

Creation of "humane service" industries

Smart Health Patch for Body Water Management

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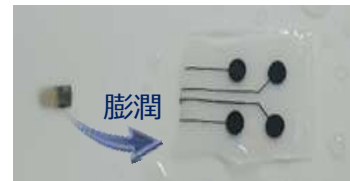
Summary :

Management of "moisture" which accounts for 60% of body weight is effective for prevention of heat stroke, care of heart failure / renal failure, management of sports and labor, etc. However, it is an issue that there is no conventional system to measure the moisture. In this research, we will create a novel health monitoring / management service through the development of wearable devices that monitor the body moisture on a daily basis. The device will be constructed by the unique biocompatible techniques: (1) stretchy biosensor, (2) hydrogel electrode, and (3) molecular permeable microneedle array.

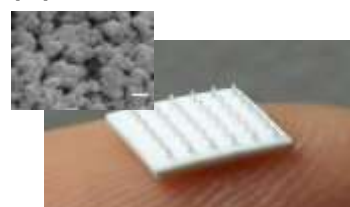
(1) Stretchable



(2) Hydrogel Electrode



(3) Permeable Needle Array



Body Water Management for Healthy Safe Society



Monitoring of **Amount** and **Component** of Body Water

Suitable Actions

- Exercise • Break
- Water Supply
- Dialysis • Medication

Information Sharing
Family • Doctors

Heatstroke Heart / Kidney Failure Fatigue



Diabetes Hypertension