and chips is a treat. Try and eat oily fish where possible - sardines, salmon, mackerel.

11. Eat more beans, chick peas, red beans, white beans, etc.
12. Add nuts and seeds to meals. Maybe in sprinkles or nibbles as a substitute for crisps etc. No salted nuts or seeds though.
13. If you smoke, stop. Or at least start cutting down. As well as the usual health warnings you have had, smoking also blocks the absorption and the proper functioning of many nutrients.
14. Drink more water - just plain tap water if nothing else available, otherwise filtered water or bottled water is preferable. Drink 6 - 8 glasses a day. As well as food, your body needs water!
15. Start exercising more, even if it is only a 30 minute walk every day. Ideally an hours exercise every day is the aim.
16. Make time for yourself. Relaxation is as important as exercise.
17. Consider taking a good quality multi vitamin tablet. Take one that is suited for your type, e.g. the over 50's or young who have different nutritional requirements. Also take a good fish oil tablet. More on supplements later.

So to go over the proposals that I have just put forward, choose the best quality fresh food you can and try and eat more raw fruit and vegetables. Drink at least 6 - 8 glasses of water daily (not counting tea, etc.) Exercise regularly and also make time for rest and relaxation. Cut down on red meat, processed foods and fat. Take a good quality multi vitamin tablet and fish oil.

CHAPTER 5. - FOOD

A long list perhaps but not a lot of difficult things to think of like calories, recipes, etc and no starving yourself. Where you cut out the things suggested they are replaced by healthier options. In the following chapters we will look at The Nutrition Diet in more detail and expand on the ideas that will benefit you and your health.

Now back to the explanations. You have had a basic outline of the digestive and other systems; so now you have a simplistic idea of how the food we eat is dealt with and why nutrient rich food is important. We now look at the food itself and how it is made up.

The main component of food is water. Just as the main component of our body is water. Food also contains carbohydrates, fats and protein as well as vitamins, minerals and fibre.

Starchy sugary foods are high in carbohydrates which along with fats are our main energy source. Fats and protein provide the material for cell growth and repair. So we do need some fat and sugars - but the right sort.

As well as providing the nutrients for the body's needs, food also provides energy which is not just energy in the sense of our get up and go but energy for the functioning of body cells. The energy is produced by breaking down food molecules in various chemical processes. Glucose and fatty acids are, in the main, chemical substances providing the fuel to produce energy.

Another important component of food is dietary fibre. Dietary fibre is the part of the food not broken down by digestion. Dietary fibre has its own role to play in digestion and bowel function. It also happens to control blood sugar levels and may help reduce cholesterol levels in the blood.

So as you can see, food and nutrition is important and essential to health, a healthier life and better weight control. Each part of the food we eat is equally important and has an effect on our metabolism. You need a wide, varied, healthy whole food diet to get the

wide varied mix of nutrients. You need a wide varied mix of nutrients as they all depend on each other to function fully.

One of my few technical details in this book gives an example. Below shows how the functioning of the adrenal glands works to produce anti stress hormones including adrenaline. There is a certain route starting from the food we eat to the production of adrenaline. On the way certain vitamins are needed for the system to function correctly.

The route starts with food and the dietary protein in that food.

Dietary Protein -> needs Vitamin B6 and zinc; to help make

L-Pheylalanine -> which needs folate, iron, copper, zinc and magnesium manganese and Vitamin C; to help make

L-Tyrosine -> which needs folate, iron, copper, zinc and magnesium manganese and Vitamin C; to help make

L-Dopa -> which needs Vitamin B6 and Zinc; to help make

Dopamine -> which needs Vitamin C; to help make

Noradrenaline -> which needs Vitamin B12, Folate, andNiacin; to help make
ADRENALIN (finally!)

That is as technical as we will get, but you can see from the above example how everything plays its part in a long and complicated process which starts with the food we eat. If for some reason the process is disrupted, say by lack of zinc the production of anti stress hormones may be affected. And this is only one of thousands of processes going on in the body all the time.

You might wonder, so what if I don't get all the vitamins mentioned in the right quantity for them to carry out all their functions. And you may well not notice any immediate effect anyway. However vitamin and mineral deficiencies or mal function can in the

long term cause problems for health. The adrenal example is only one process and as I said there are many more dependent on the same vitamins.

Sticking with adrenaline. You can get adrenal imbalance if the process doesn't work properly and too much adrenalin can cause high levels of stress and anxiety while too little can cause low energy, poor motivation and poor concentration. So everything is relevant.

There are, depending on who you ask, 50-100 essential nutrients required for good health, to promote physical and mental health and for a long healthy lifespan. You can't get all the vitamins and minerals and nutrients needed from a particular food or even a few foods. Some foods have more than others. Cooking affects the nutrient content of some foods more than others as does storage. The mineral content of foods are affected by modern farming methods. Therefore the only way to get all the nutrients needed is to eat a wide varied diet that includes plenty of different fruits and vegetables. These have the widest range of nutrients and if eaten raw provide more benefit.

The main foods that you should concentrate on to obtain the best variety of nutrients are - Apples, Bananas, Berries, Grapefruit, Grapes, Kiwi fruit, Oranges, Peaches, Pears, Pineapple and Prunes. All vegetables, especially Broccoli, Tomato, Garlic and Onions. Seeds and nuts, Flax seeds, Sunflower seeds, Pumpkin seeds, Almonds, Walnuts, in particular but not peanuts. Sproutings. Oily fish such as sardines, mackerel and salmon. Grains and oats in particular but try and avoid wheat. Lentils and beans. Olives and olive oil. If you include meat small portions of meat from organic reared animals. Avoid all sugar products and processed foods.

That gives you plenty of choice to start basing your diet on a nutrient rich diet. Later in the book is list of Vitamins and Minerals, where they can be found and what they are used for in the body. Also later in the book we will look at diet in more detail.

CHAPTER 6. - DIETARY NEEDS

As already mentioned the body needs nutrients and the body needs the following in the correct proportions to function properly: Carbohydrates, Protein, Fats, Vitamins, Minerals, Water and Fibre.

Foods contain a variety of nutrients but are described as carbohydrate or protein etc because they contain a higher amount of one or the other.

Carbohydrates are our main energy source and should make up 50-60% of our diet. They are found in a variety of foods - cereals, bread, potatoes, fruit and vegetables.

Carbohydrates are converted to sugar in the body. Some carbohydrates are high glucose and some low glucose. Carbohydrates in fruit and vegetables, oats and pulses are low level glucose; pasta and noodles are medium level and potatoes and white rice are high level. So additional sugar is not needed in the diet. Try to use low glucose carbohydrates in your diet as much as possible.

Carbohydrates are needed to regulate protein and fat metabolism. Together with protein and fats they promote growth of body tissue, bones, skin and lubricate joints. Carbohydrates consist of starches, sugars and fibre and provide energy and heat. If there is a shortage of carbohydrates in the diet, protein is taken for energy and heat. Another reason for a balanced diet, as protein has its own job to do. If there is too much carbohydrate in the diet it is converted to fat.

We should use whole grain and complex carbohydrates in our diet not high sugar and refined flour products such as white bread, cakes and biscuits.

Eating high levels of carbohydrates and having a sedentary lifestyle (not enough exercise!) leads to overweight as the excess glucose from the carbohydrates is converted into fatty acids and triglycerides. You can overcome this by taking more exercise and by cutting down on bread and pasta. Eating more vegetables will provide more carbohydrates to compensate plus more nutrients.

Metabolism of Carbohydrates. When digested carbohydrate, mainly in the form of glucose, is absorbed into the blood via the small intestine and transported to the liver or stored as glycogen and passed to body cells and muscles. Carbohydrates not required are converted to fat and stored in fat deposits.

Protein is essential in the diet and makes up 20% of the body's weight. It is the main component of muscles, hair, skin, eyes and internal organs, especially the heart and brain.

Protein is broken down by digestion into amino acids and absorbed through the intestinal wall (another reason for healthy gut so that absorption works properly). Proteins are a combination of 22 amino acids which include 12 manufactured by the body and 10 essential amino acids obtained only from food.

There are two types of protein in food - first class protein and second class protein. First class proteins are foods that provide all 10 essential amino acids. These foods include meat, fish, eggs, dairy and soy beans.

Second class amino acids don't contain all the essential amino acids in one food type and include peas, beans, brown rice, lentils, bread and potatoes.

If you eat meat and dairy products or eggs, you will probably be getting enough protein to provide the essential amino acids required. In fact most people eat too much of these foods. If you are a vegetarian you will need to combine different protein foods to get the complete supply of amino acids.

Amino acids are needed for growth and repair of the bodies cells and tissues, making hormones, enzymes , plasma and antibodies, making them an important part of nutrition.

Metabolism of Protein - Digestion breaks down the protein in the diet to amino acids. The process starts in the small intestine and amino acids are absorbed and then transported via the liver into general circulation for the cells and tissues.

Fats - are divided into animal fats and vegetable fats. Animal fats are mainly saturated fatty acids found mainly in meat and dairy products and eggs and in oily fish. Though the oily fish has a high proportion of unsaturated fat so is considered healthy. All animal protein contains some fat even apparently lean meat.

Vegetable fats are mainly unsaturated fatty acids found in margarine and vegetable oils.

Fat is necessary to produce energy and heat. It is also necessary for certain organs such as the kidneys, eyes and brain. Fat is also needed to transport Vitamins A, D, E and K which are fat soluble .

So we do need some fats and they have an important part to play in the body's metabolism.

Metabolism of Fat - Once absorbed fats are transported in the blood eventually reaching the liver. Fatty acids (and glycerol) circulating in the blood are used by organs and glands as energy. In the liver they are used to provide energy and heat.

Excess fatty acids are neutralised and stored in fat cells until required to provide energy. But if you eat too much fatty food and don't use up the energy, the stored fat will grow! And so will you. As already mentioned, fat is also synthesised from carbohydrates and proteins when there is more than needed and also stored as fat deposit.

Water - is essential for life and is the largest component of our body volume, making up over 60% of the body's mass. Water has to be replaced as it is lost continuously through breathing, perspiration, urine, etc. Then other things we do like take coffee or alcohol are dehydrating to the body.

Including food and drink we need about six pints daily to replace the water lost from our normal daily functions. We should be drinking 3-4 pints (1 1/2 + litres) of added water daily. Ideally that should be just straight plain water, though herbal teas are often included in that amount. But black tea, coffee, alcohol and fizzy drinks, etc certainly do not count as fluids.

If nothing else is available ordinary tap water is ok, and even better is bottled or filtered water, depending on where you live. Tap water in some areas is better than others. Drink 6 - 8 glasses of water a day. It may sound a lot but can easily become routine with a little planning.

Try and drink a glassful 1/2 hour before each meal and another two glasses 2 1/2 hours after a meal and you soon have the required amount.

Water is also needed for distribution of Vitamin C and the B Complex vitamins, some of the most important in the body.

Vitamins and Minerals. I have stressed the importance of the vitamins and minerals for our health and well being and that they can only come from the food we eat - unless we get them from supplements. Maybe a good multivitamin is an answer for ensuring a minimum supply of all the required nutrients. It is however only a supplement and does not replace good quality wholesome food and certainly not an excuse for eating rubbish.

In fact eating and drinking the wrong things can in fact deplete vitamins or block their functions. For instance phosphates in fizzy drinks take calcium from the body. Refined sugar depletes zinc.

Getting the correct amount of nutrients may be difficult. The recommended government advice is to eat at least five portions of fruit and vegetables each day - do we do that? Most people only eat maybe two or three portions. What applies to nutrients also applies to the other dietary needs - carbohydrates, proteins, etc.

Our long term health, and that includes weight, depends on our choice of a varied diet containing fresh fruit and vegetables, nuts, seeds, grains, beans, meat and fish, eggs and dairy products. Not so much of the meat and dairy products as most of us eat too much anyway, but they are still a good source of nutrients and need not be given up altogether unless you feel otherwise, such as a vegetarian.

We will be low on vitamins and minerals if our diet consists of high sugar, high fat and processed convenience foods. The long term effect of a lack of vitamins and minerals is hard to define but believed to be a factor in many modern diseases including arthritis, obesity, cancer, heart problems, etc.

Vitamins and minerals and nutrients are needed to make sure the body functions and stays healthy. That includes preventing illness and disease. All the vitamins and minerals have a role to play in this. For instance, we all know from history the role Vitamin C played in the prevention of scurvy on long sea voyages.

A few health benefits of vitamins and minerals are:

- Vitamin A is for skin health and infections and essential for night vision.
- Vitamin C is essential for the immune system and making collagen for healthy joints and protects against cancer and heart disease.
- Vitamin D is important for maintenance of healthy bones.
- Calcium is necessary for a healthy heart as well as bones.
- Zinc is essential for growth and healing.
- Omega 3 is needed for a healthy heart (even the government is recommending prescribing omega 3) and it is anti inflammatory.

Many nutrients have more than one function and also work with other nutrients to do their job properly.

As with most things to do with the body, nutrition is only part of the whole and individual vitamins and minerals are only really effective when working together. Many nutrients need other nutrients to work more effectively and some examples follow. For instance to help absorption:

- Calcium needs magnesium and Vitamin D and vice versa.
- Iron needs Vitamin C
- Zinc needs Vitamin B2 and Vitamin A
- Manganese needs Vitamin C
- Chromium needs Vitamin B3

Conversely copper absorption is affected by too much zinc. Vitamins also need each other for example Vitamin A is best taken with a multi vitamin formula, B vitamins are best taken together as a B complex, Vitamin D needs Vitamin A C and E and Vitamin E works best with Vitamin C and Selenium.

It is therefore important to eat as healthy diet as you can afford and your lifestyle allows. Supplements can enhance a healthy diet but they are not a substitute for it.

Another reason we may benefit from dietary supplements is the poor environment we live in today. Whether it is toxins in food, water or air, or aluminium in saucepans, mercury in dental fillings, we are surrounded and attacked by things that have a detrimental effect on nutrition. That includes stress from our increasingly stressful lives. So the addition of a good multi vitamin tablet to any diet however good is probably essential, and will in the long term lead to better health, energy and well being. Depending on your diet supplements may be targeted at what is missing from your diet rather than the scatter gun approach of a multi vitamin and mineral tablet.

As mentioned before there are factors outside your control that affect the quality of the food we eat and their nutrient value. Toxins in food, water and the environment. Poor soil conditions from modern farming methods and from over farming can mean the depletion of minerals. Transportation and long storage times of foods also depletes the nutrients in food. So you may think your diet is fairly healthy but it is not as healthy as you think and you may not be able to do much about it.

Therefore the use of a good multi vitamin supplement will enhance a good diet and improve the uptake of nutrients needed by the body. But I repeat it is not an excuse for a poor diet or replacement for good food. Remember - Your Body Needs Food!.

Something else to think about with food and nutrition. Look at the list of foods that contain vitamins. How much of each do you actually eat? How many are you discouraged from eating and advised not to eat. Yet all have a nutrient content with a variety of vitamins and minerals. Fish, Fish Oil, Fruit, Vegetables, Cheese, Butter, Eggs, Nuts, Seeds, Beans, Cereals, Meat.

Take eggs for example. Almost a complete source of vitamins and minerals, but due to salmonella scares, cholesterol scares, battery farms, etc we are discouraged from eating eggs. But there are many good things about eggs, so think about what you eat and how you feel about it and make up your own mind. There is plenty of sources for more

information these days. In the case of eggs, maybe a good organic free range egg can be a useful part of a healthy diet.

Fibre - Although under a separate heading, fibre is a component of carbohydrates. It is part of fruit and vegetables (skins) and the husks of grains and cereals. Though of little food value nutrition wise it is important for digestion and a low fibre diet can cause constipation and other intestinal problems. Fibre also has other benefits besides digestion as it helps absorb toxins and cholesterol for elimination.

There are two types of fibre - insoluble (from grains, cereals, nuts, seeds and beans) and soluble (from fruit and vegetables and oats).

Fibre is proving to be more and more important as part of a healthy diet and as such important to our health. Low fibre diets can be related to heart disease and stomach problems. Unfortunately we are usually advised to peel fruit and vegetables, often due to the pesticide and other residues contained in the skins. Processed and refined foods are generally devoid of fibre unlike fibre rich foods - salads, fruit, raw vegetables and grains.

CHAPTER 7. TYPES OF FOOD

Foods can be divided into various types - fruits, vegetables, seeds, nuts, grains, oils, fish, meat, eggs and dairy products. All having a part to play in the nutritious diet. Then added to that are the herbs and spices and drinks. We will look briefly at each category.

Fruit - is a perfect food, ready for eating. They are natural, juicy with high water content and provide good levels of nutrients. They are also low fat and high in fibre and can be eaten raw. They are also generally low calorie. Fruits also contain natural

sugars, so make a good replacement for cakes and chocolate, etc if we need something sweet.

"An apple a day keeps the doctor away" as the old saying goes and there is truth in this. They are also high fibre and pectin in apples helps detoxify and cleanse. They also help clean the teeth. In fact most fruit and vegetables are beneficial to health.

Citrus fruits are popular for their Vitamin C content and high in minerals such as potassium. They are also cleansing, good for colds and flu and help fat digestion and utilisation in the body.

Berries are becoming more and more touted as the latest super food and they have their own uses as all fruit. Some are known to be of specific help like cranberries. Cranberry juice is a natural remedy for urinary bladder infection. Though the 'superfood' status of berries often pushes up the price!

Then there are the tropical fruits which vary more in type and in nutrient content. Bananas are high in potassium and are composed of carbohydrate. Another example of the benefits of natural foods is the pineapple which contains a digestive enzyme called bromelain to aid digestion. Bromelain is also thought to have anti-inflammatory properties.

Other fruits we see more and more of are kiwi fruit which are high in Vitamin C and also contain an enzyme that helps reduce cholesterol.

Olives are also a fruit and olive oil is becoming more and more used and available. They are rich in essential fatty acids, vitamins including Vitamin E and have a high mineral content.

Finally we have dried fruits which is really a way of preserving fruit. Dried fruits have a high sugar content and again have health benefits. We all know about the laxative effects of prunes.

Vegetables - Vegetables are an important part of any diet, and especially fresh vegetables. Also try and eat as many as possible raw. You may be surprised as well as

to how tasty a raw vegetable can be in reality. For example a crisp piece of fresh cauliflower is sweet and juicy - unlike the boiled soggy variety. Also vitamins and minerals are lost in boiling vegetables. Vegetables are high in vitamins and minerals and have a high water content, which means low fat!. Vegetables are also a good source of fibre. You can eat plenty of vegetables and use them to replace foods with poor nutrient value or to help fill you plate when reducing the quantity of meat.

Leafy green vegetables have the highest nutrient content. They are high in Vitamin A and C and magnesium, potassium, iron and folic acid. Cabbage has anti cancer properties as do brussel sprouts, and spinach is rich in iron. Baby spinach is now widely available and sold as salad leaves to be eaten raw and is delicious in a mixed salad together with rocket and lettuce or other salad leaves.

Root vegetables are well know and carrots and potatoes often make up the most part of the vegetable content of a meal. Carrots are high in beta carotene (Vitamin A). Other root vegetables include garlic and onion which also have additional medicinal properties. Potatoes are low in calories and high in nutrients but high in carbohydrate.

Then there are tomatoes, peppers, courgettes, cucumbers, etc. They are all beneficial to our diet and health in various ways. Mushrooms have a good mineral content and are a source of vegetable protein.

Grains - These are the widest source of food as they include cereal grains; wheat, corn, oats, barley, etc and rice. However most of the fibre and nutrients in grains are removed in food processing.

This means we should be eating whole grains and rice not the bleached, whitened flour and rice most commonly sold.

As already mentioned grains are a good source of protein, though not complete. When combined in the diet with the legumes this is overcome and together form complete protein .

