

herein, a graphical representation may include one or more textual representations in combination with one or more graphical representations of or related to the data. The textual presentation may be included with the graphical presentation, or in one or more alternating displays of the graphical representation. In one embodiment, a graphical representation of bG measurement data is produced by processor 78 on display 70 so that the user is provided with a visual representation of the bG measurement data. If display of the bG measurements is desired, then the display thereof on display 70 may be produced immediately upon a single user interaction with entry means 68 indicating that the display is desired, or automatically after a pre-determined delay following the interface of bG meter 20 with docking device 50. Alternatively, the bG measurement data processed by processor 78 of docking device 50 can be accessed by a user through one or more menus provided on display 70 and navigated by user entry means 68.

[0099] It is contemplated that the graphical and textual representations of the bG measurement data produced on display 70 by processor 78 include any one or combination of xy-graphs, bar graphs, data plots, pie charts, or other suitable graphical representation to represent the bG measurements. In addition, the graphical or textual representations can be color coded to facilitate user interpretation of the results. For example, if one or more of the measured bG values is outside a recommended pre-defined range of blood glucose limits, the display can be presented with a warning indicator or in a warning color, such as red. If the one or more of the measured bG values is near or slightly above or below the pre-defined range of blood glucose limits, display 70 can be presented with a cautionary indicator or in a cautionary color, such as yellow. If all the associated bG measurements are within the recommended range, then display 70 can be presented with a satisfactory indicator or color, such as green. Further details regarding display and representations of bG measurement data are described in U.S. patent application Ser. No. 12/481,965, filed 10 Jun. 2008, the disclosure of which is incorporated herein by reference in its entirety.

[0100] In one embodiment, processor 78 is operable to perform additional functions in response to processing the bG measurement data stored on bG meter 20 or the bG measurement data stored on bG meter 20 in aggregate with other bG measurement data stored in memory 76 of docking device 50. For example, in one form docking device 50 includes an insulin bolus calculator and processor 78 is operable to determine a suitable insulin dosage with the insulin bolus calculator based on the bG measurement data. Dietary information which the user can enter and store in memory 76, further details of which are provided below, may also be considered when determining the insulin dosage. In this arrangement, docking device 50 may also provide bolusing instructions which correspond to the insulin dosage determined by the bolus calculator to one or more secondary devices, such as insulin delivery devices. Examples of insulin delivery devices include, without limitation, insulin pumps, pens and syringes. In one embodiment, docking device 50 can automatically provide the bolusing instructions to the secondary device(s) in response to determining the insulin dosage.

[0101] In another embodiment, processor 78 is operable to create a prompt on display 70 for the user to confirm that the bolusing instructions should be sent. The user can provide an input with user entry means 68 which confirms or cancels the bolusing instructions. In an alternative embodiment, the insu-

lin dosage is not automatically determined by docking device 50. Instead, the user can use user entry means 68 to open and control the insulin dosage calculator and independently determine the appropriate insulin dosage. In a manner similar to that described above, the user can instruct docking device 50 to provide bolusing instructions to the secondary device that correspond to the appropriate insulin dosage determined by the bolus calculator. While not previously mentioned, it should be appreciated that docking device 50 can provide the bolusing instructions to the secondary device(s) through a wired or wireless connection.

[0102] Docking device 50 can interface with the secondary devices to determine and/or configure various operating aspects of these devices as well. For example, in one form, processor 78 is operable to regulate the rate at which the secondary device, such as an insulin pump, delivers the insulin dosage to a user of the pump. Processor 78 can also determine the date of expiration of the pump or the amount of insulin remaining in the pump and/or calculate the estimated amount of time left before the pump distributes the remaining insulin. It is also contemplated that processor 78 can provide an audible or visual indication of these aspects of the pump or some other secondary device to the user. Still, it is contemplated that processor 78 can perform other management and configuration functions relative to the secondary devices beyond those specifically set forth herein.

[0103] It is also contemplated that docking device 50 can store insulin delivery data, such as doses or dosage amounts. In one form, processor 78 is operable to store the insulin delivery data in memory 76 of docking device 50 according to the time and date when the insulin was delivered. When docking device 50 provides bolusing instructions to the secondary device(s) as described above, it is contemplated that the insulin delivery data is automatically stored in memory 76 when the bolusing instructions are provided to the secondary device(s). Alternatively, a user can independently provide input through user entry means 68 which is indicative of the insulin delivery data, regardless of whether docking device 50 provides bolusing instructions to the secondary device(s). Processor 78 may be further operable to provide textual and graphical representations of the insulin delivery data, which may include any one or combination of xy-graphs, bar graphs, data plots, pie charts, or other suitable graphical representation to represent the insulin delivery data. In one form, the textual and graphical representations could display insulin doses delivered over a daily, weekly or monthly interval, just to name a few possibilities. In yet a further embodiment, processor 78 is operable to compare the insulin delivery data with other information stored in memory 76, such as the bG measurement data, in a single graphical or textual representation.

[0104] In addition to the foregoing, it is contemplated that processor 78 could provide user advice in response to processing the bG measurement data. The advice could be in the form of an audible, visual or audio-visual presentation, just to name a few possibilities. The advice can indicate whether the processed bG measurements are outside a recommended range, within a recommended range, or moderately outside or approaching limits of a recommended range. The advice can also present a recommended action or course of actions to the user based on the bG measurement data. For example, if one or more of the bG measurements is severely outside the recommended range, the advice can recommend dietary changes and changes to insulin dosage per a doctor's advice. If one or