
BLOOD GLUCOSE CORRELATIONS

If your lab is using methods certified by the National Glycohemoglobin Standardization Program, you can convert your glycosylated hemoglobin (HbA_{1c}) result into your average plasma glucose levels over the past 2–3 months. (Laboratories and most blood glucose meters give plasma glucose levels; however, we included whole blood glucose values here as well for people with older meters.)

HbA _{1c} (%)	PLASMA GLUCOSE LEVEL (milligrams/deciliter)	WHOLE BLOOD GLUCOSE LEVEL (milligrams/deciliter)
6	135	121
7	170	152
8	205	183
9	240	214
10	275	246
11	310	277
12	345	308

THE FRUCTOSAMINE TEST

Hemoglobin is not the only blood component that can be *glycated* (linked to a glucose molecule). Blood proteins such as albumin can also be glycated. One test to measure the glycation level of proteins in the blood is called the fructosamine test. Blood proteins have a shorter life span than red blood cells, so the fructosamine test gives an overview of just the 1–2 weeks before the test.

Studies have not yet shown that fructosamine levels can be linked to risks for long-term diabetes complications, so a fructosamine test is not a substitute for an HbA_{1c} test. There is also some controversy over how to calibrate the test properly.

The manufacturer of the first combined home blood glucose and fructosamine meter recalled the product in 2002 because of problems obtaining accurate readings, but laboratories can still perform the test if a physician deems it necessary. Some doctors prescribe this test for pregnant women to aid in tight control or for people who have health conditions that interfere with obtaining accurate HbA_{1c} results.