Seeds and Nuts. - Seeds and nuts should not be overlooked and should be included in any diet. Seeds are used in their ground form in cooking; coriander, cummin, etc. But

seeds are also highly nutritious as a food in particular pumpkin and sunflower seeds. Seeds are also a good source of polyunsaturated fats, the essential fatty acids we need.

They also contain Vitamins A, D and E and are rich in minerals. They can be eaten as nibbles (but not the salted variety!), sprinkled on cereals or added to salads. Seeds do have calories though, so don't overdo them if you are trying to lose weight.

Nuts are also a rich food with good protein and nutrient content. They also have a high oil content and like seeds this is mainly polyunsaturated fats - the good fat. But again not too much for slimmers! Roasted salted nuts should be avoided. Roasting effects the oils and reduces the nutrient content as in any cooking process. Almonds, Brazil nuts, Walnuts and hazelnuts are probably the best to eat.

A lot of people have problems with digesting nuts and peanuts are a particular case. Nuts, especially peanuts, are also a source of allergy in some people who are prone to nut allergy.

Dairy Products - We now come on to animal products of which dairy products are a part being animal based - milk, butter, cheese, yoghurts. They are a high protein food meant for building us up and a good source of calcium. It is important at times, especially during growing up and pregnancy. Though a balanced vegetarian diet can provide the same nutrition.

Dairy products though are high in fat and we probably eat too much. Milk (especially cow's milk) is known to be a common cause of food allergies.

This is probably made worse by non organic milk where cows are fed products they are not meant to eat. Then there is the question of drugs administered for health reasons (antibiotics) and for growth (growth hormones) and increased milk production.

The biggest concern with milk is its fat content and regular drinking of whole milk and other dairy products can add to the problems associated with too much fat intake - weight problems, heart problems, cholesterol, etc. Especially when included in the modern diet of fast food and processed foods and too much red meat.

Butter and cheese are also high in fat and should also be used sparingly. Though there is a case for using butter instead of margarine.

Yoghurt is the 'healthy' dairy food and provides good protein and calcium. It is also a source of B vitamins. Then the 'bio' yoghurts provide friendly bacteria such as Acidopholus and Bifidus which are helpful for digestion and protect our stomachs from disease. The added bacteria is often needed in our modern society as we take substances that kill off the friendly gut bacteria. Antibiotics are a case in point. Anyone on a course of antibiotics should realise that as well as killing off the infective bacteria they kill off the good bacteria as well. They therefore need replacing to avoid other health problems.

Avoid flavoured yoghurts and yoghurts with added sugar and colourings. Natural is best and can be eaten as it is or added to fresh fruit for desert instead of cream! or custard.

Fish. - Fish is a good addition to a mainly vegetarian diet. It is a good source of protein and complete with all the essential amino acids we need. It is also low fat and the fat that is present is good for us. But beware farmed which can be very fatty and also may be like other farmed food be contaminated with chemicals.

Oily fish such as sardines and mackerel are good for the heart and help lower cholesterol.

Fish with vegetables or salad is an ideal meal for dieters wanting to lose weight. -The Nutrition Diet again!

These days with even the oceans becoming polluted shellfish, in particular molluscs (clams, cockles, mussels) are a possible source of contamination with chemicals, metals, sewage etc. Prawns, crabs and lobster are less of a worry.

Meat and Poultry - Meat and poultry here includes eggs. The egg has a bad press now and again but is in fact one of the few complete foods. Once again for best nutrition use free range eggs. This also applies for animal welfare reasons.

One of the worries with eggs is the high cholesterol levels, but in a properly balanced healthy diet, 2 or 3 eggs a week will not be bad for you. As usual moderation and variety is the rule.

Poultry meat, chicken and turkey, etc is a low fat, low calorie meat with good protein levels (about 1/4 of the fat content of red meat). Chicken and turkey are also a good source of other nutrients - vitamin A and some B vitamins as well as minerals. Again look for free range organic birds, as chemicals, e.g. antibiotics, are a problem in the meat.

Red meat, beef, pork, lamb is more controversial and a lot of people avoid them for a variety of reasons, animal welfare issues as well as health issues. It is a fact that high consumption of red meat is bad for our health. Even the lean red meat is still 30-40% fat, and saturated fat at that. So even if you can't give up red meat, reducing your intake is a must and will be beneficial.

Again animal welfare issues are a problem - factory farming of meat, drugs, growth hormones, etc. Though red meat is a good source of protein, vitamins and minerals, they can all be provided in a healthy balanced mainly vegetarian diet. Vitamin B12 is the only vitamin not available to strict vegetarians. It is however available in oily fish, eggs and milk products, especially yoghurt.

So meat is not essential and should be eaten less frequently and in smaller quantities than most of us do at present.

Herbs and Spices. - Don't forget herbs and spices - as well as flavouring your food, many have medicinal and health benefits. They are also a good substitute for salt. If you are going to use salt use SO-LO, a low sodium version of salt. Otherwise use herbs and spices such as ginger, onion, garlic, cinnamon, cayenne, turmeric, parsley, oregano, mint, coriander etc. Use fresh or dry or as the seed depending on the herb or recipe.

As well as the flavours from the herbs and spices there are added health benefits from many of them which is a bonus.

Drinks - After all the food talk we don't forget liquids - tea, coffee, wine, soft drinks, fizzy drinks, juices, etc. Most we can and should avoid for health and diet reasons. But water is a must.

Most people don't drink enough water and if your diet is poor and doesn't contain much fruit and vegetables you definitely won't be getting enough (water that is!). You should be drinking 1 1/2 to 2 litres of good quality water daily. Some will come from fruit and vegetables but most needs to come from the glass.

I am not going to argue about whether it should be tap water, bottled water, filtered water, etc. If you are not happy with your tap water get a filter fitted or buy bottled water for drinking. The main thing is to drink more water.

Most other drinks except perhaps herbal teas, green tea and fruit/vegetable juices are unnecessary and even harmful if taken to excess. Colas and fizzy drinks have no nutritional value, contain high levels of phosphates which affect calcium levels and bone metabolism. They are also high in sugar and caffeine.

Caffeine has its own problems and its effect on the central nervous system. It increases heart rate and blood pressure (so those with high blood pressure should avoid coffee). It also affects the digestive system and kidney function.

Alcohol is widely used and abused and is not beneficial to health, especially when used to excess. Alcohol depresses the central nervous system, slows brain function and co-ordination and responses to physical functions. It is also bad for the digestive system and liver. Chemicals used in production of grapes and grains can also be a problem to health as in many other food.

At the same time various studies have been undertaken which show alcohol is good for health - in particular, a glass of red wine is good for the heart. The health benefits can probably be obtained just as well by eating red grapes as the chemical in the wine that is beneficial is derived from the grape skin. So that is not an excuse you can use to drink lots of red wine. Like everything else, moderation is the key. The occasional!! drink is

relaxing and stress reducing so can be useful. But so are relaxation exercises or physical exercise which have other benefits as well, including help with losing weight.

CHAPTER 8. PROBLEMS WITH FOOD

There are many problems with food today, not only with processed and fast food. Even buying fresh fruit and vegetables is not as simple as it should be. If you can buy organic fruit and vegetables all well and good - or grow you own. However, modern mass production of fruit and vegetables produces the crops, whether it is wheat, carrots, broccoli or whatever, but at a cost. Take the carrot for example. The carrot will not necessarily have the nutrients it should as most soils will be depleted of minerals. The carrot is grown using fertilisers and sprayed against disease. This can mean you get a good looking carrot short of nutrients, but also containing traces of chemicals as well.

Then there is the problem of interaction between chemicals. Though one food item might have a supposedly harmless additive, another might have a different supposedly harmless additive. So unwittingly you eat both without realising that the two additives could react together to form a third substance which turns out to be more harmful. But to make things more difficult it may be months or even years before you are taken ill, by which time the source of the illness will be forgotten. In fact the illness may not have been caused directly by the chemicals, but the immune system was weakened allowing another illness to attack more easily.

Chemicals in food are widespread including sprays, pesticides, fertilisers, food additives, flavourings, colourings, contamination (from packaging and processing), etc.

Most of this adulteration of foods is not done for the benefit of the consumer (though the food companies and supermarkets will say otherwise). It is done for profit.

Pollution starts in the soil as plants absorb chemicals as well as nutrients and minerals from the soil. Continued use of nitrogen based fertilisers may mean more crops, more

often from the same soil, but the other minerals we need are depleted. Minerals such as chromium, selenium and iodine - all needed as nutrients by our bodies.

Pesticides are another problem as there are often residues left in the food we buy. We are told to wash lettuce thoroughly or peel our carrots and apples to lessen the risk. But should we be put at risk anyway?

Food processing and storage also affects food, whether it is from additives or the simple storage of food for long periods. Storing half ripe food in cold stores for long periods reduces the vitamin and mineral content of these foods. So again you don't get the nutrients you think are in your fruit and vegetables.

Then there is the controversy with GM crops. A whole book could be written on that subject and there are plenty of articles and books available. Fortunately in Europe we are generally free from GM foods and any such foods should be labeled as containing GM products. Be more careful about imported foods from the US and South America.

At the end of the day you have to buy the best food you can and ideally know where it is grown and how it is grown. Alternatively grow as much as you can. You can grow a lot of salad, vegetables and herbs in a small area.

It might take a little planning and some work but is worth it.

CHAPTER 9. THE HEALTHY DIET

There are many claims and counter claims regarding a healthy diet. Nutrition has become complicated and more and more a science. Yet the basis of a healthy diet is simple and easy to follow without getting involved in the science. If you want to delve more into the technicalities of food and nutrition etc, good, but here I try to keep to basics.

The healthy diet should be based on the foods provided by nature: fruits, vegetables, grains, legumes, nuts, seeds, dairy products, eggs, fish and meat. The use of meat and dairy products should be restricted to a smaller portion of your meal and even missed out some days.

The healthy diet should be limited to:

- about 15% protein (meat, dairy products, eggs, beans, peas, lentils, soya etc.)
- about 20% fat (polyunsaturated - nuts, seeds, oily fish and/or monounsaturated olive oil)
- about 65% carbohydrate (the bulk of the meal from fruits, vegetables, grains, rice, pulses, cereals, whole grain bread, pasta, etc).

As well as the content of the diet the rules for a healthy diet are simple. Food should be

- Fresh and natural
- Nutritious (organic if possible)
- Tasty, varied and balanced.

A balanced wholefood diet without overeating is the basis for a long term healthy diet. But as I said keep it simple. Don't worry too much if you are out for the day and have fish and chips or burger and chips. Perhaps the next day you could make sure you avoid heavy food altogether and have a fruit and vegetable day.

It is generally agreed today that there is a link between diet and disease and that diet and lifestyle contribute to the diseases of today - high blood pressure, heart disease, cancer, high cholesterol, diabetes, obesity, digestive problems and many more. Also some nutrients, vitamins and minerals actually act to protect from disease.

The following are just a small snapshot of how nutrients can help protect from disease.

Vitamin C - colds and flu, cancer, high cholesterol levels

Vitamin D - Arthritis, osteoporosis

Vitamin K - helps absorb fats

Calcium - arthritis, joints, allergy complaints

Choline - (a B vitamin) - atherosclerosis, stroke, high blood pressure

This means however, that it is vital to ensure a good intake of nutrients from a wide and varied source to help protect your health.

We are all different and what suits one person does not necessarily suit another. But most basic dietary needs are the same for all. A balanced diet is necessary whatever our personal likes and dislikes. There are common rules for the nutrition diet:

- reduce calories going in (eat less) and increase calories going out by exercising more.
- eat lots of fruit and vegetables (including as snacks)
- avoid fats in the diet
- eat a wide variety of foods
- only eat when you feel hungry
- take your time over eating and chew food thoroughly
- ration what treats you allow yourself
- drink plenty of water
- walk more often and try to take additional exercise
- try using smaller plates and portions of food
- have a low calorie starter such as soup or a salad
- plan meals and their content including snacks
- take healthy snacks with you to avoid buying unhealthy snacks when out
- Try to learn more about food and nutrition (this book is a start)
- stay positive and allow yourself a treat without feeling guilty

The basics of the healthy diet then may look like this:

Breakfast - cereals and or fruit, poached or scrambled eggs on wholemeal toast

Lunch - vegetables (salad) + protein

Dinner - vegetables + starch + protein

Snacks - fruit, raw vegetables, nuts and seeds

Drinks - water, green tea, fruit and vegetable juices, herbal teas

To save on having to weight and count a portion of protein in the form of fish or meat would be about the size of the palm of your hand.

Part of a healthy diet today may have to include some sort of supplement. As we have seen even a good diet can lack some nutrients due to poor soils and artificial growing conditions. Plus other everyday things like storage, cooking etc which further depletes already lower levels of nutrients. So a multi-vitamin, extra vitamin C and a Omega 3 fish oil supplement is recommended to ensure and enhance your nutrition uptake - but not as an excuse to carry on eating the wrong foods.

CHAPTER 10. LOSING WEIGHT

There is no magic diet to help lose weight permanently. If there was we would not need all the new diet crazes, magazines and books on the latest diet fad that appear every year.

The only healthy effective diet is to eat a balanced diet and live a healthier lifestyle, with more exercise. This means perhaps changing the habits of a lifetime and habits are not always easy to break.

Motivation is needed not just immediately in the short term, but long term goals and vision need to be viewed as an aid to motivate the changes. Don't just think of a diet as a way to lose a few pounds quickly and everything will be ok. See the long term, the health benefits of a nutritious diet that will lead to a fitter, healthier person who will then be a happier more content person.

A few dietary changes are essential for weight loss and first of all cut out sugary, sweet foods, processed and refined foods. I eat a reasonably healthy diet but as I said at the start, still have the occasional 'bad' treat, etc. Because of a small health problem I

stopped all sugar and refined foods and just stuck to the strict nutrition diet. Even though I did not normally eat a lot of the 'bad' foods I still lost 3 kg in about 10 days. Which just shows you can lose weight by eating the right foods.

Make certain that carbohydrates form the main part of the diet (beans, lentils, fresh vegetables, oily fish) instead of the sweet processed foods. Eat carbohydrates with protein, e.g. fish with rice, beans with pasta to make you feel more full.

Another essential change is to cut out excess fat - particularly saturated fats. By increasing your intake of essential fats (omega 3 and 6) your metabolism actually helps weight loss. Also you ensure that other essential nutrients that rely on fats are available for the body to metabolise.

Also cut down on stimulants - tea, coffee, alcohol, chocolate etc. Eat healthy wholefood meals and only snack on fruit or raw vegetables. Apples and pears are best not the sugary fruits such as bananas and grapes.

Old dietary habits are hard to change so keep it simple. To start with just change some of the foods you eat. Reduce the amount of 'bad' foods. Eat more fruit and vegetables. Vary your diet.

This can make a difference in lower calories and more nutrients and not too much stress!

At the same time exercise more, as exercise, contrary to what you may think, actually reduces your appetite. The increased metabolic rate from the exercising carries over into the hours after exercise therefore helping to burn up calories.

Exercise is also essential as weight loss is difficult without increasing physical exercise. We don't exercise enough and as well as aiding weight loss there are the health benefits of more exercise - good for the heart, circulation, stress, etc.

Food Combining - is a diet regime worth a mention. It worked for me and without going overboard with the diet I lost the weight I needed to and now maintain a balanced weight. So a simple explanation is included in this section on losing weight. The diet

still follows the rules of eating a healthy nutritious diet and not starving yourself to lose weight.

There are basic rules for food combining:

- Carbohydrates (starches and sugars) should not be eaten with animal protein (meat, fish, poultry, cheese)
- Fruit and vegetables should be the main part of the diet
- Protein, starches and fat content of meals should be reduced
- Use whole grain unprocessed starches and avoid processed and junk foods.

The theory behind the diet is based on the digestion of different types of food. Proteins needs an acid environment to aid digestion of meat etc, and carbohydrates need an alkali environment for the digestion of bread, potatoes etc. When eaten together the digestive process is disrupted.

In the diet certain foods are acid, certain foods are alkali and certain foods are neutral. Acid forming foods include meat, fish, eggs, cheese, grains, bread and cereals, and sugars (cakes, biscuits, soft drinks, colas etc) beans, peas, legumes, lentils, chickpeas. Alkali foods include fruits, vegetables, nuts (except walnuts and cashews). Neutral foods are dairy products (excluding cheese) - milk, yoghurt, cream, cream cheese.

The simple way to start is as already mentioned. Don't eat carbohydrates (i.e. potatoes, pasta, etc) with protein (meat and fish). Have meat or fish only with vegetables or salad. Eat carbohydrates in a different meal i.e. potato and salad/vegetables or pasta with vegetables or salad. Avoid sugary processed foods.

There is much more to all this and there are books on food combining which I would recommend buying. Like everything else nutrition and diet can be as complicated as you want and if you want to delve deeper into any aspect the information is out there.

CHAPTER 11. EATING WITHOUT WORRY

Trying to diet is difficult for most people. You have to think about what you are eating or rather not eating. You have to possibly change your routine or habits. If you have a family you need to make different meals - more hassle for you. All this takes time and most of us are busy enough already, often snatching something to eat on the run.

Well The Nutrition Diet can avoid all that. You don't need to cut and count calories, only eat certain foods or starve yourself. It is easy to do and all the family can be included anyway.

As you have read the main emphasis is on healthy eating and increasing the amount of fruit and vegetables and the variety of food you eat. It is not a crash weightloss diet, though if you are overweight you will probably lose weight and achieve an optimum weight level for you.

See the chapter on our weight loss programme advice if you need to lose weight more quickly.

Your Body Needs Food - but not just any food. It needs vitamins and minerals and nutrients to maintain our cells, body systems, and also protect us from disease. Properly fed the body also helps fight disease.

None of us are perfect. We can't avoid the problems of modern living. Poor food quality, pollution and toxins. Nor junk food, chocolate, wine, coffee, etc. What we can do is minimise the effects of these things. Cut down on the bad things as much as possible and where possible replace them with better things. If you feel hungry have an apple or banana instead of a mars bar for example.

We are only human, me included, and the occasional mars bar, burger or bag of chips will happen. Meals out, and parties where you can't always eat The Nutrition Diet way will also happen. This doesn't matter if you are following The Nutrition Diet and are aware of making sure you make up for any lapses with good nutrition the next day.

Nutrients can in fact help you counter the unhealthy food, toxins and pollutants that are often unavoidable - the processed foods, junk food, smoking, painkillers, anti-biotics, alcohol, and the chemicals in food, all affecting the nutrient content of food. If our diet is predominately poor and you smoke and drink you are building up health problems.

Though, in theory, many problems can be overcome by added vitamins and minerals in the form of supplements, a healthy diet, cutting out the refined and junk food, is better. Smoking for instance affects Vitamin C amongst other nutrients. Vitamin C is an important anti-oxidant and a smoker would in theory need four times the level of Vitamin C than a non smoker to achieve the same level of benefit. It is a similar picture for a heavy drinker who would need six times the levels of Vitamin C than a non drinker.

Foods themselves have health benefits, making a diet high in fruit and vegetables beneficial to our health and well being. There are anti-oxidant foods which protect against degenerative diseases. Some foods have higher anti-oxidant qualities than others. Some of the highest are prunes, raisins and berries, spinach, kale, broccoli, red peppers, baked beans, oranges and grapes. Note, all fruit and vegetables, which I keep going on about!

Many foods have individual health properties. You don't have to buy exotic fruits and vegetables to eat 'superfoods'. Even the humble carrot and cabbage are full of healthy nutrients and broccoli can be called a superfood.

As my favorite phrase states 'Your Body Needs Food' but it needs the right food. How do we go about getting the right food that contains the vitamins and minerals we need. Modern farming methods, food processing, storage and cooking all contribute to the depletion of the nutritional value of our food. We can grow our own if we have space and time or we can buy organic. We can also buy locally at markets where the vegetables though not organic can still be fresher and better grown. We can eat more raw food and eat more fruit and vegetables as a matter of course. Be more varied and adventurous with your food.

