"Knowledge Dispels Fear"

The Depression Self Help Plan

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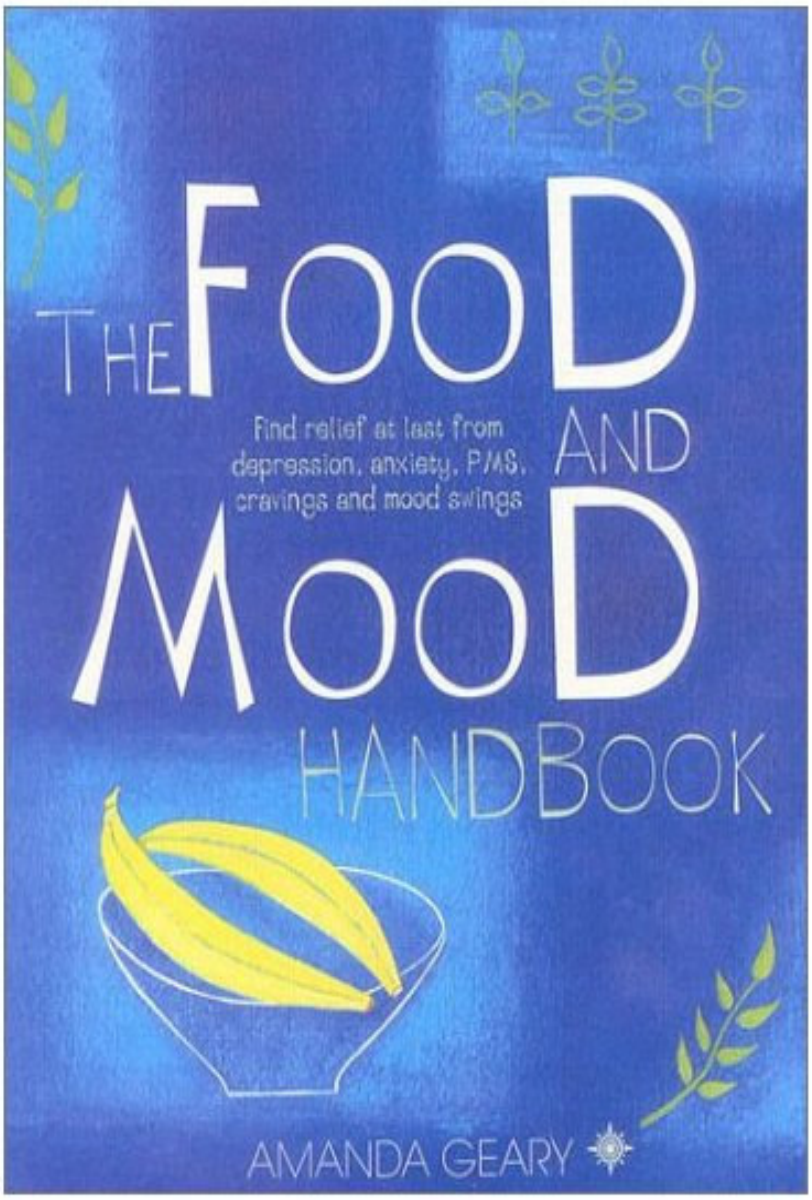
Session (6) Healthy Eating

Caution

The Depression Self-Help Plan is designed as a self-help tool for clinical Depression. It is important that you do not diagnose yourself as suffering depression but see your Doctor for an assessment and diagnosis, because there are some medical conditions whose symptoms can mimic those of depression such as thyroid gland problems, pernicious anaemia etc, and if this is the case then it is vital to get it diagnosed and treated by your doctor. If you have any health problems and/or are taking any form of regular medication, are pregnant, then discuss with your doctor before using the depression self-help techniques outlined in this course. The techniques outlined in this course are designed to be used in conjunction with any treatment from your Doctor, not as an alternative to standard treatment by your doctor. The techniques outlined in this self-help plan, such as relaxation, exercise, etc. may cause a few people on long-term medication to require a reduction to their medication; this should not be done by the individual but by their doctor. Do not practise techniques like relaxation while driving a car, or doing any other activity that needs concentration for safety and do not drive immediately after using a relaxation technique, acupressure or any other technique that makes you drowsy. We also advise that you do not make any life changing decisions such as leaving a job or ending a relationship until you have recovered from your depression, otherwise you may make a mistake that you later regret.

Recommended Reading: Healthy Eating



Geary A. (2001) The Food and Mood Handbook, Harper Collins.

