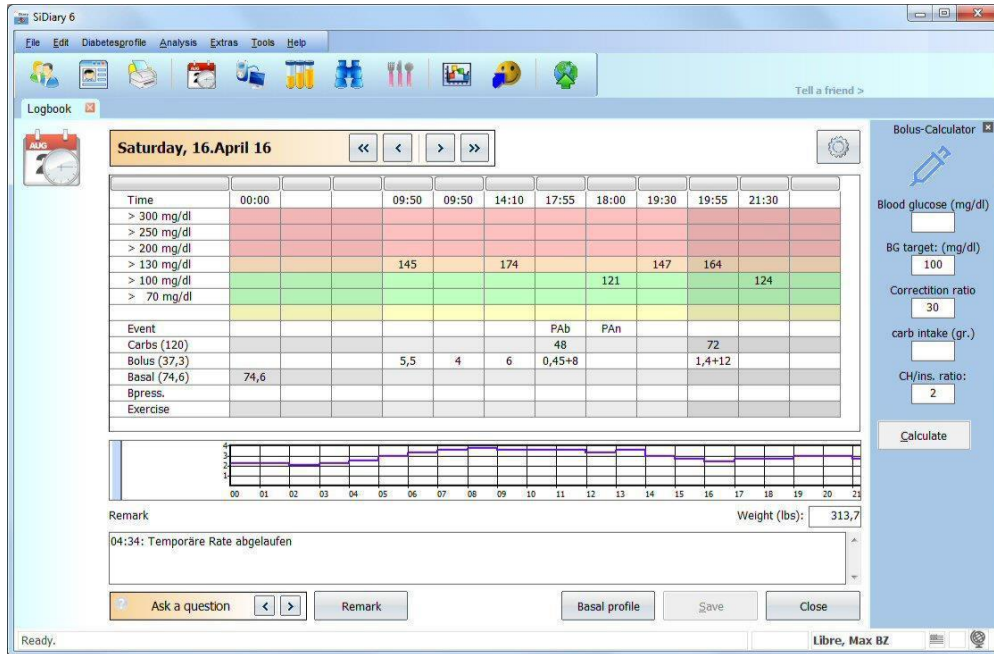
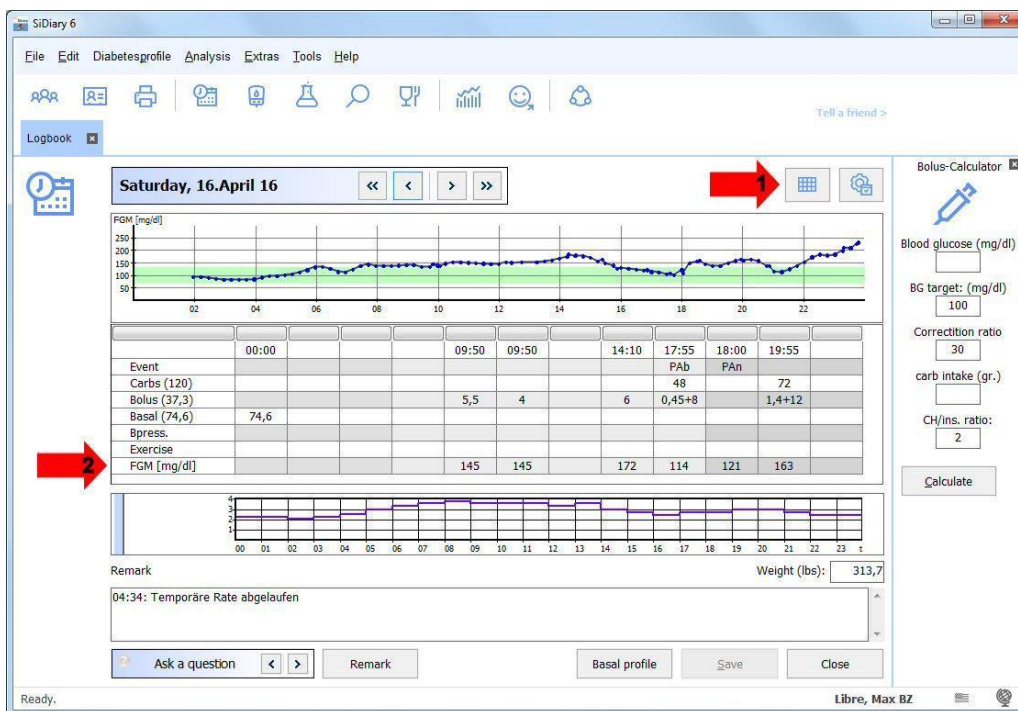


