

# Tests for Biological Molecules

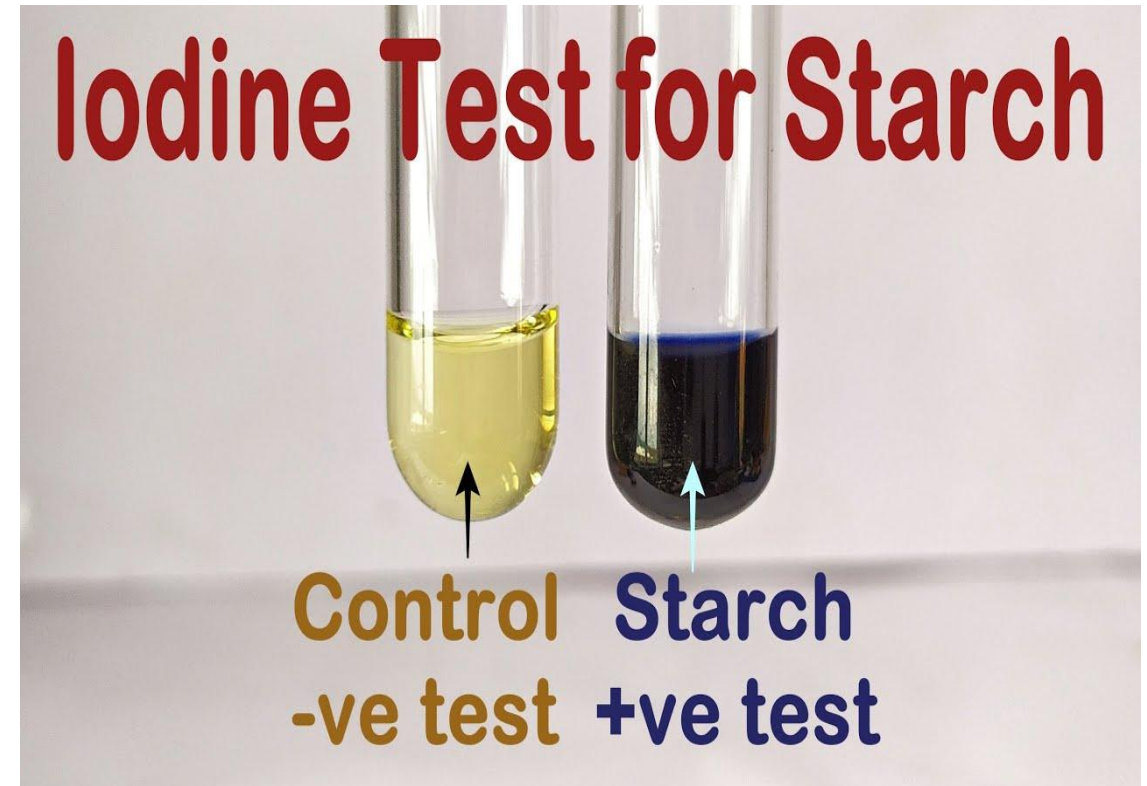
---

PREPARED BY: BESIR ZENELI

# 1. Iodine Test For Starch

---

- Summary: Purpose: Detecting the presence of starch.
- Principle: Iodine reacts with starch, forming a blue-black color.
- Observations: Brown to blue-black color change indicates the presence of starch.
- Application: Used in biology and food science.