The Role of Nutrition in Depression

> ***"People are often amazed at the improvement in mood that follows the adoption of a healthy diet and having seen the results, wonder out loud what on earth is going into modern food that is so damaging."*** Oliver James, PhD,

A couple of decades ago if you said that nutrition was a factor in the development of cancer and heart disease you would have received a number of quizzical looks, yet today it is accepted that nutrition plays a role in many health problems including heart disease and cancer. For some time now it has been postulated that there is also a link between our diet and our mood, and scientific studies are now showing that there is indeed a link between what we eat and how we feel.

Depression has been on the increase for some time and part of the reason could be the radical changes in our diet. In the last one hundred years, and even more so in the last couple of decades, the UK diet has undergone radical change, more so than at any other time in our evolution. Our natural, plant-food based diet used to be rich in foods like potatoes, vegetables, cereals and low in sugar, salt and fat, however now this has been replaced by a modern diet that is full of fat, sugar, salt, animal products and is low in fibre, fruits, vegetables and wholegrain cereals so does not supply the vitamins and minerals we need for health.

Many factors influence the amount of vitamins and minerals the food in our diets contain. The moment fresh foods are picked their nutritional content begins to decay; then the way the food is cooked can further deplete the nutrient content of that food. For example short periods of steaming vegetables, rather than boiling, has been shown to reduce the nutrient loss.

It is also important to realise that when a person is under stress the body uses up more vitamins and minerals. In a study in the USA it was shown that prisoners in jail used up double the amount of vitamin C when under stress. This is then exacerbated if we have a low fruit and vegetable diet, which is low in vitamin C. If our diet contains excess refined carbohydrates this leads to lower amounts of vitamins and minerals than if our diet is higher in complex carbohydrates and excess alcohol is yet another factor that can increase nutrient loss from the body.

The link between food and mood shouldn't seem strange, because the body's natural antidepressant, the chemical neurotransmitter Serotonin, is manufactured from the nutrients in our diet such as essential fatty acids, vitamins like B6 and B9 (folic acid) and minerals such as selenium. Dietary surveys of modern UK diets have revealed that 42% of our daily calories come from fat, and over 20% of our daily calories come from refined sugars. Neither fat nor refined sugars supply the body with fibre, vitamins or minerals, just empty calories. So by reducing fat and sugar intake and switching to eating complex carbohydrates, fruit, vegetables, fish, we will be supplying the body with vital nutrients the brain requires. Switching back to our natural diet would double our nutrient intake.

Nutritional Therapy

> ***"Nutritional Therapy is a complementary therapy, which means it can work along side orthodox medicine. It is a way of using food and supplements to encourage the body's natural healing."*** (www.nutritionaltherapy.co.uk)

One valuable therapy to use in the management of depression is Nutritional Therapy. Clinical depression is a complex condition with many factors that can exacerbate it; one of these factors can be poor nutrition. Hippocrates said thousands of years ago – "Let Food be thy Medicine and Medicine be thy Food."

Many nutritional factors have been suspected in the development and maintenance of depression, such as low intake of vitamins like B1, B6 and folic acid, low minerals such as selenium, magnesium and low levels of Omega 3 essential fatty acids. An excess intake of alcohol, artificial sweeteners, pesticides, refined carbohydrates and even hypoglycaemia and food sensitivities have all been implicated.

Research is showing us more and more that nutrition can impact on psychological health. One leading nutritional organisation recently held a conference on the role of food and mood and the Mental Health Foundation, one of the leading UK charities for psychological health, recently published a report on the role of nutrition for psychological well being called "Feeding Minds."

There are many factors that influence nutrient absorption such as stress. Stress is known to increase the loss of nutrients from the body, for example in one study people under stress were found to require twice the amount of vitamin C in their diets compared to people who were not stressed.

The type of diet we follow can have a very powerful influence on our ability to deal with stress. Research on diet and stress by Patrick Holford of The Institute of Optimum Nutrition, showed that people who switched to healthier eating had stress levels half that of people who were on a poor diet.

More and more research is revealing the role that food can play in our psychological well-being. The Food and Mood Project in Sussex has carried out research which indicates that a healthier diet does not only have physical benefits but psychological ones also. People feel less fatigued, have more energy and their mood improves.

It is important to not just treat the symptoms of depression with medication what is needed is a more holistic approach including Exercise, Cognitive Behavioural Therapy, Complementary Therapies and Nutrition. Nutritional management of depression is too extensive a subject to be fully covered here but we have given details of a number of books you can read such as the Food and Mood Handbook by Amanda Gear. We recommend that you consult a Nutritional Therapist, two of the leading organisations for Nutritional Therapists are The Institute of Optimum Nutrition, Tel: 0870 979 1122 and British Association of Nutritional Therapists – Tel: 08706 061 284.

