

A new way to help you make the connection between daily and long-term glycemic control.

Introducing estimated Average Glucose (eAG), a new way to understand how well you're managing your diabetes

If you have diabetes you are probably familiar with the term A1C, the test that measures how well you are doing in managing your diabetes over time. The A1C represents the average glucose in your blood over a 3-4 month period.

We have long known that A1C measures average blood glucose over time, but there has never been a careful study to show exactly how a given A1C matches to an average glucose value. A major study has just been completed that tells us how to translate an A1C value into an average glucose value.

eAG is directly related to A1C, but uses the same values and units that you observe when you check your blood glucose with a meter or receive a fasting glucose value on a lab report.

An A1C of 7% — the goal for most people with diabetes—is the equivalent of an eAG of 154 mg/dl.

Why talk about eAG?

Though eAG and A1C represent the same thing—the average level of glucose in the body over time—for many patients, it may be helpful to begin thinking about their diabetes control in terms of eAG. First, it's simple: with eAG you use the same units you're familiar with from self-monitoring. Second, understanding the relationship between eAG and the values you get in self-monitoring may help you understand how your daily blood glucose checks relate to your long-term control.

How does eAG relate to my regular meter readings?

If you were to regularly check your blood glucose every morning, and before meals, you may find that your values are often in the low 100s, and the average value displayed on your meter might be around 125. But if your A1C during that same time period was 7.5, that would translate into an eAG of 169.

Why would the eAG number be so much higher than the “average” displayed by the meter?

For most people who self-monitor their diabetes, more glucose checks are performed more often when blood glucose levels are low than when they're high. Therefore the average displayed on your meter – in this case a 125 – is likely to be less than the actual eAG of 169.

Using eAG may help facilitate a better understanding of actual daily control – helping you and your health care provider to make necessary changes to your diet and physical activity to improve overall diabetes management.

A1C to eAG Conversion Chart

This table shows the relationship between A1C and estimated average glucose. (The units mg/dl are used in the United States; the units mmol/l are used in much of the rest of the world.)

A1C %	eAG mg/dl
6	126
6.5	140
7	154
7.5	169
8	183
8.5	197
9	212
9.5	226
10	240

For more information about eAG contact the
American Diabetes Association

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www.diabetes.org