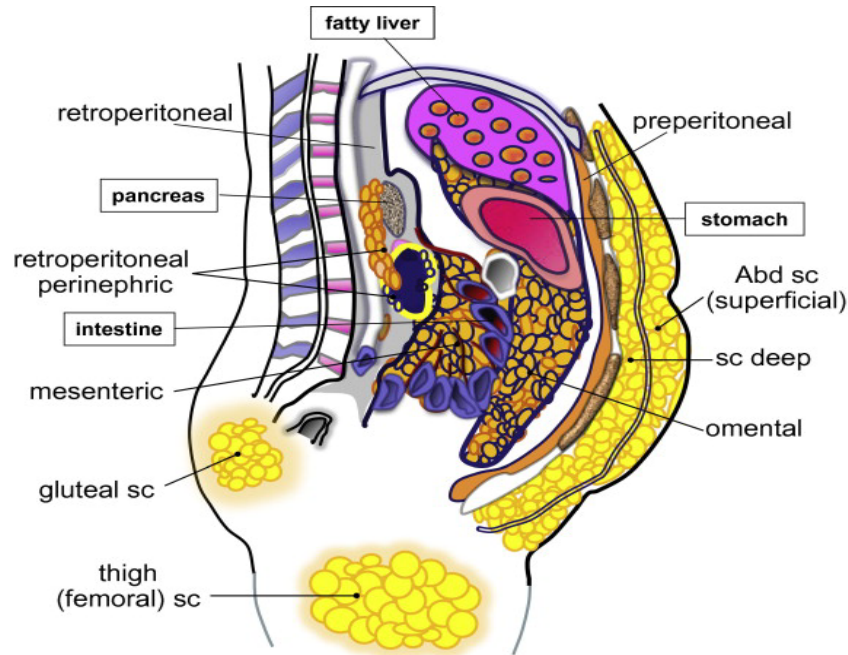
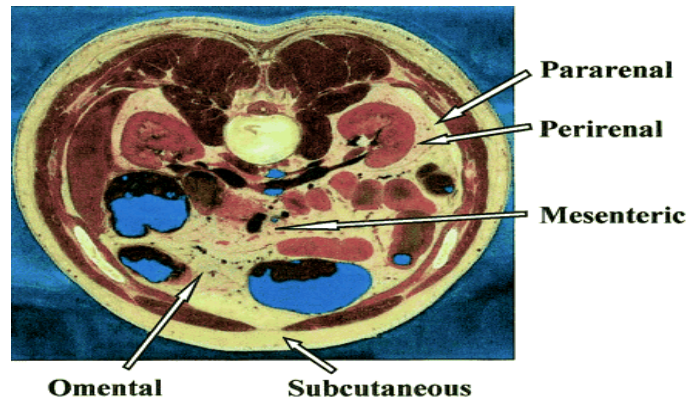


