Food Science

You will create a report (at least 7 pages) in which you research the science of food consumption.

You will be required to research the following 7 topics:

* Conversion of Food into Energy
* Basic Nutrients
* The Importance of Water
* Carbohydrates
* Minerals
* Vitamins
* Food Interchange and Interdependence of Nutrients

In your research you will each need to:

* Distinguish how the body converts food to energy.
* Demonstrate understanding of the process of metabolism.
* Explain the difference between calorie and kilojoule.
* Identify basic nutrient sources and their functions
* Explain the purpose of dietary standards
* Determine the functions and importance of water, as well as the results of water deficiency.
* Differentiate among the 3 types of carbohydrates and explain the purpose of each.
* Assess the importance of fibre in the diet.
* Identify the composition the composition, functions and sources of fats.
* Analyze the current information about the role of fat intake on heart conditions.
* Identify and describe the components of protein.
* Describe digestion and metabolism of protein.
* Identify sources of iron, calcium, phosphorus, iodine and fluorine.
* Identify micro-nutrients that are important to humans.
* Describe mineral function.
* Compare fat-soluble and water-soluble vitamins.
* Analyze the need for, and the hazard of, vitamin supplementation.
* Recall “Canada’s Food Guide” and it’s recommendations.

Your report should be a comprehensive interpretation of the science of food – you need to make a complex subject seem normal - use diagrams, personal accounts and expository language to convey your findings. Your report must contain 3 citations and cannot be plagiarized.

50 marks