Abstract: A method, system, and computer program product related to the detection of physical activity using changes in heart rate. The method, system, and computer program product evaluates short term glucose demand and long term insulin action due to physical activity. The method, system, and computer program product is further related to the improvement of open and closed loop control of diabetes by accounting for the metabolic changes due to physical activity. The method, system, and computer program product is directed to detecting in real time the short and long term effects of physical activity on insulin action via heart rate analysis, and recommending changes in insulin dosing to compensate for the effects of physical activity. With these recommendations, the open and closed loop control of diabetes can be improved and steps can be taken to prevent hypoglycemia that may result from increased insulin sensitivity due to physical activity.
INTERNATIONAL SEARCH REPORT

A CLASSIFICATION OF SUBJECT MATTER

According to International Patent Classification (IPC) or to both national classification and IPC

B FIELDS SEARCHED

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
USPC 5/00

C DOCUMENTS CONSIDERED TO BE RELEVANT

Alice (Wittmann et al) 05 Jun 2003 (05 06 2003), para [0013], [0017], [0028], [0029]

BR (Curtice et al) 21 May 2002 (21 05 2002), col 3, ln 1-4, col 6, ln 3-6

D DOCUMENTS CONSIDERED TO BE RELEVANT

Further documents are listed in the continuation of Box C

Date of the actual completion of the international search
20 June 2008 (20 06 2008)

Date of mailing of the international search report
21 JUN 2008

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