



CAPT_GLU_0600 Glucose Ranges - Meter, Quality Controls and Adult Ranges

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Glucose Ranges – Meter, Quality Controls and Adult Ranges

CAPT_GLU_0600

Quality Control Ranges ⁽¹⁾:

- **QC Control 1** : 2.4 - **3.3** – 4.1 mmol/L
- **QC Control 3**: 13.9 – **16.7** – 19.4 mmol/L

Linearity Ranges ⁽²⁾:

- **Level 1**: 0.56 - 0.98 - 1.39 mmol/L
- **Level 2**: 2.6 - 3.4 - 4.2 mmol/L
- **Level 3**: 5.0 - 6.1 - 7.2 mmol/L
- **Level 4**: 13.9 - 16.7 -19.4 mmol/L
- **Level 5**: 23.3 - 27.8 - 32.2 mmol/L

Bio-Rad Meter Trax QC (Mid Level) ⁽³⁾: 9.3 mmol/L (dev ±3.0)

Glucose Meter Adult Ranges; Normal, Out, Critical and Out of Reportable Range ⁽⁴⁾:

	NORMAL RANGE	CRITICAL RESULTS
Adult (>17 years old)	4.0 to 11.0 mmol/L	<2.6 mmol/L >25.0 mmol/L

Meter Range: 0.6 – 33.3 mmol/L

Outside Range: <0.6 mmol/L & >33.3 mmol/L

Vancouver General Biological (Analyzer) Reference Glucose Ranges *information provided by VGH

Reference ranges for random glucose:

Age	Reference Range
0 to <3 days	2.6-5.6 mmol/L
3 days to <20 years	3.3-11.0 mmol/L

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Documents used outside of OMNI are uncontrolled.

≥20 years

3.6-11.0 mmol/L

The ranges are the same for both plasma and whole blood glucose.

Any glucose result <2.0 mmol/L or >30.0 mmol/L is considered critical.

Reference intervals established as clinical targets are based on accepted guidelines or consensus statements.

Canadian Diabetes Guideline ⁽⁵⁾

Reference range reflects euglycemia, which takes into account:

- The threshold for hypoglycemia, defined by a random glucose level <4.0 mmol/L
- The threshold for diabetes, defined by a random glucose level ≥11.0 mmol/L

Diabetes Canada (formerly the Canadian Diabetes Association) suggests the following blood glucose ranges as a general guide ⁽⁶⁾.

Most adults (non-pregnant)

- Blood Glucose:
 - Fasting and before meals: 4.0 to 7.0 mmol/L
 - 2 hours after meals: 5.0 to 10.0 mmol/L

References:

1. Nova StatStrip Xpress vials
2. Nova Linearity Vials
3. Bio-Rad Insert
4. PHSA Specific Supplemental Training Resource
5. Canadian Diabetes Guidelines (<http://guidelines.diabetes.ca/cpg>)
6. HealthLinkBC <https://www.healthlinkbc.ca/health-topics/aa135726#aa135726-sec>