Alcohol

"There are probably people who are considered alcoholic who only drink to control their anxiety. When this is treated successfully, their strong urge to drink lessens. The alcoholism is really only secondary to the anxiety disease, a complication of it." (Dr David Sheehan)

A lot of people, when faced with chronic stress, anxiety and depression, try to cope by using alcohol to find relief from their suffering, when in fact alcohol can actually increase the severity of the symptoms; they then end up having to consume ever higher and higher amounts of alcohol in order to sustain its effects. As a result excess alcohol can cause or exacerbate a wide range of additional psychological and physiological health problems on top of the initial stress, anxiety and depression.

A report published by the Institute of Alcohol Research said that nearly two million people in the UK have an alcohol problem and cannot get through a day without consuming alcohol. Alcohol, if consumed in excess amounts, can and does have a potentially powerful and mostly negative effect on brain and body biochemistry, causing or exacerbating chronic stress, anxiety and depression. It is a chemical stressor that stimulates the sympathetic nervous system and adrenal glands to release stress hormones like cortisol, which if you suffer stress are already high anyway.

Certain nutrients are needed by the body in order for it to manufacture chemicals that dampen anxiety. Alcohol causes depletion of vitamin B6 and Folic acid which are the very nutrients needed for us to be in optimum psychological health enabling us to cope with stress. Research has shown that alcohol in excess amounts can lower our mood and reduce the effectiveness of antidepressants.

Alcohol in small amounts can have a relaxant, anti-anxiety effect and this is why a lot of people use it. Alcohol acts by mimicking the activity and function of the chemicals already present in the brain that help us to relax; however, if you use it in this way, as your body gets used to the alcohol you have to consume ever larger amounts to achieve the same effects and research has shown that alcohol in excess, in the long term, can significantly increase our anxiety.

In order to recover our optimal psychological health it is absolutely vital that we reduce our alcohol to currently recommended limits. The latest government advise is that pregnant women and women trying to get pregnant should consume no alcohol what so ever. If you are consuming excess levels it would be wise to contact one of the alcohol organisations to help you to withdraw.

Current Guidelines For The Level Of Maximum Consumption Of Alcohol:

- 21 units per week for men.
- 14 units per week for women, (But no alcohol if pregnant).

A Unit Of Alcohol Represents:

- Half a pint of ordinary beer (not strong) or
- A pub measure of spirit or
- A normal size glass of wine.

Caffeine

" . . . . caffeine is routinely used to induce panic attacks in clinical experiments. When given caffeine doses of the equivalent of that in 4 – 5 cups of coffee, nearly half of panic disorder patients, experienced a reaction that was indistinguishable from a spontaneous panic attack."

Caffeine is a potent chemical with psychoactive effects that our body has absolutely no requirement for. Research has indicated that caffeine can interfere with our brain chemistry and therefore can be a factor in exacerbating stress, anxiety, panic, depression and insomnia. Caffeine stimulates the release of excess stress hormones via its stimulant effects on the adrenal glands. It stimulates the pancreas to secrete insulin, which lowers blood sugar so the body has to compensate by releasing stress hormones, which cause the body to release energy, fat and glucose reserves to stabilize blood sugar levels.

Some people are more sensitive to caffeine's effects than others so their tolerance for caffeine can be far less than other people. Even small amounts of caffeine found in decaffeinated versions of tea and coffee can cause them problems. Research has shown people prone to stress and anxiety tend to be especially sensitive to the effects of caffeine; gradually removing caffeine from the diet can be a great help in relieving stress, anxiety, depression and related problems. Caffeine can exacerbate or even cause stress, anxiety, depression and insomnia because it interferes with a neurotransmitter chemical in the brain called adenosine. This is the chemical that turns down our anxiety levels - it's our body's version of a tranquilliser. Caffeine docks into a receptor for adenosine and regular use of caffeine is enough to produce anxiety and depression in susceptible individuals.

Research has indicated that caffeine increases the secretion of stress hormones like adrenaline, so if you are already secreting higher stress hormones, caffeine will boost it even higher and exacerbate stress, anxiety, and depression even further than it already is. By cutting down your caffeine intake you will lower your stress hormone levels and therefore reduce stress, anxiety and depression.

