ANALYTE TESTING METHOD AND SYSTEM

Background

[0001] Glucose monitoring is a fact of everyday life for diabetic individuals. The accuracy of such monitoring can significantly affect the health and ultimately the quality of life of the person with diabetes. Generally, a diabetic patient measures blood glucose levels several times a day to monitor and control blood sugar levels. Failure to test blood glucose levels accurately and on a regular basis can result in serious diabetes-related complications, including cardiovascular disease, kidney disease, nerve damage and blindness. There are a number of electronic devices currently available which enable an individual to test the glucose level in a small sample of blood. One such glucose meter is the OneTouch® Profile ™ glucose meter, a product which is manufactured by Lifescan.

[0002] In addition to glucose monitoring, diabetic individuals often have to maintain tight control over their lifestyle, so that they are not adversely affected by, for example, irregular food consumption or exercise. In addition, a physician dealing with a particular diabetic individual requires detailed information on the lifestyle of the individual to provide effective treatment or modification of treatment for controlling diabetes. Currently, one of the ways of monitoring the lifestyle of an individual with diabetes has been for the individual to keep a paper logbook of their lifestyle, and to test their blood glucose on a regular basis, particularly before meals, after meals, and when fasting. Another way is for an individual to simply rely on remembering facts about their lifestyle and when they test, and then relay these details to their physician on each visit.

[0003] The aforementioned methods of recording lifestyle information are inherently difficult, time consuming, and possibly inaccurate. It's easy to forget to test, and paper logbooks are not always carried by an individual and may not be accurately completed when required. Paper logbooks are small and it is difficult to enter detailed information requiring detailed descriptors of lifestyle events. Furthermore, an individual may often forget key facts about their lifestyle when questioned by a physician who has to manually review and interpret information from a hand-written notebook. There is no analysis provided by the paper logbook to distil or separate the component information, and there

is no way for a paper logbook to proactively remind a user to test. Also, there are no graphical reductions or summary of the information. Entry of data into a secondary data storage system, such as a database or other electronic system, requires a laborious transcription of information, including lifestyle data, into this secondary data storage. Difficulty of data recordation encourages retrospective entry of pertinent information that results in inaccurate and incomplete records.

[0004] Moreover, a diabetic individual often has to keep a plurality of devices on their person for diagnosis and treatment, for example both glucose level monitoring equipment and medication. Hence, having to carry paper records of their lifestyle and a log of when they test is an added unwanted burden, and entry of data therein is very time consuming.

[0005] There currently exist a number of portable electronic devices that can measure glucose levels in an individual and store the levels for recalling or uploading to another computer for analysis. One such device is the Accu-Check™ Complete™ System from Roche Diagnostics, which provides limited functionality for storing lifestyle data. However, the Accu-Check™ Complete™ System only permits a limited selection of lifestyle variables to be stored in a meter. There is a no intelligent feedback from values previously entered into the meter and the user interface is unintuitive for an infrequent user of the meter. In addition, there is no convenient way to remind the user when to test, and to assure that tests are being conducted at appropriate times.

Summary of the Disclosure

[0006] Applicants have recognized a need for an electronic device that reminds the user when to test and that provides assurance that tests are being conducted and recorded at appropriate times. Such device must be intuitive and easier to use, thereby encouraging an individual to test at appropriate times. Appropriate times should be taken to mean times that are particularly relevant to management of diabetes, and which might affect or represent an individual's physical condition. Examples of appropriate times are before and after food consumption, before and after physical exertion (e.g. exercise), before and after medication intake, and after fasting.

[0007] In view of the foregoing and in accordance with one aspect, there is provided a method of operating an analyte measurement device having a display, user interface, processor, memory and user interface buttons, the method can be achieved by measuring an analyte with the analyte measurement device; displaying a value representative of the analyte; prompting a user to activate a test reminder; and activating the test reminder to remind a user to conduct a test measurement at a different time.

[0008] In an embodiment, the prompting includes repetitively flashing on the display an icon representative of one of the user interface buttons to prompt a selection of such user interface button.

[0009] In an embodiment, the prompting includes illuminating one of the user interface buttons to prompt a selection of such user interface button.

