

Testing solutions for the presence of organic molecules assignment



Thus, in the course of doing the lab it could be concluded that organic molecules were in fact present. All living things are composed of atoms. Atoms form when molecules bond to one another. Inorganic molecules are associated with nonliving things while organic molecules are associated with living things. In this laboratory, organic molecules of cells were studied: Carbohydrates (inconsistencies, disaccharide, polysaccharides), proteins, and lipids (i. . , fat). This study was performed in order to specifically test for the three organic molecules listed above within several different solutions in order to either confirm or deny their presence. To test the hypothesis of the solutions in the study containing organic molecules, several solutions were obtained in the lab and tested with iodine for starches, Benedict's agent for sugars, and Beirut reagent for lipids.

Materials used in this study included: 1 wax pencil for marking test tubes, 5 clean test tubes marked at the LLC level each for the test for starches, Iodine solution for actually testing for the presence of starch, a potato/onion for further starch testing, 1 razor blade for slicing the potato/onion thinly for microscopic viewing, 5 more clean test tubes for the sugar test, Benedict's reagent to react with the presence of sugar in order to prove or disprove its presence, 4 more clean test tubes to test solutions for proteins, Beirut reagent to show the presence or lack thereof of proteins.

Results: 1 . Testing for Starches: 5 tubes were tested for the presence starch. 2 of the 5 tubes tested positive for starch, while 3 tested negative. The 2 positive tubes were: Starch suspension and potato juice. The 3 negative tubes were water, onion juice, and glucose solution. 2. Testing for sugars: 5

tubes were tested for the presence of sugars. Tube #1 (Water) - No sugars present, Tube #2 (Glucose solution) - Very high amount of sugars present.

Tube #3 (Starch suspension) - No sugar to low sugar present. Tube #4 (Onion juice) - Moderate to high sugar levels present. Tube #5 (Potato juice) - Low amount of sugars present. 3. Testing for proteins: 4 tubes were tested for the presence of proteins. 2 of the 4 tested positive for protein, while 2 tested negative. Tube #1 (Distilled water) - No proteins present. Tube # 2 (Albumin) - Proteins present.

Tube #3 (Pepsin) - Proteins present. Tube #4 (Starch) - No proteins present. From doing this experiment, one can observe the data and conclude that organic molecules absolutely are found to be present in solutions sampled from organic plants or creatures. Since the knowledge of this subject is already very, ere, very well established and proven, the reader would have an easy time relating the results of this study to those before it.

One could speculate that if one were to take samples from multiple organic materials, the results and molecular make up would all be very similar to one another due to the similarities that all organic creatures share when it comes to their structures and ways of utilizing energy. The original hypothesis that organic molecules would indeed be found in samples taken from organic material was born out by the results indicating that certain solutions did in fact contain them.