Clinical Psychologists in the USA carried out research which indicated that caffeine can be a factor in causing or exacerbating depression and that on removal of caffeine from the diet, depression lifts, and on re-introducing it to the diet again, depression worsens. Caffeine can have an anti-depressant action in small amounts but can have a depressive effect in larger amounts. Caffeine users report significantly higher depression scores when compared to non-users. The higher the total caffeine intake, the more likely the subjects are to suffer from depression. The researchers were unable to identify a clear-cut dosage level that produced symptoms.

Dr James Lee, a researcher at Duke University, North Carolina in the USA, said of caffeine and anxiety, "Moderate caffeine consumption makes a person react like he/she is having a very stressful day. If you combine the effects of real stress with the artificial boost in stress hormones that comes from caffeine then you have compounded the effects considerably." During his study the volunteers produced 32% more adrenaline, their blood pressure was raised and their heart rates were faster.

Caffeine has a diuretic action and causes depletion of several important nutrients vital for optimum psychological health. Caffeine depletes the body of vitamin B6, which is one vitamin involved in the manufacture of serotonin (this chemical is low in people with anxiety and depression) so this may be another route where caffeine is involved in depression. Some caffeinated drinks also contain tannin, which also interferes with nutrient absorption of essential minerals including calcium, iron and magnesium as well as B group vitamins.

Caffeine is found in a variety of sources such as:

- Tea
- Coffee
- Chocolate
- Cola
- Certain over-the-counter medications
- Cocoa

Sudden withdrawal from caffeine can cause uncomfortable side effects like headaches. So it is wise to gradually reduce our caffeine intake over a number of weeks. You can substitute caffeinated beverages with non-caffeinated versions found in local health food shops.

Caffeine Intake Questionnaire

Caffeine Content of Some Common Beverages

Substance	***Approx. mg***		***No. per day***	***Total***
Coffee				
Drip (5oz)	130	X	_____	= _____
Percolated (5oz)	95	X	_____	= _____
Instant freeze-dried (5oz)	70	X	_____	= _____
Decaffeinated (5 oz)	3	X	_____	= _____
Tea				
5-minute steep (5oz)	60	X	_____	= _____
3-minute steep (5oz)	35	X	_____	= _____
Other				
Hot cocoa (5oz)	10	X	_____	= _____
Regular or diet cola (12oz)	45	X	_____	= _____
Other soft drinks (12oz)	0	X	_____	= _____
Dark chocolate (100g bar)	80	X	_____	= _____
Milk Chocolate (100g bar)	20	X	_____	= _____
Lucozade (330 ml can)	40	X	_____	= _____
Total			Total	= _____

Carbohydrates

> ***"We don't know why people under stress seem to choose carbohydrate and fat-rich foods, one speculates that it might have something to do with the biochemistry of carbohydrates which increases serotonin's availability in the brain."*** (Professor Jane Wardle)

Carbohydrates are the starchy foods like bread, pasta, rice, potatoes, breakfast cereals, etc. that supply the body with energy. There are two different types of carbohydrates:

- Complex carbohydrates
- Refined carbohydrates

Carbohydrates have unfairly got a bad press as being a cause of obesity. This is not so, it is refined carbohydrates that are the problem. In fact Complex Carbohydrates only become very high in calories if we add fat to them when we cook or serve them. Potatoes are low in calories unless we add butter when we mash them or bake them, or have them as chips. One serving of chips has about three times the calories of one serving of boiled potatoes. Carbohydrates should form the basis of all meals, and are even better if we choose the wholegrain form as these have extra fibre.

Refined Carbohydrates, such as refined, sugary foods are robbed of vital fibre, vitamins, and minerals; they do not supply vitamins and minerals needed for the body to process food and they also rob the body of it's depleted stores of B-group vitamins. Refined carbohydrates reduce the available Vitamin C, and impair white cell function; they destabilize blood sugar levels causing them to peak and trough making insulin levels rise too fast. We do not need refined sugar, it only contains calories, it has no other nutrients at all, and we get all the energy we need from other foods, especially from complex carbohydrates. Many foods that are high in sugar also contain a lot of fat, eating too many refined carbohydrates can lead to obesity. Excess sugar is also linked to tooth decay. Poor nutrition foods like caffeine and refined carbohydrates can exacerbate any stress we are under. Nutritionist Anthony Haynes has said that "Many dietary factors can cause the same effects as stress by stimulating the adrenal glands."

Research has suggested that some people are sensitive to refined sugar and this refined sugar could be one factor in the development of depression. In one study a group of patients were randomly divided to avoid sugar and caffeine and the control group did not avoid sugar and caffeine. The group that avoided the use of sugar or caffeine had significant improvements in their depression.

