## **KNOWLEDGE**



## Biology Topic B7 Non-communicable diseases

## **ORGANISER**

Section 1: Key Definitions	
Non-communicable disease	Long term or slow progressing disease not caused by infectious pathogens.
Risk factor	Characteristic or exposure that increases the likelihood if developing a disease.
Correlation	When one thing changes when the other one does. e.g more tomatoes eaten, less heart disease.
Casual Link/Cause:	When one factor changes, the other one changes as well an there is evidence to show that the change of one factor actually causes the other to change
Cancer	Non-communicable disease caused by uncontrolled cell division.
Causes of cancer	Ionizing radiation e.g Gamma Rays, Viral infection, Chemicals in food or cigarette, Inherited mutations in the gene.
Casual Link/Cause:	When one factor changes, the other one changes as well an there is evidence to show that the change of one factor actually causes the other to change
Causes of cancer	Ionizing radiation e.g Gamma Rays, Viral infection, Chemicals in food or cigarette, Inherited mutations in the gene.
Benign tumours	Form in one place and do not spread to other tissues
Malignant tumours	May spread to different tissues and form secondary tumours
Lifestyle risk factors for cancer	Smoking, obesity, common viruses and UV light. Genetic factors are also risks for some cancers.
Carcinogens	Agents that cause cancer or increase the risk of causing cancer
Ionizing radiation	Radiation that penetrates the cells and damages chromosomes, causing mutations in the DNA.
Treating cancer	Radiotherapy – cancer cells are destroyed by targeted doses of radiation  Chemotherapy – chemicals are used to stop cancer cells dividing or causing the cancer cells to 'self destruct'.
Smoking	Can cause heart disease and lung cancer Fetus exposed to smoke has restricted oxygen, which can lead to premature birth, low birthweight, and stillbirth Tobacco smoke contains carbon monoxide (a poisonous gas) and nicotine (addictive chemical)
Diet	Affects risk of developing cardiovascular diseases through cholesterol levels and through obesity.  Obesity is a risk factor for type 2 diabetes  Lack of exercise is a risk factor for type 2 diabetes
Alcohol	Can damage the liver and cause cirrhosis and liver cancer Can cause brain damage and death Alcohol taken by pregnant women can affect the development of the unborn baby