SiDiary 6.1 – Successful work with continuous glucose monitoring systems (CGMS)

Since the update from SiDiary 6 to version 6.1, there is not only a new layout with other colors, but also a new option for the detail logbook. Until now at the top of the table the blood glucose levels was firmly integrated



New since version 6.1 is a button (see arrow 1), with which you can switch: either has the day then the blood sugar table like in the previous versions (pictured above in color), or it shows the progress curve of CGMS/FGM data and it is ideally suited for systems such as the Freestyle Libre, the Freestyle Navigator, the Dexcom or other systems that provide data from a continuous glucose measurement:



In this view, you can see at a glance when something has changed on glucose during the day and then later it can be edited as post explanations for these changes.

If you move the mouse over a data point in the trajectory - as in the image - so you can see directly more information as a tool tip: the exact time, the exact value and the data source for this point (how this value gets into the logbook).

In addition, in the graph view another row appears (see arrow 2). This line can't be changed; in it the measured CGMS value at this time is shown for each column with an entry (the Freestyle Libre values are named 'FGM'). That means whenever you enter something in the logbook, you can find here the appropriate CGMS value from this time. It also works with entries that you have made in one of our Apps or you have added later.

CGMS-AddIn

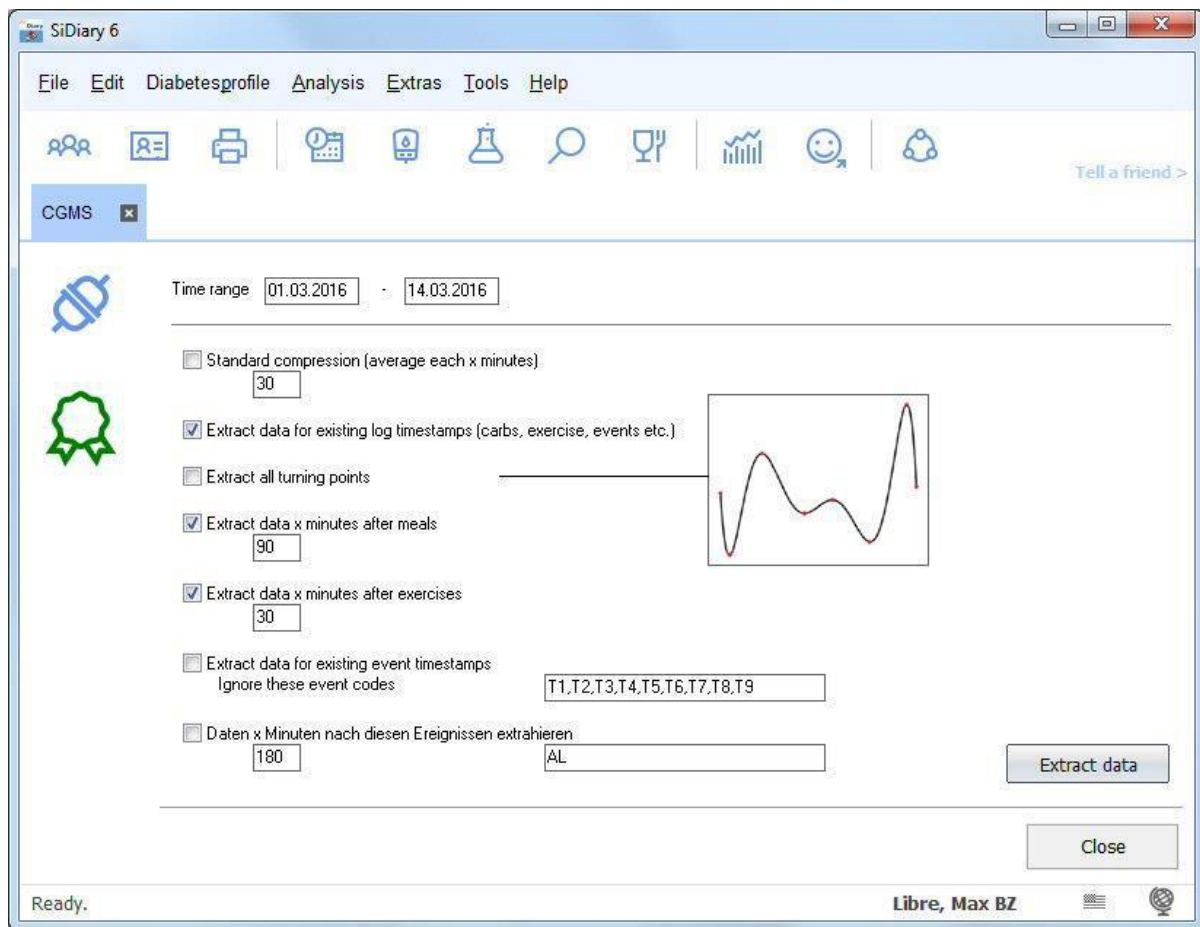
Of course you can continue to use our CGMS AddIn. Glucose values from CGM systems are not really a blood glucose value, because it is not measured in the blood but in the interstitial fluid. Therefore SiDiary import these values not as BG (blood glucose), but as the data type (which roughly means "Category") CGMS.