Chronic stress causes the brain to release a hormone, which causes us to crave sugary, fatty foods. The average person in the UK has been shown to consume 100 pounds of sugar a year, that is nearly 2 pounds of sugar a week. Many people will find it hard to believe they consume this much sugar but most of the sugar in the western diet is hidden in processed foods. For example there are 8 teaspoons of sugar in a 12 oz can of cola and some breakfast cereals supply 50% of their calories in the form of refined sugars; so choose a low, or no sugar version.

How to Reduce our Sugar Intake

> ***"Our food should be our medicine and our medicine should be our food."*** (Hippocrates)

- Reduce the amount of sugar you add to tea/coffee, brown sugar is not nutritionally superior to white sugar
- When buying soft drinks, choose low calorie versions
- Switch to a breakfast cereal that has no added sugar
- Use real fruit juices not juice drinks and dilute as 1 part fruit juice to 2 parts of water
- Cut down jam/marmalade. Choose low sugar versions
- When buying tinned fruit choose ones packed in natural juices not ones in glucose syrup
- Consume less biscuits, sweets and cakes
- Reduce the intake of processed foods, most of the sugar in the western diet is hidden in processed foods

Artificial Sweeteners

Some research has indicated that in certain people the use of artificial sweeteners may be a factor in their depression. The research indicates that artificial sweeteners can have a negative affect on the serotonin system of the brain. So to be on the safe side it would be wise to avoid the use of all artificial sweeteners. Artificial sweeteners can be found in soft drinks, and even in some foods such as canned beans.

Complex Carbohydrates

"Complex carbohydrates stimulate our brains synthesis of neurotransmitter hormones. Imbalance in serotonin can make a person more vulnerable to stress. Serotonin plays a role in our brains stress management system and helps to make us feel more calm."

Research has shown that a diet rich in grains, pulses, nuts, seeds, fruits and vegetables helps make us more stress resistant. The World Health Organisation recommends that unrefined, complex carbohydrates make up 50 to 80% of our daily calorie intake. We should aim to eat 6 portions of complex carbohydrates a day.

Complex carbohydrates include:

- Oats
- Fruits
- Wholegrain Cereals
- Whole grains
- Vegetables
- Pulses
- Wholemeal Bread
- Brown rice

Complex Carbohydrates are more filling and help to keep our blood sugar levels stable. For example, oats are an unrefined, complex carbohydrate, which retain their fibre and nutrient content. Complex carbohydrates like brown rice can help protect against several types of cancer and Heart Disease. New research published in the American Journal of Clinical Nutrition has shown that eating lots of these foods reduces rates of heart disease by almost one-third.

Whole grains are a complex carbohydrate which retain all of their B-group vitamins and fibre, however when they are milled into refined grains like white flour they can loose many of the vital nutrients like B-group vitamins and minerals. When whole grain rice is milled into white rice it retains less than half its vitamin B6, one third of its B3 and only 20% of its original B1. Stoneground wholemeal flour and stoneground bread have higher levels of B-group vitamins because of the grinding methods used; if steel rollers are used a lot of heat is created which destroys the nutrient content of the gain. Stoneground flour uses stones instead of metal rollers so retains a lot of its nutrient content and its high levels of B-group vitamins. Always consume stoneground wholemeal flour products and bread. More than 50 scientific studies have now shown that eating whole grains on a regular basis can reduce the risk of heart disease and cancer by up to 30%. In the United States Nurses Study people who consumed one portion of whole grains a day lowered their heart attack risk. Examples of Whole grains are:

- Wholemeal bread
- Oats
- Brown Rice
- Wholegrain cereals

Complex carbohydrates still contain their fibre allowing the sugar in our food to be released into the blood stream more slowly, keeping our blood sugar levels stable, however the western diet is loaded with sugars (refined carbohydrates) that have had the fibre removed so are released quickly into the blood stream causing our blood sugar to yo-yo up and down. Therefore it is important to make sure our diets contain plenty of complex carbohydrates such as wholegrain pasta, brown rice, potatoes, wholegrain cereals, fruit, etc. rather than refined carbohydrates such as sugary foods and drinks.

Fibre

"Fibre is certainly effective in the prevention of constipation but it is also beneficial in reducing the risks of bowel cancer."
(Prof. Gordon McVie, Cancer Research Campaign)

Fibre is a compound found in plant-based foods. It is the indigestible part of the plant cell walls and is not really one compound but a group of compounds. Fibre used to be called roughage and is now referred to as NSP (Non-Starchy Polysaccharide). A high fibre diet is important in helping us to cope with stress because it helps glucose from our foods to be released more slowly into our blood stream. Refined foods are low in fibre so cause the glucose to be released too quickly into our blood stream; this causes the blood sugar levels to fall too quickly and the brain in response triggers the release of stress hormones to release the body's energy reserves in order to increase our blood sugar levels.

