

Factors for a balanced diet



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Anatomy and Physiology

Nutrition can be described as “ The intake of food, considered in relation to the body’s dietary needs” (WHO, 2018). To be healthy we should consume a balanced diet including foods from each section of the eat well plate. If you are not receiving the correct nutrition it can lead to health complications such as an increased risk of getting diseases and having a lower immune system. In the short term poor nutrition can cause stress, tiredness and our productivity, whereas overtime it can lead to obesity, tooth decay, diabetes, high blood pressure, osteoporosis, cancers and depression.

To achieve a balanced diet, you need to balance the fats and carbohydrates with foods with protein, vitamins and minerals. Fruit and vegetables should make up a third of your plate, it has been proven by eating 5 portions of fruit and vegetables a day that it can lead to a lower risk of heart disease, strokes and some cancers, starchy foods such as potatoes provide us with the fibres, vitamins and minerals that we need, calcium keeps your bones healthy and leads to a lesser chance of having bone related illnesses such as osteoporosis, when using spreads and oils use a lower fat one as this will mean your cholesterol level will remain low. If you have a balanced diet it can have a positive impact on the body such as reducing the risk of chronic diseases, further to this by receiving the correct nutrients it means that you have higher energy levels making it easier for you to exercise, it may also increase your lifespan and keep you looking healthier as you grow older, it has been found that those who eat a balanced diet experience lower levels of stress, inflammation and have a better immune system. Overall eating a healthy diet can raise your immunity so you are less prone to infections and

if your body does get an infection it can fight it off and you are less likely to be overweight and suffer from nutritional related disorders.

In addition," Both obesity and diabetes are closely related to diet and nutrition. Whereas diet can become the direct cause of obesity" (Handbook of food and nutrition, 2000, Pg. 565.) Eating a diet that can be described as unhealthy does not provide you with the necessary nutritional needs that your body requires. This means you are taking in too many bad and unhealthy foods and it causes health related issues. For example, obesity, Obesity can be defined as " a condition in which the fat stores are excessive for an individual's height, weight, gender and race to an extent that produces adverse health outcomes"(Omari, A. & Caterson, I. 2007, Pg. 233). Obesity causes many issues to a person physically for example, it has been known to cause cardiovascular disease, diabetes, joint problems, cancer and hypertension. If you carry the weight in your upper body such as your stomach, then it is more detrimental to your health as this is where your vital organs are kept and closer to the heart. According to Abdullah and Ian " Obesity particularly increases the risk of coronary heart disease in those younger than 50" (Omari, A. & Caterson, I. 2007, Pg. 242). As well as causing harm to the body physically obesity can have an impact on a person's mental health leading to low self-esteem, confidence issues and poor self-image. Further to this cardiovascular disease is very commonly linked to poor diet and nutrition, this can be linked to obesity as if the weight is carried high in the waist or hip then it's going to affect the organs. and can then lead to diabetes and hypertension. (Mann, J. & Chisholm, A. 2007, Pg. 287) To add on to this a lack of vitamins and minerals can cause health

complications. For example, a lack of Vitamin A can cause poor night vision and an increase infection in the nose and throat, lack of vitamin B can cause stunted growth and damage to the cornea, Vitamin c deficiency can cause scurvy which causes wounds to fail to heal and lastly lack of vitamin D can cause rickets. (Beckett, B. S., 1981)

Furthermore, certain chemicals found in food can have a massive impact on our anatomy and physiology. For example, food colouring can be particularly dangerous, such as quinoline yellow. Possible effects on the body can include dermatitis, Asthma, hives and other various forms of skin rashes. In addition, it can cause increase hyperactivity in children, and can cause respiratory irritation if it is ingested or inhaled. This can cause problems with the respiratory system and possibly cause life threatening conditions. From researching this chemical, it is evident that it does not have a good impact on the body and should be avoided as it can cause a lot of health problems that can consequently lead to more life-threatening conditions.

