Biology essay circulatory and digestive system working together



Circulatory system is an organ system where nutrients pass through. Cardiovascular and lymphatic systems make up the complete circulatory system. Arteries, veins, and the heart are the main organs in the circulatory system. Examples of nutrients that are passed through are electrolytes, amino acids and lymph. Also other substances passed through the specific organ system are gases, hormones and blood cells to and from cells. The reason the substances are passed through the circulatory system is to fight diseases and stabilize body temperature and bodies pH, and also to maintain homeostasis. Digestive system is made up of the digestive tract, which is a series of hollow organs which are joined in a long and twisting pipe like tube from the mouth to the anus. Organs of the digestive tract are made up out of mouth, esophagus, and stomach, and small intestine, large intestine also called as the colon, rectum, and anus. The way that the digestive system works is pretty simple to remember. First you bite on something eatable, then the enzymes in your saliva start digesting the carbohydrates. Once the food bits are in your stomach, they are drowned in gastric juice, which is made up of the enzyme called pepsin and a acid called hydrochloric acid. The enzyme and the acid start to break down the food and by doing that, nutrients are released. Digested food then from the stomach is pumped into the small intestine, which the gets flooded by fluids and enzymes from the liver, or better know as the bile, and from the pancreas. After when the chemicals have been broken down the molecules from the food into its smallest form, they are called glucose, which is a sugar molecule. Important and useful molecules pass through the walls of the small intestine into the bloodstream. Proteins on the other hand can be reduced into amino acids

and fats can be reduced to fatty acids and glycerol. The smallest forms of https://assignbuster.com/biology-essay-circulatory-digestive-system-workingtogether/ the usable nutrients pass through the walls of the small intestine and are then absorbed into the bloodstream. The "leftover" material continues its journey on to the large intestine, where fecal matter — poop- is created. The large intestine absorbs water and some electrolytes from the "leftover" material. This is done for that the body doesn't suffer from dehydration. If too little water is absorbed , diarrhea occurs and constipation if vice versa. Once feces are created they pass down to the colon, where they are stored. A signal to your brain is sent, when the colon is full, telling you that you need to relax your anal sphincter and release the feces. The digestive and circulatory systems working together is a huge deal in our bodies. The digestive system provides the circulatory system with all the nutrients the blood and body need. After the digestive system provides the body with some energy gathered from food and that given energy then feeds the muscles surrounding the heart. Daniel Aaltonen — 12. 1, 2012