[0010] In an embodiment, the method further includes disabling all of the user interface buttons except for one of the user interface buttons.

[0011] In an embodiment, the user interface buttons include an up button, a down button, an enter button, and a test reminder button.

[0012] In an embodiment, the test reminder includes a before meal test reminder or an after meal test reminder.

[0013] In an embodiment, the test reminder includes an after meal test reminder.

[0014] In an embodiment, the prompting includes always prompting a user whenever a measuring step has been completed.

[0015] In an embodiment, the prompting includes prompting a user whenever a measuring step was taken before a meal.

[0016] In an embodiment, the activating includes storing in memory the date and time to display the test reminder.

[0017] In an embodiment, the analyte measurement device includes a glucose meter.

[0018] In an embodiment, the measuring includes inserting a test strip into a strip port provided by the measurement device; and depositing a blood sample on a testing portion of the test strip without entering a calibration parameter for the test strip.

[0019] In an embodiment, the measuring includes inserting a test strip into a strip port provided by the measurement device; inputting a calibration parameter for the test strip via the user interface buttons of the device; and depositing a blood sample on a testing portion of the test strip.

[0020] In an embodiment, the inserting includes turning on the measurement device when the strip is fully inserted into the strip port.

[0021] In an embodiment, the plurality of menus to be displayed is selected.

[0022] In an embodiment, the plurality of menus includes at least one time for the test reminder.

[0023] In view of the foregoing and in accordance with another aspect, there is provided a method of operating an analyte measurement device having a display, user interface, processor, memory and user interface buttons, the method can be achieved by pressing one of the user interface buttons to turn the analyte measurement device on, prompting a user to confirm selection of a test reminder, and pressing one of the user interface buttons to confirm selection of a test reminder.

[0024] In an embodiment, the prompting includes repetitively flashing on the display an icon representative of one of the user interface buttons to prompt selection of such user interface button.

[0025] In an embodiment, the prompting includes illuminating one of the user interface buttons to prompt a selection of such user interface button.

[0026] In an embodiment, the method further includes disabling all of the user interface buttons except for one of the user interface buttons.

[0027] In an embodiment, the user interface buttons include an up button, a down button, an enter button, and a test reminder button.

[0028] In an embodiment, the test reminder includes a before meal test reminder or an after meal test reminder.

[0029] In an embodiment, the test reminder includes an after meal test reminder.

[0030] In an embodiment, the confirming includes storing in memory the date and time to display the test reminder.

[0031] In an embodiment, the analyte measurement device includes a glucose meter.

[0032] In an embodiment, the plurality of menus to be displayed is selected.

[0033] In an embodiment, the plurality of menus includes at least one time for the test reminder.

[0034] In view of the foregoing and in accordance with another aspect, there is provided an analyte measurement device comprising a housing having: a strip port coupled to an analyte measurement unit; a processor coupled to the analyte measurement unit, a

memory, user interface input, and a display driver; a display unit coupled to the display driver; and a plurality of user interface buttons including a test reminder button so that upon activation of the test reminder button, a time and date can be stored in the memory to remind the user to conduct a measurement.

[0035] These and other embodiments, features and advantages will become apparent to those skilled in the art when taken with reference to the following more detailed description of the invention in conjunction with the accompanying drawings that are first briefly described.

Brief Description of the Figures

[0036] The accompanying drawings, which are incorporated herein and constitute part of this specification, illustrate presently preferred embodiments of the invention, and, together with the general description given above and the detailed description given below, serve to explain features of the invention (wherein like numerals represent like elements), of which:

[0037] Figure 1 is an exemplary plan view of an analyte measurement device, according to an embodiment .

[0038] Figure 2 is an exemplary block diagram illustrating the principal internal components of an analyte measurement device, according to an embodiment .

[0039] Figure 3 is an exemplary flow chart illustrating a method of operating an analyte measurement device, according to an embodiment .

[0040] Figure 4 is an exemplary flow chart illustrating a method of operating an analyte measurement device when only a single user interface button on the analyte measurement device is active, according to an embodiment .

