

A Guide to Restoring



for people with

Eating Disorders

by

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Remember

An Eating Disorder Is About Feelings

Not About Food

- This booklet will help restore healthy eating if you or someone you care for suffers from an eating disorder.
- Food and eating play an important role in our lives. Food is **ESSENTIAL** for our health and development
- Problems with food can occur through times of stress, loneliness, sadness, boredom, and anger
- Food eaten in moderation will not make you fat
- Food may become a problem when it is used to help you deal with situations
- Try not to bottle up emotions, the problem will not go away
- Getting back to a normal eating pattern does take time and it should be done slowly so that you do not become too overwhelmed. It will take a lot of hard work at the start, but in time it **WILL** become a normal part of your day
- Resuming normal eating will take time

ANOREXIA NERVOSA

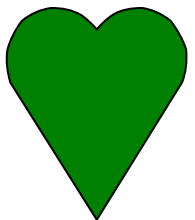
The word anorexia means loss of appetite. It is characterised by severe body weight loss through extreme restriction of food. The eating restriction is often due to low self-esteem, perception of ideal body weight and fear of gaining weight. Sufferers often have a distorted body image of themselves, in which they see themselves as fat even when they are extremely thin.

Someone suffering from anorexia may strive for perfection, and often set themselves high goals. Sufferers tend to feel that the only control they have in their lives is concerning food and weight. Thus by restricting their food intake they feel empowered and in control.

Some people think that by changing themselves to fit in to what they perceive to be a 'perfect' person, this will then make things in their 'world' ok.

The long term effects of anorexia include:

- **Health problems**
- **Depression, anxiety, personality problems**
- **Osteoporosis (due to lack of calcium)**
- **Malnutrition leads to irregular heart rhythms & multiple organ failure.**
- **Death**



