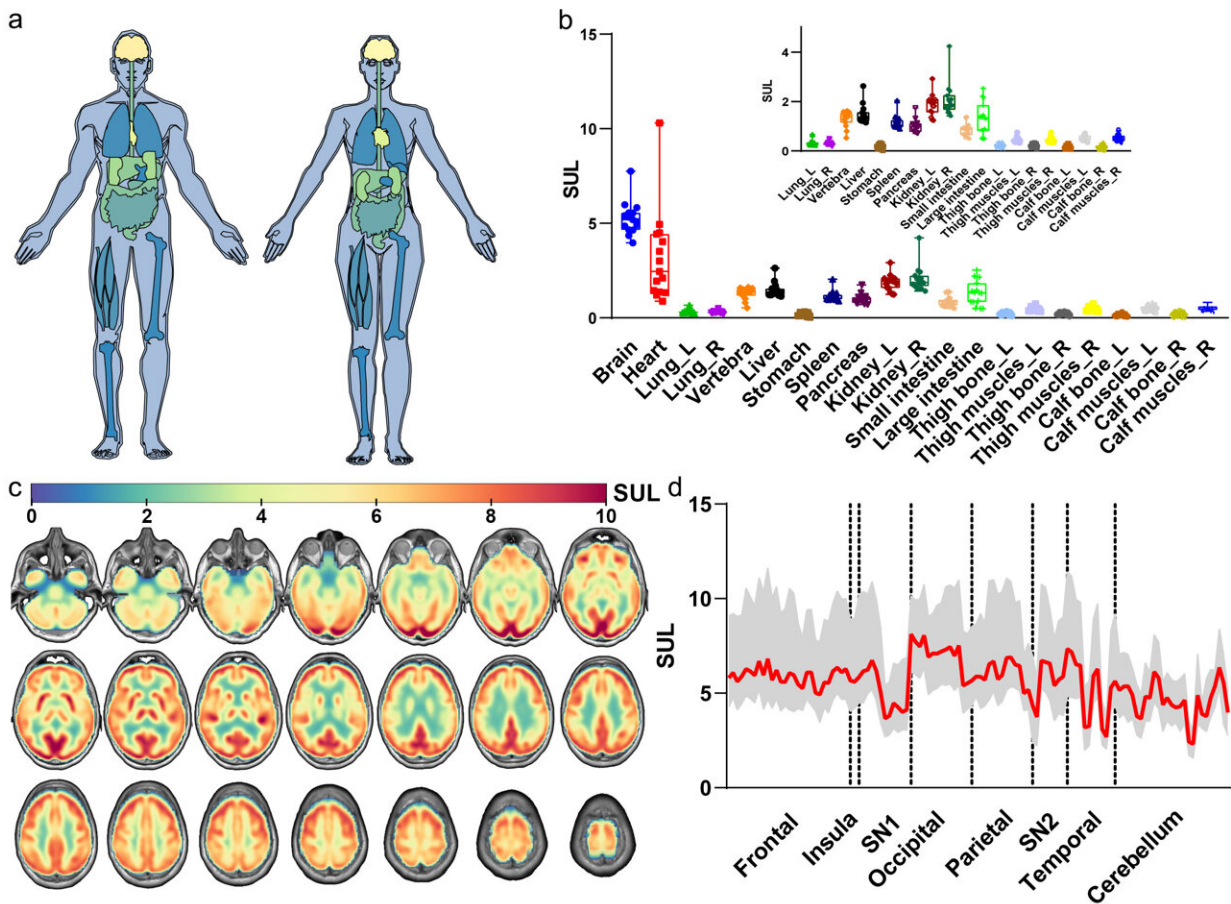


Study provides an atlas of detailed glucose uptake profiles across the human body

November 3 2022



Glucose uptake activity in organs and parts throughout the human body in healthy weight subjects. Credit: Weizhao Lu et al.

Positron emission tomography (PET) is a powerful tool for the

visualization of metabolism, especially the measurement of glucose uptake in vivo. Previous studies have assessed glucose uptake in several tissues such as the brain, visceral adipose tissue, and liver using PET imaging. However, due to the inadequate axial field of view of the existing PET scanners, simultaneous measurement of glucose uptake in major organs and parts across the entire human body has not yet been achieved.

A recent study published in *Life Metabolism* provides an atlas of [glucose uptake](#) across the entire human body via the state-of-the-art total body PET/CT system.

The researchers used the uEXPLORER total-body PET/CT scanner to generate a detailed profile of glucose uptake across the entire human body, and then explored the effect of age, sex, and laterality on glucose uptake, as well as the differences of glucose uptake across the whole body between healthy and overweight groups.

This study has demonstrated the utility of PET/CT in the understanding of human metabolism and metabolomics. A glucose uptake atlas might also be useful in diagnosing and treating malignancies, obesity, diabetes, and other metabolic disorders.

More information: An atlas of glucose uptake across the entire human body as measured by the total-body PET/CT scanner: a pilot study, *Life Metabolism* (2022). [DOI: 10.1093/lifemeta/loac030](https://doi.org/10.1093/lifemeta/loac030)

Provided by Higher Education Press

Citation: Study provides an atlas of detailed glucose uptake profiles across the human body (2022, November 3) retrieved 15 July 2023 from <https://medicalxpress.com/news/2022-11-atlas->

[glucose-uptake-profiles-human.html](#)

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.