[0041] Figure 5 is an exemplary flow chart illustrating a method of operating an analyte measurement device where a user is prompted to activate a test reminder whenever a previous measuring process was taken before a meal, according to an embodiment.

[0042] Figure 6 is an exemplary flow chart illustrating a method of operating an analyte measurement device where the date and time to display a test reminder are stored in the memory of an analyte measurement device, according to an embodiment.

[0043] Figure 7 is an exemplary flow chart illustrating a method of operating an analyte measurement device after inserting a test strip into a strip port in the analyte measurement device, according to an embodiment.

[0044] Figure 8 is an exemplary flow chart illustrating a method of operating an analyte measurement device after inserting a test strip into a strip port in the analyte measurement device and either entering or confirming calibration parameters of the test strip, according to an embodiment.

[0045] Figure 9 is an exemplary flow chart illustrating a method of operating an analyte measurement device after inserting a test strip into a strip port in the analyte measurement device thereby turning the analyte measurement device on, according to an embodiment.

[0046] Figure 10 is an exemplary flow chart illustrating a method of operating an analyte measurement device where the analyte measurement device is turned on by pressing a user interface button, a user is prompted to confirm selection of a test reminder, and a user interface button is pressed to confirm selection of a test reminder, according to an embodiment.

[0047] Figure 11 is an exemplary flow chart illustrating a method of operating an analyte measurement device when only a single user interface button on the analyte measurement device is active, according to an embodiment.

[0048] Figure 12 is an exemplary flow chart illustrating a method of operating an analyte measurement device where the date and time to display a test reminder are stored in the memory of an analyte measurement device, according to an embodiment.

[0049] Figure 13 is an exemplary flow chart illustrating a method of operating an analyte measurement device and actions taken by the analyte measurement device, according to an embodiment.

Detailed Description of the Figures

[0050] The following detailed description should be read with reference to the drawings, in which like elements in different drawings are identically numbered. The drawings, which are not necessarily to scale, depict selected embodiments and are not intended to limit the scope of the invention. The detailed description illustrates by way of example, not by way of limitation, the principles of the invention. This description will clearly

enable one skilled in the art to make and use the invention, and describes several embodiments, adaptations, variations, alternatives and uses of the invention, including what is presently believed to be the best mode of carrying out the invention.

[0051] Figure 1 illustrates an analyte measurement device 100, for testing glucose levels in the blood of an individual. Analyte measurement device 100 may include user interface buttons (106, 108, 110, 114) for entry of data, navigation of menus, and execution of commands. Data can include values representative of analyte concentration, and/or information, which are related to the everyday lifestyle of an individual. Information, which is related to the everyday lifestyle, can include food intake, medication use, the occurrence of health check-ups and general health condition and exercise levels of an individual. Analyte measurement device 100 also may include display 104. Display 104 can be used to report measured glucose levels, and to facilitate entry of lifestyle related information.

[0052] Analyte measurement device 100 may include first user interface button 106, second user interface button 108, third user interface button 110, and test reminder button 114. User interface buttons 106, 108, and 110 facilitate entry and analysis of data stored in the testing device, enabling a user to navigate through the user interface displayed on display 104. Test reminder button 114 allows test reminders to be set. User interface buttons 106, 108, and 110 include first marking 107, second marking 109, and third marking 111, which help in correlating user interface buttons to characters on display 104. Test reminder button 114 can include markings as well, helping to correlate test reminder button 114 with to characters on display 104.

[0053] Analyte measurement device 100 can be turned on by inserting a test strip 10 into strip port 112, by pressing and briefly holding first user interface button 106, or when data traffic is detected across optional data port 113. Analyte measurement device 100 can be switched off by removing the test strip 10, pressing and briefly holding first user interface button 106, navigating to and selecting a meter off option from a main menu screen, or by not pressing any buttons for a predetermined time. Display 104 can optionally include a backlight. The test strip port 112 may include its own light source or the port 112 may share a common light source with the backlight for the display 104.

