

Blood Urea

Presented By

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What is urea?

- **Urea is the main end product of protein metabolism.**
- **It is formed by removal of amino group from amino acids in liver and excreted in urine.**
- **Urea represents 50% of non protein nitrogen of normal blood.**



- Normal blood contains **15-40 mg/dl** of urea
- In adults over 60 years it rises to **50 mg/dl**
- During pregnancy it is **15-20 mg/dl**
- Raised values are seen in dehydration
- In renal failure it rises up to **500 mg/dl**
- In severe liver disease blood urea is decreased



Reference values:

- **Newborns (< 10 days) : 6.4-53.5 mg/dl**
- **Adults (12-60 years) : 15-40 mg/dl**

Physiological:

- *Increase:*

It occurs in normal people on high protein diet.



- **Decrease:**
 - **In infants**
 - **Pregnancy**
 - **Low protein and high carbohydrates diet**



Pathological:

- **Increase:**
 - **Excessive formation: increased protein catabolism in fever and sepsis.**



➤ **Faulty excretion:**

- **Pre-renal failure: a low renal blood supply leads to reduced GFR ex: CHF**
- **Renal failure: damage to nephrons leads to decreased urine formation and excretion ex: nephritis**
- **Post-renal failure: urinary tract obstructions**



- **Decrease:**

In transfusion of glucose solution due to dilution of body fluids and reduced protein catabolism

What are medicines that increase blood urea?

- *Amphotericin B*
- *Nafcilline*
- *Gentamicin*
- *Diuretics*
- *Corticosteroids*



FREE CALL CONFERENCE

Meeting ID:

hayderpharmacist

الساعة 11 صباحا ليوم الاربعاء المصادف

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