Tracking Diet And Nutrition with a Wearable Bio-Iot

Tech ID: 30225 / UC Case 2018-821-0

BRIEF DESCRIPTION

Faculty at UC Irvine have invented a wearable biosensor that quantifies macronutrients such as sugar, salt, fat, protein, and water consumed by the wearer. It may be used much like a fitness tracker for self-monitoring and promotion of healthy dietary choices.

SUGGESTED USES

Molecular-level dietary tracking

FEATURES/BENEFITS

- Biosensor
- Smart glasses

TECHNOLOGY DESCRIPTION

Obesity and related conditions such as high blood pressure, high cholesterol, and type 2 diabetes are becoming more prevalent in the United States and are often associated with poor nutrition and inactivity. Wearable bio trackers such as activity performance watches have emerged in recent years to combat the problem of inactivity and offer people the ability to track their body's movements throughout each day. There has also been a recent push to develop wearable biosensors that quantify nutrient intake, although to date accuracy of these sensors has remained a barrier to widespread implementation.
Researchers at University of California, Irvine have invented a first in class wearable biosensor that tracks wearer's diet, accurately accounting for the amount of certain molecules such as sugars, salt, fat, protein, and water consumed. This biosensor can be mounted in the mouth and it will transmit data to a user interface located in a pair of smart glasses. This will give wearers unique knowledge about the nutritional profile of their food selections and may empower them to make healthier eating choices. This invention may be especially pragmatic in communities with reduced access to health care as a way to self-monitor and proactively take steps to improve diet.

STATE OF DEVELOPMENT

Sensors have been developed and are currently in testing.There are plans to continue with model development and conduct studies to determine the efficacy of the sensors.

PATENT STATUS

Country	Type	Number	Dated	Case
United States Of America	Published Application	20220013212	01/13/2022	2018-821

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OTHER INFORMATION

KEYWORDS

Food, Health, Sensors, Biosensors, Tracking, Diet, Nutrition, Wearable, IoT, Internet of Things, Macronutrients, Wearer, Track, Movements, Sugars, Salt, Fat, protein, Smart Glass, Self-Monitor, Sensors

CATEGORIZED AS

- **Biotechnology**
  - Food

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