

## 2013 Section B Q1

**(a) In relation to the information provided in the chart, comment and elaborate on the percentage of respondents consuming the recommended number of daily servings from each shelf of the Food Pyramid**

This chart shows us that in 1998, 40% of the population ate the recommended amount of carbohydrates and that it has decreased to 26% by 2007. In the 19<sup>th</sup> century, cereals, breads and potatoes were a popular staple food as they were produced in Ireland. However, nowadays many people have decreased their intake of these foods as they contain gluten, which is now a common intolerance. People also consume too much carbohydrates by large portion sizes.

The fruit and veg percentage has increased from 1998 from 56% to 65% in 2007. Today many people are more educated about eating the right amount of fruit and veg in order to prevent sickness and deficiency diseases e.g. night blindness and to include fibre in their diet to promote healthy digestive systems. There is a wide variety of fruit and veg available which is cheap, making it more appealing to people.

There has been a slight change regarding the consumption of dairy products, decreasing by 2%. Dairy products are very affordable and there's a wide variety of them. Many people in Ireland consume more than 3 servings per day which can have a negative affect e.g. high cholesterol or they can intake too little which can cause osteoporosis or weak bones and teeth in kids.

The consumption for top shelf foods has remained the same at 14%. This is quite a negative result as the rest of the population over-consume foods high in fat, sugar and salt. This leads to many health problems like obesity, diabetes and high blood pressure.

## **(b) Identify and give an account of the main factors that are contributing to the prevalence of obesity in Ireland.**

Many people aren't exercising which leads to obesity. Their energy intake is greater than their energy output. People drive everywhere or get the bus as well as sitting down all day in a sedentary job. This results in many people being inactive all day and when they return home from work they are too tired to exercise.

Today many people regularly consume processed foods and takeaways which contributes to the prevalence of obesity. These foods are high in fat and salt which can cause many health problems including obesity.

A lot of people overeat and snack on unhealthy foods e.g. crisps which are high in fat, salt and sugar. Over-consumption of these foods leads to obesity. People should eat healthier foods like nuts and fruit as snacks.

People's portion sizes are a big factor of the prevalence of obesity today. Some people's portion sizes nowadays can be too big. Recommended portion sizes should be used to provide the correct amount of food that is needed by the person. If not they can overeat, causing obesity.

## **(c) Outline the significance of fatty acids in the diet**

Unsaturated fatty acids help to reduce LDL cholesterol and increase HDL cholesterol which results in decreasing the risk of CHD.

Omega 3 fatty acids are good for the body as they improve brain activity and also reduce risks of certain cancers.

**(d) Describe the structure of each of the following: cis fatty acids, trans fatty acids and omega 3 fatty acids.**

*Cis fatty acids* – Have two hydrogen atoms on the same side of the double bond (below or above).

*Trans fatty acids* – The hydrogen atoms are on different sides of the double bond.

*Omega 3 fatty acids* – Double bond is between the 3<sup>rd</sup> and 4<sup>th</sup> carbon atoms along the chain.

**(e) Discuss how food labelling assists consumers in making informed food choices.**

Food labelling informs consumers where the food is from as they may prefer to support local businesses or have a lower carbon footprint.

Food labelling shows the use by dates and best before dates so the consumer knows when to eat them by preventing waste of food, money and preventing the risk of sickness.

It also informs consumers what ingredients are in the food to prevent allergic reactions e.g. nuts which are serious hazards.

It shows instructions informing the consumer how to store the food e.g. in a cool, dry place. This helps to reduce the rate at which the food will spoil.