CGMS values can't be displayed in the table view of the detail logbook, because there are too many values. The table can display a maximum of 99 columns. If more columns are available for one day, the logbook can be presented as a data list only.

But you can hide data types in SiDiary for diary view. They are then still in the program yet (and may in the statistics displayed as a line chart), but no longer appears in the detail logbook, so that this can also be displayed again as a table.

Our CGMS AddIn can extract individual values from the data type CGMS and then add to the logbook as a blood glucose value.

You can activate this AddIn in the program menu by selecting "Extras → AddIns" and then start it in the program menu "Edit → CGMS"



Above you can specify the period from which data is to be extracted. Below you will find the opportunity to set conditions, which data should be extracted and then added to the logbook as a blood glucose value.

Here should apply: "less is more". If you add too many values, the logbook will be confusing. On clearest it remains, if you add only the values that would be measured with a conventional blood glucose meter too, if you have enough test strips.

With the setting shown in this screenshot it will be add values to each meal with carbohydrates, to sports entries and in events like 'FBG' (fasting blood glucose in the morning after waking up), 'Car' (blood sugar before driving a car) or 'Bed' (blood sugar at bedtime).

'Car' and 'Bed' are currently not available in the list, but you can add your own events to the list in SiDiary.

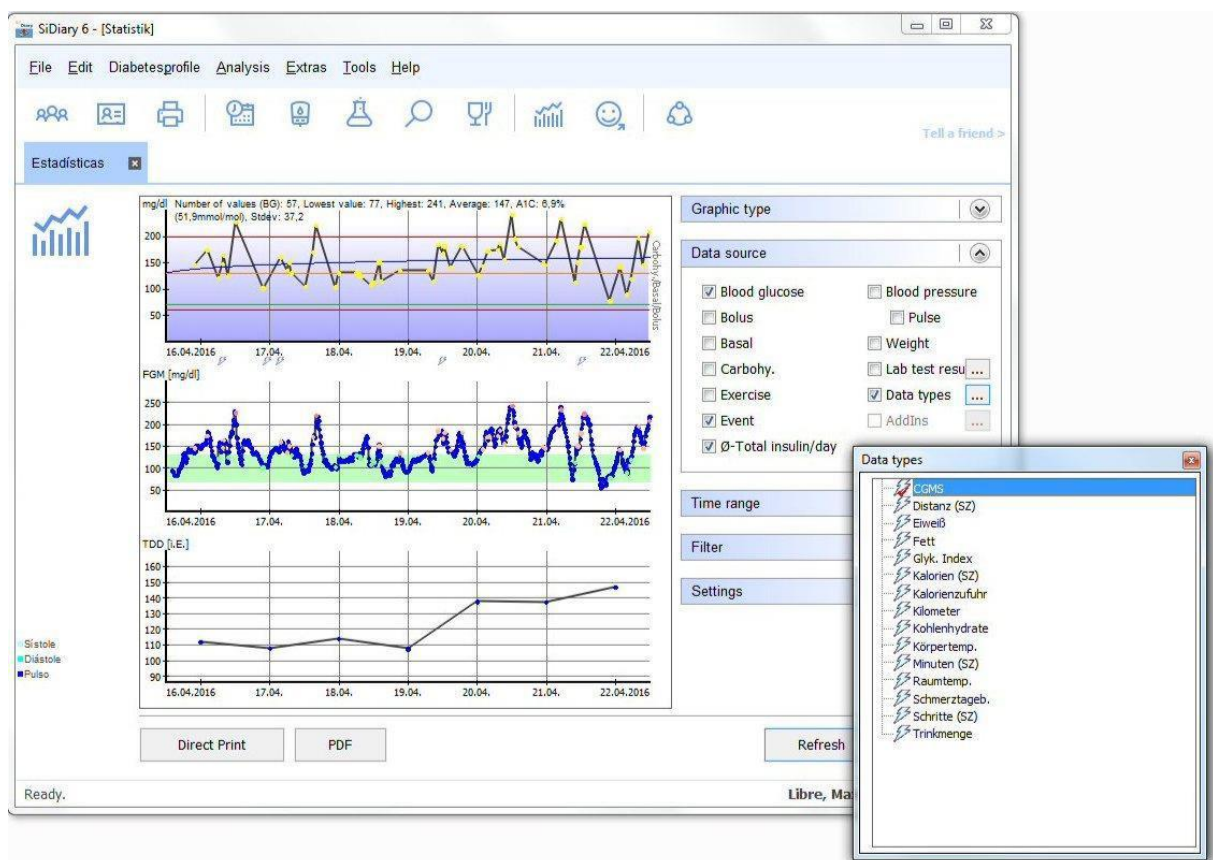
Furthermore a value is added as a BG 90 minutes after an entry for carbs (=post prandial BG) and 30 minutes after a sports entry.

That should be enough data already, because of the exact course of the glucose values you have the line graph in the statistic (which you can print it there as a direct printing or save it as a PDF file)

Very important: the here discussed values are **added**, that means before extracting values, all this entries that specify the conditions like carbs, sports items and events must already exist in the logbook! This can be added, for example, with our apps for smartphones and tablets, which you can always carry with you. If you enter there carbs, sports and events, then sync your app with SiDiary Online AND then synchronizes the PC version also, you will have these entries in the PC version too and nothing stands in the way of a successful adding of BG values.

Statistic

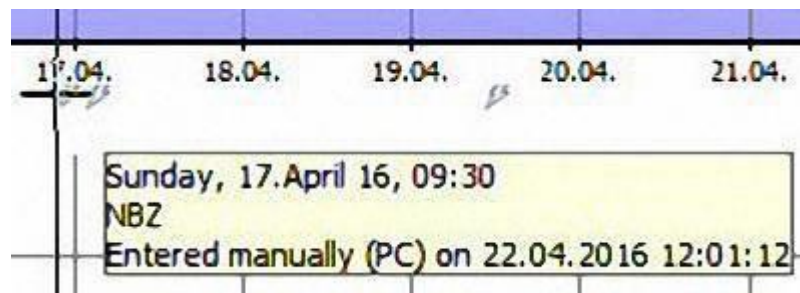
While you see in the detail logbook the CGMS/FGM data curve for the current day, you can view in the statistic as the graph type line graph a curve over a longer period. Simply select data types as your data source and then pic CGMS with the button with the three points (see picture)



In the picture you see another new feature in SiDiary 6.1: you can use as data source the events and "TDD", the Total-Daily-Dose (= total dose per day) of insulin.