[0054] Data port 113 is optional, and accepts a suitable connector attached to a connecting lead, thereby allowing analyte measurement device 100 to be linked to an external device

such as a personal computer. Data port 113 can be any port that allows for transmission of data (serial or parallel) such as, for example, serial or parallel port in wired or wireless form. A personal computer, running appropriate software, allows entry and modification of set-up information (e.g. the current time, date, and language), and can perform analysis of data collected by analyte measurement device 100. In addition, the personal computer may be able to perform advanced analysis functions, and/or transmit data to other computers (i.e. over the internet) for improved diagnosis and treatment. Connecting analyte measurement device 100 with a local or remote computer facilitates improved treatment by health care providers.

[0055] Referring to Fig. 2, an exemplary internal layout of analyte measurement device 100 is shown. Analyte measurement device 100 may include a processor 200, which in some embodiments described and illustrated herein is a 32-bit RISC microcontroller. The processor can be bi-directionally connected via I/O ports 214 to memory 202, which in some embodiments described and illustrated herein is an EEPROM. Also connected to processor 200 via I/O ports 214 are the data port 113, the user interface buttons 106, 108, 110, and 114, and a display driver 236. Data port 113 can be connected to processor 200, thereby enabling transfer of data between memory 202 and an external device, such as a personal computer. User interface buttons 106, 108, 110, and 114 are directly connected to processor 200. Processor 200 controls display 104 via display driver 236.

[0056] In embodiments described and illustrated herein, analyte measurement device 100 may include an Application Specific Integrated Circuit (ASIC) 204, providing electronic circuitry used in measurements of glucose level in blood that has been applied to a test strip 10 inserted into strip port 112. Analog voltages can pass to and from ASIC 204 by way of analog interface 205. Analog signals from analog interface 205 can be converted to digital signals by A/D converter 216. Processor 200 further may include core 208, ROM 210 (containing computer code), RAM 212, and clock 218. In one embodiment, the processor 200 is configured (or programmed) to disable all of the user interface buttons except for a single button upon a display of an analyte value by the display unit such as, for example, during a time period after an analyte measurement. In an alternative embodiment, the processor 200 is configured (or programmed) to ignore any input from all of the user interface buttons except for a single button upon a display of an analyte value by the display unit.

[0057] Figure 3 is an exemplary flow chart illustrating a method of operating an analyte measurement device, according to an embodiment described and illustrated herein. Method 300 may include processes 302, 304, 306, and 308. In process 302, an analyte-measuring device measures an analyte. In process 304, the analyte measuring device displays a value representative of the analyte. In process 306, the analyte measuring device prompts the user to activate a test reminder. In process 308, the user activates a test reminder to remind a user to conduct a test measurement at a different time. In any embodiments described and illustrated herein, the analyte measurement device may include a display, a user interface, a processor, a memory and user interface buttons. In any embodiments described and illustrated herein, prompting may include repetitively flashing on the display an icon representative of one of the user interface buttons to prompt selection of such user interface button. In any embodiments described and illustrated herein, prompting may include illuminating at least one of the user interface buttons to prompt selection of at least one user interface button. It is noted that the reminder is not limited to before meal or after meal but can be utilized any specific time selected by the user, patient or physician.

[0058] Figure 4 is an exemplary flow chart illustrating a method of operating an analyte measurement device when only a single user interface button on the analyte measurement device is active, according to an embodiment described and illustrated herein. Method 400 may include processes 402, 404, 406, 408, and 410. In process 402, an analyte-measuring device measures an analyte. In process 404, the analyte measuring device displays a value representative of the analyte. In process 406, the analyte measuring device prompts the user to activate a test reminder. In process 408, the analyte measuring device deactivates all but a single user interface button. In process 410, the user activates the test reminder to remind the user to conduct a test measurement at a different time. In any embodiments described and illustrated herein, user interface buttons may include an "up" button, a "down" button, an "enter" or "OK" button, and a test reminder button. In any embodiments described and illustrated herein, the test reminder can include a before meal test reminder or an after meal test reminder. In any embodiments described and illustrated herein, the test reminder can be an after meal test reminder.

