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**Lab Dept:** Chemistry

**Test Name:** **GLUCOSE**

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***General Information***

**Lab Order Codes:** GLUC

Note: Test is also included in the [Basic Metabolic Panel](#) (PR7), [Comprehensive Metabolic Panel](#) (PR12) and [Renal Panel](#) (RENP).

**Synonyms:** Fasting Blood Sugar

**CPT Codes:** 82947 – Glucose; quantitative, blood

**Test Includes:** Glucose concentration reported in mg/dL.

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***Logistics***

**Test Indications:** Glucose is derived from the breakdown of carbohydrates in the diet and in the body stores. The glucose level in the blood is maintained within a narrow range by regulatory hormones such as insulin, glucagons, or epinephrine. The most frequently encountered disorder of carbohydrate metabolism is high blood sugar due to diabetes mellitus. Hypoglycemia is a blood glucose concentration below the fasting level.

**Lab Testing Sections:** Chemistry

**Phone Numbers:** MIN Lab: 612-813-6280

STP Lab: 651-220-6550

**Test Availability:** Daily, 24 hours

**Turnaround Time:** 30 minutes

**Special Instructions:** N/A

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***Specimen***

**Specimen Type:** Blood

**Container:** Green top (Li Heparin) tube **preferred**  
Alternate tube: Red, marble or gold top tube

**Draw Volume:** 0.6 mL blood

<b>Processed Volume:</b>	0.2 mL serum/plasma
<b>Collection:</b>	Routine collection. Mix tubes containing anticoagulant by gentle inversion.
<b>Special Processing:</b>	Lab Staff: Centrifuge specimen, remove serum/plasma aliquot into a plastic sample cup. Store at refrigerated temperatures.
<b>Patient Preparation:</b>	None
<b>Sample Rejection:</b>	Mislabeled or unlabeled specimen

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***Interpretive***

<b>Reference Range:</b>	<b>Age</b>	<b>Range (mg/dL)</b>
	Newborn:	60 – 90 mg/dL
	1 month – 12 years:	60 – 105 mg/dL
	>12 years:	70 – 100 mg/dL

**Critical Values:** All ages: <50 or >300 mg/dL

**Limitations:** Glucose concentrations are decreased by excess hemolysis, excess bilirubin and excess lipemia.

**Methodology:** Hexokinase Ultraviolet (UV)

**References:** GLUC Flex® reagent cartridge insert sheet PN 717040.001 (Issue Date 2008-02-29) Rev C

Clinical Significance, Dade Behring Inc., Glasgow Business Community, Mailbox 531, P.O. Box 6101, Newark, Delaware 19714

Jacobs & DeMott Laboratory Test Handbook (2001) Lexi-Comp, Inc, Hudson, OH, 5th Edition

Biorad Liquichek Control Product inserts, Bio-Rad Laboratories, Irvine, CA 92618

**Updates:**  
 2/17/2005: Critical value for Newborns <40 or >160 mg/dL removed. Critical value range made consistent for all ages.  
 8/28/2005: Turnaround time previously listed changed from 4 hours to 2 hours.  
 8/19/2009: Turnaround time previously listed as 2 hours.  
 2/8/2016: Update alt tube types

