

Urea Nitrogen Information Sheet

Urea and Urea Nitrogen

Urea is a waste product from the breakdown of proteins within the body. It is usually removed from the body by the kidneys. Urea levels can be assayed by measuring the whole urea molecule or just the nitrogen component, which is known as urea nitrogen or blood urea nitrogen (BUN). Measurements of urea in a blood sample are useful for the evaluation of kidney function and metabolic health (1).

What are normal blood urea nitrogen levels?

Urea nitrogen levels vary by age and gender. Children tend to have lower urea nitrogen levels with levels increasing in the teenage years. Adult females have levels between 7.0 and 20.1 mg/dL, while adult males have levels between 8.4 and 25.7 mg/dL (2).

What influences urea levels?

Kidney damage and reduced kidney function inhibit the removal of urea from the blood and result in high blood urea levels. Various other factors can also result in elevated urea, including dehydration, urinary tract obstruction, congestive heart failure, shock and stress, severe burns, and gastrointestinal bleeding.

Reduced urea in the blood is rare, but may indicate liver disease, malnutrition or overhydration (3).

What are signs of kidney damage?

Often there are no obvious symptoms during the early stages of kidney disease (4). However, early detection of abnormal kidney function is important, because early treatment usually slows disease progression.

The initial symptoms of kidney complications can include:

- Muscle cramps
- Nausea
- Lack of appetite
- Insomnia
- Swelling in the feet and ankles
- Frequent urination
- Puffiness around the eyes
- Dry and itchy skin
- Foamy urine

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Where can I find more info?

Visit www.genetrackdiagnostics.com for full test information, including specimen collection requirements

CONTACT US:

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References:

- (1) Lyman JL. (1986). Blood urea nitrogen and creatinine. Emergency Medical Clinics of North America. 4(2), 223-233.
- (2) Alinity c Urea Nitrogen Reagent Kit. [Package Insert]. s.l. : Abbott GmbH & Co, 2018.
- (3) Lum G, Leal-Khoury S. (1989). Significance of low serum urea nitrogen concentrations. Clin Chem, 35(4), 639-640.
- (4) Chronic kidney disease (CKD). American Kidney Fund.

NOTE:

This brochure is provided for general information purposes only. It is not intended to replace medical advice from a health professional.