To achieve the primary goal of reproduction, the reproductive system requires a lot of energy (Jones & Lopez, 2017). This requisite energy can be achieved through aerobic respiration which requires oxygen and respiratory substrate, often glucose. The circulatory system ensures that oxygen is transported from the lungs to the cells and tissues of the reproductive system where the demand is high. During gestation, for instance, more oxygen is transported to the uterus where the fetal blood with fetal hemoglobin can access optimal oxygen concentrations to facilitate its anatomical development, growth, and survival (Peate, 2018). Other organs of the respiratory system that are actively involved in the biosynthesis of different molecules including the gametes also require large amounts of energy hence have a greater demand for oxygen and nutrients. At the same time, the reproductive system generates metabolic wastes that are transported by the circulatory system to the points of excretion thereby preventing the development of toxic environments within the tissues of the reproductive organs (Peate, 2018). Therefore, the performance and health of the reproductive system are heavily dependent on the optimal functioning of the circulatory system.

Summarized by © lakhasly.com