There are two types of fibre:

1. Soluble
2. Insoluble

All foods containing fibre have both soluble and insoluble fibre in varying amounts, but foods like fruits, vegetables and pulses have higher levels of soluble fibre while wholegrain based foods tend to be made up of mainly insoluble fibre. It used to be thought that fibre had no role in human health, but this has proved to be incorrect, fibre performs a number of vital functions.

Soluble fibre, which is found in foods like oats, barley, pulses, fruits, vegetables etc, helps to increase the number of friendly bacteria in the bowel and lower blood cholesterol.

Insoluble fibre provides most of the bulk to speed up and stimulate the large intestine so preventing constipation. Sources include grains, nuts and cereals.

A high fibre diet has many beneficial effects on our health including our emotional health. Researchers led by Professor Andrew Smith at Cardiff University, looked at research subjects eating breakfast cereals that contained different fibre contents. They found that the subjects consuming high fibre breakfast cereals were more emotionally stable in comparison to those research subjects fed low fibre breakfast cereals.

It is recommended than we should be consuming:

16 grams of fibre per day for women
18 grams of fibre per day for men

But 8 out of 10 people in the UK are only consuming 12 grams of fibre per day. Our western diet, which is based mainly on fat, protein and refined carbohydrates, is therefore, naturally low in fibre because these foods contain little, if any fibre.

Fruits and Vegetables

> ***"People everywhere who eat the most fruits and vegetables, compared with those who eat the least, slash their expectations of cancer by about 50 %. That includes cancers of the lung, colon, breast, cervix, oesophagus, oral cavity, stomach, bladder and ovary."*** (Dr Gladys Block, PhD)

The old adage of "An apple a day keeps the doctor away" is so true, except that we need to eat more than one apple. Research by The World Health Organisation has shown that all adults should be eating 1 pound of fruits and vegetables, which is 5 portions, a day. A leading cardiac charity, the National Heart Forum, says that if we ate the 5 pieces of fruits and vegetables, per person, per day as recommended by the World Health Organisation, this would save 30,000 lives each year.

One portion of fruit-vegetables is:

- 1 apple or orange or banana
- 1 large slice melon/pineapple
- 2 tablespoons of vegetables
- 1 cup of grapes or strawberries
- 2 tablespoons of fruit salad
- 1 tablespoon of dried fruit
- 2 plums or apricots
- 1 desert bowl of salad

Only 10% of the UK population are eating the recommended 5 portions of fruits and vegetables a day. In fact on average most of us only eat three portions a day. Our fruit and vegetable consumption in the UK is amongst the lowest in Europe. The Greeks eat more than twice the fruit and vegetables we do, and in a nation of smokers, deaths from heart disease in Greece are half those in Britain.

Fruits and vegetables are rich in fibre, complex carbohydrates, vitamins, minerals, antioxidants and phytochemicals, that all increase our resistance to a wide range of health problems. For example they contain Salicylic acid, which is an aspirin-like compound that stops the blood clotting excessively. Fruits and vegetables are rich in potassium, a mineral that helps control blood pressure.

Fruits and vegetables are rich in folic acid, which reduces the blood level of a substance called Homocysteine, which may be a risk factor for heart disease. It has been suggested that low levels of folic acid may be a factor in depression. Folic acid is one of the B-group range of vitamins and along with Vitamins B6 and B12 is required for the manufacture of the mood neurotransmitter serotonin.

The World Health Organisation recommends that each person consume 1 pound (400 grams) of fruit and vegetables a day. But research shows that the vast majority of the UK population are not achieving this level of consumption. Remember it is important to thoroughly wash all fruits and vegetables before eating them.

Omega 3 Essential Fatty Acids

> ***"There is a correlation between severity of depression and Omega 3 fatty acid levels. The lower the levels, the more severe the depression."*** (Dr Rhian Edwards PhD)

It is a common misconception that all fats are bad, but this is not so. Certain fats are essential to health and are often referred to as the Essential Fatty Acids (EFAs), because they are a vital component of all cell structures. Essential Fatty Acids cannot be manufactured by the body but are supplied from our diet. Omega 3 is an essential fatty acid found mainly in oily fish such as herring, kippers, mackerel, pilchards, sardines, salmon, tuna, trout and anchovies which live in colder waters like the Arctic Sea; the fats stop the cold water freezing their blood. The Essential Fatty Acids (EFA's) these oily fish contain, have been found to be useful in helping to combat a number of psychological and physiological health problems. Omega 3 EFA's are thought to have a positive influential effect on the neurotransmitter serotonin.

