

It's getting hot in here: Your cells reach 122 Fahrenheit when making energy

Our body temperature might not ever get much hotter than 37°C [98.6°F]. But it turns out that the insides of our cells can reach a scorching 50°C [122°F].

Our cells effectively burn food in oxygen to produce energy. Unlike a fire, this is a controlled process involving several steps, but it still generates a lot of heat.

Pierre Rustin of INSERM in France and colleagues have now used a dye developed by a group in Singapore to measure the temperature inside the mitochondria of human kidney and skin cells kept at 38°C. They found that mitochondria operate at temperatures at least 6 to 10°C higher than the rest of the cell.

The finding makes sense when you think about it, says [biochemist Nick Lane](#) at University College London, author of [a book about mitochondria](#). "Mitochondria are the main sources of heat, and they have to be hotter than the rest of the body," he says. "I'd never really thought of that before."

[Read the full study [here](#).]

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: [The energy generators inside our cells reach a sizzling 50°C](#)