MONITORING BLOOD GLUCOSE LEVELS

ABSTRACT

Blood glucose levels are measured by illuminating a sample site with near infrared light and monitoring characteristic glucose absorption peaks in light returned to a detector. The absorption peaks are augmented by application of a magnetic field from a magnet (15) to blood travelling to the sample site. The illumination, detection and magnetisation may be synchronised by controllers (23, 17, 18) with the systolic cycle determined by monitoring blood flows with an oximeter (19, 22). In a preferred arrangement, non-invasive *in vivo* measurements of blood glucose are made at the subungual region (14) at a finger tip (11).

Figure 2