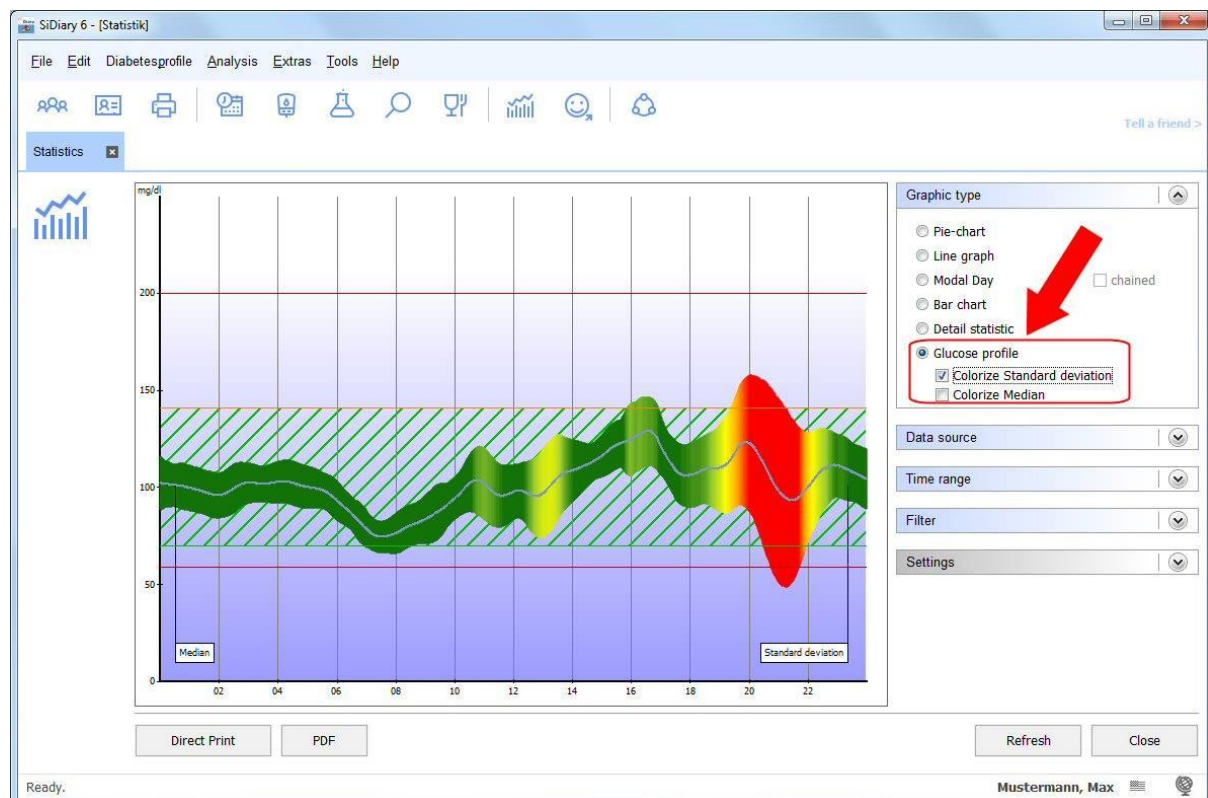
The total dose of insulin per day (in this case the lowest of the three curves) is shown as a line graph and shows over a prolonged period applying steady increase as e.g. possible resistance development.

Events appear under the BG curve as flash symbol. If you move the mouse cursor over it, you can see the underlying entry as a tooltip incl. its data source, so you can see how this entry got into the logbook.



SiDiary provides also the graphics type 'Glucose Profile' in the statistics section, which shows the median of the CGMS values as well as the standard deviation.

With this new option it is not only possible to see the magnitude of the CGMS values over the time of the day but also how strong these values are waving or how stable the glucose development is. You can see it in the statistic section of the PC version, if you select the entry 'Glucose Profile' as graphic type.



In the example shown here the standard deviation is additionally colored, so that you can see at the very first glance: the greener, the more stable the glucose development is during this period while a deep red indicates that at this time of day (in the example here between 7 and 11 p.m.) the greatest variance occurs.

To calculate this graph all CGMS data of the selected time period is projected into a 24 hour graph. To see changes and improvements of your glucose profile you might select one week as an example

