Noninvasive wearable glucose sensor using microwaves

IOWN **Evolution** Well-being · Lifelong Health Support



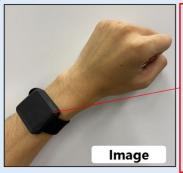
Background

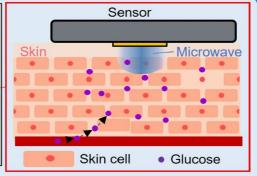
Blood glucose level (BGL) is significant biological information that has been pointed out to be related to various diseases such as diabetes. Measurement of individual daily trend of BGL to reduce of the time of hyperglycemia is important because it was influenced by the meal, sleep, exercise etc.

Summary

Measurement of deily glucose trend is conventionally difficult with out needle-inserting. Then we proposed a noninvasive glucose measurement technology using electrom agnetic waves and confirmed measurement of physiological range of glucose in water mixture by the prototype of wearable sensor.

Technology overview

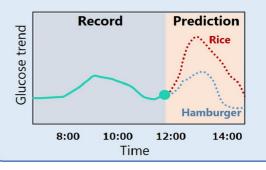




Glucose changes in human body is monitored noninvasively by microwaves.

Usage image

A service that suggests you to eat what you like with maintaining own health will be provided by sensing record and Bio Digital Twin computing.



Features

- Noninvasive glucose measurement technique without needles using microwaves
- Component and system design for compact size and high stability of continuous measurement
- Suggestion of personalized diet and exercise to reduce hyperglycemic and blood glucose spike

Future_benefits

We aim to contribute a world where people can maintain their wellness without burden by using wearable glucose sensors and suitable and personalized suggestion.

Exhibiting Company

NIPPON TELEGRAPH AND TELEPHONE CORPORATION

Contact

rdforum-exhibition@ml.ntt.com