Don't be afraid to mix different ingredients in a dish, even if they are not traditionally mixed together. For example instead of just having cucumber with your salad; chop the cucumber up, mix with some chickpeas (ready cooked) and sprinkle with black pepper and olive oil. The flavours blend and you get the advantage of added nutrients.

CHAPTER 12. HOW TO SURVIVE CHANGING YOUR DIET

As already mentioned it is not easy for even the most health conscious of us to get all the nutrition we need from a normal diet. There are though some things we can do. Dietary changes have already been mentioned together with taking more exercise. There are other lifestyle changes you can make and the following is some of the ways you can improve your diet and lifestyle for the better.

Diet:

Eat less meat and saturated fat

Eat more fruit and vegetables

Avoid processed and fast foods

Eat more organic food

Drink plenty of water

Use olive oil and cold pressed vegetable oil for cooking

Use organic eggs and chicken

Eat two portions of oily fish a week

Avoid fizzy drinks, colas, etc

Cut back on sugar and sugary foods

Vary your diet and mix your foods more

Cleanse or fast occasionally

Cut back on fried and BBQ foods

Take a good quality multi vitamin supplement.

Lifestyle:

Stop smoking. Smoking interferes with nutrient absorption
Reduce alcohol consumption
Reduce coffee consumption
Take more exercise
Try to take a period of relaxation daily. Yoga, Tai Chi, meditation, or even lie down and close your eyes for 1/2 hour
Avoid or cut out over the counter medication
Try something new - yoga, the gym, jogging, a new hobby
Listen to your body
Be positive about yourself
Try growing your own vegetables, even an allotment!
Avoid or take more care with cleaning and household chemicals, aerosols.
Try to avoid rush hour and walking in heavy traffic
Turn down the central heating. You don't need to sit around in shirt sleeves.

Some of these may sound obvious, some silly, some impossible, but I hope it will get you thinking about what is good for you and make some changes for the better.

The other thing you have to survive is the information out there. Either too much or too little and often contradictory or only half the information. At the end of the day you can only do what is best for your health and well being. But you also need to be aware of what you are not being told sometimes.

As already stated everything to do with our health and lifestyle interacts with something else and that goes for nutrition as well. Foods react with each other. Pollutants react with us and interfere with nutrient absorption as does lifestyle. Everything is related and affects us in some way.

Here are some examples.

We all know about good bacteria and bad bacteria (infections) in our gut. We get an infection and the doctor may prescribe antibiotics which attack and kill the infection. However at the same time the antibiotic attacks the good bacteria because antibiotics don't discriminate between the two.

I am not saying don't take antibiotics if they are really needed but do you ever get told to take acidophilus or bio yoghurt to help replenish the good bacteria needed for good health.

The contraceptive pill is another case in point where nutrition is affected by and everyday medicine. How many women are told about the long term effect with nutrition. Now they want to give the pill to younger and younger girls for whom nutrition is vital while growing up.

Another example - the immune system is a wonderful way for the body to fight disease and a healthy immune system is vital for fighting illness and infection. Many drugs, e.g. steroids and anti viral drugs cause anaemia and suppress the immune system, just when you need it to be working well. Stress also adds to the weakening of the immune system.

You can help improve the immune system with nutrition - good diet, avoiding processed and refined foods, reducing fat and sugar. Boost the immune system with vitamin C, selenium and echinacea.

The following are a few of the examples of how the effects of every day living can limit the effectiveness of vitamins and minerals.

- Statins taken to lower cholesterol also lower COQ10, itself needed to maintain a healthy heart. Vitamin B3 (niacin) is effective in normalising cholesterol instead of statins.
- Vitamin A is affected by alcohol, coffee and smoking
- Vitamin B - most of the B vitamins are affected by the birth control pills. Do women get told this?
- Vitamin C is vital for our health in many ways but is affected by smoking, alcohol and fried foods.

- Calcium is affected by alcohol, lack of exercise and caffeine and stress increases excretion of calcium
- Iron is affected by phosphates in fizzy drinks and also anti acid tablets. Just two of the things that affect iron metabolism.

Then there are drug interactions which are not always warned about, for example:

- Paracetamol reacts with alcohol and can increase liver damage in heavy drinkers.
- Anti Acids - reduce absorption of other medications (antibacterial, antifungal, etc) and affect magnesium and iron
- Aspirin reduces Vitamin C absorption
- Diuretics affect calcium absorption.
- Anti Arthritic drugs impair Vitamin C and Thiamine
- Non Steroidal Anti Inflammatory Drugs actually speed up the progression of arthritis.

So there are always more things that affect us than we realise and more than we can control in our busy, stressed, consumer led, social lifestyles and we can't change it all. But I hope you can get the message that you can help yourself with the simple things. A good healthy diet, cutting down on what is bad for you, taking more exercise and relaxing more, and don't worry if you are not perfect - no one is!

I continue to advocate keeping things simple to benefit from the nutrition diet. Eat more fruit and vegetables, cut down on fats, reduce meat consumption, avoid processed and fast foods, avoid colas and fizzy drinks, watch alcohol and caffeine consumption, drink more water and take more exercise.

If you want to know more there are plenty of books and the internet to get more detailed information if you want to follow up on anything I have said here. What I hope I have

done is get you thinking about diet and nutrition and how important it is. Also I hope you have learnt enough to question what affects your diet. Whether it is medication, environment, pollution or whatever. Don't accept things without question - if you are ill and the doctor prescribes medication, ok, but ask how it affects vitamins, etc in case you need to help correct any imbalances that are made.

Many things interfere with nutrition and as already stated everything to do with our health and lifestyle interacts with something else and that goes for nutrition to.

CHAPTER 13 - SUPPLEMENTS

So after reading about a healthy diet and the things that affect the nutrient uptake do we need a vitamin and mineral supplement.? In theory we should get all our nutrients (vitamins and minerals) from our diet. In practice that may not be as easy as it sounds - even if you eat a relatively healthy diet.

The level of nutrients in the food we finish up eating is dependant on a variety of things, some already mentioned in previous sections. Organic or non-organic foods are different in nutrient quality. The state of the soil food is grown in, transportation, storage, pest control, food processing, cooking, etc. all affect the vitamin and mineral levels in our food.

Modern farming methods relying on fertilisers to produce more crops more often from the same soil mean minerals are depleted, so though a vegetable may grow and look good it may well be missing important nutrients such as selenium or boron. Where are we going to get them from if not supplements. Selenium like all nutrients has its role to play in our health. In the case of selenium, it is needed to help prevent cancer and heart disease.

Foods are often picked before they are ripe so are not fully developed in nutrient value. Transport and storage further reduces the amount and quality of vitamins and minerals. So again how do we counter this - take a supplement or try to eat better quality food and more of it.

Then cooking adds to the loss of vitamins and minerals, especially boiling. The vitamins in greens or carrots etc finish up being thrown away with the water they were cooked in. (You could use the water for soup stock!)

That is not the end of it. Stress affects the absorption of nutrients into our body. Just at a time when we perhaps need more nutrients. It is not just stress. Old age affects nutrient absorption as well, as the body's metabolism slows and changes with age. And vitamins and minerals are particularly important as we age.

Then everyday things like coffee, alcohol, sugar, and smoking all affect absorption of vitamins and minerals. Other outside things such as traffic fumes, prescription and over the counter medicines all add to the problems. All affect nutrient absorption or metabolism.

This is further complicated by interactions between vitamins and minerals. Lack of one vitamin can affect absorption of another. You can't just say 'oh that's alright it doesn't matter if I miss one or two nutrients, there are plenty more.' For example magnesium as well as having its own tasks such as helping with healthy bones and teeth and muscles and working on relaxing muscles including the heart muscles, also plays a part in calcium uptake. Vitamin C also helps calcium absorption.

All the other nutrients also have interactive requirements. So just having a reasonable diet may not be enough as if only one or two nutrients are missing they may be important and other processes can be affected.

There are strong arguments then for a good quality multi-vitamin to be taken daily. Then again the scatter gun approach may not always be best as you may get sufficient quantity of some of the nutrients in your diet. Equally the arguments for using high doses of single vitamin supplements in certain circumstances may be wrong as this

could also upset the balance of vitamins. Just because you read that a high dose of something is beneficial and the latest health fad don't be tempted to follow the trend. At least consult a qualified nutrition expert or doctor as you should also do if considering a single supplement or herb for medicinal purposes.

You may think well I am healthy, eat well, etc, so why worry, I am getting plenty of vitamins and minerals in my diet. But whatever the nutrient quantity you take the body uses what it gets to first to maintain the status quo and do the immediate work necessary to maintain every day body functions. Made harder if you are not living the healthiest of lives. Other long term requirements that the nutrients should be tackling come second. This is done at the expense of old age. Many illnesses of aging, from cancer to heart disease are linked to vitamin and mineral deficiency. Often during our younger years. A recent study has shown that folic acid shortage is linked to alzheimers and dementia. Shortages of other vitamins are linked to diseases of old age.

Low magnesium is linked to bowel cancer and also high blood pressure. Calcium deficiency is not only involved in bone disease, but also diabetes and lack of Vitamin D is associated with certain cancers including breast cancer and prostate cancer.

All this uncertainty may lead us to the conclusion that a good quality multivitamin is the answer and I would agree with that, especially at vulnerable times - the young growing up, women during pregnancy, and for the elderly. Good quality multivitamins are available to match your needs according to age. Sensible, because different groups have different nutrient requirements.

Maybe you should have your diet analysed either by a nutrition adviser or even online where there are software programmes for this purpose. Then you can find what nutrients are missing from your diet and just supplement those items.

I would go slightly further and recommend taking Omega 3 fish oil as well. We eat less oily fish and what omega 3 we get is partly destroyed by cooking and food processing. Omega 3 oil is essential for the heart and for brain function. It is also felt important enough for the government's health advisers to consider recommending that omega 3 fish oils be given to people with heart disease.

There are other occasions when a single supplement may be necessary but as I said if you feel that is necessary consult your nutrition therapist for proper advice. The exception I would say are probiotics (seen everywhere in bio yoghurts and drinks.) Some people take probiotics on a daily basis, but they are certainly needed after a course of antibiotics. The antibiotics kill off healthy gut flora as well as the infection being treated. Probiotics are also a good remedy to help with a stomach upset or digestive problems.

I take a mainly mineral multi plus Omega 3 fish oil and as necessary probiotic supplements. I also eat bio yoghurt regularly but not the fruit sugary ones. I would recommend that action to anyone as a basic support to help maintaining health. I find that with the healthy diet I advocate and the addition of these supplements I stay well and in fact can't remember the last time I had to go to the doctors other than for routine check ups. Everyone is different though so it is still wise to get your own advice by consulting the appropriate expert.

CHAPTER 14 - VITAMIN KILLERS AND ROBBERS

Your Body Needs Food - but even if you do the right thing and follow the rules and try to eat a nutritious diet rich in vitamins and minerals it may not be enough. There are many things that stop vitamins and minerals being absorbed and doing the job they were meant to do.

You don't get told about the anti nutrients that block or rob you of nutrients. On top of that there are many reasons why your food lacks nutrients. The biggest loss of essential fatty acids, vitamins and minerals takes place during food processing and refining. Wheat germ and bran are rich in fibre, vitamins, minerals and essential fatty acids. They are all lost during the production of white flour. Likewise raw sugar is rich in nutrients and again they are lost in processing to produce white sugar.

Whether it is farming methods, food processing and food storage or chemicals, pesticides, toxins, medicines, (yes medicines that are supposed to make you well can also be vitamin robbers), alcohol, tobacco and traffic fumes, there are plenty of things that you need to be aware of and often don't get told.

Even your lifestyle affects nutrient uptake:

Smoking, excessive alcohol and coffee, too much strong tea and lots of colas and fizzy drinks can have a bad influence on your vitamin and mineral levels. Smoking reduces Vitamin C, B Vitamins and zinc and copper, therefore smokers should be aware of the need for extra vitamins. Even better stop smoking. Tea and coffee reduces absorption of iron and zinc. Alcohol uses up vitamins, especially the B vitamins essential for many processes including the nervous system and to help in energy metabolism. Depriving the body of essential nutrients means that there could be a need for extra vitamins.

Exercise - lack of exercise causes loss of calcium, especially in the elderly. Conversely too much exercise depletes your store of nutrients which is why athletes and sportsmen need to have a nutrient rich diet. Is the keen jogger or gym user aware of this fact or advised on diet.

Diet - processed foods, e.g. those foods full of white sugar and white flour have little or no nutrient value. Too much salt as well as affecting blood pressure also causes loss of calcium and potassium. Too much saturated fat depletes magnesium. High protein diets, too much salt and sugar, too much tea, coffee and fizzy drinks, too much alcohol and a lack of vitamin D can all increase the loss of calcium from the bones or reduce the amount which is absorbed from food.

Then there are the medicines - both over the counter and prescription medicines can be bad for nutrition. But does your doctor explain all this - not often. Here are some of the more common drugs. ALWAYS ask your doctor about any medication prescribed and its affect on nutrition.

Aspirin - affects vitamins A B and C as well as calcium and magnesium.

Antacids - interfere with the absorption of vitamins A and B complex vitamins as well as calcium, magnesium, iron and phosphorous. Antacids that contain aluminium interfere with the absorption of Vitamin D.

Antibiotics - Many of us will perhaps know about the need to take a course of probiotics if prescribed antibiotics which as well as killing the infection/bacteria prescribed for also kill the friendly gut flora, which then needs replacing. But this also interferes with vitamins B and K.

Anticonvulsants - Interfer with the absorption of vitamins B6, D and K as well as folic acid. These drugs are normally taken for long periods to treat such things as epilepsy but also used for other problems including migraine.

Since all these vitamins are important to health, higher doses may be needed.

Anti inflammatories - Widely used both over the counter and on prescription affects many vitamins and minerals including folic acid, iron, vitamins C and B12 and calcium.

Cholesterol medication - can interfere with absorption of iron, betacarotene, vitamins A, D and K and folic acid. Not always necessary either as diet can cure high cholesterol in many cases.

Cortisone - treatments reduce potassium, and vitamins A, C, D and B vitamins.

Diuretics - deprive the body of B vitamins, potassium, magnesium and zinc.

Laxatives - when used regularly, lower calcium levels, iron and Vitamins A, D, E

The Pill - adversely affects folic acid, vitamins C, E and B complex. The pill also affects the gut flora. Do all the women on the pill get advise on the affects of the pill and nutrition.

Anti depressants, Sleeping pills, Tranquillizers - Sleeping pills affect the uptake of vitamin D which is being reported as more important to our health. Anti depressants interfere with B2 and zinc and magnesium. To show how you need to be aware of the importance of nutrition, people with chronic fatigue (which can be caused by zinc deficiency) are often prescribed anti-depressants which lower zinc levels even more and yet are supposed to help.

So it is all very complicated or so it appears. Interference with vitamin and mineral absorption, nutrient robbery and lack of nutrients in food mean that vitamin deficiency can creep up without warning. The last thing you need if you are already having to take medication for an existing illness. Make sure you question your doctor - don't get fobbed off. If you are ill it is almost certainly a good idea to take a good multi vitamin in any case as you may not be eating as normal. Even when well you may need to make up your own mind about your nutrient uptake. If in doubt seek advice and get all the information you can. The Nutrition Diet is always a good start and can be adopted gradually and is a diet for life.

If after all this you think you might need a supplement have a look at the additional information on supplements in Chapter 13.

CHAPTER 15 - THE NUTRITION DIET SUMMARY

I hope that what you have read so far has been worthwhile and made you think about food and nutrition. The following chapters include food tips and recipes to help you with the nutrition based diet.

The Nutrition Diet is not difficult to follow and there are no set rules to follow within the simple rule of eating more healthy nutritious food. The basis of The Nutrition Diet is not just a diet for when you want to lose weight or feel you need to change your habits

for a while or because you feel ill, but a diet for life. It is a permanent change but necessary and can only be achieved if you want to change.

If you go back to the very beginning of our being - cells - every cell needs food - i.e. nutrients and without these nutrients cells will not function properly and disease is more likely.

The Nutrition Diet is a preventative diet and if all is well you won't notice any difference, but that doesn't mean you can stop the healthy diet and eat junk. We need to eat a healthy diet all our lives and benefit then from a longer healthier life which can be done with The Nutrition Diet.

During that long and healthy life we will have problems and most people are affected by old age, aches and pains, and stress to name just three main ones. But they can be helped by The Nutrition Diet as well. The Annexes to this book cover these specific subjects.

CHAPTER 16 FOOD AND RECIPE TIPS

Here are a few ideas for basic recipes with added content that can help make the recipe more nutritious.

BREAKFASTS - Breakfast is important and often missed by many people with our ever more busy lifestyles. Even so you can do something. If you only grab a slice of toast on the run then make sure it is a slice of brown/wholemeal toast. If you don't even have time for that grab a banana - it is better than nothing.

Cereals are probably the most popular breakfast. There are all sorts of cereals and most appear healthy but often contain a lot of added sugar and salt. The healthier option is probably oats. You can make porridge but that is not the only solution. There are oat based muesli bars (again good if you breakfast on the move!) but watch out for sugar

content. You can even get Oatabix. Oats also have the benefit of providing energy to start the day but are low glycaemic.

My favourite cereal recipe for breakfast includes oats. I get a bag of muesli (sugar free or low sugar), add a bag of oats and mix together in a large tub. Then mix in added seeds - sunflower, pumpkin, linseed etc and dried fruit.

For breakfast take a serving of the mixture and add enough milk to moisten and leave to soak. Do this when you get up while you are getting washed and dressed. When you are ready for breakfast add more milk as required and enjoy a healthy tasty start to the day. You can also top the dish off with half a kiwi fruit chopped or some other fresh fruit.

If you are against milk use water for the first stage to soak the cereal mix and then when ready to eat add some natural yoghurt drink or fruit juice. Delicious!

COLESLAW - Not the insipid carrot and white cabbage sitting in a watery white liquid as sold in supermarkets, but a healthy mix of vegetables. The following recipe is just an idea to get you thinking about changing an everyday item and adding variety to the diet. Maybe you have your own ideas.

Ingredients: Start with the basic grated carrot and white cabbage or crisp heart cabbage. Then add a small courgette finely chopped, add a handful of sunflower seeds and a handful of raisins, you could also add a few pieces of walnut. Stir together and add mayonnaise to taste. Season with a pinch of cayenne if desired - cayenne is good for the circulation as well. If you like you can add a slug of olive oil to the coleslaw as well. Delicious with a baked potato or piece of quiche or even roast chicken!

SALAD - Another meal that is not always done with imagination. Not just lettuce, cucumber and tomato. but a meal that can be varied and full of different ingredients. Take the basic lettuce. Add rocket, spinach, a sprinkle of parsley and finish with a covering of grated carrot. You can still add seeds and nuts to taste and sprinkle with a simple dressing of apple cider vinegar, olive oil and black pepper. By the time you add tomato, green or red pepper and cucumber to the plate you have a nutritious salad with different tastes and simple to prepare. Of course there are many more delicious foods to add, radishes, cress, chickpeas, sweetcorn, beetroot, etc but I only mention a few and just want you to think variety, after all variety is the spice of life.

GARLIC. We all know the health benefits of garlic especially its anti bacterial properties. It is widely used in cooking especially with stir fries, pasta dishes, curries etc. You can buy garlic pills and also eat it raw which gives the best effect. Many people are put off raw garlic by the strong taste and the smell left behind but I find that adding chopped raw garlic to a finished meal gets round this. I have found it goes well with broccoli and brussel sprouts and I chop a clove of garlic and sprinkle it on the vegetables as you would salt or pepper. You can experiment and sprinkle garlic on other things like chicken and baked potato. Delicious and healthy.

PASTA - The ever popular pasta can be a varied and different dish and this is one of my favourite concoctions that adds nutrient value to any pasta dish.

