

Name _____

The Exquisite Excretory System

Open-Ended Response Answer Key

1. The kidneys are considered the superstar organs of the excretory system because they filter the blood, remove waste products, regulate substances in the body, and play a vital role in maintaining overall health.
2. If the excretory system malfunctions and waste products build up in the bloodstream, it can lead to toxic levels of substances in the body. This can result in kidney damage, organ failure, and various health problems such as high blood pressure and electrolyte imbalances.
3. When the excretory system does not regulate blood pressure correctly, it can lead to conditions like hypertension (high blood pressure), which can increase the risk of heart disease, stroke, and other cardiovascular problems. Symptoms may include dizziness, headaches, and fatigue.
4. The body's acid-base balance refers to the pH level of the blood, which needs to be maintained within a specific range for proper bodily functions. This balance is important for enzymatic reactions, cell function, and overall health. An imbalance can lead to acidosis (too much acidity) or alkalosis (excess alkalinity), affecting bodily functions and potentially causing health issues.