Moreover Preservatives such as sodium nitrate can have a negative impact on the body sodium nitrate is a salt product that is used to preserve food and make it taste better, it is essential to have some sort of salt in your diet but too much can cause health complications, e. g. it can lead to issues such as leukaemia, heart disease and other related cancers such as ovarian. If you consume too much sodium nitrate you may also be subject to nitrate poisoning, that mostly affects younger children and can cause a blood disorder.

Antioxidants are used to treat and fight infection in the body, this keeps us healthier, however they may not always be as good on the body as people think. Due to you taking in antioxidants it means that your body is unable to make them itself and this leads to an unbalance in the body. If you take a high dosage of antioxidants it can have a negative impact on your body as it can become toxic for example water soluble antioxidants vitamin B6 if taken in a high dosage can cause you to develop nerve damage, consequently vitamin C can cause nausea, abdominal cramps, fatigue and kidney stones. If you take antioxidants it can decrease the benefits you receive from exercise such as reducing your diabetes risk. Overall antioxidants are dangerous if heavily relied on as for example it is known to shorten people's lives.

Furthermore, Artificial sweeteners are known for their negative impacts on health. Aspartame is the sweetest artificial sweetener which means less of it must be used. There is a lot of controversial issues surrounding the use of aspartame in food as there has been a link between it and brain tumours. Eating or drinking anything that contains this can have possible side effects for your body such as phenylketonuria which means someone has too much phenylalanine in their blood which is found in most fizzy drinks, especially diet ones, This therefore can be toxic and life threatening to a person's health. Other side effects include cancer, seizures, headaches, depression, dizziness, weight gain, Alzheimer's disease and multiple sclerosis.

The NHS website states we consume too much sugar, approximately 140 teaspoons a week per person. In order to reduce our sugar intake we should cut down on bad sugary foods for example cereals contain a high regard of sugar so to cut this down try alternative breakfast ideas. Further to this main

meals contain high measures of sugar especially take away meals in order to reduce this we can become aware of the recommended sugar intake for the day.

Most of our sugar content comes from fizzy drinks, coke contains 17 cubes of sugar so instead of grabbing for this whenever your thirsty try for better alternatives such as water, milk, or water with a splash of fruit juice. If we follow these simple guidelines we can hopefully reduce the risk of developing diet related health problems.

According to the world health organisation we are to consume no more than 7 teaspoons of sugar which is roughly about 30 grams a day. One teaspoon of sugar equals 4 grams so it is easy to see how we can go over the amount we should be consuming daily. In addition, our bodies need some form of sugar to be able to function properly. In order for you to survive carbohydrates are broken down in to sugar to provide you with energy that will circulate around the body however consuming too much can cause your body to have health problems, for example if you eat too much sugar it can lead to obesity which in itself can cause type 2 diabetes, heart disease and even some cancers, and lastly it can lead to tooth decay.

Lastly, I will investigate natural and added sugars, Natural sugars are sugars already in foods for example fruits have natural sugar in them which is healthier for you whereas added sugar is sugar that has been added to foods which is bad for your body. The difference is that natural is good for your body as it provides fibre that slows down your digestion and in turn you will experience less of a sugar spike, however you still need to be careful with

the amount of natural sugar you consume as well. Consuming too much added sugar can lead to health problems such as becoming overweight, heart disease, Acne, Diabetes, Cancer, Depression, more prone to aging, it can also lead to liver and kidney issues.

To conclude I have done a lot of research into nutrition and can see the impact that it has on the body, if you consume a healthy diet rich in vitamins and minerals you will be less likely to be prone to disease such as heart disease, cancer and diabetes whereas if you eat a diet rich in fatty foods then you will be prone to health problems one of the main being obesity which leads to other health issues. Good nutrition is so vital in the body as it can mean that we are able to live a healthy lifestyle, there are great campaigns that are promoting switching to healthier diets to ensure people are preventing their chances of falling ill, for example food4thought and the 5 a day campaign further to this the national obesity forum is a charity that raises awareness about obesity and makes it a public issues and comes up with key ideas as to how it can be addressed. This all helps to ensure people are aware of the consequences of leading a bad diet.

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