Nations that have a high fish content in their diet and therefore have naturally higher intakes of Omega 3 fish oils like Japan and Taiwan, have 10 times lower incidence of depression than nations that consume small amounts of fish such as the United Kingdom.

In one study a team from China Medical College Hospital in Taiwan conducted a double blind, placebo controlled trial comparing Omega 3 essential fatty acids with a placebo, as well as the usual standard treatments, in people with clinical depression. The patients who received the Omega 3 essential fatty acids had significantly decreased scores on the Hamilton Rating Scale for Depression than the placebo group.

One research study in the United Kingdom found that mothers who ate low amounts of fish had double the risk of developing postnatal depression when compared to mothers who ate lots of fish. Pregnancy can cause extra nutrient demand on the body.

The World Health Organisation and UK Food Standards Agency recommend that we only need to consume 1 portion of oily fish per week to gain all the benefits of Omega 3 EFA's. If you eat tinned salmon or tuna try to buy the ones that are packed in water instead of oil or brine.

Caution

If you are pregnant, trying to get pregnant or breast-feeding; have a blood disorder or taking anticoagulants; if you have diabetes, or if you have any allergies then talk to your pharmacist or doctor before taking Omega-3 supplements.

The UK's Food Standards Agency advise pregnant women, those trying to become pregnant or those breast-feeding who consume fish, to cut down because of mercury levels in the fish.

Vitamins and Minerals

> ***"B-vitamins are essential for the manufacture of chemical transmitters such as serotonin, the chemical which controls moods and other enzymes in the nervous system. If levels drop, the body copes less well with stress."***
> (Dr J. Herbert)

Vitamins are chemical compounds supplied by the foods that we eat. Vitamins such as Vitamins A, B, C, D, E, K, etc, play a vital role in both physical and psychological well-being. The B-group vitamins, which comprise B1, B2, B3, B5, B6, B12 and folic acid are collectively known as the anti-stress vitamins because of the important role they play in keeping the nervous system healthy.

B-group vitamins are needed by the body to break down the carbohydrates we eat. Usually the body can use B-group vitamins that naturally occur within the food that is being metabolised, however the typical western diet is high in refined carbohydrates, which have a lot of their B-group vitamins refined out so the body has to rob its own stores to process the food. So not only does our modern diet provide little B-group vitamins, the body's own stores are being depleted whilst it is metabolising our food.

Foods such as whole grains retain all of their B-group vitamins and fibre, however when they are milled into refined grains like white flour they can loose many of the vital B-group vitamins and minerals. Stoneground flour however retains its high levels of B-group vitamins. Rice, when it is milled into white rice, retains less than half its Vitamin B6, a third of its B3 and only 20% of its original Vitamin B1.

The B group vitamins are essential for nervous system function; vitamin B1 (thiamine) in particular may reduce stress-induced anxiety and improve mood. In a study of young Welsh women, there was an association between low thiamine levels (Vitamin B1) and feeling less composed, less confident and more depressed. Yet when these women received vitamin supplements for 3 months there was a marked improvement in mood in those whose thiamine levels increased. According to Professor Benton who carried out the research at the University of Wales in Swansea, about 6% of this Welsh sample of 20 year olds had thiamine levels so low that their mood was adversely affected.

B-group vitamins make us less sensitive to stress. For example, in one study research subjects who were under stress were given daily vitamin B-complex; their stress levels were assessed before and after the treatment and the data found that they were more stress resistant after a month of taking the vitamin B-complex.

It has been suggested that low levels of folic acid may be a factor in depression because folic acid is required for the manufacture of the mood neurotransmitter serotonin. Vitamin B6 and B12 are also important in the manufacture of serotonin. Low serotonin makes the sympathetic nervous system (which triggers the fight/flight response) more sensitive, making us more vulnerable to stress and depression. Some studies indicate that when you use folic acid along with antidepressant medication for treatment resistant depression, the medication may be more effective than the antidepressant on its own.

Daily Food Pyramid

Bread, Cereal, Rice and Pasta (6-11 servings)

1 serving is: 1 slice of bread, ½ cup of rice, cooked cereal or pasta, 1 cup of ready-to-eat cereal. (Try to use wholegrain versions)

Fruit Group (2-4 servings)

1 serving is: 1 medium apple, orange, or banana, ½ cup of chopped, cooked or canned fruit, ¾ cup of fruit juice.

