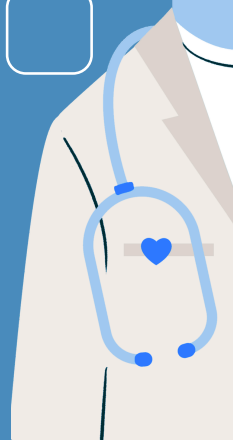


Why Energy Matters in Cancer Treatment



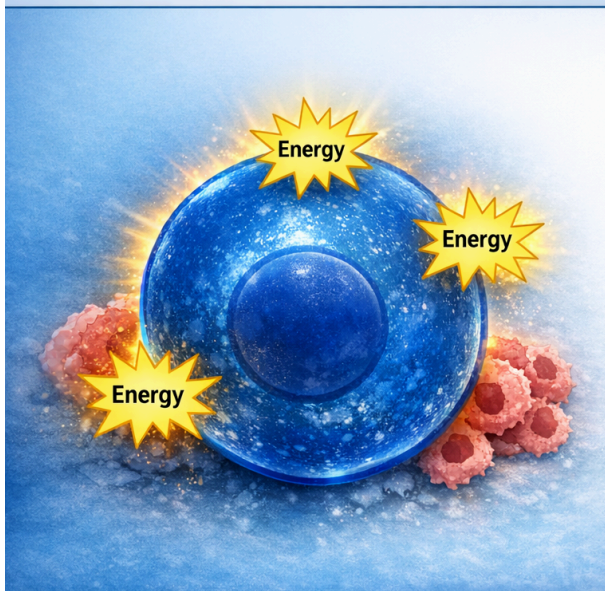
Immune cells need energy to fight cancer

Researchers studied CD8 T cells, a part of our immune defense that kills cancer cells. They found that CD8 T cells need energy to fight cancer better.

Seeing cell energy levels to choose the best treatment

The researchers created a microscope technique that shows how much energy the CD8 T cells have. This can help doctors choose the best treatments for a patient and lead to better medicines.

HIGH ENERGY = STRONG CANCER FIGHT



Immune fighter cells with high levels of energy are able to kill more cancer.

LOW ENERGY = WEAK CANCER FIGHT



Immune fighter cells with low levels of energy kill less cancer.



Carbone Cancer Center
UNIVERSITY OF WISCONSIN
SCHOOL OF MEDICINE AND PUBLIC HEALTH

Heaton et al. In vivo label-free imaging reveals distinct CD8 T cell metabolic changes during effective radio-immunotherapy in cold murine melanoma versus hot colon carcinoma. AACR 2025.

