Researchers led by Wei Gao, assistant professor of medical engineering, have developed a mass-producible wearable sensor that can monitor levels of metabolites and nutrients in a person’s blood by analyzing that person’s sweat. Previously developed sweat sensors mostly target compounds that appear in high concentrations, such as electrolytes, glucose, and lactate. Gao’s sweat sensor is more sensitive than current devices and can detect these sweat compounds at much lower concentrations. In a recent study, the team demonstrated that this sensor is able to accurately detect levels of the stress hormone cortisol in near real time.

Find out more at magazine.caltech.edu/post/sweat