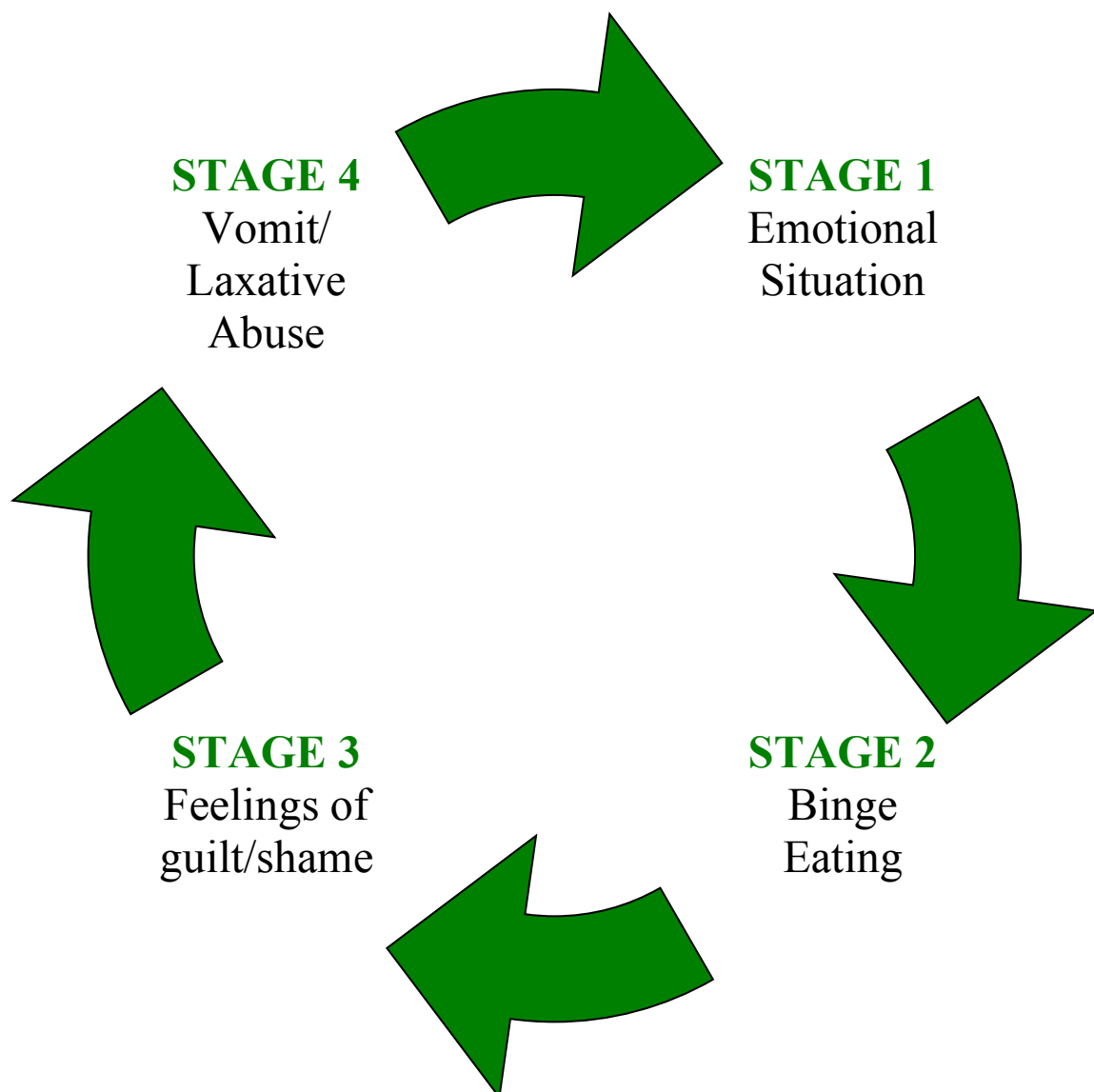


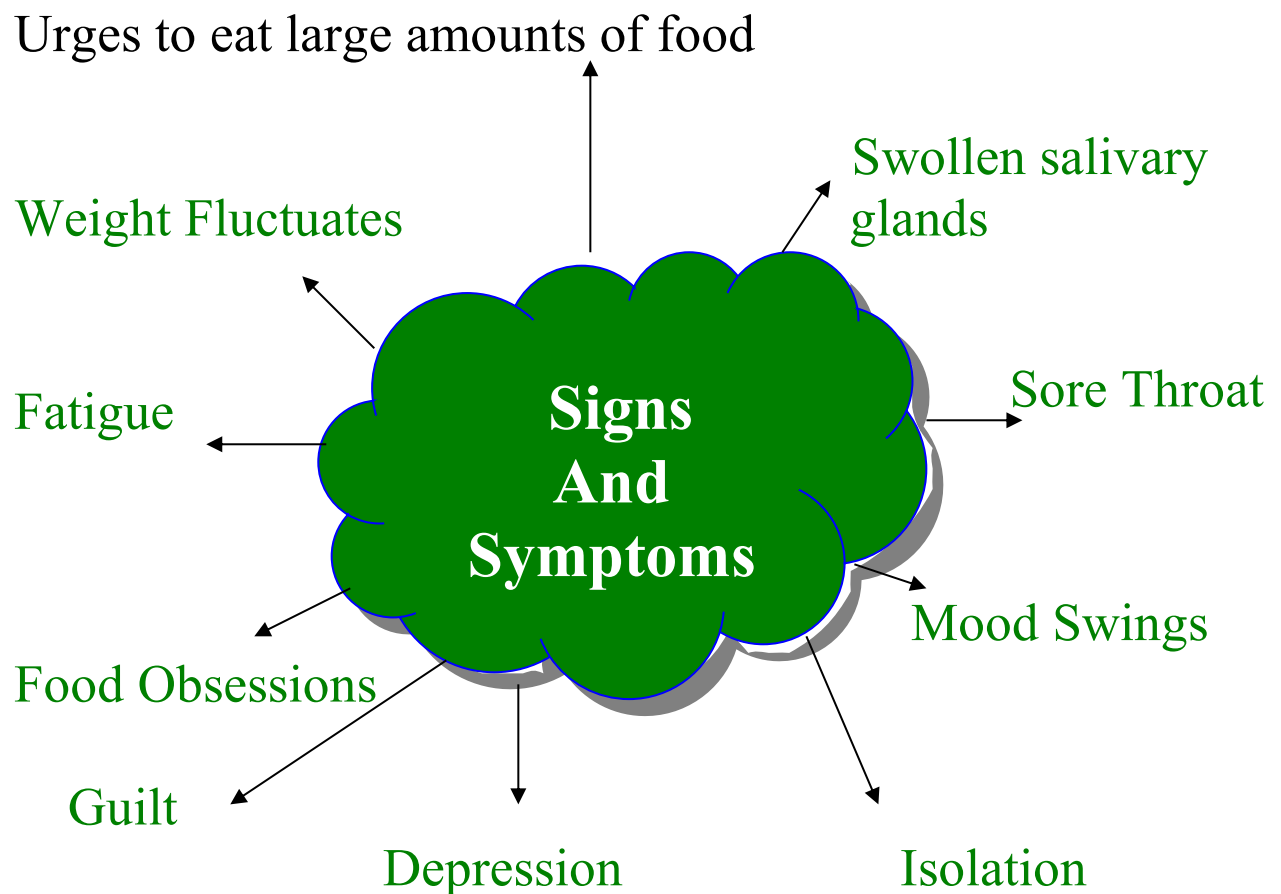
The **goals** of **nutrition therapy** for individuals suffering from anorexia are:

1. **Re-establish** normal eating patterns
2. **Restore** Nutritional Status
3. **Maintain** a reasonable weight

BULIMIA NERVOSA

Bulimia Nervosa involves recurring binge cycles, during which individuals consume large amounts of food compulsively, and then use compensatory behaviours to rid them of the food. Weight is perceived to be controlled by vomiting, taking laxatives and over exercising. People suffering from Bulimia are prone to fluctuate in weight. It is a very secretive illness the onset of which tends to be in late adolescence. It is also possible for someone to display a combination of both anorexia and bulimia, thus adding to the complexity of the illness.





Individuals binge in an attempt to deal with an emotional situation, and as with other eating disorders will use food as a coping strategy. The foods that are likely to be consumed in a 'binge' are high in calories and carbohydrates. In an attempt to get rid of any feelings of guilt for over-eating and correct the over indulgence of high calories, individuals will vomit, take laxatives and over exercise. Taking laxatives prevents the re-absorption of fluid and salts from the gut, if used in excessive amounts it can cause severe depletion of vital fluids and salts. The weight change **ONLY** reflects a change in the amount of fluid in the body, and **NOT** changes in body fat. When water/fluids are next consumed body weight will increase.

The long term effects of bulimia include:

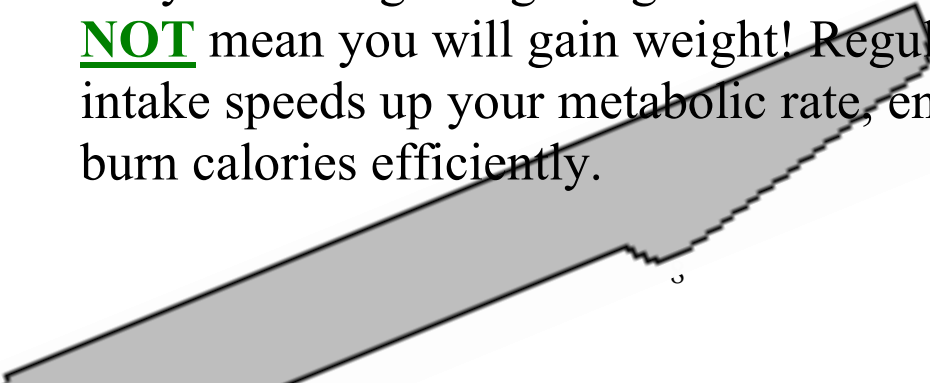
- Due to Vomiting:
 - Electrolyte imbalances
 - Loss of potassium
 - Damage to heart muscle
 - Oesophageal inflammation
 - Rupture of the stomach
 - Erosion of tooth enamel
 - Bowel problems

The **goals** of nutrition therapy for individuals suffering from bulimia are:

1. **Identify** food fears
2. **Correct** food misinformation
3. **Re-establish** normal eating patterns – and this will take time to achieve

BREAKING THE CYCLE OF BULIMIA

To help break the cycle and achieve nutritional goals ~~it~~ changes should be introduced gradually. Meals should be based around a person's food **preferences**. Initially an individual may experience bloating which can be uncomfortable, however this is **natural**. The discomfort is only temporary and is just a sign that your body is healing and getting used to food again. It does **NOT** mean you will gain weight! Regular dietary intake speeds up your metabolic rate, enabling you to burn calories efficiently.



