





GCSE (9-1) Combined Science (Biology)

Health, disease and the development of medicines

Specification/Revision Checklist



Reference	Description	I understand this 	I need to check this 	I need help with this 	Revised 
5.1	Describe health as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity, as defined by the World Health Organisation (WHO)				
5.2	Describe the difference between communicable and non-communicable diseases				
5.3	Explain why the presence of one disease can lead to a higher susceptibility to other diseases				
5.4	Describe a pathogen as a disease-causing organism, including viruses, bacteria, fungi and protists				
5.5	Describe some common infections, including: a) Cholera (bacteria) causes diarrhoea b) Tuberculosis (bacteria) causes lung damage c) Chalara ash dieback (fungi) causes leaf loss and bark lesions d) Malaria (protists) causes damage to blood and liver e) HIV (virus) destroys white blood cells, leading to the onset of AIDS				
5.6	Explain how pathogens are spread and how this spread can be reduced or prevented, including: a) Cholera (bacteria) - water b) Tuberculosis (bacteria) - airborne c) Chalara ash dieback (fungi) - airborne d) Malaria (protists) – animal vectors				
5.8	Explain how sexually transmitted infections (STIs) are spread and how this spread can be reduced or prevented, including: a) <i>Chlamydia</i> (bacteria) b) HIV (virus)				

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5.12	Describe how the physical barriers and chemical defences of the human body provide protection from pathogens, including; a) physical barriers including mucus, cilia and skin b) chemical defence, including lysozymes and hydrochloric acid.				
5.13	Explain the role of the specific immune system of the human body in defence against disease, including: a) exposure to pathogen b) the antigens trigger an immune response which causes the production of antibodies c) the antigens also trigger production of memory lymphocytes d) the role of memory lymphocytes in the secondary response to the antigen.				
5.14	Explain the body's response to immunisation using an inactive form of a pathogen.				
5.16	Explain that antibiotics can only be used to treat bacterial infections because they inhibit cell processes in the bacterium but not the host organism.				
5.20	Describe that the process of developing new medicines, including antibiotics, has many stages including discovery, development, preclinical and clinical testing.				
5.23	Describe that many non-communicable human diseases are caused by the interaction of a number of factors including cardiovascular diseases, many forms of cancer, some lung and liver diseases and diseases influenced by nutrition.				
5.24	Explain the effect of lifestyle factors on non-communicable diseases at local, national and global levels, including: a) exercise and diet on obesity and malnutrition, including BMI and waist : hip calculations, including the BMI calculation b) diet on malnutrition c) alcohol on liver diseases.				

5.25	<p>Evaluate some different treatments for cardiovascular disease including:</p> <p>a) life-long medication</p> <p>b) surgical procedures</p> <p>c) lifestyle changes.</p>				
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