Ingredients: Onion, garlic, mushroom, courgette, broccoli, spinach or rocket and jar of Sacla Tomato and Parmesan pasta sauce. Salt and pepper to taste and mixed mediterranean herbs or italian seasoning herbs and parsley.

Chop the onion mushroom and courgette into small pieces, chop the garlic and stir fry the onion, garlic, mushrooms and courgette together for a few minutes. Add the spices and continue to stirfry until tender. Add the Sacla tomato and parmesan sauce and simmer. While this is cooking steam or boil the broccoli until just tender, drain and put aside **BUT KEEP THE WATER** from the broccoli. Put the broccoli water and additional water together in a pan and cook your pasta. Just before the pasta is ready roughly chop the broccoli and add to the stir fry. Drain the pasta and serve with the sauce. Sprinkle with fresh parsley and parmesan cheese.

For an added nutrient value take a handful of spinach or rocket and chop roughly and add to the pasta as it is boiling in the saucepan. When you drain the pasta the reduced greenery will be mixed with the pasta. It is all easier than I make it sound. For another variation on the content, this time in the sauce, swop the broccoli for beans. Instead of adding broccoli to the stir fry mix, open a tin of red beans and stir in sufficient for your taste. Again it makes a change in nutrition content and variety is a plus.

SOUP - Soups are many and varied and always popular. They are also nutritious as any vitamins and minerals which would normally be lost when boiling vegetables in water remain in the soup. In fact vegetable water can be used as stock for the soup. This is a good variation on a vegetable soup which also provides the '5 a day' recommended for

you diet, is filling without being fattening. Again use quantities to suit and even add or change ingredients.

Ingredients: carrots, onion, celery, potatoes, tomatoes (or a can of tomatoes), a handful of red lentils, red beans or butter beans, cabbage, Vegetable stock and garlic. Dice the carrots, onions, celery and potatoes. Shred the cabbage and finely chop or crush the garlic.

Put the carrots, potato, onion, celery into a pan and stir fry in olive oil for a few minutes before adding the tomato and garlic and cook for a further 3 or 4 minutes. Add the stock, bring to the boil and then turn down heat, add the lentils and simmer for 20 minutes. Add the cabbage and beans and cook for a further 5 or 10 minutes or until all the ingredients are cooked to your liking. When ready either mash the soup with a potato masher or pour half into a blender and blend before putting it back in the pan with the unblended part. Serve with crusty wholemeal bread. Add small macaroni pasta for a more filling meal.

RATATOUILLE - A version that is easy to use. Ingredients include courgette, onion, tomato, aubergine, red pepper, green pepper, garlic, mixed herbs, salt and pepper to taste. Chop a large onion and a couple of cloves of garlic and stir fry gently in a pan with olive oil until softened. Add two medium size courgettes diced and continue frying. Add a small to medium aubergine chopped and diced and red and green pepper to taste. The peppers can be left out if not keen. Continue stirring and then add a large tea spoon of mixed herbs and two or three tomatoes, skinned. Mix all together, add salt and pepper to taste and cover the pan with the lid and cook on low heat for 20 or 30 minutes stirring occasionally. It is delicious served with a baked potato, white fish and even on toast. Again you can vary the dish depending what is in your cupboard - add mushrooms or beans. You can also make a large amount when the vegetables are in season and freeze portions for later use.

You can also base the changeover to The Nutrition Diet on your current diet.

Begin by changing the way you do things before changing the content of your diet if that is easier to begin with. Make simple changes such as cooking only with olive oil instead of vegetable oil. Steam vegetables instead of boiling them.

Reduce the size of meat portions and increase the size of vegetable portions to compensate - or add another vegetable.

The latter idea of adding something to your present diet or meals and recipes is one way of improving meals without having to think up brand new meals and new shopping habits. Again you are changing things gradually based on your current habits. Further changes will come as you find these simple changes give you more variety and additional flavours to meals. You will want to try more of your own ideas! As you eat more and more in line with The Nutrition Diet you will find your taste buds changing and you will enjoy healthy eating more and more.

CHAPTER 17. SOUPS AND STOCKS

Soup is not part of our everyday menu but should be used more often. It is a healthy and nutritious choice. But not the tinned or packet variety. I mean good wholesome homemade soups. It is not difficult to make and doesn't take too much time. Make your own soups and taste the difference.

The other reason for the benefit of soups is that you get to eat all the nutrients in the ingredients. When you boil vegetables - carrots, broccoli, greens, peas, beans etc a lot of the vitamins and minerals finish up in the water which is thrown away. Anything cooked in the soup stays there so we have a healthier meal.

(Note: You can also keep vegetable water from your dinner preparations to use as stock in the soups.)

Here are a variety of easy to make and healthy soups. Like any recipe only use it as a guide and feel free to change something or add more of an ingredient to suit you and your families taste - or to use up any scraps you might have in the fridge.

If you are busy you can always make soups the night before and then you only have to heat it up when you get home the next day.

Also add bulk to soups to make a meal, for instance pasta, rice, chickpeas, beans and bread. They all provide good bulk and help turn a soup into a meal.

Enjoy your soup!

First, the base of a good soup is the stock. So here are the basic recipes for various stocks.

Meat based stock:

2lbs of meat bones
2 ltrs/3.5 pints of water
2 onions
2 sticks of celery
2 carrots
salt and pepper to taste
bouquet garni or mixture of herbs
boil the bones in the water removing the scum.
Add the ingredients and boil for about 5 hours
Strain and keep stock for soups and stews etc.

Chicken stock:

Chicken carcass or bones or scraps
2-3 pints of water
1 onion
2 carrots
herbs or bouquet garni

Place all the ingredients in a pan and bring to boil, then simmer for 3 hours.
Strain and keep for stock

Fish stock:

Fish heads, bones and trimmings

1.5 pints of cold water

1 onion

bouquet garni or herbs

Boil the fish in the water and remove scum.

Add the onion and bouquet garni and simmer for 1/2 hour.

Strain and keep for stock.

Vegetable Stock:

1 large onion

2 Carrots

2 sticks of celery

1 medium potato

Bouquet Garni

Place all the ingredients in a saucepan with 1 litre of water and bring to boil. Turn down heat and simmer for 1 hour.

Note: Feel free to add any other vegetable to enhance the flavour or benefit of the stock, such as a few spinach leaves.

SOUPS

Meal in a Soup (5 -a - day Soup)

We keep getting told to eat 5 - a - day fruit and /or vegetables and with this soup you can get your 5-a-day!

Ingredients:

3 large carrots roughly chopped
1 large onion roughly chopped
4 sticks of celery roughly chopped
2 large potatoes diced into small pieces
1/2 savoy cabbage shredded
1 large leek sliced thinly
400gm tin of chopped tomatoes
400gm tin of butter beans (or beans of your choice)
5 oz spaghetti broken into small pieces
2 cloves of garlic crushed
2 tbsp tomato puree
2 tbsp olive oil
chopped parsley
2 ltrs (3.5 pints) vegetable stock
parmesan cheese

Instructions

Put carrots, onion, celery, leek into food processor and process into small pieces.

Heat olive oil in pan and add vegetables, potato and garlic and cook for 5 minutes or until softened.

Stir in tomato puree, stock and tomatoes.

Bring to boil then cover and simmer for 10 minutes.

Add beans and pasta and cook for a further 10 minutes.

Add cabbage and cook for a further 5 minutes.

Season and serve with chopped parsley and parmesan cheese and a drizzle of olive oil (optional) and fresh crusty wholemeal bread.

Carrot and Coriander Soup

A fresh tasting healthy soup

Ingredients:

125gm (4.5 oz) red lentils

250gm (9 oz) carrots

150 ml fresh orange juice

300ml water

450ml vegetable stock

4 tbsp fresh chopped coriander

1 bay leaf

salt and pepper to taste.

Instructions

Chop carrots.

Place the lentils in a saucepan with the bay leaf and water and bring to boil.

Reduce the heat and cover and simmer until the lentils are softened.

Place the carrots in a pan and top with the orange juice and vegetable stock.

Bring to boil and cook for 15 minutes or until carrots are tender.

Drain the lentils and remove the bay leaf.

Place the lentils the carrots and liquid into a food processor or blender and blend to taste.

Stir in coriander, saving a little for garnish.

Reheat and serve season to taste.

Vegetable Soup

Preparation Time: 10 minutes

Cooking Time: 50 minutes

Serves: 4

Ingredients:

50g butter
1 onion sliced
250g carrots
250g swede
1 turnip diced
1 potato, diced
2 parsnips diced
3 sticks of celery
1 handful of red lentils
1 bay leaf
1 clove garlic
1000ml vegetable or chicken stock
500ml milk
125g frozen peas
Salt and pepper

Instructions:

1. Melt butter, add onions, garlic, celery, carrots, potatoes, parsnips, turnip and swede. Cook, covered for 10 minutes.
2. Add stock lentils and bay leaf and simmer for 30 minutes. Add milk, remove bay leaf and season.
3. Stir peas into the soup and simmer for a while on a low heat, then serve.

Leek Chickpea and Parmesan Soup

Preparation Time: 10 minutes

Cooking Time: 40 minutes

Serves: 4

Ingredients:

2 leeks, washed and shredded
15g butter
2 garlic cloves, chopped

handful fresh thyme leaves/tsp dried if not available
400g tin cooked chickpeas, drained and rinsed
600ml chicken or vegetable stock
2 potatoes, peeled and diced
salt and pepper to season
extra virgin olive oil
parmesan cheese, grated

Instructions

Gently heat the butter and add the leeks, garlic and thyme.
Slowly cook until the leeks are soft. Add the chickpeas, stock and potatoes.
Bring to the boil and simmer until the potatoes are cooked (20-30 minutes).
Break up the chickpeas and potatoes to thicken slightly.
Season to taste.
Pour into bowls and top with a splash of olive oil and some grated parmesan cheese.

Scotch Broth

This classic recipe uses a cut of mutton or beef to make the broth, but a vegetarian alternative uses stock made with any leftover vegetables. Serve with tattie scones.

Serves: 4

Ingredients

1.5 litres stock, vegetable, lamb or beef
1 tbsp pearl barley
1 tbsp yellow split peas
1 tbsp dried green peas
(or use 3 tbsp mixed broth mix)
1 carrot, peeled and diced
1 leek, washed and sliced
1 onion, peeled and sliced
1/2 small swede, peeled and diced
1/2 small cabbage, roughly chopped

1 handful chopped parsley
salt and pepper

Instructions

Put the ingredients into a saucepan, bring to the boil, then cover and simmer for 1 1/2 hours until peas are tender. Season and add parsley before serving. If you are a meat eater, make stock by boiling a neck of mutton or boiling beef with 1.5 litres water and a tsp salt, add the barley and peas and bring to the boil, skim and add the rest of the vegetables. Simmer for 1 1/2 hours, then remove and cut up the meat before serving.

Chickpea and Rosemary Soup

Ingredients

3 tbsp olive oil
8 cloves of garlic
1 tbsp fresh rosemary leaves
1/2 tsp red pepper flakes (crushed)
3 tins chickpeas washed and drained
1 medium leek (chopped)
4 cups of chicken stock
2 tbsp lemon juice
salt and pepper to taste.

Instructions

In a large pan, heat oil over medium heat. Add garlic finely chopped, leek, rosemary and red pepper flakes, stirring until garlic starts to brown - about 1-2 minutes.

Add chickpeas and cook a further 2-3 minutes stirring constantly. Add stock and bring to boil and then simmer for 30 minutes.

Serve with a sprinkle of fresh garlic and a slug of olive oil.

Chicken, Leek and Corn Soup

Serves: 4

Ingredients

2 corn cobs
50g butter
2 red chillies, deseeded and diced
2 streaky bacon rasher, diced
1 onion, chopped
2 leeks, halved
2 potatoes, peeled and diced
meat from 4 chicken thighs, diced
1 litre chicken stock
200ml single cream
1tbsp chives/parsley, chopped
sea salt and freshly ground pepper

Instructions

Stand each cob upright on a board and cut downwards with a sharp knife to remove the kernels.

Heat the butter in a large pan, add the chillies, bacon, onion, garlic and leeks and fry for about 10 minutes, without browning.

Add the potatoes, chicken, corn and stock and simmer for 15-20 minutes, until the potatoes are tender and the chicken is cooked.

Stir in the cream and herbs, season well and serve.

Carrot and Ginger Soup

Serves: 4

Ingredients:

1tsp olive oil
1 medium onion, peeled & chopped

2 garlic cloves, peeled & crushed
1 level tsp mustard powder
2.5cm piece fresh ginger, peeled & grated
freshly ground black pepper
pinch of salt
1 litre vegetable or chicken stock
6 medium carrots, peeled & chopped
2 tbsp parsley, roughly chopped
natural yoghurt to serve

Instructions

Heat the olive oil in a large saucepan and soften the onion and garlic with the mustard powder, ginger, pepper and salt, adding 2 or 3 tbsp stock after a minute or so. After another 2 -3 minutes, add the carrots, stirring well. Pour in the rest of the stock, bring to the boil, then cover and leave to simmer for 40 minutes. Blend the soup until smooth. Stir in the chopped parsley. When serving, swirl a spoonful of yoghurt through each portion.

Lentil and Mushroom Soup

Ingredients:

2 tbsp olive oil
1 large onion, finely chopped
4 sticks of celery, chopped and diced
500gm button mushrooms chopped in chunks
2 cloves of garlic finely chopped
200gm green lentils
2 pints chicken stock (or vegetable stock)
chopped parsley
zest of 1 lemon

Instructions

In a large pan heat oil then add onion, celery and garlic.

Cook gently till softened, stirring occasionally and don't let onions brown.

Add mushrooms and increase heat and cook for 2-3 minutes.

Pour in stock and lentils, stirring well and bring to boil.

Lower heat and simmer for 25-30 minutes until lentils are tender.

Season to taste and add chopped parsley before serving.

Creamy Carrot and Orange Soup

Ingredients:

1 oz butter

1 large onion chopped

2lb carrots chopped/diced

2 pints of stock (vegetable stock or chicken stock)

zest of 1/2 orange

1/2 pint of orange juice

1/2 pint of creme fraiche

1 bunch of chives chopped

salt and pepper to taste.

Instructions

In a large pan melt butter and stir fry onion until soft but not brown.

Add carrots and stir fry 2-3 minutes

Add stock and bring to boil and then simmer until carrots are tender.

Add orange juice and orange zest.

Place in blender and blend, then add creme fraiche and chives.

Reheat to serve but don't boil.

Lettuce and Pea Soup with Mint

Ingredients:

900gm/2lb bag of garden peas

1 large onion chopped

1 large potato chopped or diced
Handful of chopped lettuce leaves
6 cloves garlic
1 tbsp fresh chopped mint
stock/water

Instructions

Put the peas, onion, garlic and potato in a saucepan and cover and simmer for 10 minutes.

Add mint and lettuce and simmer for another 10 minutes.

Allow to cool and blend together

Season to taste.

Reheat when required and serve with a drizzle of cream and a couple of fresh mint leaves for garnish.

Carrot Leek and Lentil Soup

Ingredients:

2 oz (50gm) Butter
2 medium onions sliced and chopped
2 large carrots diced
2 or 3 leeks sliced
4 oz(100gm) red lentils
2 pts(1 ltr) stock - chicken or vegetable stock
salt and pepper to taste
fresh chopped parsley

Instructions

Melt the butter in a pan and fry onions gently for about 5 minutes.

Add carrot and onion and leek and cook for a further 5 minutes.

Stir in lentils and the stock.

Season and simmer for 35 - 45 minutes.

Leave to cool then liquidise the soup either all of it or only part if preferred.

Reheat when required and serve with chopped parsley.

Minestrone Soup

Ingredients:

1 carrot, 1 stick celery, 1 leek
3 runner beans, 1 turnip, 1 large onion
1/4 of a cabbage
2 clove garlic
4 tbsp of frozen peas
4 tomatoes
2 rashers fried bacon (chopped)
macaroni (1 cup)
1 ltr (2 pts) stock
salt and pepper to taste
Butter
Parmesan cheese

Instructions

Clean and cut vegetables into strips.

Chop onion

Melt butter in pan and saute onion, leek and garlic until soft.

Add stock

Bring to boil and add carrot, turnip and macaroni.

Simmer for 20 - 30 minutes.

Add cabbage, peas and beans and simmer a further 20 minutes.

Stir in tomatoes and bacon and season to taste.

Bring back to boil for a few minutes and server with grated parmesan cheese

Bean and Cabbage Soup

Ingredients:

7 oz (200gms) red kidney beans soaked overnight.
1 small cabbage shredded
1 large onion chopped
2 cloves garlic
2 tbsp olive oil
1 bay leaf
2 pints of stock
salt and pepper to taste

Instructions

Put the beans and onion in a saucepan with bayleaf and add stock or water.

Bring to boil and boil for 10 minutes then simmer until beans are tender.

Discard the bayleaf.

Liquidize the soup and then add the cabbage and bring back to boil and simmer until cabbage is cooked. Add more water if needed.

Add salt and pepper to taste.

Garnish with fresh chopped parsley and a drizzle of olive oil.

CHAPTER 18. MAIN COURSES AND SALADS

Like soups the main meal can be just as healthy and nutritious. The most important part is the ingredients. They should be as fresh as possible, organic if possible and as varied as possible.

The traditional roast dinner with 'meat and 2 veg' is ok but have a change. Cut down on the meat content, especially if it is red meat, and add another vegetable.

Small changes like that are simple and effective.

Before we get to the individual main course recipes have a look at the ratatouille, coleslaw, pasta and salad recipes and tips below. They make nutritious additions to any meal - fish, chicken or meat. Believe it or not one of my favourite meals is a large bowl

of coleslaw, baked potato, tomato and a tin of sardines in olive oil! Yes a tin of sardines - cheap and healthy - oily fish and full of calcium. You can also have the same meal with a piece of chicken or fish instead of the sardines. All easy to make and little change to your routine.

Another tip is to use plenty of herbs and spices and add other ingredients to any meal if you want to experiment with a recipe. You can also base the changeover to The Nutrition Diet on your current diet.

Begin by changing the way you do things before changing the content of your diet if that is easier to begin with. Make simple changes such as cooking only with olive oil instead of vegetable oil. Steam vegetables instead of boiling them. Reduce the size of meat portions and increase the size of vegetable portions to compensate - or add another vegetable.

The latter idea of adding something to your present diet or meals and recipes is one way of improving meals without having to think up brand new meals and new shopping habits. Again you are changing things gradually based on your current habits. Further changes will come as you find these simple changes give you more variety and additional flavours to meals. You will want to try more of your own ideas!

As you eat more and more in line with The Nutrition Diet you will find your taste buds changing and you will enjoy healthy eating more and more.

Variety is the spice of life and the same applies to food - the more varied the ingredients the more varied the range of nutrients available.

Enjoy your meal.

First some ideas on easy to create healthy dishes. Individual recipes follow.

COLESLAW - Not the insipid carrot and white cabbage sitting in a watery white liquid as sold in supermarkets, but a healthy mix of vegetables. The following recipe is just an idea to get you thinking about changing an everyday item and adding variety to the diet. Maybe you have your own ideas.

Ingredients: Start with the basic grated carrot and white cabbage or crisp heart cabbage. Then add a small courgette finely chopped, add a handful of sunflower seeds and a handful of raisins, you could also add a few pieces of walnut. Stir together and add mayonnaise to taste. Season with a pinch of cayenne if desired - cayenne is good for the circulation as well. If you like you can add a slug of olive oil to the coleslaw as well. Delicious with a baked potato or piece of quiche or even roast chicken!

SALAD - Another meal that is not always done with imagination. Not just lettuce, cucumber and tomato. but a meal that can be varied and full of different ingredients. Take the basic lettuce. Add rocket, spinach, a sprinkle of parsley and finish with a covering of grated carrot. You can still add seeds and nuts to taste and sprinkle with a simple dressing of apple cider vinegar, olive oil and black pepper. By the time you add tomato, green or red pepper and cucumber to the plate you have a nutritious salad with different tastes and simple to prepare. Of course there are many more delicious foods to add, radishes, cress, chickpeas, sweetcorn, beetroot, etc but I only mention a few and just want you to think variety, after all variety is the spice of life.

