

Interpreting blood sugar results

Patients with *no known diabetes*

If patient is...	Blood sugar reading (mg/dL)	Diagnosis	Treatment
RANDOM blood sugar reading	less than 140	Normal	None
RANDOM blood sugar reading	140-200	High. May have pre-diabetes	Counseling required
RANDOM blood sugar reading	200 or greater	High. May have diabetes	Refer to MD
FASTING (before meal or fasted overnight)	Less than 70	Below target range (may be hypoglycemic)	Suggest eating carb-containing food
FASTING (before meal or fasted overnight)	70-100	Normal	None
FASTING (before meal or fasted overnight)	100-125	High. May have pre-diabetes	Counseling required
FASTING (before meal or fasted overnight)	126 or greater	High. May have diabetes	Refer to MD

For patients with *known diabetes*

If patient is...	Blood sugar reading (mg/dL)	Diagnoses per ADA	Treatment
2-hr POSTPRANDIAL (after meal)	Less than 180	Within ADA's target range	None
2-hr POSTPRANDIAL (after meal)	180 or greater	Above ADA's target range. May need medication or carb-content of meal adjusted	Refer to MD
FASTING (8-hours of empty stomach)	Less than 70	Below ADA's target range (may be hypoglycemic)	Suggest eating carb-containing food
FASTING (8-hours of empty stomach)	70-130	Within ADA's target range	None
FASTING (8-hours of empty stomach)	Above 130	Above ADA's target range. May need medication adjusted	Refer to MD

ADA=American Diabetes Association

Other vital signs:

Pulse Rate

Best to measure pulse rate for a full minute. Can measure for 30 seconds and multiply by two, or measure for 15 seconds and multiply by 4.

Population	(beats per minute or bpm)
Well conditioned adult athletes	40-60
Adults (& children ages 10+)	60-100
Children ages 1-10:	60-140
Infants to age 1	100-160

If heightened pulse rate, patient may be excited or anxious, or that there is some issue with the heart. Decreased pulse rate usually reflects an athletic heart or medication (e.g. beta blocker).

Respiration Rate (at rest):

Best to measure respiration rate for a full minute. Can measure for 30 seconds and multiply by two, or measure for 15 seconds and multiply by 4.

Population	Breaths per minute
Older Children and Adults	16-20
Children five years of age	25
Infants	34-40

If higher than the normal range, may indicate that the oxygenated blood may not be adequately delivered.

Temperature:

Population	Normal temperature range (in degrees ° F)	Fever
Older Children and Adults	(97.8°-99.1°) Homeostasis 98.6°	102°
Infants younger than 3 months	(97.8°-99.1°) Homeostasis 98.6°	100.4°

Blood Pressure Results

(Note: HTN cannot be diagnosed in one reading & goals need to be individualized)

Population	Systolic Pressure	Diastolic Pressure
Adults, normal is	<120	<80
Pre-Hypertension	120-139	80-89
Adults, high is at or above	140	90
Adults 30-59 with high blood pressure	Aim for <140	Aim for <90
Adults 60+ with high blood pressure	Aim for <150	Aim for <90
Adults with diabetes or kidney disease	Aim for <140	Aim for <90