My assignment

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**Level**; 200

## Answers

## AN OVERVIEW OF THE VIRUS

The corona virus is an infectious disease that mainly affects the respiratory systems of humans eaily. The virus doesn't show its symptoms until about 7- 14 days. The virus has been sad to affect mainly and majorly older people, and individuals who already have underlying medical problems such as cancer, chronic respiratory disease or cardiovascular disease and those who smoke on a regular basis.

The respiratory system has a conducting portion is made of the nasal cavity, pharynx, larynx, trachea, wind pipe, two primary bronchi, secondary, tertiary and terminal bronchioles. The conducting passages are called ducts, and are lined by ciliated pseudo stratified columnar epithelial tissue which includes mucus secreting goblet cells, the ciliary beating sweeps mucus and dust it carries up the bronchi and trachea towards the pharynx where it can be swallowed. The alveoli is lined by a simple squamous epithelium.

The two nasal cavities open to the atmosphere, the nasal chamber is lined by ciliated columnar epithelium which is doted with mucus cells that secrete mucus. Pharynx is a common passage of the respiratory and digestive system, it has 3 parts; Anterior nasal pharynx, Middle oral pharynx and Posterior laryngeal pharynx. The pharynx is lined by both stratified squamous and ciliated pseudo stratified epithelium with goblet cells. Regions of the pharynx that are likely to be roughened up by food are lined by stratified squamous epithelium. The pharynx opens into the larynx and a regular tube through the opening called the glottis. Larynx controls the air pathways and is a specialized organ responsible for

production of voice. The wall of the larynx has a complex structure made up of a number of cartilages, membranes and muscles. It is lined by ciliated pseudo stratified columnar epithelium.

The trachea is a fibrobelastic cartilaginous tube. The trachea cylindrical tube about 12cm starting from the larynx to the bifurcation of the two primary bronchi, it strengthened with 16-20 rings of hyaline cartilages that are connected by dense fibroelastic ligaments. Trachea is lined with a layer of pseudo stratified ciliated columnar epithelium. Mucus helps to moisten and protect the airways. The trachea divides into two tubes called bronchi and each bronchus enters the lungs at the hilum. They have a similar structure to that of the trachea and they are lined by pseudo stratified columnar epithelial tissue. Each primary bronchus divides into smaller secondary bronchi, there are 3 in the right lung and 2 in the left lung, the secondary bronchi further subdivide to give rise to tertiary bronchi and terminal bronchioles with diameter less than 1 mm. it is lined by simple cuboidal epithelium.

In relation to the conducting portion attacked by corona virus, Gas exchange is carried out by small alveoli sacs that make up most of the space in the lungs, the inhaled virus likely binds to the epithelial cells in the nasal cavity which dries out the mucus, then passes through the trachea and dries out the mucus there as well and passes through the air sac through the blood air barrier and then passes through the thin walls of the alveoli to the red blood cells and surrounding capillaries. The way oxygen is transferred to the blood and carbon dioxide is returned to the alveoli to be released from the lungs is the same way the virus enters into the body of an individual. The ciliated cells are primary cells infected in the conducting air ways. The corona virus migrates down the respiratory tract from the nasal cavities to pharynx to larynx, to trachea where it incubates for a few days then into the lungs where it collapses the alveoli enough for the patient to start developing other respiratory tract infections. The corona virus mainly attacks the cells of the lungs causing the virus to spread round the body by replicating.

## REFERENCES

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