PASTA - The ever popular pasta can be a varied and different dish and this is one of my favorite concoctions that adds nutrient value to any pasta dish.

Ingredients: Onion, garlic, mushroom, courgette, broccoli, spinach or rocket and jar of Sacla Tomato and Parmesan pasta sauce. Salt and pepper to taste and mixed mediterranean herbs or italian seasoning herbs and parsley.

Chop the onion mushroom and courgette into small pieces, chop the garlic and stir fry the onion, garlic, mushrooms and courgette together for a few minutes. Add the spices and continue to stir fry until tender. Add the Sacla tomato and parmesan sauce and simmer. While this is cooking steam or boil the broccoli until just tender, drain and put aside **BUT KEEP THE WATER** from the broccoli. Put the broccoli water and additional water together in a pan and cook your pasta. Just before the pasta is ready roughly chop the broccoli and add to the stir fry. Drain the pasta and serve with the sauce. Sprinkle with fresh parsley and parmesan cheese.

For an added nutrient value take a handful of spinach or rocket and chop roughly and add to the pasta as it is boiling in the saucepan. When you drain the pasta the reduced greenery will be mixed with the pasta.

It is all easier than I make it sound. For another variation on the content, this time in the sauce, swap the broccoli for beans. Instead of adding broccoli to the stir fry mix, open a tin of red beans and stir in sufficient for your taste. Again it makes a change in nutrition content and variety is a plus.

RATATOUILLE - A version that is easy to use. Ingredients include courgette, onion, tomato, aubergine, red pepper, green pepper, garlic, mixed herbs, salt and pepper to taste. Chop a large onion and a couple of cloves of garlic and stir fry gently in a pan with olive oil until softened. Add two medium size courgettes diced and continue frying. Add a small to medium aubergine chopped and diced and red and green pepper to taste. The peppers can be left out if not keen. Continue stirring and then add a large tea spoon of mixed herbs and two or three tomatoes, skinned. Mix all together, add salt and pepper to taste and cover the pan with the lid and cook on low heat for 20 or 30 minutes stirring occasionally. It is delicious served with a baked potato, white fish and even on toast. Again you can vary the dish depending what is in your cupboard - add mushrooms or beans. You can also make a large amount when the vegetables are in season and freeze portions for later use.

RECIPES

Cauliflower and broccoli pilaf with chicken

Ingredients

1 tbsp oil for frying

4 chicken breasts , preferably with skin on

1 tbsp curry powder

200g basmati rice

500ml chicken stock

250g cauliflower
250g broccoli
1 lemon, cut into small wedges
small bunch chopped fresh coriander

Heat the oil in a frying pan that has a lid or flameproof casserole.
Add the chicken, skin-side down and fry until the skin is browned.
Add the curry powder and rice, fry for 1 minute, then stir in the stock.
Add the lemon wedges to the pan and turn the chicken skin-side up.

Bring to the boil, then simmer with the lid on for approximately 10 minutes, then add the cauliflower and broccoli and cook for another 5 minutes or so until the chicken is cooked through and the rice has absorbed all the stock and is tender (you may need to add a little more stock if the rice looks like drying out too much). Sprinkle over the coriander leaves and serve

Cheesy Lentil and Root Vegetable Bake

Ingredients:

3-4 potatoes, washed, unpeeled and diced
2 parsnips, washed, unpeeled and diced
2 carrots, washed, unpeeled and diced
half a squash, peeled and diced
200g cooked green lentils
50g cheddar cheese, grated
2tbsp single cream
salt and black pepper
1 small onion, finely chopped
handful of fresh parsley, finely chopped (optional)
2 tbsp butter

Place the potatoes, carrots, parsnips and squash in a pan of water and bring to the boil.
Cook the vegetables until tender.

Drain the water from the pan of vegetables and add the cooked lentils, cream, butter, salt, black pepper, parsley and raw onion to the pan. Thoroughly mash the ingredients together.

Transfer the vegetable mash to an ovenproof dish, sprinkle with the cheese and place under a hot grill until the cheese melts.

Lovely served with sausages.

Fish Pie

Ingredients:

750g swede

750g potatoes

300g fresh haddock

300g smoked haddock (undyed)

100g cooked prawns

125ml milk

250ml bechamel sauce

2 bayleaves

salt & pepper

1 tbsp chopped parsley

25g butter

Preheat the oven to 200C (400F, gas 6). Cut the potato and swede into chunks and boil separately until tender then mash with a knob of butter and season (keeping separate).

Cut the fresh haddock into chunks and cook gently in the milk and bay leaves for 5-6 minutes. Cook the smoked haddock the same way but just in water.

To make the bechamel sauce melt 25g butter in a saucepan, stir in 15g (desert spoon)

flour to make a smooth paste. Stir in 250ml milk and stir continuously until thickened.

Roughly flake the fish into a shallow oven dish . Sprinkle over the prawns then pour over enough of the bechamel sauce to cover the fish and add the chopped parsley and season. Spoon alternate layers of swede and potato to make the topping, dot with butter and bake for 20 minutes until golden.

Pasta With Broccoli, Salmon and Pine Nuts

Ingredients

A bunch of Purple Sprouting Broccoli or couple of small heads of Broccoli

100-200g smoked salmon, cut into small pieces (the trimmings are ideal)

2 tbsp olive oil

2 tbsp pine nuts

Pasta for two

Put the pasta on to boil. When nearly cooked, heat the oil in a pan, wash and trim the PSB and, if using calabres, cut into small florets.

Dry the veg, add to the hot oil and cook for a minute or so. When starting to brown, add the pine nuts and salmon pieces and stir, cooking over a high heat for another minute or two until the nuts are browned. The broccoli should still be slightly crunchy.

Drain the cooked pasta, stir in the salmon, broccoli and nuts and serve.

Purple Sprouting Broccoli and Leek Au Gratin

Serves: 4

Ingredients:

300g leeks, sliced
300g purple sprouting broccoli
4 hardboiled eggs
1 tbsp butter
1 heaped tbsp flour
250ml hot milk
250ml hot psb water (reserved
from cooking)
4 tbsp cream
2 slices ham (optional) - chopped
50g grated gruyere cheese (or
other cheese)
1 tbsp breadcrumbs
salt and pepper
nutmeg
25g melted butter

Cook and drain the PSB and leeks, reserving the cooking water.

Melt the butter in a pan and stir in the flour to make a roux. Leave to cook over a low heat for a few minutes (do not allow to brown). Add milk and the PSB water gradually to make a smooth sauce.

Simmer for 15 minutes until the sauce is thick. At this point put in chopped ham and cream. Season.

Arrange the PSB and leeks in an oval gratin dish, with sliced hard boiled eggs on top - pour the sauce over them.

Mix cheese and breadcrumbs together and scatter over the top of the sauce. Drizzle with the melted butter and put in a hot oven (gas mark 7, 425°F, 220°C) for about 20 minutes until the top is brown.

Roast Chicken With Almonds

Ingredients:

10 chicken breast halves

Salt and pepper

1 (5 1/2 oz.) pkg. slivered almonds

1 (10 1/2 oz.) can cream of mushroom soup

1 (10 1/2 oz.) can cream of chicken soup

1/4 to 1/2 c. dry white wine, or water or other liquid

Parmesan cheese

Spread chicken in very lightly greased baking dish.

Cover with 2/3 of the almonds.

Mix soups with wine. Pour over chicken and almonds.

Sprinkle Parmesan cheese on top and then sprinkle remaining almonds over.

Bake at 350 degrees for 2 hours uncovered.

Serves 8 to 10.

Potted Chicken with Peppers and Mushrooms

Ingredients:

4 chicken breasts

3 green peppers

2 (3 oz.) cans mushrooms

1 lg. onion

4 potatoes

1 tsp. salt

1/2 tsp. pepper

1 1/2 tsp. paprika

Oil for browning

1 cup water

Brown chicken and remove from pot.

Brown peppers sliced and remove from pot.

Brown onions and mushrooms together.

Add peppers and chicken, plus seasoning and water.

Cover and cook on slow flame after first boil, for 2 hours.

Add more water if it dries out.

Remove chicken

Add peeled potatoes in large chunks and cook for additional 15 to 20 minutes until done in gravy.

Chickpea Casserole

Ingredients:

2 onions chopped, 4 garlic cloves

2 aubergines diced, 2 courgettes diced

2 tins (425gms) chickpeas

115gm (4 oz) basmati rice

115g (4 oz) green olives

600 ml (1 pt) vegetable stock

a handful of fresh chopped coriander

1 tsp saffron

salt to taste

1 red chilli

2 tsp cummin seeds, 2 tsp coriander seeds (crushed)

1 tsp turmeric

1 tbsp olive oil

1/2 lemon thinly sliced

Fry onions in the olive oil in a large saucepan for 5 minutes.

Stir in cummin, coriander seeds, garlic, courgette, aubergine, chilli, saffron, turmeric and pinch of salt. Cook for 2 or 3 minutes.

Drain chickpeas and rinse.

Add to the saucepan with rice olives and some lemon slices, and pour in the stock.

Bring to boil, cover and simmer for 20 minutes.

Garnish with chopped coriander and serve.

Note: Serve with tomato salad or mixed green salad with mint as side dishes or just as it is.

Roast Mixed Vegetables

This dish can be varied to suit your own taste and availability of vegetables.

Ingredients:

250 gm (9oz) potatoes or sweet potato

250 gm (9oz) celeriac

250 gm (9oz) courgette

250 gm (9oz) aubergine

2-3 carrots

3 onions

1 leek

1 parsnip

4 tomatoes

5 cloves garlic

100 ml olive oil

herbs - 3 tbsp oregano

2 tbsp rosemary

2 tbsp mint

fresh parsley

(Note: If easier substitute 4 or 5 tbsp of mixed mediterranean herbs for individual dried herbs)

Cut vegetables into good size chunks and cut leeks into thin rings.

(Par boil potato and parsnip if using these vegetables)

Cut onions into wedges.

Cut tomatoes in half or quarters depending on size

Chop garlic and parsley

Mix everything together with olive oil in a large bowl and transfer to roasting tin.
Cover with foil and cook for 30-40 minutes in oven at 180 C or gas mark 4.
Remove foil and cook further 10-15 minutes.
Serve with chicken or other roast meat or serve as it is with grated parmesan cheese.

Chicken Breast with Ham and Cheese

Ingredients:

3 whole chicken breast, split, skinned and boned
3 slices (4 oz.) Swiss cheese, cut in half
3 slices (4 oz.) boiled ham, cut in half
2 tbsp. margarine
1 can cream of chicken soup
1/4 cup. milk
Chopped parsley

Flatten chicken breast.

Top each with 1/2 slice cheese, then ham.

Secure with toothpicks.

In skillet brown chicken side down in margarine or butter.

Stir in soup, milk and cover.

Cook over low heat for 20 minutes.

Stir now and then.

Top with parsley.

Chicken Stew

Ingredients:

4 chicken breasts, stewed
1 (6 oz.) can mushrooms

1/2 med. head cabbage, chopped
2 med. onions, chopped
Salt, pepper and garlic to taste
1 (12 oz.) tomato juice

To stew chicken, cover with water and pressure 15 minutes.

Remove chicken from water, add mushrooms, cabbage and onions.

Add salt, pepper, and garlic to taste.

Add tomato juice and chopped chicken.

Simmer for about 1 hour.

Fish Chowder

An excellent way in which to utilize a small quantity of fish is afforded by fish chowder. In addition, this dish is quite high in food value, so that when it is served with crackers, little of anything else need be served with it to make an entire meal if it be luncheon or supper. Cod, haddock, or fresh-water fish may be used in the accompanying recipe.

Ingredients:

2 lb. fish
1 small onion
1 cup. sliced potatoes
1/2 cup. stewed tomatoes
1-1/2 tsp. salt
1/8 tsp. pepper
2 Tb. butter
1-1/2 cup. milk

Skin the fish, remove the flesh, and cut it into small pieces. Simmer the head, bones, and skin of the fish and the onion in water for 1/2 hour. Strain, and add to this stock the fish, potatoes, tomatoes, salt, and pepper. Simmer together until the potatoes are soft. Add the butter and milk. Serve over crackers.

Salmon Cutlets

Cut salmon into steaks or cutlets about an inch thick.

Wipe them with a dry cloth, and season them with salt and cayenne pepper.

Have ready a pan of yolk of egg well beaten, and a large flat dish of grated bread crumbs.

Put some fresh lard or clarified beef dripping into a frying pan, and hold it over a clear fire till it boils.

Dip your cutlets into the beaten egg, and then into the bread crumbs.

Fry them of a light brown.

Serve them up hot, with the gravy in the bottom of the dish.

Easy Oven Stew

Ingredients:

3/4 lb Boneless beef round steak, trimmed and cubed

1 tbsp Cooking oil

4 medium Potatoes, cut into 1 inch cubes

5 medium Carrots, cut into 1 1/2 inch chunks

1 stick celery, cut into 1 inch chunks

1 large Onion, cut into 1 inch chunks

14 1/4 oz Can of chunky stewed tomatoes

3 tbsp Quick cooking tapioca

1 tsp Browning sauce

1/4 tsp Pepper

1 cup Frozen peas

In oven or pan, brown the steak in oil.

Add the next eight ingredients; cover and bake in oven at 300 for 4 to 5 hours.

Add the peas during the last 30 minutes of baking.

Serves 6

Easy Pork Chop Dinner

Ingredients:

4 Pork chops

Can of chicken broth

1 Onion chopped

2 Cloves of garlic - chopped

2 tsp olive oil

Put oil in frying pan and heat until hot. Brown the pork chops on both sides.

Now add the chicken broth, onions, garlic and any other spices that you might like into the frying pan.

Simmer on low heat for about an hour.

The pork chops should be tender and not dried out.

Quick Beef Minestrone

Ingredients:

1/2 lb Ground beef

16 oz Frozen Italian mixed vegetables

2 cup Water

2 cup Shredded cabbage

Grated Parmesan cheese

1 can Condensed tomato soup

1 tsp Dried basil

1/2 cup Uncooked elbow macaroni

In a soup pot, cook beef until well browned.

Drain off fat.

Stir in frozen vegetables, undiluted soup, water and basil. Heat to boiling, stirring occasionally.

Simmer 15 minutes.

Stir in cabbage and elbow macaroni. Cook until tender.

Sprinkle with grated cheese.

SERVES 6.

Quick Chicken And Noodles

Ingredients:

4 Skinless boneless chicken breast halves

1/4 tsp Garlic powder

1/8 tsp Paprika

1 cans (14.5 oz.) chicken broth

1/2 tsp Dried basil leaves, crushed

1/8 tsp Pepper

2 cups Frozen broccoli, cauliflower, carrots

2 cups Dry wide egg noodles

In a medium nonstick skillet over medium-high heat, cook chicken 10 minutes or until browned. Sprinkle with garlic powder and paprika. Set chicken aside.

Add broth, basil, pepper and vegetables. Heat to a boil. Stir in noodles.

Return chicken to pan. Reduce heat to low. Cover and cook 10 minutes or until chicken is no longer pink. If desired, garnish with fresh basil.

Serves 4

Greek Pasta Salad

Ingredients

1 pound rotini pasta

1 pound boneless skinless chicken breasts

3 stalks celery -- chopped

1 red bell pepper -- chopped

2 1/4 ounces black olives -- sliced
4 ounces feta cheese -- drained & crumbled
3 green onions -- finely sliced
16 ounces Italian salad dressing

Cook chicken and bay leaf in water to cover .
Bring to boil and cook for 30 min. or until juices run clear.
Cool and remove skins.
Or, you can cook chicken in frying pan until cooked through.
Cut into bite size pieces.
Cook pasta and drain. Add all ingredients and mix well.
I use only about half the bottle of dressing and then put the rest on
the table if someone wants more.
Serve warm or cold.
Serves 6

Basic Potato Salad

Ingredients:

2 pounds new potatoes
1/2 pound mushrooms
3 green onions
3 stalks celery
3 tablespoons vinegar
2 hard-boiled eggs
2 tablespoons Dijon mustard
1/4 cup mayonnaise
Salt, pepper

Cover potatoes in pan with cold water and bring to boil over high heat.

Cook until potatoes are tender.

Meanwhile, thinly slice mushrooms, onions and celery and combine in mixing bowl. When potatoes are tender, drain and halve or quarter potatoes, depending on size and add to bowl.

Sprinkle with vinegar. Cover and refrigerate.

When cool, chop eggs and add to bowl.

Add mustard and mayonnaise, and season to taste with salt and pepper, mixing everything together gently.

Bean and Tuna Salad

Ingredients:

3 cups Water

2 cans Cannellini beans

1/3 cup Olive oil

3 teaspoons Red wine vinegar

1 teaspoon Salt

Fresh pepper to taste

1 medium Red onion

12 ounces Tuna -- drained

Mix together oil, vinegar, salt and pepper. Pour over beans and onion in a shallow bowl.

Cover and refrigerate at least 1 hour.

Transfer bean mixture to serving platter with slotted spoon.

Break tuna into chunks and arrange on bean mixture.

Coriander Chicken Salad

Ingredients

1 cup Coriander -- chopped

3 Scallions (including tops) -- minced

2 Chicken breasts -- boneless skinless

3 tablespoons Butter or margarine

1/4 cup Sesame seeds -- toasted
Garlic clove -- minced
1/2 Head of iceberg lettuce -- shredded
-----SESAME DRESSING-----
1 tablespoon Dry mustard, 1 tablespoon -Water
1/2 cup Sesame oil, 1/2 cup Salad oil
1/4 cup Soy sauce, 3 teaspoons Sugar
1 tablespoon Lemon juice, 1/4 teaspoon Chinese 5-spice powder

Cut chicken into strips (optional: soak in soy sauce for one hour).
Fry chicken in butter and garlic until brown. Reduce heat and simmer until done.
Cool in the refrigerator.
Toss cooled chicken with coriander, sesame seeds and scallions.
Toss in sesame dressing
Serve over a bed of shredded lettuce.

DRESSING: Make a paste of mustard and water.
Blend in other ingredients until homogeneous.
Optional: let dressing sit at room temperature over night to get well-blended mixture
(but it tastes fine freshly made, too)

Cumin Crusted Chicken Salad

Ingredients:
1/4 cup Chopped Tomato
3 tablespoons Peeled -- Chopped Cucumber
3 tablespoons Chopped Green Pepper
1 tablespoon Chopped Purple Onion
1 small Jalapeno Pepper Chopped
1 tablespoon Ground Cumin, 1 teaspoon Pepper
4 (4 Oz.) Chicken Breasts, Boned And Skinned

1 tablespoon Red Wine Vinegar
Cherry Tomatoes (Optional)
Fresh Basil (Optional)

Combine Tomato, Cucumber, Green Pepper, Purple Onion & Jalapeno Pepper in a small bowl and set aside.

Combine Cumin & Pepper. Rub all sides of chicken breasts with this.

Place in a large cast iron skillet over medium high heat until hot.

Add chicken and cook 6 minutes on each side or until tender.

Remove from skillet, reserving drippings in skillet.

Set chicken aside.

Add vinegar to pan drippings and cook 2 minutes, stirring constantly.

Pour over reserved vegetable mixture, tossing well.

Thinly slice each chicken breast diagonally across grain and arrange on individual serving plates

Serve with reserved vegetable mixture.

Garnish each serving with cherry tomatoes and basil

Italian Bean and Tomato Salad

Ingredients:

1 1/2 cups romaine lettuce -- shredded

1/2 cup tomato -- seeded, coarsely

-- chopped, unpeeled

1/2 cup great northern beans, canned -- drained

1/4 teaspoon dried rosemary -- crushed

1/4 teaspoon pepper -- fresh-ground

2 tablespoons low sodium chicken broth

2 tablespoons balsamic vinegar

1 teaspoon olive oil

Combine first 3 ingredients in a bowl; toss gently.
Combine rosemary and next 4 ingredients; stir well.
Pour over lettuce mixture, and toss gently.