# Animation – Iodine Starch

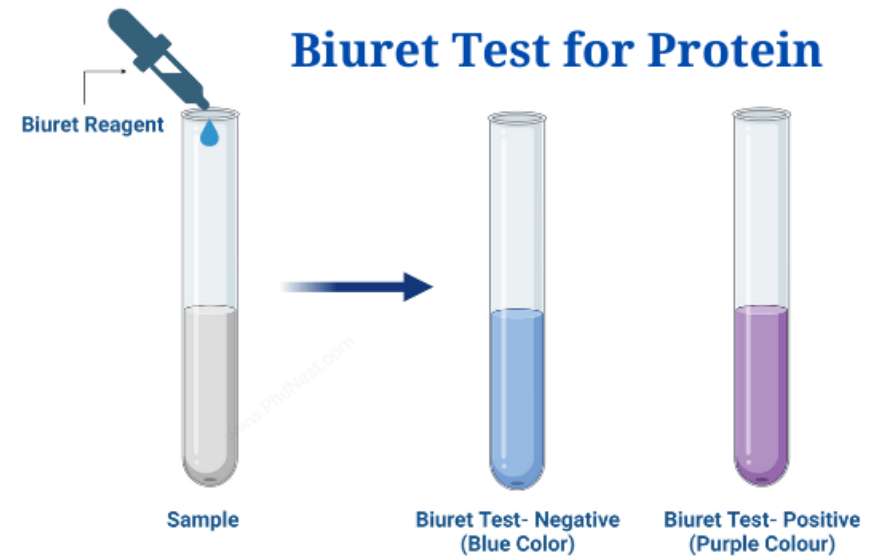
---

<https://www.youtube.com/watch?v=YI-Imfp-f3g>

## 2. Biuret Test For Protein

---

- Summary: Purpose: Identifying the presence of proteins.
- Principle: Biuret reagent reacts with proteins, turning the solution purple.
- Observations: Blue to purple color change indicates the presence of proteins.
- Application: Important in biochemistry and food analysis.



# Animation – Biuret Protein

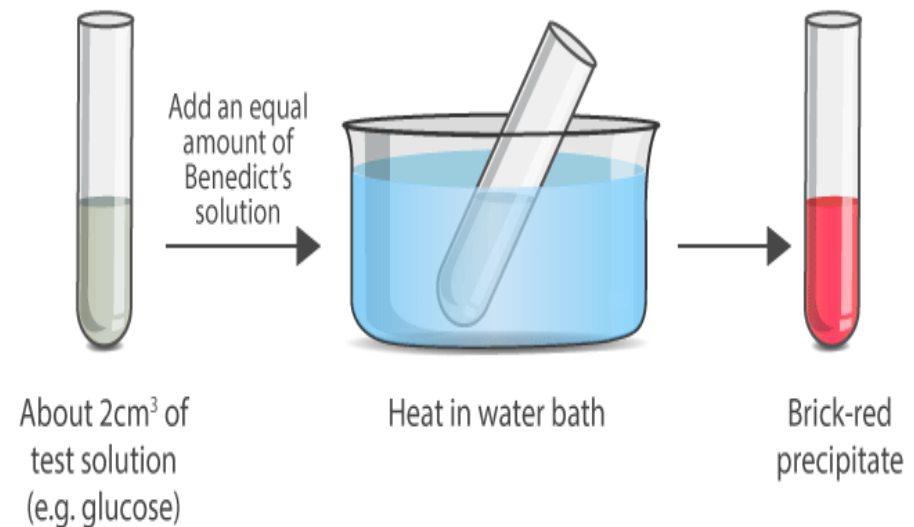
---

<https://www.youtube.com/watch?v=pDfBOf3seUc>

# 3. Benedict's Test For Glucose

- Summary: Purpose: Detecting the presence of glucose.
- Principle: Benedict's solution reacts with glucose when heated, changing color.
- Observations: Blue to green, yellow, or brick-red color change indicates presence of glucose.
- Application: Used in food industry and clinical chemistry.