[0059] Figure 5 is an exemplary flow chart illustrating a method of operating an analyte measurement device where a user is prompted to activate a test reminder whenever a

previous measuring process was taken before a meal, according to an embodiment described and illustrated herein. Method 500 may include processes 502, 504, 506, and 508. In process 502, an analyte-measuring device measures an analyte. In process 504, the analyte measuring device displays a value representative of the analyte. In process 506, the analyte measuring device prompts the user to activate a test reminder whenever a previous measuring process was taken before a meal. In process 508, the user activates a test reminder to remind the user to conduct a test measurement at a different time. In any embodiments described and illustrated herein, the analyte measuring device may prompt the user to activate a test reminder whenever a measuring process has been completed.

[0060] Figure 6 is an exemplary flow chart illustrating a method of operating an analyte measurement device where the date and time to display a test reminder are stored in the memory of an analyte measurement device, according to an embodiment described and illustrated herein. Method 600 may include processes 602, 604, 606, and 608. In process 602, an analyte-measuring device measures an analyte. In process 604, the analyte measuring device displays a value representative of the analyte. In process 606, the analyte measuring device prompts the user to activate a test reminder. In process 608, the user activates a test reminder to remind the user to conduct a test measurement at a different time by storing in the memory of the analyte measurement device the date and time to display the test reminder. In any embodiments described and illustrated herein, the analyte measuring device may include a glucose meter.

[0061] Figure 7 is an exemplary flow chart illustrating a method of operating an analyte measurement device after inserting a test strip 10 into a strip port 112 in the analyte measurement device, according to an embodiment described and illustrated herein. Method 700 may include processes 702, 704, 706, 708, and 710. In process 702, a test strip 10 is inserted into a strip port in an analyte measurement device. In process 704, blood is applied to a test portion (the portion distal from the strip port 112) of the test strip 10 without entering or confirming calibration parameters of the test strip 10. In process 706, the analyte measuring device displays a value representative of the analyte. In process 708, the analyte measuring device prompts the user to activate a test reminder. In process 710, the user activates a test reminder to remind the user to conduct a test measurement at a different time. In any embodiments described and illustrated herein, measuring may include: inserting a test strip 10 into a strip port in the analyte

measurement device, then depositing a sample of blood on a testing portion of the test strip 10 without entering a calibration parameter for the test strip 10.

[0062] Figure 8 is an exemplary flow chart illustrating a method of operating an analyte measurement device after inserting a test strip 10 into a strip port in the analyte measurement device and either entering or confirming calibration parameters of the test strip 10, according to an embodiment described and illustrated herein. Method 800 may include processes 802, 804, 806, 808, and 810. In process 802, a test strip 10 is inserted into a strip port in an analyte measurement device. In process 804, blood is applied to a test portion of the test strip 10 after entering or confirming calibration parameters of the test strip 10. In process 806, the analyte measuring device displays a value representative of the analyte. In process 808, the analyte measuring device prompts the user to activate a test reminder. In process 810, the user activates a test reminder to remind the user to conduct a test measurement at a different time. In any embodiments described and illustrated herein, the measuring may include: inserting a test strip 10 into a strip port in the measurement device; inputting a calibration parameter for the test strip 10 via the user interface buttons of the device; and depositing a blood sample on a testing portion of the test strip 10.

[0063] Figure 9 is an exemplary flow chart illustrating a method of operating an analyte measurement device after inserting a test strip 10 into a strip port in the analyte measurement device thereby turning the analyte measurement device on, according to an embodiment described and illustrated herein. Method 900 may include processes 902, 904, 906, 908, and 910. In process 902, a test strip 10 is inserted into a strip port in an analyte measurement device, thereby turning it on. In process 904, blood is applied to a test portion of the test strip 10 without entering or confirming calibration parameters of the test strip 10. In process 906, the analyte measuring device displays a value representative of the analyte. In process 908, the analyte measuring device prompts the user to activate a test reminder. In process 910, the user activates a test reminder to remind the user to conduct a test measurement at a different time. In any embodiments described and illustrated herein, inserting may include turning on the measurement device when the strip is fully inserted into the strip port. In any embodiments described and illustrated herein, a plurality of menus may be displayed. In any embodiments described and illustrated herein,

one of a plurality of menus may include at least one amount of elapsed time for the test reminder.