It may help to start by eating little and often, as small meals/snacks will be easier to eat and will not leave you feeling quite so full or bloated. High fibre or low sodium foods should be included to help control fluid retention and constipation.

Having a **structured eating plan** may be useful to know what you are eating in advance. Try to eat meals at regular and normal times and try not to eat more than planned, as this could cause you to binge or vomit. Refrain from skipping meals, and sit down during each meal to increase the awareness of eating. Meals should be eaten slowly in a **relaxed atmosphere**. Some may feel the distraction of television helpful.



Do not rush your food, chew slowly this may help you learn to enjoy the variety of different flavours and textures.

To help break the cycle of bulimia it may help to begin re-introducing foods that are easier to digest, for example mashed potato, oatmeal. Then once the body starts to get used to having food, solids can be introduced. Gas producing and high fat foods should be limited. When it is easier to tolerate a meal, the calories can be gradually increased in order to achieve a healthy weight.

Try to stop counting the calories, as this will only prevent you from eating normally, instead you could concentrate on what healthy eating actually is. After eating, try to **distract** yourself with an activity you enjoy.

Normal eating patterns do take time to re-establish and should be done slowly so that you do not become too overwhelmed. It will take a lot of hard work at the start, but in time it **WILL** become a normal part of your day

BINGE EATING DISORDER

Binge Eating Disorder (BED) has the same characteristics as bulimia, but the sufferer does not usually use compensatory behaviours i.e. vomiting. Due to the increased volume of food consumed, BED can lead to problems with obesity, high blood pressure, diabetes or heart disease.

Binge Eating disorder falls into the category of Eating Disorders Not Otherwise Specified (EDNOS)

Binge Eating should be taken seriously and if not treated as such will inevitably lead to long term physical problems.

It is important that a person's physical needs are balanced with their emotional needs

NUTRIENTS

For nutrition to be adequate, an individual must consume essential nutrients. Each nutrient has its own function to bodily processes.

Carbohydrate

Fat

Protein

Vitamins

Minerals

Fibre

Water

ENERGY

GROWTH & REPAIR

STAY HEALTHY

**SUSTAINING
GOOD
HEALTH
MEANS YOU
MUST HAVE
A BALANCE
OF ALL
NUTRIENTS**

Hardly any foods contain just one nutrient. Most foods contain a variety of nutrients of carbohydrate, protein and fat, together with water. Minerals and vitamins are also present, but in smaller quantities.

Balance of Good Health



Ref: <http://www.wiredforhealth.gov.uk/cat.php?catid=888&docid=7268>

On a daily basis our body needs food from all 5 sections of the Balance of Good Health, for different reasons and in different amounts.

PORTIONS

Portion control is about finding a good balance. When choosing your portions you should:

1. where possible choose wholegrain starchy foods
2. mix and match fruit and vegetable varieties
3. opt for lean meat, fish and poultry, and protein alternatives
4. choose milk, cheese and yogurt

Six to eleven portions a day of carbohydrate based foods seem a lot, however most of us actually eat more than this. This is because the recommended portion is smaller than we think.

A portion of **starchy carbohydrate** is:

- 1 slice of toast
- 3 tbsp of porridge oats
- 1 mini pizza
- 1 medium potato
- 3 heaped tbsp boiled pasta
- 2 heaped tbsp boiled rice
- ½ bread roll/bagel



A portion of **fruit** and **vegetables** is:

- 3 tbsp cooked vegetables (e.g. peas & carrots)
- 1 tomato / 7 cherry tomatoes
- 1 handful of grapes
- 1 medium piece of fruit (apple, banana)
- 2-3 small fruits (plums, apricots, Satsuma)

A portion of **dairy** is:

- ½ pint (200ml) semi-skimmed milk
- 30g hard cheese (e.g. cheddar)
- 236ml yogurt



A portion of **protein** is:

- 60-90g cooked lean beef, pork, oily fish
- 75-120g raw meat, poultry, oily fish
- 120g Soya, tofu, or vegetable-based meat alternative
- 150g cooked white fish / canned tuna



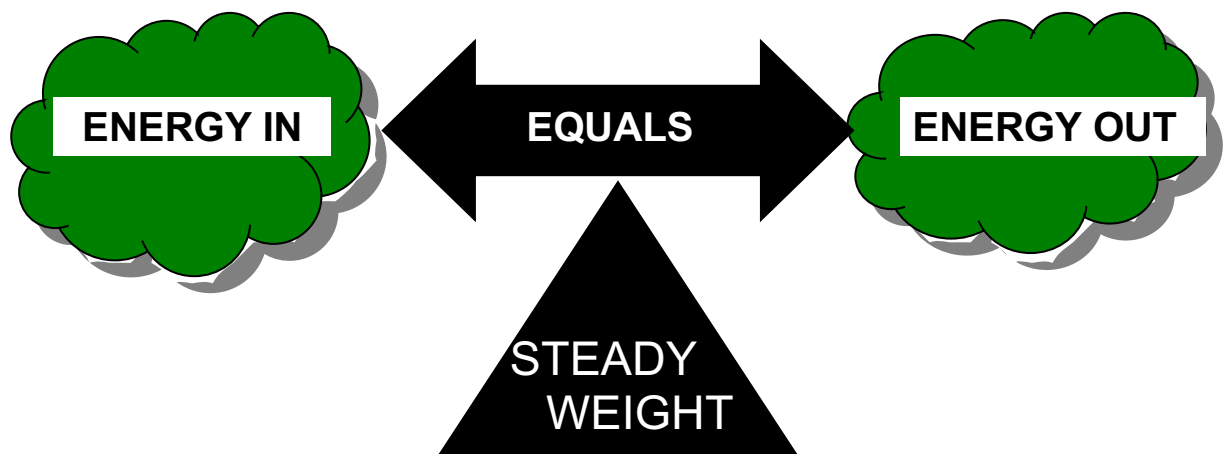
A portion of **fat** is:

- 1 tsp margarine / butter
- 2 tsp low-fat spread
- 1 tsp oil
- 1 tbsp mayonnaise / vinaigrette