Vegetable Group (3-5 servings)

1 serving is: 1 cup of raw, leafy vegetables, ½ cup of other vegetables cooked or raw, ¾ cup of vegetable juice.

Meat, Poultry, Fish, Dried Beans, Eggs and Nuts (2 – 3 servings)

1 serving is: 1 egg, 2 tablespoons of peanut butter, ½ cup of cooked, dried beans, 1/3 cup of nuts. (Use low fat chicken, turkey etc)

Milk, Yoghurt and Cheese (2-3 servings)

1 serving is: 1 cup of milk or yoghurt, 1 ½ oz natural cheese, 1 oz of processed cheese. (Use low fat versions)

Fats, Oils and Sweets

Use fats, such as monounsaturated fats in olive oil, sparingly, keep sweets to the minimum, move away from saturated animal fats and use low fat dairy products.

Resources Session (6)

Action Plan: Healthy Eating

	Yes	No
▪ Consider borrowing and reading the recommended book for this session The Food and Mood Handbook	☐	☐
▪ Consider consulting a qualified nutritionist.	☐	☐
▪ Fill in the caffeine intake questionnaire and record your score.	☐	☐
▪ Consider consuming foods lower in salt	☐	☐
▪ Consider consuming more wholegrain foods	☐	☐
▪ Consider increasing intake of fruits and vegetables	☐	☐
▪ Consider consuming less caffeine	☐	☐
▪ Consider reducing alcohol intake	☐	☐
▪ Consider increasing the amount of fish in your diet. (If you are pregnant, trying to get pregnant, have diabetes, or any form of chronic health problem and/or on medication check with your doctor before consuming extra fish.)	☐	☐

Useful Self-Help Books, Websites, Addresses: Healthy Eating

Books

- Geary A. (2000) The Food and Mood Handbook, Harper Collins
- Desmaisons K. (1999) Potatoes not Prozac, Prentice Hall.
- Newman-Turner R. (1984) Naturopathic Medicine: Treating the Whole Person, Harper Collins.
- Somer E. (1999) Food and Mood, Henry Holt.
- Wurtman J. (1986) Managing your Mind and Mood through Food, Rawson Assoc.
- Doyle W. (1994) Teach Yourself Healthy Eating, Hodder and Stoughton.
- Trattler R. (1987) Better Health through Natural Healing, Thorsons.
- Davies S, Stewart A, (1987) Nutritional Medicine, Pan Books.

Websites

- www.foodandmood.org
- www.vegepa.com
- www.salt.gov
- www.food.gov.uk
- www.5aday.nhs.uk
- www.naturopathy.org.uk

Addresses

- ***Al-anon (for carers of people with alcohol problems)***
  Great Dover Street, London, SE1 4YF. ☎: 0207 403 0888, Fax: 0207 378 9910
  Email: enquiries@al-anonuk.org.uk Web: www.al-anonuk.org.uk
- ***Alcoholics Anonymous***
  PO Box 1, Stonebow House, Stonebow, York. YO1 7NJ, ☎: 0845 769 7555
  Web: www.alcoholics-anonymous.org.uk
- ***Alcohol Concern***
  First Floor, 8, Shelton Street, London, WC2H 9JR, ☎: 0207 395 4000
  Web: www.alcoholconcern.org.uk
- ***The British Association for Nutritional Therapy***
  27, Old Gloucester Street, London WC1N 3XX, ☎ & Fax: 08706 061 284
  Email: administrator@bant.org.uk Web: www.bant.org.uk
- ***Food and Mood Project***
  PO Box 2937, Lewes, East Sussex BN7 2GN.
  Email: info@foodandmood.org, Web: www.foodandmood.org
- ***Food Standards Agency***
  Aviation House, 125 Kingsway, London, WC2B 6NH, ☎: 0207 276 8000
  Web: www.food.gov.uk
- ***Institute of Optimum Nutrition (ION)***
  Avalon House, 72, Lower Mortlake Road, Richmond, Surrey TW9 2JY
  ☎: 0870 979 1122, Fax: 0870 979 1133, Email: reception@ion.ac.uk
  Web: www.ion.ac.uk
- ***The General Council and Register of Naturopaths***
  Goswell House, 2 Goswell Road, Street, BA16 0JG, ☎: 08707 456 984
  Fax: 08707 456 985, Email: admin@naturopathy.org.uk
  Web: www.naturopathy.org.uk

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