## BENEDICT'S TEST



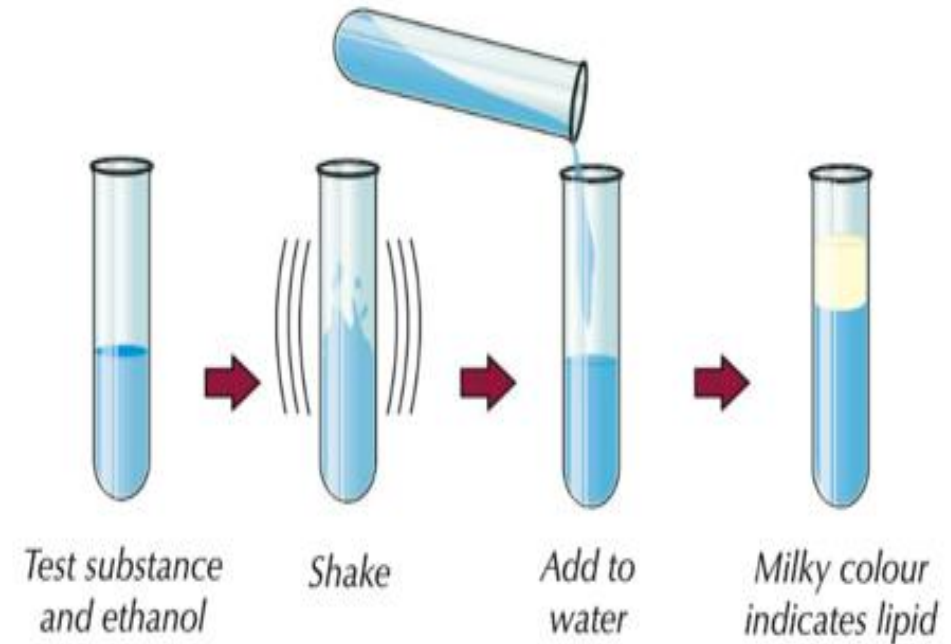
# Animation – Benedict Glucose

---

<https://www.youtube.com/watch?v=HxevnEdU9AI>

## 4. Ethanol Emulsion Test For Fats

- Summary: Purpose: Indicating the presence of fats.
- Principle: Fats, being hydrophobic, form emulsions when mixed with ethanol.
- Observations: Formation of a cloudy or milky emulsion.
- Application: Useful in food and lipid analysis.



**Figure 9:** The emulsion test for lipids.



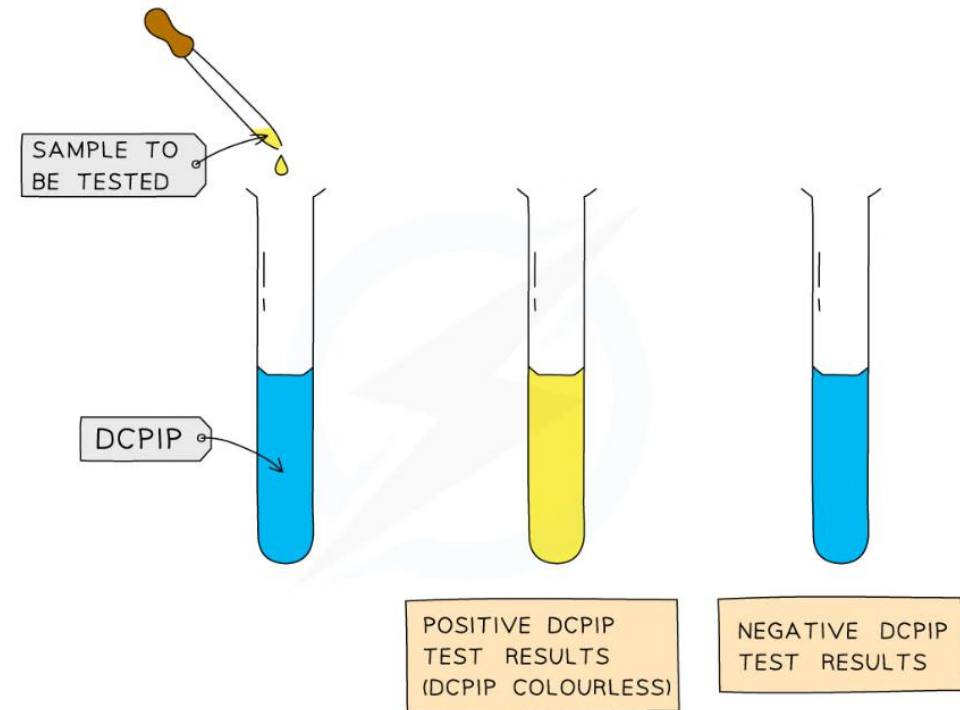
# Animation – Emulsion Lipids

---

<https://www.youtube.com/watch?v=wScbwdrLucA>

# 5. DCPIP Test for Vitamin C

- Summary: Purpose: Detecting the presence of vitamin C (ascorbic acid).
- Principle: DCPIP changes color when it reacts with vitamin C.
- Observations: Color change from blue to colorless or pink.
- Application: Applied in nutritional analysis and pharmaceuticals.



Copyright © Save My Exams. All Rights Reserved.

# Animation – DCPIP Vitamin C

---

<https://www.youtube.com/watch?v=tnEYA8Nd4o8>