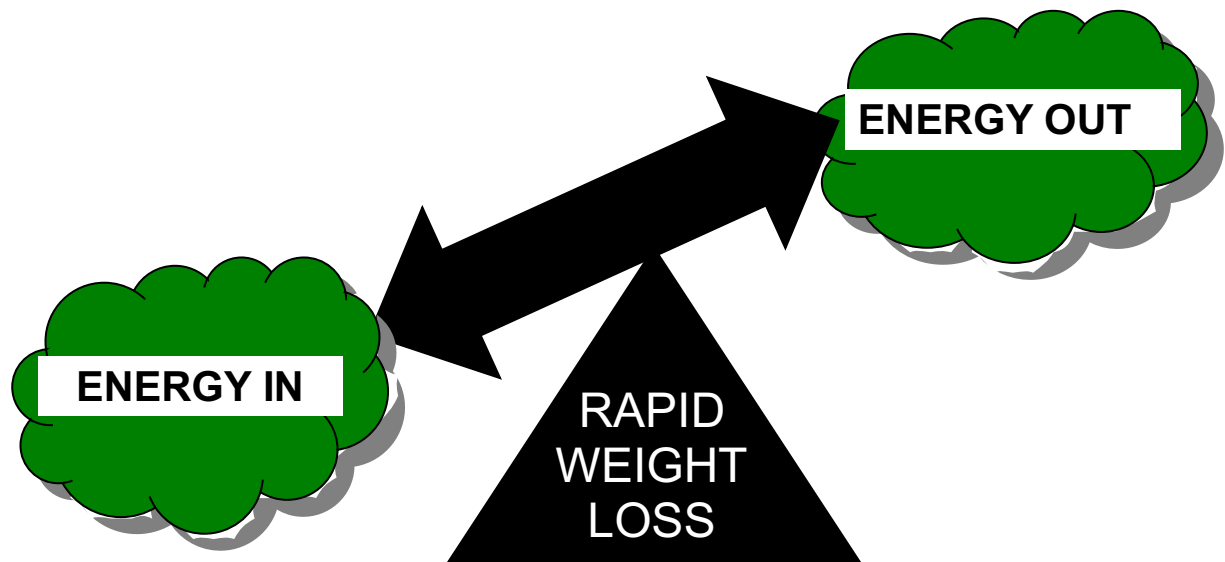
ENERGY

The body uses energy from carbohydrate, protein and fat sources in the diet. Through the process of digestion and absorption energy is released from food into the body.



The energy provided from food in the diet should equal the energy given out in everyday living (which includes processes such as walking, sleeping, standing etc); this in turn will enable a stable weight to be maintained

Energy is needed for the body to function properly. The body uses energy from carbohydrates, fat and protein in the diet. Energy is used to perform muscular work and maintain body temperature, and body processes such as breathing, but a lot is also lost as heat. We must also remember that things like breathing and sleeping also uses energy



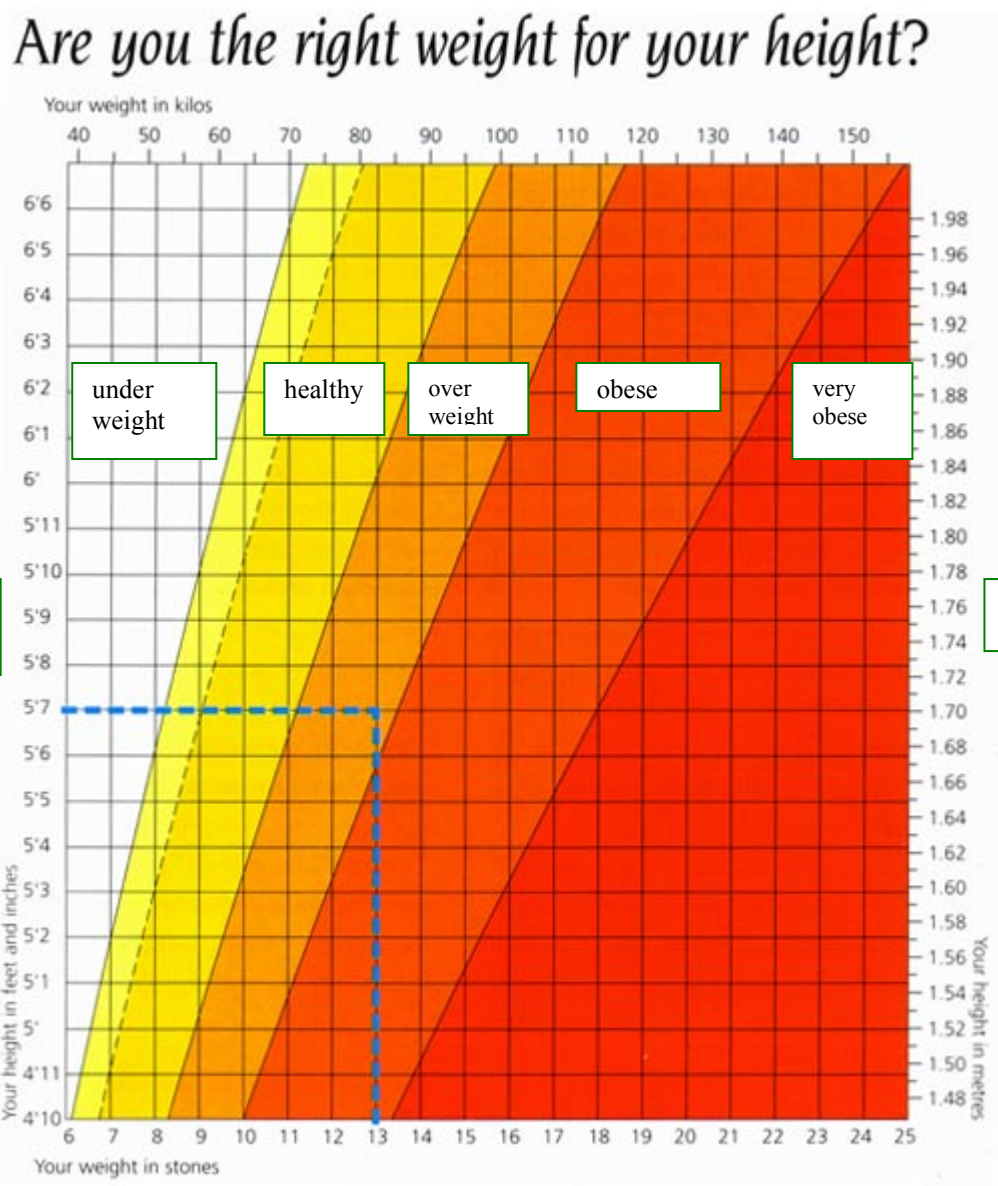
A rapid weight loss occurs when the energy from food is much less than what is needed by the body (see diagram above), and this in turn can be harmful to your health.