[0064] Figure 10 is an exemplary flow chart illustrating a method of operating an analyte measurement device where the analyte measurement device is turned on by pressing a user interface button, a user is prompted to confirm selection of a test reminder, and a user interface button is pressed to confirm selection of a test reminder, according to an embodiment described and illustrated herein. Method 1000 may include processes 1002, 1004, and 1006. In process 1002, the user presses a user interface button to turn the analyte measurement device on. In process 1004, the analyte measuring device prompts the user to confirm selection of a test reminder. In process 1006, the user presses a user interface button to confirm selection of a test reminder. In any embodiments described and illustrated herein, prompting may include repetitively flashing on the display an icon representative of a single user interface button to prompt selection of the single user interface button. In any embodiments described and illustrated herein, prompting may include illuminating at least one of the user interface buttons to prompt selection of at least one user interface button.

[0065] Figure 11 is an exemplary flow chart illustrating a method of operating an analyte measurement device when only a single user interface button on the analyte measurement device is active, according to an embodiment described and illustrated herein. Method 1100 may include processes 1102, 1104, 1006, and 1108. In process 1102, the user presses a user interface button to turn the analyte measurement device on. In process 1104, the analyte measuring device prompts the user to confirm selection of a test reminder. In process 1106, all but a single user interface button on the analyte measurement device are deactivated. In process 1108, the user presses the single activated user interface button to confirm selection of a test reminder. In any embodiments described and illustrated herein, the user interface buttons may comprise an up button, a down button, an enter button, and a test reminder button. In any embodiments described and illustrated herein, the test reminder may comprise a before meal test reminder or an after meal test reminder. In any embodiments described and illustrated herein, the test reminder may comprise an after meal test reminder.

[0066] Figure 12 is an exemplary flow chart illustrating a method of operating an analyte measurement device where the date and time to display a test reminder are stored in the

memory of an analyte measurement device, according to an embodiment described and illustrated herein. Method 1200 may include processes 1202, 1204, and 1206. In process 1202, the user presses a user interface button to turn the analyte measurement device on. In process 1204, the analyte measuring device prompts the user to confirm selection of a test reminder. In process 1206, the user presses the single activated user interface button to confirm selection of a test reminder and to store in the memory of said analyte measurement device the date and time to display said test reminder. In any embodiments described and illustrated herein, the analyte measurement device may comprise a glucose meter. In any embodiments described and illustrated herein, the method may further comprise selecting a plurality of menus to be displayed. In any embodiments described and illustrated herein, plurality of menus may comprise at least one elapsed time for the test reminder.

[0067] Figure 13 is an exemplary flow chart illustrating a method of operating an analyte measurement device and actions taken by the analyte measurement device, according to an embodiment described and illustrated herein. Method 1300 may include processes 1302, 1304, 1306, 1308, 1310, 1312, 1314, 1316, 1318, and 1320. In process 1302, a user inserts a test strip 10 into a strip port in an analyte measurement device. In process 1304, the analyte measuring device turns on. In process 1306, the analyte-measuring device displays an LCD check screen. In process 1308, the analyte measuring device displays a sample application prompt. In process 1310, the user applies sample to the test strip 10. In process 1312, the analyte measuring device displays a series of countdown screens. In process 1314, the analyte measuring device displays a value representative of the analyte and prompts the user to activate a test reminder. In process 1316, the user optionally activates a test reminder, causing the date and time for the test reminder to be displayed to be stored in the memory of the analyte measurement device. In process 1318, the analyte measurement device optionally displays a test reminder confirmation. In process 1320, the analyte measurement device turns off after a predetermined time, with or without interaction from the user.

[0068] In conclusion, the testing device and methods described and illustrated herein significantly reduce obstacles associated with blood glucose testing. The present invention promotes frequent monitoring for diabetic individuals by providing a simple, efficient way of reminding a user to test. By testing in the manner described herein, it is

easier for a user to establish proper testing frequency, and provide vital information to health care practitioners.

