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Biochemistry	المادة باللغة الانجليزية
الكيمياء الحياتية	المادة باللغة العربية
الثالثة	المرحلة الدراسية
م م اسامة حامد عبدالله	اسم التدريسي
Iodine Test	عنوان المحاضرة باللغة الانجليزية
كشف الايودين	عنوان المحاضرة باللغة العربية
6	رقم المحاضرة
1. Abousalah, K. and Alnaser, A., 1996, Principles of Practical Biochemistry. 2. Farid Shokry Ataya, 2007, Practical Biochemistry. AlRoshd Publisher, Riyadh, Saudi Arabia. 3. Milio, F. R. and Loffredo, W. M., 1995, Qualitative Testing for Amino Acids and Proteins, Modular Laboratory Program in	المصادر والمراجع



## ➤ Iodine Test

- This test differentiates between polysaccharides such as (starch, glycogen, dextrin), and other sugars (monosaccharides, disaccharides) . Some polysaccharides like starch (amylose, amylopectin), glycogen, and dextrin give individual colors when iodine is added to them.
- The idea of this test is based on a physical color phenomenon, not a chemical reaction, as iodine is positioned between the folds of carbohydrate chains of amylose molecule, for example, and gives a dark blue color resulting from the reflection of light. This color disappears with heating and returns with cooling again. Amylopectin gives a violet color with iodine, while glycogen gives a brown color. Dextrin gives colors ranging from light violet, depending on the number of glucose units in the dextrin molecule.

## ➤ Method

- To 1mL of 1% sugar sample in a test tube, add 5 drops of iodine solution, mix gently, and observe the color obtained.

Sample	Observation	Inference
Sugar sample	Individual color	Presence of polysaccharides
Sugar sample	Color absence	Presence of other sugar

