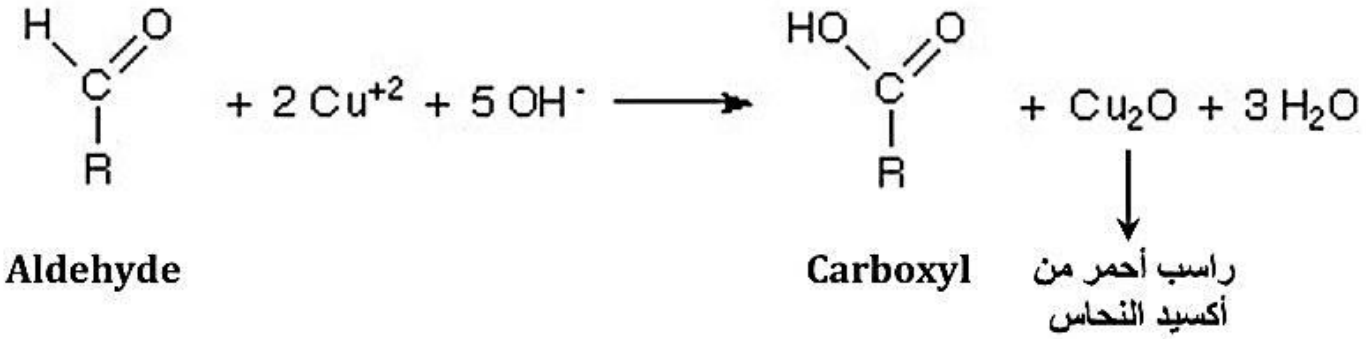
الكلية	الصيدلة
القسم	فرع العلوم المختبرية والسريرية
المادة باللغة الانجليزية	Biochemistry
المادة باللغة العربية	الكيمياء الحياتية
المرحلة الدراسية	الثالثة
اسم التدريسي	م م اسامة حامد عبدالله
عنوان المحاضرة باللغة الانجليزية	**Benedict Test**
عنوان المحاضرة باللغة العربية	كشف بندكت
رقم المحاضرة	**3**
المصادر والمراجع	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

Benedict Test

- This test distinguish between reducing sugars like (glucose, fructose, maltose), and non-reducing sugars like (sucrose).
- Benedict's reagent a solution containing copper ions in basic medium.
- Alkaline copper ions solution reduced by sugars that have a free aldehyde or ketone group, the copper ions oxidize the aldehyde or ketone group to a carboxyl group, lead to the formation of a carboxylic acid. The copper ions are reduced to copper and form a red precipitate of copper oxide.



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➢ Method

➢ To 1ml of 1% sugar sample in a test tube, add 2 ml of Benedict's reagent(sodium citrate, sodium carbonate, and copper sulfate), and mix the above gently and keep it in a water bath at 80°C for 5min, and allow it to cool off, the formation of red precipitate is a positive test.

Sample	Observation	Inference
Sugar sample	Red precipitate	Presence of reducing sugar
Sugar sample	No red precipitate	Presence of non reducing sugar