



**Detection of ketone bodies in urine.**

- Ketone bodies are acetone , acetoacetic acid and B- hydroxybutyric acid.
- Normal level of ketone bodies in urine less than 18 mg/day.
- Ketonuria means presence of ketone bodies in urine in abnormal concentration.

Causes of ketonuria :

Defect in carbohydrate metabolism as in,

1- ketosis

2-diabetes mellitus

3-low carbohydrate diet

4-starvation

## Detection of ketonuria by Rothera test:

1-saturate urine sample by ammonium sulfate

2-in test tube add 5ml of saturated urine sample +2ml of conc. Ammonia solution + 3 drops of 5% sodium nitroprusside

3- mixing

# Result:

Permengnate color appear.....+ve ketonuria.

No permengnate color.....-ve ketonuria.

*Thank  
You!*