Orange Lettuce and Walnut Salad

Ingredients:

6 Servings

1 head romaine lettuce

3 navel oranges, 3 temple oranges

2 Tbs lemon juice, 2 Tbs sugar

1 pinch salt, 1/2 tsp cinnamon

1 Tbs orange flower water

3/4 cup walnuts, chopped

Wash lettuce and section into leaves, discarding the tough outer ones. Drain. Wrap in paper towels to dry.

Store in refrigerator until needed.

Peel oranges and remove all outside membranes, using a small serrated knife and employing a seesaw motion.

Section the oranges by cutting away all the membranes from the orange flesh.

As you work, lift out each section and place in a small mixing bowl.

Squeeze the juice from the remainder of the orange over the sections to keep them moist.

Cover; keep chilled. Make a dressing by mixing the lemon juice, sugar, salt, cinnamon, orange flower water, and 2 tbs of the orange juice.

Blend well, then taste. The dressing should be sweet.

Just before serving, shred the lettuce and arrange in a glass serving dish. Pour the dressing over it; toss. Make a design around the edges with overlapping sections of orange, then sprinkle the salad with the chopped walnuts and dust with more cinnamon.

Serve immediately.

Lentil Salad

Ingredients

1/4 cup fresh lemon juice
2/3 cup olive oil
1 teaspoon Italian seasoning
1 clove garlic -- mashed
2 cups dried lentils
1/2 cup diced celery
2 whole red ripe tomatoes -- chopped

Whisk together lemon juice and olive oil.

Beat in Italian seasoning and garlic.

Wash lentils and boil in a quart of water until barely tender, about 30 minutes.

Drain.

While warm, toss with lemon dressing.

Cool to room temperature.

Add celery and tomatoes.

Serve immediately or chill and serve cold.

Red Cabbage and Apple Salad

Ingredients:

1 head red cabbage
2 carrots -- peel, grate
2 celery ribs -- peel, dice
2 Granny Smith apples -- core, dice
6 tablespoons peanut oil
6 tablespoons cider vinegar
2 tablespoons sugar
2 teaspoons caraway seed
salt -- to taste
black pepper -- to taste

Core cabbage and cut in half from top downward through stem end.

Shred or slice in very thin slices.

Place the cabbage in a large bowl and toss with grated carrot, diced celery and apple.

In another bowl, mix oil, vinegar, sugar and caraway seeds.

Season liberally with salt and pepper.

Toss cabbage mixture and dressing then serve immediately or refrigerate (covered tightly) up to 24 hours

Greek style potato salad

Ingredients:

1 1/2 -2 lbs. potatoes washed

1/2 cup Crumbled feta cheese thoroughly rinsed and drained

1 Medium onion peeled, cut in Half, then thinly sliced

1/2 cup Fresh parsley, coarsely chopped

1/2 tsp Salt free extra spicy season

3 tsp Salt free garlic & herb season

1 tsp Oregano

1/3 cup Lemon juice

2 tbsp Olive oil

2 tbsp Vinegar

Boil potatoes until firm but tender. Do not overcook (15-20 minutes).

Cool by placing pot of potatoes in sink and gently running cold water over potatoes.

Drain thoroughly.

Cut potatoes into 1/2 inch cubes.

Place in a large bowl with the rest of the ingredients and toss lightly, mixing well.

Diced Pepper, Tomato & Onion Salad

Ingredients:

4 Servings

2 large green bell peppers, grilled and skinned

3 tomatoes, skinned & seeded

1 large Spanish onion

6 Tbsp olive oil

2 Tbs vinegar

1 garlic clove, finely chopped

1 salt

Stem & de-seed the grilled bell pepper. Wash & dice the flesh. Dice the tomatoes & mix with the peppers.

Dice the onions & mix them with the other ingredients as well. Combine the olive oil, vinegar & garlic. Add salt to taste & mix well. Pour over the salad & chill.

Just before serving, strain off the excess juices & arrange in a salad bowl.

Tuna Salad

A salad that is both attractive and appetizing can be made by using tuna fish as a foundation. This fish, which is grayish-white in color, can be obtained in cans like salmon. As it is not high in price, it gives the housewife another opportunity to provide her family with an inexpensive protein dish.

Ingredients:

1 c. tuna fish

1/2 cup. diced celery

1 cup. diced cucumber

Salt and pepper

Vinegar

Lettuce

Mayonnaise

Open a can of tuna fish, measure 1 cupful, and place in a bowl.

Dice the celery and cucumber, mix with the fish, and sprinkle with salt and pepper.

Dilute some vinegar with water, using half as much water as vinegar, and sprinkle enough of this over the mixture to flavour it slightly.

Allow the mixture to stand for about 1/2 hour in a refrigerator or some other cold place and just before serving pour off this liquid.

Heap the salad on lettuce leaves, pour a spoonful of mayonnaise over each portion, and serve.

ANNEXES

ANNEX 1. Nutrition and Aches and Pains

Aches and pains may not sound like diet and nutrition, but they can be caused by diet, and nutrition can play a part in management and prevention of aches and pains.

Aches and pains are something we all suffer, young or old we are all at risk whether from sport, work, or just old age. As we become older the accumulation of years of wear and tear are felt. Backache, sore joints, stiff muscles, rheumatic and arthritic pains, fibromyalgia and general stiffness and so on.

At times it is also difficult to pin point what the problem is. Exact diagnosis is difficult and therefore the subsequent treatment equally difficult. Generalised joint pain can be the result of some illness such as rheumatic fever or influenza, infections, or gut flora imbalance. Some diseases or medicines or foods can also damage or make the gut wall more permeable which may also lead to aching joints caused by toxins etc, leaking into the system. The underlying problem has therefore to be diagnosed and sorted out then the joints have a chance of getting better. Simply taking a painkiller while giving immediate relief is not the answer and in fact can make things worse.

We get aches and pains in our joints or aching muscles and say we have a touch of arthritis or rheumatism or fibrositis without really understanding what is going on. Getting to the root cause is difficult. Some diseases like rheumatoid arthritis can be tested for but others are more problematic to diagnose accurately. Then some conditions come and go, have good periods and bad. We don't really know what to put it down to. There is no simple answer, but an awareness of the possible causes and solutions may help evaluate what is best for you.

Therefore the reasons for the aches and pains are many and varied. Back pain for instance can even be the result of blocked arteries that feed the vertebrae. Because the arteries are blocked for whatever reason insufficient nutrients are absorbed from the blood stream.

In this case the long term cure has nothing to do with normal joint remedies but to look at ways to treat and unblock the arteries. Diet and nutrition then come into play. The joints are then able to get the nutrients they require for joint health. There are no simple cures although a hefty painkiller might take away or mask the pain for a lot of people, the cure or any long term alleviation of pain is not being tackled.

Finding the cause of the problem and tackling it is not easy as we are all unique and different, in our make up, our lifestyles, background, diet, etc. What appears to cure one persons arthritis doesn't necessarily cure another, and the experts differ as well. Take a simple thing like oranges for instance. Some experts say arthritis sufferers should avoid them and others disagree. In fact oranges have a good level of calcium as well as vitamin C. Though called an acid fruit, when digested the residue is alkaline. Try them for yourself and listen to your body and make your own mind up. As I said we are all different.

Reports appear saying a new medicine, wonder food, herb or whatever is the answer to all the problems, but not everyone is going to find it works for them. You could take everything you read about and have heard about in a scatter gun approach but that is probably not wise or practical. Even if you feel better you would not have a clue what is making you better. Also the random mixture of remedies may well cause other problems.

What we have to do is look at the patient as a unique individual and find out how he or she can be helped. This means looking at the wider picture - diet, lifestyle, illness, stress, work and so on. Though we are all different and the causes of our aches and pains may be different there is a common basis to start treatment. Certain changes can be made to lifestyles that are beneficial to our whole health.

This will also form a basis to help our aches and pains whatever the cause. These changes could be dietary and or lifestyle. A healthier diet, reduction of alcohol, sugar, coffee, etc. more exercise and relaxation. Even if you don't do anything else your health will benefit in the long term.

Meanwhile back to aches and pains and the causes and possible causes, if they can be found. The names of the illnesses or disease are different but it is not black and white and some problems overlap others. Pain is pain though, whatever the illness is called.

Some examples are:

Rheumatoid Arthritis - A chronic inflammatory auto-immune disease caused as a result of microbial infection, possibly by viruses. Rheumatoid Factors are formed in the blood. The damage to joints is cumulative so the problem worsens. Tests can be carried out to help with diagnosis. Any help here has to look at the immune system and foods that can boost the immune system as well as general health and help to deal with the pain and inflammation.

Osteoarthritis - is a degenerative non-inflammatory disease affecting the cartilage which wears out quicker than it is replaced. Wear and tear on the joint causes irritation and pain and though the disease itself is non-inflammatory the damage to the joint causes inflammation. Bone density tests can be obtained to make diagnosis easier. Any help in this case is done by looking at building and repairing the cartilage and associated areas in the joint and again treating any pain and inflammation.

Gout - Is inflammation in certain joints caused by the deposit of sodium urate crystals in joints and tendons. It is often caused by over production of uric acid or defective excretion by the kidneys. The cause of the over production or the defective excretion needs to be looked at and again treatment of the inflammation and pain addressed.

Other types of arthritic condition include:

Ankylosing Spondilitis - another auto-immune inflammatory disease affecting the sacroiliac and vertebral joints.

Acute Infective Arthritis - caused by infections from elsewhere in the body being carried in the blood to the joints which are very often already damaged by normal wear and tear or other arthritic disease and aggravating the situation.

These diseases need the root cause looked at and as with all the others the pain and inflammation needs to be dealt with.

Causes of Arthritis.

Some of the causes of arthritis can be summarised as follows:

- poor joint lubrication (boost synovial fluid)
- hormone imbalance
- allergies (prevalent amongst almost all rheumatoid sufferers and many others)
- free radicals (found present in inflamed joints)
- infection
- bone strain/damage
- posture
- diet
- stress

The common denominator for all these problems is the resulting pain and inflammation. The causes are varied depending on the diagnosis. To complicate matters further other illnesses can show up with symptoms of 'arthritis' - fibromyalgia and adrenal fatigue syndrome are two. Fibromyalgia is more well known and amongst other things, joints are painful and stiff though not necessarily from wear and tear. Muscle ache or tenderness is also prevalent. The muscles are affected by pain and tender to the slightest pressure at various points on the body. Tiredness and disturbed sleep are also symptoms of fibromyalgia.

Adrenal fatigue syndrome is less well known and is due to a variety of causes and like fibromyalgia is difficult to diagnose. Adrenal fatigue syndrome though has other symptoms, the main one being not surprisingly fatigue - to such an extent that everyday normal tasks are affected. Though if you suffer from any arthritic illness it takes it out of you and you can feel worn out as well. Causes also overlap with other reasons for aches and pains such as infection, environmental toxins and candida. Stress also plays a part disrupting the stress hormones cortisol and adrenalin. Our modern lifestyles, living with constant stress and the resulting tendency to use coffee, cigarettes and high sugar foods to counter the stress makes matters worse and the thyroid functions are disturbed. This can amongst other things lead to calcium imbalance and the arthritis as well. Symptoms of fibromyalgia and adrenal fatigue can be similar to arthritis and rheumatoid arthritis. Liquorice root can help fibromyalgia and adrenal fatigue. It also has anti-inflammatory properties. If you already have some arthritis the symptoms are made worse by the two illnesses mentioned. Another complication can be allergies either food or environmental which provoke or worsen arthritis.

HOW TO HELP:

This emphasises the need for a full holistic approach to any illness and an open mind is needed to look at all the possibilities. It is important to get the correct diagnosis so that the right treatment can be sorted out and given.

Diagnosis and treatment is further complicated by periods of improvement and then relapses and worse periods of pain. Though tests and x-rays can make some diagnosis, even then other factors like diet and stress can also complicate and worsen the symptoms so a holistic approach is needed to make life better.

If an accurate diagnosis is possible all well and good. But there are still the outside effects that affect the illness and measures that can be taken to help treatment and recovery from the diagnosed illness. As mentioned earlier this can start with diet and lifestyle changes which will have an overall benefit to your health.

The basis of good health is nutrition. The remedies to relieve aches and pains whether medicines or natural are only remedial. We need to look at long term permanent care. All our bodies systems rely on nutrition to maintain and repair and build the cells that

make up our being. The food we eat supplies that nutrition and the nutrients to do this. This means a healthy whole food diet with plenty of fruit and vegetables and bean, nuts and seeds is the priority.

The nutrients in food all have a part to play and interact with each other so are all necessary. For example Vitamin A is crucial for the immune system but also helps teeth and bones. Vitamin C strengthens blood vessels and is an important anti-oxidant but it is also essential for collagen, ligaments and tendons. Vitamin D is needed to regulate Calcium and Phosphorous to build strong bones.

So the list goes on, whether vitamin or mineral, nutrients all have their part to play in our long term health. A healthier balanced diet can be started immediately and be of benefit whatever the other problems you have. For instance rheumatoid arthritis sufferers are found to have high levels of low density lipoprotein (LDL) cholesterol (the 'bad' cholesterol) which also affects the cardiovascular system.

Clogged arteries prevent nutrients getting to the cells etc. including joints and bones. Low density lipoprotein combines with cholesterol and gets deposited on the artery walls. Meanwhile the high density lipoprotein takes cholesterol out of the arteries. Avoid LDL cholesterol foods and increase HDL cholesterol (the good cholesterol) with omega 3 oils. A high acid diet leads to a loss of minerals including calcium so a more alkaline diet is recommended. Reduce intake of acid forming foods such as meat and dairy products and sugars including biscuits, cakes, canned drinks etc. Eating more fruit and vegetables will increase the alkaline content of your diet. Ideally the diet should be 20% acid forming foods and 80% alkaline. So a good diet plays its part in the management of aches and pains.

- Eat a wide variety of foods
- Eat plenty of fruit and vegetables and grains
- Avoid processed foods
- Choose a diet low in fat, especially saturated fat and cholesterol
- Choose a diet moderate in sugars
- Avoid or reduce stimulants such as alcohol and caffeine
- Avoid fizzy drinks including diet colas etc

- Drink plenty of water
- Take more exercise
- Relax more - try yoga, meditation, tai chi etc.

Add to this a good quality multi vitamin and Omega 3 oil supplement and the basis for a healthier lifestyle is started. Following on from this basic healthy living framework more specific needs for your particular problems can be looked at and incorporated once diagnosed by your doctor or qualified health practitioner.

TREATMENTS:

The most common symptom with all these illnesses is aches and pains. From this we are probably taking a Non Steroidal Anti Inflammatory Drug (NSAID), possibly prescribed by our GP. But more often than not bought over the counter, which is not necessarily a good thing to do without getting some sort of professional advice. The long term use of NSAID's is not advised. Recent reports have found some types of NSAID have side effects that can cause heart problems and at least 2 brands have been withdrawn. All have a detrimental effect on the stomach with long term use damaging the mucous lining and this in itself allows more toxins to get into the system worsening the arthritis and the NSAIDs also inhibit calcium absorption. Long term use of painkillers can also be counter productive as they become less effective as the body gets used to them. This can lead to even more heavy use and more damage.

There are natural alternatives to NSAIDs and these should be tried. If already taking NSAIDs they can be started alongside these and at the same time reduce the dependence on the NSAIDs. This will give the natural alternatives chance to take effect as natural and vitamin supplements do take longer to work but then do the job properly. If possible though it would be better to stop the NSAIDs as another side effect is the interference with some vitamins and minerals the body uses.

Natural pain killers include Fish Oil, Ginger and Turmeric and they are also anti-inflammatory. Linolenic acid found in flax seeds, walnuts and soya beans also relieves muscle and joint pain. Bromelain from pineapple helps reduce pain and swelling.

Natural Anti-inflammatory foods include Oleic acid found in olive oil, Boswellic acid from frankincense and anti-oxident foods such as fruit and vegetables, especially prunes, berries, spinach and broccoli. Evening Primrose oil also helps joint lubrication.

As well as things that make you better there are plenty of things that can worsen the problems of arthritic conditions besides poor diet and lifestyle.

- Aluminium: exacerbates osteoporosis and as well as found in cooking pans is found in anti acid medication.
- Anti-acids: prevent absorption of Vitamin A and B complex vitamins. Vitamin A is required for bones, body tissue and Vitamin B vitamins help muscle and to maintain body tissue.
- Diuretic drugs: cause loss of potassium, calcium, magnesium and zinc, all needed for bone health.
- Anti Arthritic drugs: Indomethacin impairs Vitamin C and thiamine two things that actually helps sufferers. Phenylbutazone impairs folic acid and NSAIDs speed up progression of the disease.
- Phosphorous: excess (found in fizzy drinks and processed and junk foods) can prevent absorption of calcium and magnesium.
Neomycin: and antibiotic drug, impairs folic acid and antibiotics in general interfere with the gut flora creating more problems.

If you have to take diuretic drugs or NSAIDs be aware of the side effects and if necessary take supplements to replace and loss of nutrients. Vitamin C's functions include controlling cholesterol levels and maintaining healthy collagen (needed in the joints). Poor gut flora health can increase infections or contribute to toxic substances that contribute to inflammation. If taking any antibiotic you should also take a probiotic supplement to replace healthy gut flora.

RELIEF FOR ARTHRITIS ETC:

- Linolenic Acid - Relieves muscle and joint pain
- Oleic Acid - Anti inflammatory
- Liquorice Root - Glycyrrhizin stimulates adrenals. Reduces inflammation.
- Bromelain - From pineapple and aids digestion and reduces pain and swelling.

Boswellic Acid - (from frankincense), a powerful anti inflammatory.

Olive Oil - Hydroxytyrosol (a polyphenol) in olive oil reduces inflammation.

Evening Primrose Oil - Contains GLA for lubrication.

Anti oxidents - Help reduce inflammation.

Bioflavonoids - Anti inflammatory.

Nutrients - Many nutrients in the diet help including anti-oxidents, essential fatty acids, B Vitamins, Vitamin C, Vitamin D, Calcium, Magnesium, Boron, Glucosamine and MSM.

Fish Oil, Ginger and Tumeric and Iso oxygene found in hops - natural pain killers and anti inflammatory.

JOINT HELP:

Glucosamine and MSM - to lubricate joints.

Vitamin C - protein metabolism in laying down collagen to connective tissues.

Selenium - deficiency associated with joint degeneration.

Silicon - helps strong collagen (found in whole grain bread and cereals and root vegetables).

Manganese - growth and integrity of connective tissues, cartilage, tendons and ligaments (works with glucosamine sulphate)

Vitamin A - to balance osteoplasts and osteoclasts in bone growth.

Vitamin D - regulates calcium/phosphorous metabolism in calcification, bones and teeth.

Vitamin A and D - for bone development and maintenance.

Magnesium Sulphate - for bones and maintenance of bones.

Boron - helps maintain calcium balance and healthy bones.

Vitamin D, Magnesium and Boron all help absorption of calcium.

The causes of aches and pains are many and varied as are the treatments. Diagnosis is not always straightforward. Some of the possible help with aches and pains have been mentioned as has the need for good nutrition whatever the condition.

NUTRIENTS:

In osteoporosis calcium is the key to strong bones but calcium without magnesium cannot be absorbed properly into the bone and magnesium is often deficient, particularly in menopausal women. Like everything else about our body, bone health is not a single nutrient matter but a balance of nutrients, all needed regularly.

Vitamin D helps calcium absorption and a little daily exposure to the sun is all that is needed. Other nutrients needed are Vitamin K, Boron, Vitamin B6, Folic Acid, Vitamin B12 and Vitamin C. Quite a mix but available in a healthy varied diet and/or using a good quality supplement as necessary.