[0069] While the invention has been described in terms of particular variations and illustrative figures, those of ordinary skill in the art will recognize that the invention is not limited to the variations or figures described. In addition, where methods and process described above indicate certain events occurring in certain order, those of ordinary skill in the art will recognize that the ordering of certain process may be modified and that such modifications are in accordance with the variations of the invention. Additionally, certain of the process may be performed concurrently in a parallel process when possible, as well as performed sequentially as described above. Therefore, to the extent there are variations of the invention, which are within the spirit of the disclosure or equivalent to the inventions found in the claims, it is the intent that this patent will cover those variations as well.

WHAT IS CLAIMED IS:

1. A method of operating an analyte measurement device having a display, user interface, processor, memory and user interface buttons, the method comprising:

measuring an analyte with the analyte measurement device;

displaying a value representative of the analyte;

prompting a user to activate a test reminder; and,

activating the test reminder to remind a user to conduct a test measurement at a different time.

2. The method of claim 1, in which the prompting comprises repetitively flashing on the display an icon representative of one of the user interface buttons to prompt a selection of such user interface button.

3. The method of claim 1, in which the prompting comprises illuminating one of the user interface buttons to prompt a selection of such user interface button.

4. The method of claim 1, further comprising disabling all of the user interface buttons except for one of the user interface buttons.

5. The method of claim 1, in which the user interface buttons comprise an up button, a down button, an enter button, and a test reminder button.

6. The method of claim 1, in which the test reminder comprises at least one of a before meal test reminder or an after meal test reminder.

7. The method of claim 6, in which the test reminder comprises an after meal test reminder.

8. The method of claim 1, in which the prompting comprises always prompting a user whenever a measuring step has been completed.

9. The method of claim 1, in which the prompting comprises prompting a user whenever a

previous measuring step was taken before a meal.

10. The method of claim 1, in which the activating comprises storing in memory the date and time to display the test reminder.

11. The method of claim 1, in which the analyte measurement device comprises a glucose meter.

12. The method of claim 1, in which the measuring comprises:

inserting a test strip into a strip port provided by the measurement device; and

depositing a blood sample on a testing portion of the test strip without entering a calibration parameter for the test strip.

13. The method of claim 1, in which the measuring comprises

inserting a test strip into a strip port provided by the measurement device;

inputting a calibration parameter for the test strip via the user interface buttons of the device; and

depositing a blood sample on a testing portion of the test strip.

14. The method of claim 1, in which the inserting comprises turning on the measurement device when the strip is fully inserted into the strip port.

15. The method of claim 1, further comprising selecting a plurality of menus to be displayed.

16. The method of claim 15, in which the plurality of menus comprise at least one time for the test reminder.

17. A method of operating an analyte measurement device having a display, user interface, processor, memory and user interface buttons, the method comprising:

pressing one of the user interface buttons to turn the analyte measurement device on;

prompting a user to confirm selection of a test reminder; and,

pressing one of the user interface buttons to confirm selection of a test reminder.

18. The method of claim 17, in which the prompting comprises repetitively flashing on the display an icon representative of one of the user interface buttons to prompt selection of such user interface button.

19. The method of claim 17, in which the prompting comprises illuminating one of the user interface buttons to prompt selection of such user interface button.

20. The method of claim 17, further comprising disabling all of the user interface buttons except for one of the user interface buttons.

21. The method of claim 17, in which the user interface buttons comprise an up button, a down button, an enter button, and a test reminder button.

22. The method of claim 17, in which the test reminder comprises a before meal test reminder or an after meal test reminder.

23. The method of claim 17, in which the test reminder comprises an after meal test reminder.

24. The method of claim 17, in which the confirming comprises storing in memory the date and time to display the test reminder.

25. The method of claim 17, in which the analyte measurement device comprises a glucose meter.

26. The method of claim 17, further comprising selecting a plurality of menus to be displayed.

27. The method of claim 26, in which the plurality of menus comprise at least one time for the test reminder.

28. An analyte measurement device comprising:

a housing having:

a strip port coupled to an analyte measurement unit;

a processor coupled to the analyte measurement unit, a memory, user interface input, and a display driver;

a display unit coupled to the display driver; and

a plurality of user interface buttons including a test reminder button so that upon activation of the test reminder button, a time and date can be stored in the memory to remind the user to conduct a measurement.