..Room For Thought..

....many people believe that if they do not eat they are the ones in control. However, if you allow yourself not to eat, the eating disorder is the one controlling you....

HEIGHT - WEIGHT CHART

Weight in kilos



Weight in stones

The chart above shows the weight to height ratios. The chart is used to indicate whether an individual is an acceptable weight for their height.

Ref: <http://www.eatwell.gov.uk/heightweightchart>

To interpret the key on the chart:

- **Under-weight** = more food should be consumed, and in some cases of extremely low weight a doctor and a dietician should be consulted.
- **Healthy** = the right quantity of food is being eaten
- **Over-weight** = some weight loss may be beneficial to health
- **Obese** = a need for weight loss
- **Very obese** = urgent weight loss needed, it may be useful to consult a dietician/doctor

BODY MASS INDEX (BMI)

Please be aware the BMI calculation does not take into account age, or gender. In the case of children it may be more appropriate to refer to a child centile growth chart for a more accurate calculation. Neither is a BMI a 'stand alone' assessment of medical risk.

Body Mass Index (BMI) is a height to weight formula to determine categories for weight. This scale is commonly used to determine ranges for eating disorders. When weight is in the average range it is considered to be healthy. To calculate your BMI you divided your weight in kilograms by the square of your height in metres:

$$\begin{aligned}\text{BMI} &= \text{weight (kg)} / [\text{height (m)} \times \text{height (m)}] \\ \text{E.G. a man is 1.78m (5'10") tall, weighing 86kg (13st 6lb)} \\ 1.78 \times 1.78 &= 3.17 \\ 86 / 3.17 &= 27.1 \\ \text{Body Mass Index} &= 27.1\end{aligned}$$

NOTE: To calculate your weight in kilograms, you need to multiply your weight in pounds by **0.46**. Please see Weight – Height Chart (page 17) which shows height in both feet and metres.

Body Mass Index Scale

Healthy Weight	25.0 to 18.5
Underweight	18.5 to 17.5
Anorexia Nervosa	17.5 to 15.0
Severe Anorexia Nervosa	15.0 to 13.5
Critical Anorexia Nervosa	13.5 to 12.0
Dangerously underweight	Less than 12.0

Ref: www.iop.kcl.ac.uk

It's important to remember there is a range of healthy body weights. A combination of factors determines our weight, and that's why it's difficult to set an exact ideal weight that applies to everyone.

A decorative header featuring two images of bread on the left and right, with several yellow butterflies in the center. The word "CARBOHYDRATE" is written in large, bold, green capital letters across the middle.

CARBOHYDRATE

Carbohydrate is compounds of carbon, hydrogen, and oxygen

The functions of carbohydrate include:

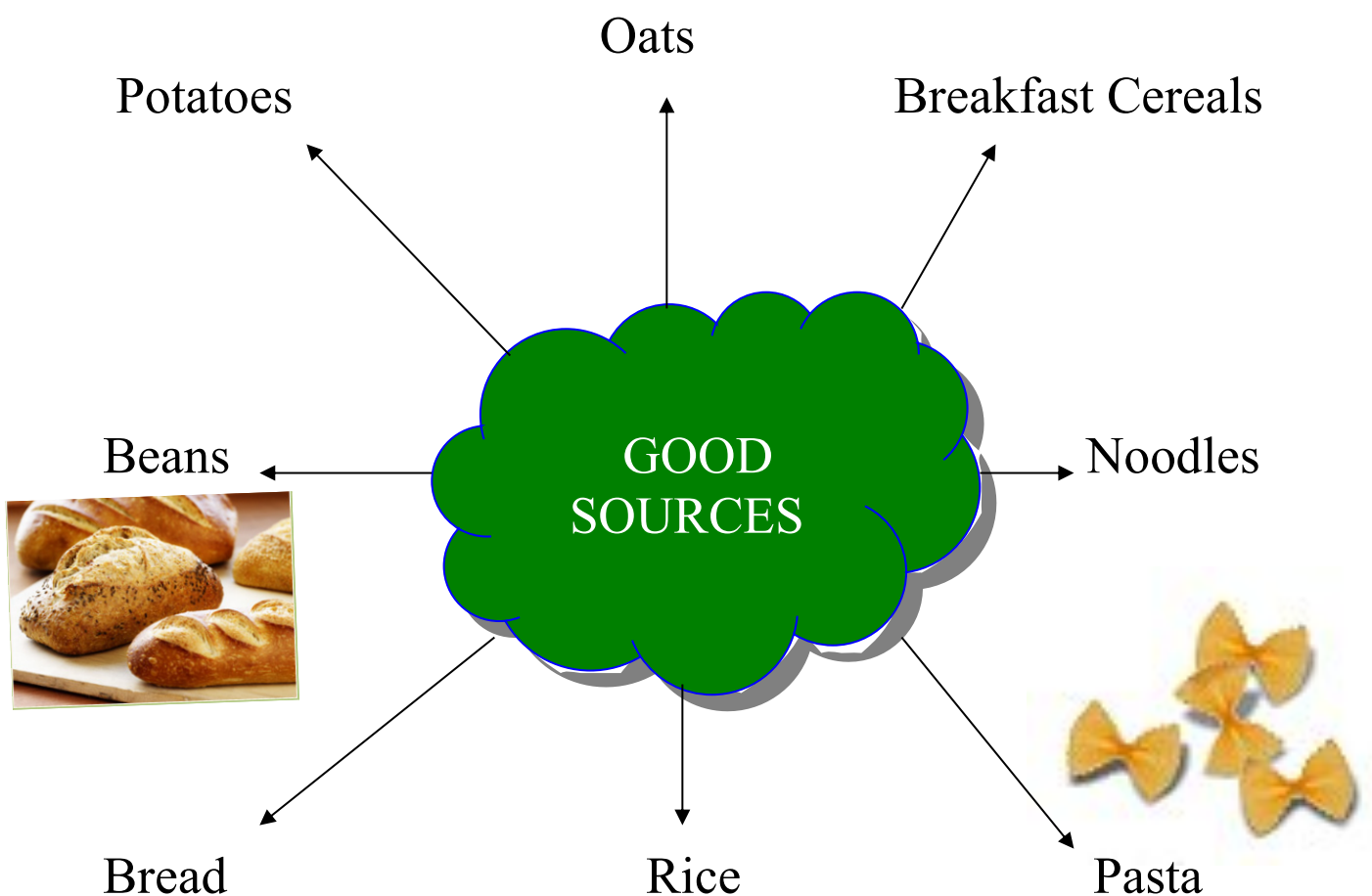
- Energy (crucial for brain functioning)
- Aiding the normal functioning of the intestine
- Helping to burn fats more efficiently & completely
- Conserving protein during energy production

