

الصيدلة	الكلية
العلوم المختبرية السريرية	القسم
Practical Biochemistry I	المادة باللغة الانجليزية
الكيمياء الحياتية العملي	المادة باللغة العربية
الثالثة	المرحلة الدراسية
م.م. عبدالرحمن خالد مصدق	اسم التدريسي
Iodine Test	عنوان المحاضرة باللغة الانجليزية
كشف الايودين	عنوان المحاضرة باللغة العربية
6	رقم المحاضرة
Abousalah, K. and Alnaser, A., 1996, Principles of Practical Biochemistry	المصادر والمراجع
Farid Shokry Ataya, 2007, Practical Biochemistry. AlRoshd Publisher, Riyadh, Saudi Arabia	

### محتوى المحاضرة

#### ➤ Iodine Test

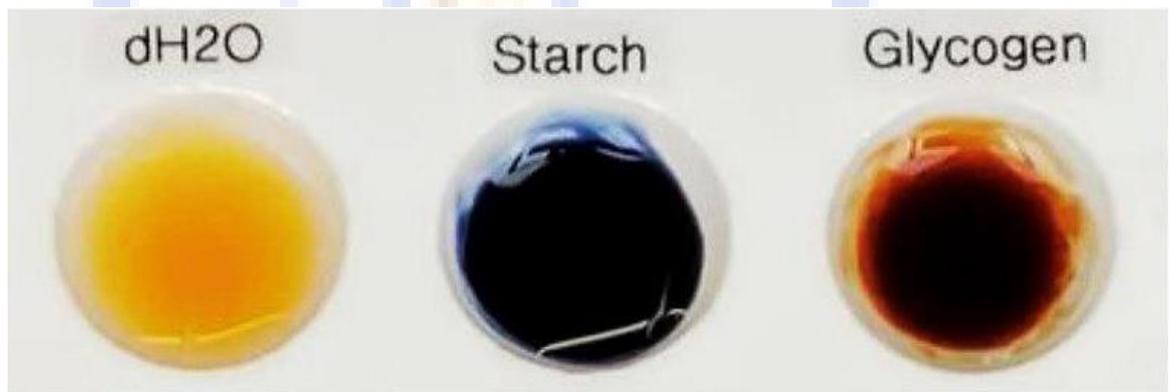
- This test differentiate between polysaccharides such as (starch, glycogen, dextrin), and other sugars (monosaccharides, disaccharides) . Some polysaccharides like starch (amylose, amylopectin), glycogen, and dextrin give individual colors when iodine is added to them.
- The idea of this test is based 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
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