The role of dairy products to obtain calcium is not clear and many studies found relying on dairy products for calcium had no additional effect on bone health. Calcium is a mineral and eating greens such as broccoli, watercress, kale, cabbage etc. gives the necessary calcium plus the companion nutrients needed including magnesium, Vitamin K and Vitamin C. Other food sources include nuts and seeds and oily fish which also has the bonus of benefiting the heart.

Similarly with rheumatoid arthritis, diet can play a part though despite claims about the benefits of special cures and diets, none are completely proven. As always one thing might work for someone and not for another. But once again one fact can be justified - a healthy balanced nutritious diet that promotes a healthy weight is paramount.

Eat a variety of fresh foods

Choose a diet with plenty of grains, fruit and vegetables

Choose a diet low in fat, saturated fat and cholesterol

Choose a diet low in sugars

Drink plenty of water

Drink alcohol in moderation or not at all

Take physical exercise and take time for proper relaxation

Long term use of arthritis medication can compound nutritional problems as already mentioned. As in osteoporosis the commonly observed vitamin and mineral deficiencies found in arthritis sufferers are Vitamins C, D, B6 and B12, Folic Acid, Calcium and Magnesium and in this case also Vitamin E and Zinc.

Though food is again the preferred source of vitamins and minerals for optimum health it may be necessary to use supplements to counter any unavoidable deficiencies and to obtain enough of a specific vitamin or mineral to make a difference.

In some patients specific foods have been shown to trigger or worsen symptoms of Rheumatoid Arthritis but avoiding these foods, though giving short term relief, has no real long term benefit. These specific food triggers do not always affect everyone in the same way and again this is an area for trial and error to find any food that aggravated your condition and to avoid it if possible.

SUMMARY:

To sum up, the body is a complex machine that suffers wear and tear, damage from ill treatment and abuse and requires regular maintenance and repair. The means for this are many and varied and though there are some common denominations like a nutrient rich diet, in many cases we need to find our own personal solution and what treatment is best for you personally.

Look at the whole picture and possible causes of aches and pains not just think that taking a pain killer is all that is needed or possible. The main common denominator is nutrition and the healthy diet and lifestyle advocated here should be the aim of all sufferers.

There are a 100+ nutrients, each with their own interactive requirements and uses and for optimum health a good multivitamin and a daily dose of essential fatty acids will help supplement your diet and guarantee a supply of all the nutrients, which, however good the diet, may not be provided in our foods. Don't accept that your aches and pains are there forever and there is nothing you can do about it. Get the correct diagnosis and treatment, look at your diet and lifestyle, be aware of your whole self and don't accept that nothing can be done. You can improve your health and get help and relief from aches and pains whatever the causes. You may have to change your lifestyle and make a little effort but the resulting benefits can improve your health and lead to a better quality of life. So it is worth it!

ANNEX 2. Nutrition and Old Age

We will all get old and as we do diet becomes more important. The fastest growing sector of the population in most countries is the elderly. They are also one of the groups most likely to be at risk from poor diet. Whether it is not enough food, too much food or the wrong food. That is why it is never too soon to adopt the good dietary habits and lifestyle recommended in The Nutrition Diet. It is also never too late as anyone can benefit from improved diet.

We all start feeling our age, whether it is aches and pains, poor vision, slower brain function, high blood pressure, high cholesterol, cancer, heart disease and general tiredness, insomnia, fragile bones etc. Many old age problems are the result of poor diet as well as general wear and tear and aging. Most people die from preventable diseases. It is never too soon to start as how we lived yesterday affects how we are living today

THE BIGGEST INFLUENCE ON LIVING A LONG AND HEALTHY LIFE IS WHAT YOU EAT - OR DON'T EAT

It is important that older people eat foods with high nutrient content especially as they may be eating smaller meals generally. A lot of elderly people fail to get the right foods, or the right amounts needed to meet essential energy and nutrient needs. Generally eat less calories but more nutritious calories. Avoid 'empty' calories, sugars and saturated fats. Physical and mental and economic changes contribute to poor nutrition among the elderly. A lot of problems of old age can be helped by the establishment of healthy nutritional habits. Our diets and lifestyle become more important as we get older.

As we get older our metabolism slows down and we need less calories but at the same time we need more nutritious food as our absorption and metabolism of nutrients is also affected by old age. Muscle tissue decreases as we get older leading to a fall in metabolic rate. We may also need different nutrients or different amounts of nutrients. For instance dietary protein is not used efficiently and therefore we may need added quality protein in the diet. Fibre is important as well as it helps reduce the risk of colon cancer.

Often as we get older we get in habits that are hard to break. Eating the same things for instance. Maybe not eating so much or conversely eating too much. Contributing factors may include lack of cooking skills, money problems, medical and dental problems and medication, which often interferes with nutrient absorption. All these factors can contribute to the fact that many older men and women eat less food than they need to meet their energy and nutrition needs.

Being alone or just the two of you means maybe you can't be bothered cooking proper meals or you cook a 'normal' meal that is too much for just one or two but eat it all anyway as you don't like to waste good food. Overeating then leads to being overweight which is made worse by not exercising. But because you are slowing up a little you may find exercise too much. Then too much food just increases your weight and makes matters worse. Exercise is just as important in old age as it always has been. More so when retired as you may spend more time sitting around and get stiff and creaky! Exercise helps to keep you young. Exercise also reduces stress and helps keep bones and joints healthy.

All this makes it even more important for the elderly to have a highly nutritious diet. This is even more important when illness strikes and you are admitted to hospital. Unfortunately nutrition doesn't seem to be part of the medical care. Nutrition should be part of any medical care and also be part of your health regime at home, and not just when illness happens.

It is never too soon to think about your future health prospects. Many old age problems such as insomnia, tiredness, worsening eyesight, fragile bones etc are the result of poor diet. **Think about old age before you get old and get into good habits.** What you eat now affects your health in old age.

There is plenty of evidence that good nutrition promotes health and vitality while poor nutrition does the opposite and can also prolong recovery from illness and lead to a poorer quality of life. **GOOD NUTRITION IS AGELESS** and the message to young and old must be that the quality of nutrition is the basis for a good quality of life.

There is also evidence that the dietary advice put out by many organisations doesn't take into account the specific needs of particular groups of people - in particular the elderly. For instance low fat, low cholesterol diets are promoted but while these may well benefit the younger and middle aged, the restrictions of these diets is not always good for the older person. The right fat is a necessary part of nutrition and the demonisation of cholesterol is now coming under scrutiny. The 'one diet fits all' approach may not suit either our health or nutritional needs as we get older.

What should the elderly do? First as a general rule eat more fruit and vegetables and reduce the intake of stimulants and junk or processed foods. Exercise more and follow The Nutrition Diet advice. More specific problems of old age may need individual attention and are discussed as we go along. These include digestive problems, aches and pains, colds and flu, infections, failing eyesight, etc. The common solution to these problems is often drugs such as pain killers, antibiotics, anti inflammatory tablets, anti acids and so on. Most of these have side effects and are not advisable for long term use. We have all read about the health scares with Non Steroidal Anti Inflammatory Drugs. Many over the counter medicines interfere with nutrient metabolism. The effects are made worse in old age as the body systems are generally weaker.

Digestion

Many of these problems can be avoided or overcome or helped by good nutrition and in some cases perhaps added nutrition with supplements. Overcoming nutrition problems in old age is often little different from any other time. Nutrition problems in old age often start with digestion (as it can at any age). Like everything else in old age the production of stomach acid and digestive juices slows down. Reduced production of gastric hydrochloric acid affects breakdown of complex carbohydrates, fats and proteins. As well as resulting in digestive illnesses, poor digestion also means poor absorption of much needed nutrients. the ability to digest, absorb and use nutrients changes with old age, just when it is even more important.

We can improve digestion. A lack of nutrients and eating the wrong kinds of food affect digestion causing indigestion, bloating, poor absorption, etc. Hydrochloric acid production declines in old age as does zinc. High protein meals with lots of meat make digestion more difficult. Betaine hydrochloride supplements can help overcome a lack

of stomach acid. Diet can also help, by reducing the amount of meat you eat and putting less strain on the digestion. Foods such as prunes help constipation and eating more fibre is beneficial.

Poor diet also affects the production of digestive enzymes as production of these enzymes depends on many nutrients, especially vitamin B6. Poor diet again leads to undigested food which causes the wrong gut bacteria, leading to flatulence, stomach pain and bloating. Again this can be overcome by digestive enzyme supplements and as absorption improves digestion will improve and the supplements may not be needed.

The other thing we should all be doing is taking a probiotic supplement, or yoghurt in the form of plain bio yoghurt or the probiotic drinks - again natural. Some reports question the effectiveness of flavoured bio yoghurts and drinks and they are also very often high in sugar. These probiotics provide the friendly bacteria that are essential for gut health and should be encouraged. Antibiotics will destroy these friendly bacteria as well as the infection they are prescribed for, so if you have to take a course of antibiotics make sure you get a good probiotic supplement to replace those destroyed.

Probiotics also help digest food, breaking down both protein and fats. They also help nutrient absorption (important as we get older), especially calcium and other minerals. they also relieve constipation and help in healing various digestive disorders.

While on the subject of digestion, one thing you should not be taking for indigestion is anti acid tablets. The long term use of these actually harms the gut making matters worse. As we get older we are producing less stomach acid not more. Acid is in the stomach for a reason - to help digestion and also kills dangerous bacteria. Neutralising stomach acid with anti acid tablets weakens the body's ability to protect the stomach and digestion.

Indigestion or 'heartburn' is not due to too much acid but by eating the wrong foods, eating too much and eating too quickly - actually made worse by too little stomach acid not too much. This means poor digestion is leaving food in the stomach for long enough for it to begin fermenting. Gas from the fermentation causes bloating and discomfort and some stomach contents back up and causes a 'burning' sensation in the oesophagus.

Anti acids interfere with the absorption of nutrients as well, especially calcium and other minerals. This can aggravate osteoporosis. They can also cause constipation - again because they are interfering with the digestive process. So if you suffer from indigestion or heartburn avoid foods that cause indigestion - hot spicy foods, fatty greasy foods, acidic foods, coffee and alcohol. Eat less, eat more slowly and increase fibre and water consumption.

Low stomach acid actually increases with old age and this in itself interferes with nutrient assimilation and absorption. Particular calcium and other minerals. Taking anti acid tablets will only make matter worse. If you get indigestion regularly make sure you get a proper diagnosis before you rush out and buy anti acids.

The other big complaint in old age is aches and pains. We all get creaky, stiff joints and back ache, etc. Aching joints and muscles, osteoporosis, arthritis, fibromyalgia, and of course wear and tear, etc. Very often the symptoms are similar whatever the name put to the problem and most of the time you get the same treatment even if the problems are different. The doctor doesn't really appear able to 'cure' it and often just puts it down to old age and writes a prescription for painkillers, anti inflammatory tablets, etc - often both.

Taking the medicine and thinking or accepting that nothing can be done is not the only answer. In fact long term use of pain killers and NSAID's are bad for you. The regular use of the painkillers and anti inflammatory drugs can cause their own medical problems and also interfere with nutrient metabolism making matters worse. It is easy to get a repeat prescription for ever more but not good for you. You can do something about it and though it might be a bit more difficult than getting a repeat prescription it is worth it. Nutrition and lifestyle changes can help reduce pain and inflammation in many cases.

What can be done to relieve this problem that effects us all even the not so elderly? We are all different, have different diets and lifestyles and the causes of the aches and pains may be different even if the pain is the same. There is a common basis to start treatment. Changes in diet and lifestyle that are beneficial to our whole health.

The basis of good health is nutrition and long term permanent care of ourselves. Our bodies rely on nutrition to maintain and repair itself. The foods we eat should supply that nutrition.

- Eat a wide variety of foods
- Eat plenty of fruit and vegetables
- Avoid processed foods
- Choose a diet low in fat, especially saturated fats
- Choose a diet low in sugar
- Avoid or reduce stimulants such as alcohol and caffeine
- Avoid fizzy drinks, colas, etc
- Drink plenty of water
- Take more exercise
- Relax more - try something like yoga, tai chi, etc.

Supplements can help as an added boost to nutrition. However good our diet modern life, farming methods, cooking etc all deplete nutrients so a good quality multi vitamin tablet and an Omega 3 fish oil tablet will help provide support. There are multi vitamins especially formulated for the over 50's to provide more targeted help. There are also natural anti inflammatory and painkillers but don't expect them to give instant relief like a painkiller drug. Fish oil as already mentioned, ginger and turmeric are natural painkillers and also anti inflammatory.

Bromelain in pineapple also helps. Olive oil is anti inflammatory as well and anti oxidants found in fruit and vegetables help.

There are plenty of other aids for aches and pains, arthritis, etc. Calcium, Vitamin D, MSM, Chondroitin, etc. They are sold singly or in combination and can help some people, but not all the people all the time. As I have said we are all different and though two people may have a similar pain in the joints or back the cause may be different and therefore what helps one does not necessarily help the other.

You have to be prepared to experiment and find out what suits you best.

Whatever the causes no treatment will work without the diet and lifestyle changes mentioned. Bad diet and a sedentary lifestyle contributes to the problem in the first place and will continue to do so unless you change and no amount of pills will do any good without the changes.

Immune System

As we get older we may find ourselves more prone to infections, and find it harder to recover from infection and illness. The immune system is designed to fight infections and a strong immune system can make a difference between a minor 24 hour cold bug and being laid up with flu for a week or more. Or a minor stomach bug becomes full blown food poisoning due to a weak immune system.

Boosting the immune system is straightforward - exercise and diet and the mind all play a part. Stress, depression, etc lower the immune system as well as outside physical infections. The physical infections usually come from the digestive tract and the lungs via the air we breath. Breathing through the nose actually helps prevent unwanted bugs entering the lungs, but more and more we see people of all ages breathing through their mouths. The digestive system has its own immune system and it is important to have a healthy gut flora which is part of that system.

Antibiotics which are supposed to kill infections are also bad for our immune systems. While attacking an infection they also attack the immune system by destroying the gut flora needed by our body. Therefore when antibiotics are necessary a course of acidophilus should be taken and continued after the course of anti biotic treatment so that the healthy gut flora is replaced.

As we all know Vitamin C is recommended for colds, etc and in fact Vitamin C is an important immune booster so there is truth in that. Other boosters include Vitamin A and Vitamin E and the B Vitamins. All available in a healthy nutritious diet - though added supplements (as part of a good multi vitamin or individually) may be beneficial as a preventative or to boost the immune system when fighting infections.

The other big infection fighter is the probiotics already mentioned. They help prevent harmful bacteria such as e-coli growing and make it hard for bugs to survive. Probiotics are also a boost for the immune system generally so also help fight other immune system diseases, viruses and infections. If you have a tummy bug take a course of probiotics instead of going to the chemist.

As in all the systems of the body the immune system is helped and kept healthy by diet. Again we are back to the same advice - plenty of fruit and vegetables, especially berries. Strawberries for instance have more Vitamin C than oranges. Also try and reduce alcohol intake as alcohol suppresses the immune system.

We should also try to avoid or minimise stress as stress lowers the immune systems. Difficult in our modern work orientated world but try and find time for relaxation, even yoga or tai chi classes and don't forget exercise which also boosts the immune system.

One thing to also include in the medicine chest is the herb echinacea, which will help fight infections, boosting your immune system when it is low.

Eyes

Another sign of old age is failing eyesight. It comes on slowly at first and you only notice it when you maybe start holding the newspaper further and further away to read it. Eventually your arms aren't long enough. Healthy eyes are important at any age and diet and nutrition can help protect and maintain your vision. Prevention is important as some eye complaints, once they occur, are irreversible.

It is also more important than ever to get a regular eye test because very often eye problems do not show except when diagnosed during eye tests. Also other health problems can affect the eyes, such as high blood pressure and diabetes. Eye strain from too much close work and of course computers add to the problem as does the sun and UV light.

A lot can be done with nutrition and one of the most important vitamins for the eye is Vitamin A, which is essential for eye health. Vitamin C is also important. Cataracts often develop as we get older and both these vitamins help.

The main cause of cataracts is damage by free radicals - from burnt food and oils (beware the BBQ and fried food), smoking and UV light. Diets high in dairy foods and sugar can also contribute to cataracts.

Floater can also appear and are often another result of aging eyes. In themselves they are not damaging but the cause should be checked to ensure there are no other problems.

They are normally caused by the aqueous fluid of the eye drying and the cellular debris makes a shadow over the retina. If you get a lot of floaters suddenly you should see an eye specialist to check for detached retina problems.

The other problem that may not be noticed until you have an eye test, is raised Intra Ocular Pressure. Again this will need looking at by an eye doctor as high ocular pressure can be a sign of glaucoma and if left unchecked blindness can be the end result. Regular eye tests are therefore important if you are over 60.

Glaucoma is also related to poor nutrition, high blood pressure and stress. All of which can be corrected by proper diet - started before the onset of any problems, not after when it might be too late. Glaucoma can be helped by Vitamin C and Rutin and Magnesium can help lower intra ocular pressure.

Most of us will also be affected by macular degeneration as we get older, if we live long enough. Once again free radical damage, smoking and sunlight contribute as does arteriosclerosis (which again is preventable by proper diet). Vitamin A, carotenoids, and grape seed extract all help.

As you can see free radical damage is an important contributor to eye damage so a diet high in anti oxidants is necessary. This includes:

Plenty of fruit and vegetables especially broccoli, carrots, kale, berries prunes, watermelon, oranges, avocados, dark green leafy vegetables tomatoes etc.

Bilberries are also beneficial as they protect the eyes from oxidative damage.

Oily fish is also a must as it is for many other reasons. It benefits the vascular system as a whole including the blood vessels to the eyes.

Reduce or cut out foods that cause free radical damage, fried foods and trans fats. Cut sugar and sugary foods, salt and alcohol and reduce dairy products. This is also good advice in general anyway.

This all sounds depressing but all the more reason to look after your health before the event. A healthy nutrient rich diet, exercise and relaxation will help maintain health and

prevent the onset of many problems. It is no good thinking you are healthy and don't need to worry because many problems of degenerative diseases don't appear until it is too late. Also doing something about it now takes some determination because often, if you are reasonably healthy, you won't notice any appreciable difference in your health. What you are doing by following a healthy diet and lifestyle is preventing disease in the future and that won't show today.

With a lot of the problems of modern farming, food processing, environmental problems etc you can't always guarantee that what appears healthy food has in fact got all the nutrients expected. A good multi vitamin for the over 50's is therefore beneficial. As well as the full range of vitamins and minerals they often contain added nutrients specific for old age - e.g. lutein for the eyes, bilberry, grapeseed extract, green tea extract, etc.

Also a good Omega 3 fish oil will be a help for general health as well as the heart and it is also anti inflammatory.

So while getting older has its problems they don't have to happen but to ensure a healthy old age you need to start doing something about it now. You might say why bother, I like my fry ups and smoking and drinking etc. Also these days people live longer whatever the state of their health due to modern medical care. But often people appear or act old before their time or suffer this and that problem and are on medication the rest of their lives and still suffering.

Do you want to live in your old age with all sorts of problems or be problem free.

You may have noticed that all these problems of old age - whether heart, obesity, vision, or whatever all have the same solution - healthy nutritious diet, with plenty of fruit and vegetables, less saturated fat, salt and sugar, less processed and junk food, less alcohol and caffeine, and more exercise and relaxation. All recommended in The Nutrition Diet.

Also relevant at any age as it happens, so start now.

You don't have to be a saint - I'm not. the occasional drink, steak and chips or whatever can still be enjoyed but as a treat not the norm, and then they are enjoyed even more

anyway. The norm should be more fruit and vegetables, nuts and seeds, legumes, etc. which will allow your body to recover from the occasional over indulgence.

Also on the plus side is the fact that you are probably retired and you have more time to care for yourself, take the exercise you need, prepare healthy meals, join classes or clubs and make time for yourself. Old age can have its benefits as well.