Simple carbohydrates (sugar) go straight into the bloodstream and give the body a boost, but the energy is used up quickly, which can lead to a feeling of depletion. Complex carbohydrates are needed to be broken down by the digestive system before they can be converted into energy; this in turn results in steady blood sugar levels.



6-11 portions daily

Many foods contain a mixture of both simple and complex carbohydrates, for example, biscuits and cakes contain flour (complex) and sugar (simple).



By eating foods from the carbohydrate group you are also consuming dietary fibre, calcium and some vitamins (vitamin B) and iron

PROTEIN

Proteins are large complex molecules composed of building blocks known as amino acids, which are essential for growth and repair of the body.

There are two types of protein:

1. Animal Protein – meat, fish eggs & poultry
2. Plant Protein – nuts, seeds, pulses & TVP (Textured Vegetable Protein)

Proteins functions include:

- Growth, repair & maintenance of body structure & tissue
- Manufacture of hormones
- Help transport other substances through blood

The protein group is important as it also supplies iron, B vitamins, zinc and magnesium, all of which are essential for the formation of blood products, strengthening of the immune system, & wound healing.



2-3 portions daily

DAIRY

The dairy group is level with protein in the healthy eating pyramid. It is recommended that 2-3 portions per day should be consumed.

Calcium is essential to the body for:

- Helping to build strong bones and teeth
- Without it bones become weak and thin, and easily fracture



This group provides calcium, protein and vitamins B12, A and D to the diet. Some dairy products are relatively high in fat, in particular saturated fat.

Dairy foods are the richest sources of calcium, and current guidelines suggest that adults should consume 700mg of calcium every day, which is equivalent to roughly 1 pint (540ml) of milk. However teenagers and children require more due to growth spurts and bone development. Research has suggested that low calcium intake is associated with raised blood pressure.

2-3 portions
daily



FAT

Fat is composed of building blocks called fatty acids. The main categories of fatty acids (saturated and unsaturated) are distinguished by their chemical structure and by the way it is processed by the body.

There are 2 types of fat:

1. Saturated Fat – **restrict** intake of (butter, lard, palm oils, fat on meat and coconut oil)
2. Unsaturated Fat (originate from plant fats and oils – sunflower oil, many fish oils, olive oil, soft margarines)

Fat can be:

- Visible – i.e. butter
or
- Invisible – i.e. chocolate pastry and cheese



It is important to include some fat in your diet, for performing certain functions e.g.

- Energy
- Lubricating body tissue
- Supporting & protecting internal organs
- Insulates the skin, protecting the body from excess heat or cold
- Essential fatty acids (maintain healthy skin & growth)

In an attempt to lose weight anorexic people often will become fixated on reducing their calorie intake to reach goals.

- Neither underweight or overweight is healthy
- A sedentary woman may maintain a healthy weight on 1800 calories per day, whilst a very active woman might require 2800 calories per day
- Male calorific requirements are higher than women
- In childhood and adolescence, more calories and more protein are needed to add muscle mass to the developing body
- After the age of 50 years, calorie requirements go down by roughly 10-20%

FRUIT & VEGETABLES



Fruit & Vegetables
(2-5 portions daily)

Fruit and vegetables provide essential vitamins, carbohydrate and fibre, which is essential for good health. They are low in fat and calories but filling.

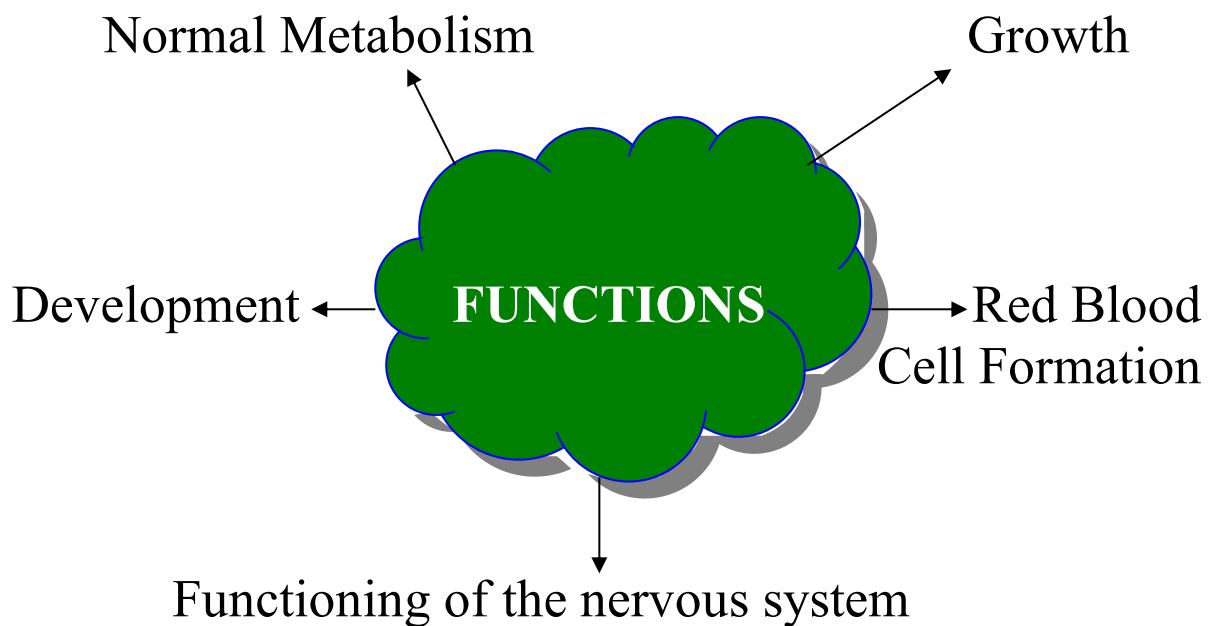
It is recommended that **5** portions should be eaten daily. This can be in the form of tinned, fresh, dried, frozen or the form of juice. To help achieve your 5 A DAY consumption, fruit can be added to breakfast cereals; it can be eaten as a snack and part of a meal.

Fruit is refreshing to eat and adds colour and flavour to the diet. Their main importance is a source of vitamin C, which is necessary to build the structure of cells and tissues, aid wound healing, iron absorption, and protects against chronic diseases. Although vegetables contain roughly 80-95% water, they provide essential nutrients including fibre, which helps to prevent or relieve constipation, as well as keeping your heart healthy.



VITAMINS

Vitamins are organic compounds of carbon, hydrogen and oxygen. They are micro-nutrients, which mean that they are needed in small quantities by the body. Vitamins are provided from all the major food groups in the Balance of Good Health



Vitamins do not directly provide energy; instead they are part of the enzyme system that is required to release energy from carbohydrate, protein and fat.

There are 2 types of vitamins fat soluble and water soluble vitamins. Fat soluble vitamins (Vitamin A, D, E, K) Fat soluble vitamins can be stored in the body's fat tissue, and therefore are only needed in moderate amounts from the diet. Water soluble vitamins, including the B vitamins and vitamin C, cannot be stored in the body in large amounts, therefore must be supplied by the diet.

MINERALS

Minerals are simple inorganic elements that are widely distributed. They represent 4% of our body weight and are found in all body fluids and tissues. Minerals are classified as major minerals (macro minerals) or trace minerals (micro minerals).

Minerals cannot be made in the body and therefore like vitamins, must be obtained in the diet. Minerals can be found in all the major food groups.

The major functions of minerals are to provide:

- Structure to body tissues
- Regulate body processes (e.g. sodium maintains fluid balance, and calcium aids muscle contractions)

Minerals move through the body via the process of digestion, absorption and metabolism. They are also components of hormones and enzymes, e.g. iodine becomes part of thyroid hormones.

Everyone has different mineral requirements, depending on age, size, activity and individual body chemistry.

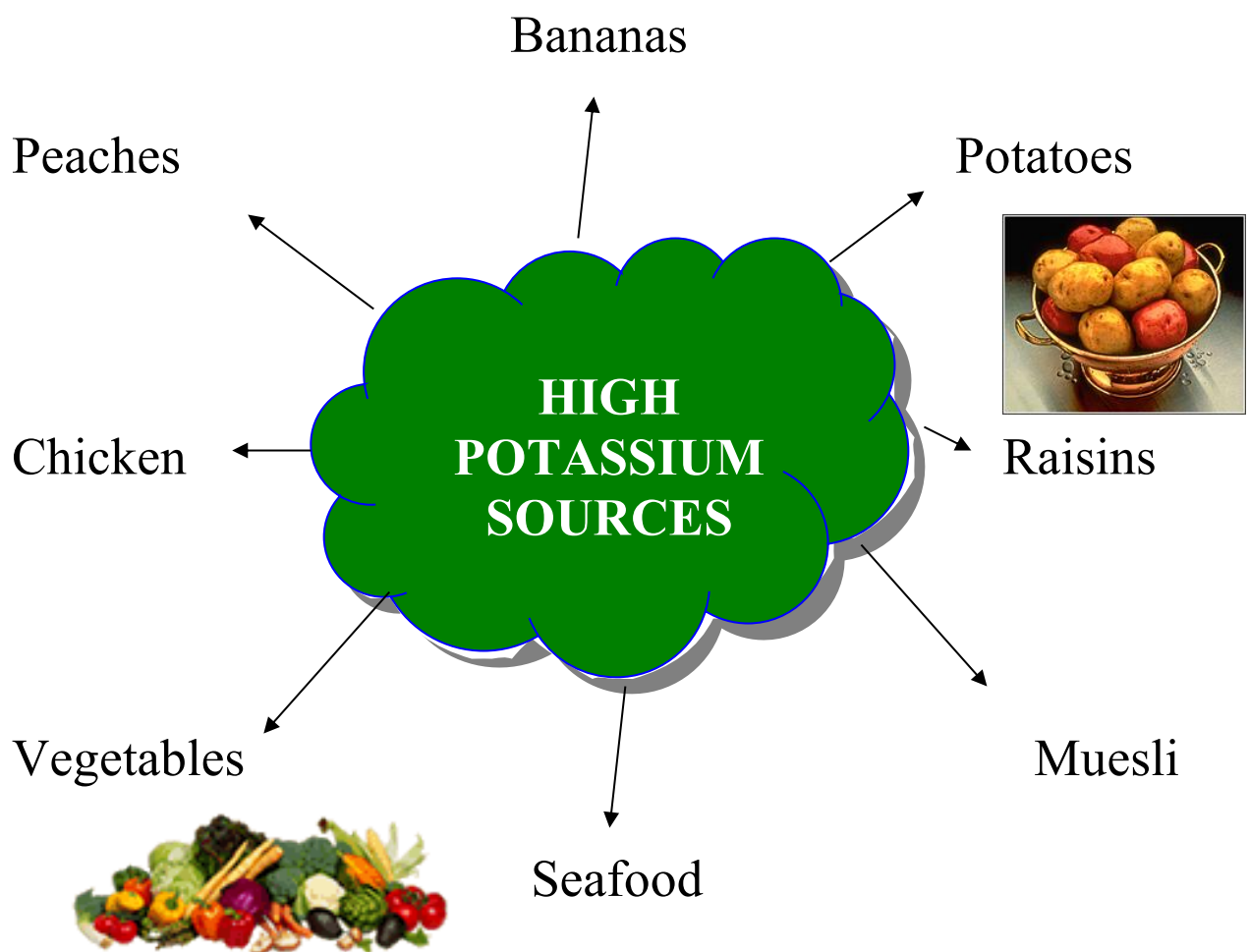
There are 8 major minerals: Calcium, Chloride, Magnesium, Phosphorus, Potassium, Iron, Sodium and Sulphur.