ANNEX 3. Nutrition and Stress

Stress is a fact of life especially these days with the added stresses of modern living. Like aches and pains and old age stress is inevitable, but that doesn't mean you have to accept it and put up with the consequences of stress. Diet and nutrition together with small lifestyle changes can help us cope with stress and block the ill effects of stress.

Some of us are more affected by stress than others who appear to thrive on stress. However stress affects us all whether we realise it or not.

Stress is the cause of illness and disease and affects nutrition, interfering with the uptake and metabolism of vitamins and minerals. Stress is associated with many illnesses, heart disease, headaches, digestive problems, ulcers, tiredness, insomnia, depression, high blood pressure, cancer and more. Stress has a lot to answer for!

Stress takes many forms both physical - working too hard or exercising too hard. Then there is mental stress - too much worry about work, family or money. Another form of mental stress is emotional stress - relationships and feelings. Finally another form of physical stress can be found everyday in our day to day lives with toxins and pollution, whether from smoke, fumes, pesticides, cleaners, or food processing chemicals and additives.

Stress is caused whenever our body is lacking in the vitamins and minerals it needs to function. This is made worse with the everyday stresses of work, family, money,

pollution, etc. because when we are stressed the body needs more nutrients as stress uses up our nutrients more rapidly.

How much this affects us depends on how we deal with stress. Another wonder of the human body is that it can adapt to stress, supplying energy and oxygen to muscles when needed and increasing mental and physical energy to deal with stressful situations. The problem is, these reactions were meant to deal with the stress of a sudden dangerous situation and then when the danger was passed the body recovered and returned to normal. It was not meant to deal with the 24 hour stresses of today which start with the traffic jam to work, stress at work, stress at home, etc. etc.

Our first reaction to all this stress is often a cigarette, or coffee, or alcohol, or chocolate. They may initially make you feel better but in fact only add to the stress on your body's systems. Stimulants such as coffee, tea, chocolate, etc have the same effect as stress itself. The caffeine releasing adrenalin to deal with the 'stress' even though in the case of caffeine the stress is artificial.

The normal reaction to a stressful situation is stimulation of the adrenal glands to release various hormones to help deal with the stress. These hormones include adrenalin, cortisol and DHEA. The release of adrenalin increases activity and energy. We all know the term common today of 'adrenalin rush'. This physical reaction to stress increases heart rate, constricts blood vessels and stimulates the brain to prepare the body to deal with the 'danger' that is causing the stress. Understandably you should not be in this state for long periods.

The adrenalin and other hormones improve oxygen and energy (glucose) supply to muscles and generate increased mental and physical energy. The blood thickens (in case you are wounded!). The body slows down other functions like digestion and repair and maintenance to concentrate on the stress situation.

The slowing of metabolism can lead to weight gain and calcium imbalance, which in turn can lead to arthritis. Just some of the health problems caused by stress and again highlighting why being in a permanently stressed state is not good for you.

Adrenalin also raises blood sugar levels so that the body releases more glucose and cholesterol into the body to increase our energy for the 'fight'. Again we don't want raised blood sugar levels or higher cholesterol levels permanently.

All this release of hormones and energy is not good. The body is designed to have this ability to help us out of or avoid a dangerous situation. Once the situation is past and the body calmed down normal functions can take place.

Today the same reactions happen if we allow ourselves to get stressed, perhaps with work or money problems etc.

But unless we can manage the stress or solve the problem quickly the stress doesn't go away and our body continues in a stressed state and is unable to resume normal functions.

Stress doesn't just occur because of the danger from one off situation such as a fall, car crash, illness, etc. Stress can, without knowing it, be a continuous threat as in the case of the workplace, where you are under pressure all the time to perform. Stress can also take the form of mental or emotional stress with money worries, family problems and relationships. Then there is the chemical stress on our body from toxins, drugs, alcohol, pollution etc. Finally nutritional stress occurs due to lack of nutrients because of poor diet.

All these situations are stressful and while some people can cope physically and mentally, many more are affected and the stressful situations send a 'danger' or 'threat' signal. Our body reacts accordingly when we can't handle the stress or when the body is suffering from stress and the problems of illness due to stress occur.

Research links stress to more and more illness and if not the cause stress makes illness worse. As stress is unavoidable in today's world we need to learn to live with stress and avoid it where we can. While a little stress can be useful to motivate us in certain circumstances, too many stresses are bad.

Unfortunately the body (overworked due to stress, caffeine, sugar, etc) is not designed to operate under continuous stress forever. Lots of stress plus lots of coffee etc divert

nutrients to fight the stress and the nutrients the body needs overall are reduced. This speeds up the ageing process and disease.

Stress can also affect our eating habits. Some people eat or drink more when stressed but usually the wrong things - sugars, chocolate, sweet foods, coffee, alcohol, etc. Others eat less or nothing and again this is damaging as when stressed you need more nutrients. Diet therefore plays an important part in dealing with stress.

Digestion is one of the things affected by stress. Stress affects hydrochloric acid production which increases in highly stressed people leading to too much acid in the stomach and ulcers. Not eating therefore makes matters worse as does eating the wrong things.

Nutrients that help the body deal with stress include B Vitamins, Vitamin C, Calcium, Magnesium, Iron, Copper and Zinc. Because stress uses up nutrients faster we need to have a nutrient rich diet, especially if stress is making you eat less food - or the wrong foods

As already mentioned the B Vitamins and Vitamin C are particularly important together with anti oxidents. Calcium, magnesium and potassium are the essential anti stress minerals. The herb ginseng is also beneficial. Either siberian or panax ginseng but not both at the same time. Ginseng boosts the adrenal glands. It helps the body fight challenges and be more resilient.

The B vitamins and Vitamin C are richest in fresh fruit and vegetables. Calcium and magnesium are found in green leafy vegetables, root vegetables and nuts and seeds. Fresh fruit and vegetables also provide potassium and dairy produce provides lots of calcium as does a tin of sardines!

Diet is therefore important. While a little coffee in moderation can increase alertness and help in a stressful situation, too much caffeine has the same effect as long term stress. Likewise alcohol. Alcohol is a major cause of stress and too much alcohol and stress make matters worse.

Sugary foods and cakes are often eaten when stressed but have no nutrient value and while boosting energy in the short term this only leads to exhaustion of the adrenal glands.

Carbohydrate meals are useful as they trigger release of serotonin which soothes you. Rice , pasta, potatoes and whole meal bread are the main source. Since stress interferes with digestion also increase your fibre intake - fruit, vegetables, whole grains etc provide fibre. Eating vegetables also increases the brains serotonin production.

Even if you are always in a hurry 3, 4 or even 5 small healthy snacks can be as good as a normal 2 or 3 meals daily routine. As long as the snack are high in nutrients and mainly fruit and vegetables, nuts, seeds, salads, etc.

Besides diet you also need to try and relieve the causes of stress where possible. Try and give yourself a break at work. If you have lunch hour, don't sit at your desk to eat your sandwich. Go somewhere away from your desk - rest room, park or where ever you can. Also use part of your lunch for exercise. Take a brisk walk before eating your lunch, even if it is only 10 or 15 minutes.

This is because exercise is also part of relieving stress. Though don't continuously overdo the exercise or you may make matters worse with physical stress on top of everything else. Walking, jogging and exercises are great for stress. Even better is something like yoga or tai chi which combines relaxation with exercise.

You might read this and think 'oh I don't have time'. Well make time as it is important for your wellbeing and in fact I expect there is spare time if you look for it. As I said earlier use part of your lunch hour to get out and walk. The TV programmes are usually a habit and not really watched - switch off, go for a walk or do some exercises or relaxation.

Finally the other stress relief is sleep. Make sure you can get to bed early enough and get a good nights sleep.

As said in the beginning stress is a fact of life and you have to live with it and therefore should seriously consider how to improve your reaction to stress. Nutrition plays an important part.

ANNEX 4. Nutrient Information

Vitamins are essential for regulating the metabolic functions of the body's cells and enabling the release of energy from the food we eat. Certain vitamins also act as anti oxidants, protecting tissues from cell damage by free radicals and helping prevent degenerative diseases.

There are 13 vitamins - Vitamin A D E and K, which are fat soluble and Vitamin B complex and Vitamin C which are water soluble. While fat soluble vitamins are stored in the body, water soluble vitamins need to be taken regularly as they are not stored for any length of time.

With the exception of Vitamin D and K the body does not have the ability to manufacture vitamins so they have to be taken from the food we eat or supplements. Even here there is uncertainty, as the body's ability to manufacture Vitamin D (an important vitamin for health) declines with age and the catalyst for manufacture of Vitamin D is the sun, which we are told to avoid.

Minerals are only present in the body in small quantities but are equally important. They are essential for a wide range of vital processes including bone formation, heart function, and the digestive system. Some minerals have also been linked to the prevention of chronic illness.

There are more than 60 different minerals of which 22 are considered essential including calcium, magnesium, chloride, phosphorous, potassium, sodium and sulphur which are called macro minerals. The other minerals are only present in minute quantities but are of equal importance in the body's metabolism and functions.

The recommended daily allowance (RDA) for Vitamins and Minerals has been derived from studies of the physiological needs of healthy people. The results are interpreted differently from country to country so RDA's vary. Because we are all different we may also have different requirements for vitamins and minerals. This is equally true if using vitamins and minerals to treat or prevent diseases.

For many people who feel under par or that their diet does not provide the full range of vitamins and minerals needed a supplement is often the answer. A good quality multi vitamin and mineral supplement can help in boosting energy levels, improve resistance to disease and generally make you feel better. Some people may find they need specific nutrients for a specific problem but since all nutrients also inter act with each other any individual nutrient taken should be taken alongside a good multi vitamin. In any case you should consult a qualified practitioner if considering using supplements for medicinal purposes.

Below is a list of vitamin and mineral details with some general information which is not exhaustive, but shows what they do, where they come from and additional information.

VITAMIN AND MINERAL DETAILS.

Vitamin A - RDA = 600mcg.

Used for Immune booster, helps body to fight colds flu and infections. Skin health, healing of wounds, burns, ulcers. Maintains healthy eyes especially night vision. Supports lining of the digestive tract.

Found in fish, butter, egg yolks, liver. Also in yellow and red fruit and vegetables and dark green vegetables (as beta carotene which the body converts to Vitamin A

Note: Only supplement Vitamin A under the guidance of a doctor. Vitamin A can be toxic at high doses. To be safe take in the form of beta carotene. Vitamin A has shown promise in fighting lung disease and controlling blood sugar.

Vitamin B1 (Thiamin) - RDA = 1.4mg

Essential for conversion of carbohydrates into energy and energy production. Promotes healthy nerves and helps improve mood. Strengthens heart and helps relieve indigestion.

Found in lean pork, whole grains, beans, nuts and seeds.

Note: Drinking a lot of coffee or tea can deplete thiamin levels. Therapeutic doses of 10 mg of thiamin can help lower blood pressure.

Vitamin B2 (Riboflavin) - RDA = 1.6 mg

Prevents or delays cataract problems, reduces frequency and severity of migraines. Improves skin. Used in production of thyroid hormone. Regulates energy and formation of red blood cells

Found in milk, cheese, yoghurt, liver, beef, fish, whole grains, eggs, avocados and mushrooms.

Note: Milk is the biggest source of Riboflavin for most people.

Vitamin B3 (Niacin) - RDA = 18 mg

Improves circulation, eases arthritic conditions and helps relieve depression. Also helps control blood sugar levels, and protein and carbohydrate breakdown.

Found in chicken, beef, fish, bread, cereals, eggs and dairy produce.

Note: Therapeutic levels of niacin should only be taken after consultation with your doctor or qualified health professional.

Vitamin B5 (Pantothenic Acid) - RDA = 6mg

Helps maintain a healthy central nervous system. May help relieve chronic fatigue syndrome, migraines and indigestion. May help allergies and used in manufacture of stress hormones. Helps metabolise carbohydrates and fats.

Found in Offal, fruit, poultry, whole grains, lentils, yoghurt and legumes.

Note: Food processing destroys much of pantothenic acid in foods.

Vitamin B6 - RDA = 2mg

Helps prevent heart disease, strokes, and keep homocysteine levels in check. Helps lift depression, relieves insomnia, reduces PMS. Helps relieve asthma attacks and allergic reactions. Maintains nerve health and treats carpel tunnel syndrome.

Found in fish, poultry, meat, chickpeas, potatoes, avocados, bananas and vegetables.

Note: Long term use of high doses of B6 may cause nerve damage.

Vitamin B12 - RDA = 6ug

Prevents anaemia,, lowers risk of heart disease and keeps immune system healthy. Helps reduce depression, blocks nerve pain, improves MS and tinnitus.

Found in meat, offal, eggs, cheese, fish and brewers yeast.

Note: Older peoples have limited ability to absorb B12 from food. Supplementing Vitamin B12 can also mask folic acid deficiency so the two should be taken together.

Biotin (B Vitamin) - RDA = 30ug

Helps metabolism of food - carbohydrates, fats and protein. Helps control blood sugar. Good for healthy nails and hair.

Found in liver, soya, nuts, oatmeal, rice, legumes, cauliflower and whole wheat

Note: Long term use of antibiotics can lead to low levels of biotin.

Folic Acid - RDA = 400 mcg

Protects against birth defects. Reduces heart disease and strokes. Lowers risk of cancer. Helps alleviate depression, especially in the elderly.

Found in green vegetables, beans, whole grains, orange juice.

Note: Folic acid is critical for cell growth and production.

Supplements are important for pregnant women and the elderly who may not get enough folic acid in the diet. Take folic acid supplements with Vitamin B12.

Vitamin C - RDA = 75mg

Improves the immune system. Helps cold symptoms and shortens illness time. Speeds wound healing and promotes healthy gums. Helps treat asthma. Helps prevent cataracts.

Protects against cancer and heart disease. Essential for collagen formation.

Found in citrus fruits, juices, broccoli, dark green leafy vegetables, peppers, berries, kiwi fruit and parsley.

Note: Higher intake is believed necessary for optimal intake and to be affective.

Amounts over 1000mg daily may cause diarrhoea. Helps the metabolism of other anti oxidents. May help in the prevention of arthritis.

Vitamin D - RDA = 5ug/mcg

Helps the absorption of calcium. Promotes healthy bones and teeth. Protects against cancer. Prevention of osteoporosis.

Vitamin D comes mainly from the sun and also oily fish

Note: Vitamin D production via the sun declines in old age. Latest research into Vitamin D is showing that it is more important for health than at first realised.

Vitamin E - RDA= 10mg

Protects against heart disease, certain cancers and other chronic diseases. Helps prevent cataracts. Boosts the immune system and helps skin healing. Protects against smoke, toxins and pollutants.

Found in wheatgerm, vegetable oils, nuts and seeds, green leafy vegetables and whole grains.

Note: Choose 'natural' Vitamin E supplements. Vitamin E is found mainly in a few foods, many high in fat. Low fat diets may mean a supplement is necessary.

Vitamin K - RDA = 80 ug

Reduces risk of internal haemorrhaging and protects against bleeding problems. Helps build strong bones and helps in osteoporosis. Essential for the blood clotting process.

Found in leafy green vegetables, pistachio nuts, vegetable oils, meat and dairy

Note: Deficiency is rare as the body manufactures most of its requirement. Vitamin K should only be supplemented with medical supervision.

Calcium - RDA 1000mg

Maintains healthy bones and teeth. Helps prevent bone loss and osteoporosis. Helps heart and muscle contraction. Helps nerves. Helps lower blood pressure. Relieves indigestion and maintains acid/alkaline balance.

Found in dairy products, orange juice, tinned sardines, broccoli, almonds.

Notes: Vitamin D is needed to help absorption of calcium. Since Vitamin D declines with old age make sure you get enough of this vitamin when supplementing calcium.

Chromium - RDA = 120 ug/mcg

Breaks down protein, fats and carbohydrates. Helps the body maintain normal blood sugar levels. Helps lower cholesterol including LDL (the bad) cholesterol.

Found in whole grain cereals, potatoes, prunes, nuts and seafood.

Notes: People with diabetes should consult their doctor before taking chromium.

Magnesium - RDA = 350 mg

Protects against heart disease, lowers blood pressure and helps muscle relaxation. Relieves symptoms of CFS and fibromyalgia. Used in energy production, nerve functions and bone formation.

Found in whole grains, nuts, legumes, green leafy vegetables and seafood.

Notes: Depleted by stress. High doses of magnesium should be balanced with calcium of optimum effect of both nutrients.

Copper - RDA = 2 mg

Formation of collagen. Helps strengthen bones, blood vessels and nerves. Maintains fertility. Helps healthy hair, and skin colour. Promotes blood clotting and helps in prevention of heart disease.

Found in shellfish, offal, beans, whole grains, nuts and seeds, peas, tomatoes, bananas, prunes.

Notes: Unless advised otherwise copper should only be taken as part of a multi vitamin supplement. Copper deficiency is rare.

Iodine - RDA = 150 ug/mcg

Needed by the thyroid gland to make thyroxine which is essential to regulate the metabolism in all the body's cells.

Found in iodised salt, seafood, fruits and vegetables if grown in iodine rich soil.

Notes: The body needs only small amounts of iodine but it is crucial to health.

Iron - RDA = 15 mg

Essential part of red blood cells. Helps with oxygen supply to muscles. Helps the immune system function.

Found in liver, lamb, shellfish, beans, peas, leafy green vegetables, dried fruit and pumpkin seeds.

Notes: Too much iron can be dangerous so don't supplement high doses without proper advice. Iron supplements can interfere with antibiotics.

Phosphorous - RDA = 1000 mg

Helps build strong bones and teeth. Essential for energy supply to cells.

Found in meat, fish, dairy products and also in food processing and colas.

Notes: Phosphorous is more likely to be over supplied especially from processed foods ;and fizzy drinks which can cause health problems. Too much may interfere with calcium absorption.

Potassium - RDA = 3500 mg

Helps lower blood pressure and prevent heart disease and stroke. Promotes healthy nerves and muscles. Maintains fluid balance.

Found in fresh fruit and vegetables, potatoes, bananas, oranges and orange juice, meat and dairy products and pumpkin.

Notes: Lengthy exercise depletes potassium levels in muscles.

Selenium - RDA = 35 ug/mcg

Works with Vitamin E to prevent cancer and heart disease. Protects against cataracts and macular degeneration. Helps maintain a healthy immune system and is anti viral.

Found in Brazil nuts, seafood, poultry and meat. Also in some vegetables if grown in selenium rich soil.

Notes: If taking selenium as a supplement reduce dosage if you get a garlic breath taste.

Zinc - RDA = 15 mg

Supports the immune system and helps against colds and flu. Helps with skin problems, wounds and digestive disorders. Also helps rheumatoid arthritis and osteoporosis. Used for under active thyroid gland and fertility.

Found in beef, pork, liver, poultry, eggs, cheese, beans and nuts.

Notes: Every cell in the body needs zinc.

Manganese - RDA = 5 mg

Helps form healthy bones, cartilage and tissue. Stabilises blood sugar, works in insulin production. Maintains healthy nervous system.

Found in pineapple, berries, oats, cereals, nuts, beans, fruit and tea.

Notes: Tea can provide a large portion of this mineral. High dosages can interfere with iron absorption.

Molybdenum - RDA = 75 ug/mcg

Helps clear the body waste, e.g. uric acid, and detox the body of free radicals. Needed in iron metabolism. Involved in metabolism of many enzyme systems.

Found in tomatoes, pork, lamb, lentils, beans, liver, whole grains.

Notes: Food levels depend on the soil content of this mineral.

Sulphur - RDA = 800 mg

Used for formation of collagen and maintenance of skin, hair and nails. Important for cell/oxygen metabolism.

Found in shellfish, seafood, garlic, poultry, meat, cheese, eggs, beans

Notes: Sulphur in chondroitin and MSM may help with joint problems.

Sodium - RDA = 2400 mg