Major Minerals	Major Functions	Food Sources
Calcium	Blood clotting, bone & tooth formation, muscle growth & contraction, nerve impulse transmission	Cheese, milk, yogurt, nuts, leafy vegetables
Chloride	Fluid, electrolyte & osmotic pressure balance	Fruits, vegetables, table salt
Magnesium	Metabolism, protein synthesis, muscle relaxation	Seafood, whole grains, nuts, cocoa
Phosphorus	Bone & tooth formation, energy, cell growth & repair	Eggs, fish, milk, cheese
Potassium	Muscle contraction, fluid distribution, rapid growth	Seafood, banana, raisins
Sodium	Cellular Fluid level maintenance, muscle function & contraction	Seafood, cheese, milk
Sulphur	Vitamin B formation, blood clotting, energy & enzyme metabolism	Milk, meats, legumes, eggs
Iron	Essential component of haemoglobin, transporting oxygen in the blood to all parts of the body	Meat, fish, eggs, beans, broccoli

The trace minerals include chromium, cobalt, copper, iodine, selenium, zinc, which all have a variety of functions necessary for body processes. Trace minerals vary with the content of the soil from which the food originates.

POTASSIUM

Repeated vomiting is dangerous and depletes the body of salts and irons, especially potassium, which is essential for the functioning of the heart muscle. If potassium stores are severely low, heart failure may result. Potassium helps to lower blood pressure and decrease the risk of stroke.



Ref:- http://www.emedicinehealth.com/low_potassium/article_em.htm

If your illness involves vomiting, laxatives or excessive diuretics as a way of controlling weight, it is not sufficient to replenish potassium levels through nutrition alone. It is important that you are monitored through your GP for your potassium levels. More information available via the above link or via SEED information within 'downloads' on the Home Page of the website www.seedeatingdisorders.org.uk

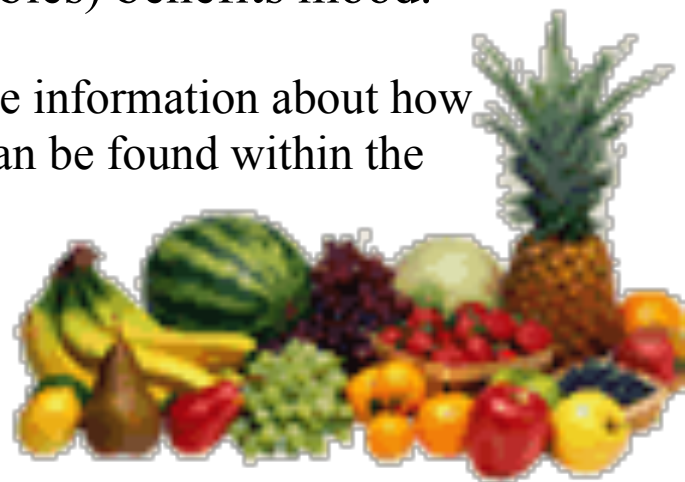
DEPRESSION & DEFICIENCIES

Clinical depression can cause disturbed eating. Food on its own cannot cure or prevent depression; it can however help improve your mood. This is because within the brain there are chemicals known as neurotransmitters that help pass messages between nerves. Serotonin and noradrenalin are two endorphins which appear to affect mood, and the body makes these endorphins by breaking down the food we eat.

It is thought that depression is a common symptom of vitamin and mineral deficiencies. A low vitamin B12 and C, and the minerals iron, potassium and zinc, can cause you to feel low and aggravate depression. There is also a tendency for individuals suffering from depression to become uninterested in food, thus they do not eat and become deficient in certain nutrients. Some anti-depressants can change your metabolism, which in turn causes your body to be deficient in certain vitamins and minerals.

Therefore, eating foods high in vitamins and minerals in your diet (e.g. fruit and vegetables) benefits mood.

Ref: www.foodandmood.org.uk More information about how an eating disorder affects the body can be found within the 'downloads' of the Home Page on www.seedeatingdisorders.org.uk



FLUIDS

Water makes up 50-80% of a person's total body weight, without it an individual wouldn't be able to survive any longer than a week. About two-thirds of the body is water, and all the organs, tissues and fluids of the body contain water as an essential component. Most adults should aim to drink 2-3 litres (6 – 8 cups/glasses) of fluid a day. Urine should be pale; if dark it suggests you aren't drinking enough.

Fluid has many functions within the body:

- Structure & shape to cells
- Aids nutrient digestion & absorption
- Chemical reactions (including the breakdown of protein to amino acids)
- Carries waste products away from cells through urine, faeces, & expiration
- Helps regulate body temperature
- Transports nutrients to cells

Water is constantly being lost from the body through urine, sweat, respiration, sickness and faeces.

To maintain fluid balances you should:

- Drink regularly throughout the day
- Drink before you are thirsty
- Include water as part of your meal
- Eat plenty of fruit & vegetables
- Keep alcohol within the recommended units

Dehydration can cause: dizziness, irritability, dry skin, falling blood pressure, decreased urine output, increased heart rate, and extreme thirst.

SUPPORT

S.E.E.D.

Venue:

Email:

Telephone:

Website:

Advice:

Telephone

Eating Disorders Support Services

267 Beverley Road, Hull HU5 2ST

info@seedeatingdisorders.co.uk

Marg on 01482 718130

www.seedeatingdisorders.org.uk

nutrition@seedeatingdisorders.co.uk

Wed 6.30pm to 7.30pm 01482 561856

beat (beating eating disorders)

First Floor

Wensum House

103 Prince of Wales Road,

Norwich.

NR1 1DW

Email: info@b-eat.com

Help Line:

Adults = 0845 634 1414 – weekdays 8:30am-8:30pm

Youth = 0845 634 7650 – weekdays 4:00pm-6:30pm

Website: www.b-eat.co.uk

www.food.gov.uk

www.foodandmood.org.uk

www.mentalhealth.org.uk

BIBLIOGRAPHY

Clarke, J. (1998) Body Foods for Life. Weindenfeld & Nicolson ltd

Food Standards Agency. Manual of Nutrition (10th edition) FSA

Hardman, A. E. and Stensel, D. J. (2003) Physical Activity and Health. Routledge

National Institute for Clinical Excellence (2004) Eating Disorders:- Anorexia Nervosa, Bulimia Nervous and Related Eating Disorders

Webster-Gandy, J. (2006) Food and Nutrition. Family Doctor Books