Adipocytes reside in *multiple visceral and sc* 'white' adipose depots



Smaller depots:
 Perivascular
 Peri- & epicardial
 Bone marrow
 Dermal

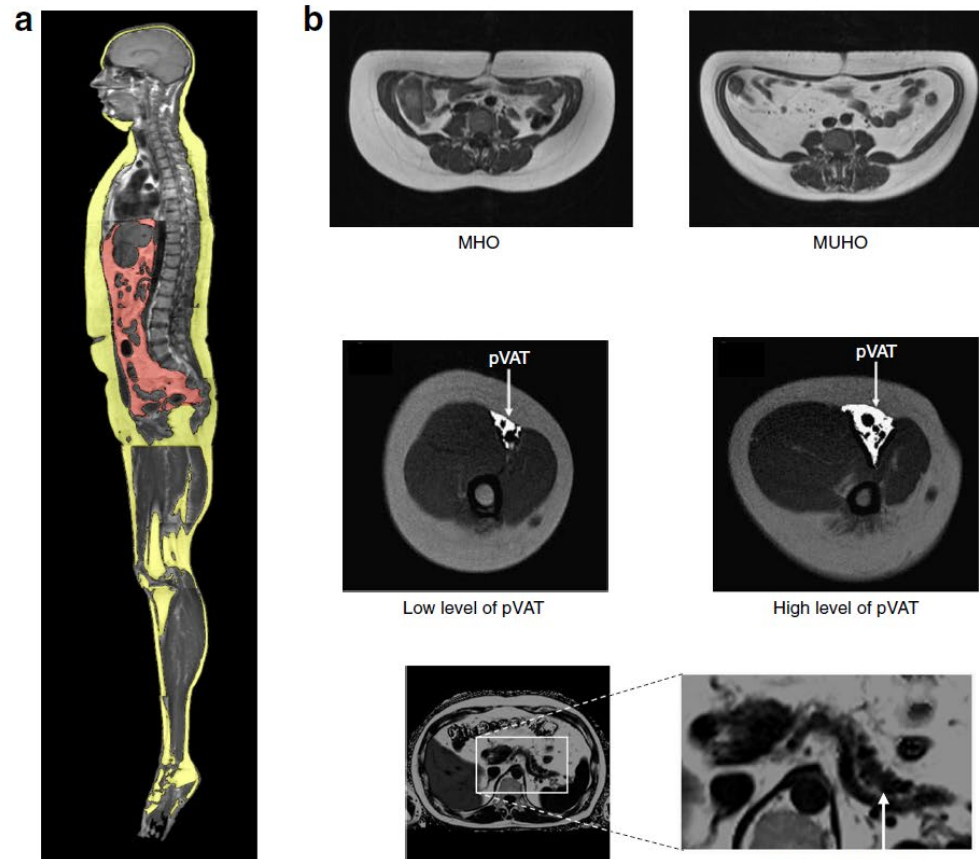
Adipocytes in each depot differ in **metabolic and secretory capacities, and functions**



Waist = visceral + abdominal sc

Whole Body MRI

1809



VISCERAL (OMENTAL)

Perivascular

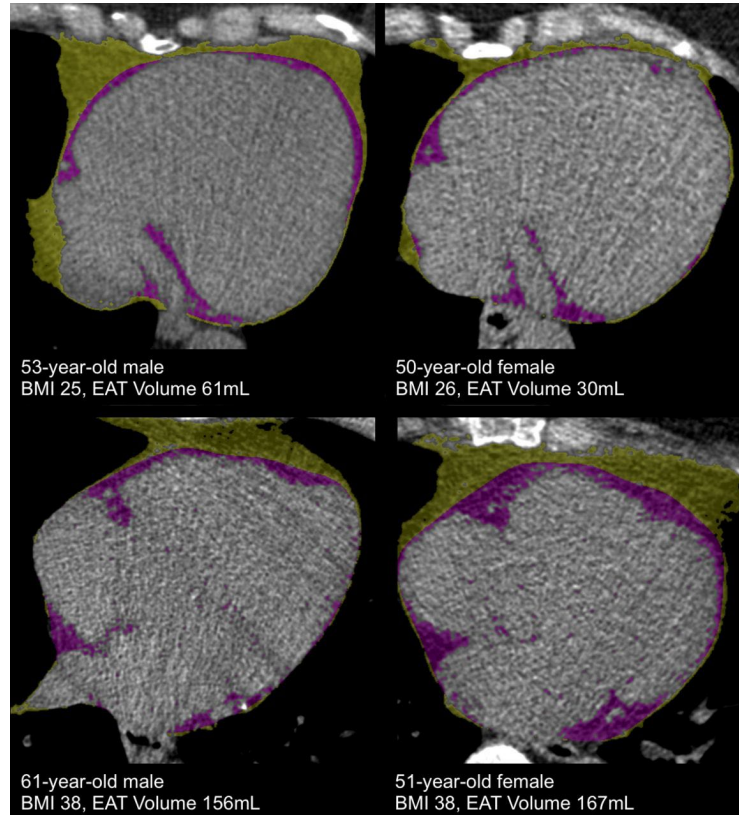
Pancreatic

Novel phenotypes of prediabetes?

Diabetologia (2016) 59:1806–1818

Haring, H-U

CT quantification of epicardial adipose tissue (EAT).



CT quantification of **epicardial adipose tissue (EAT - purple)**.

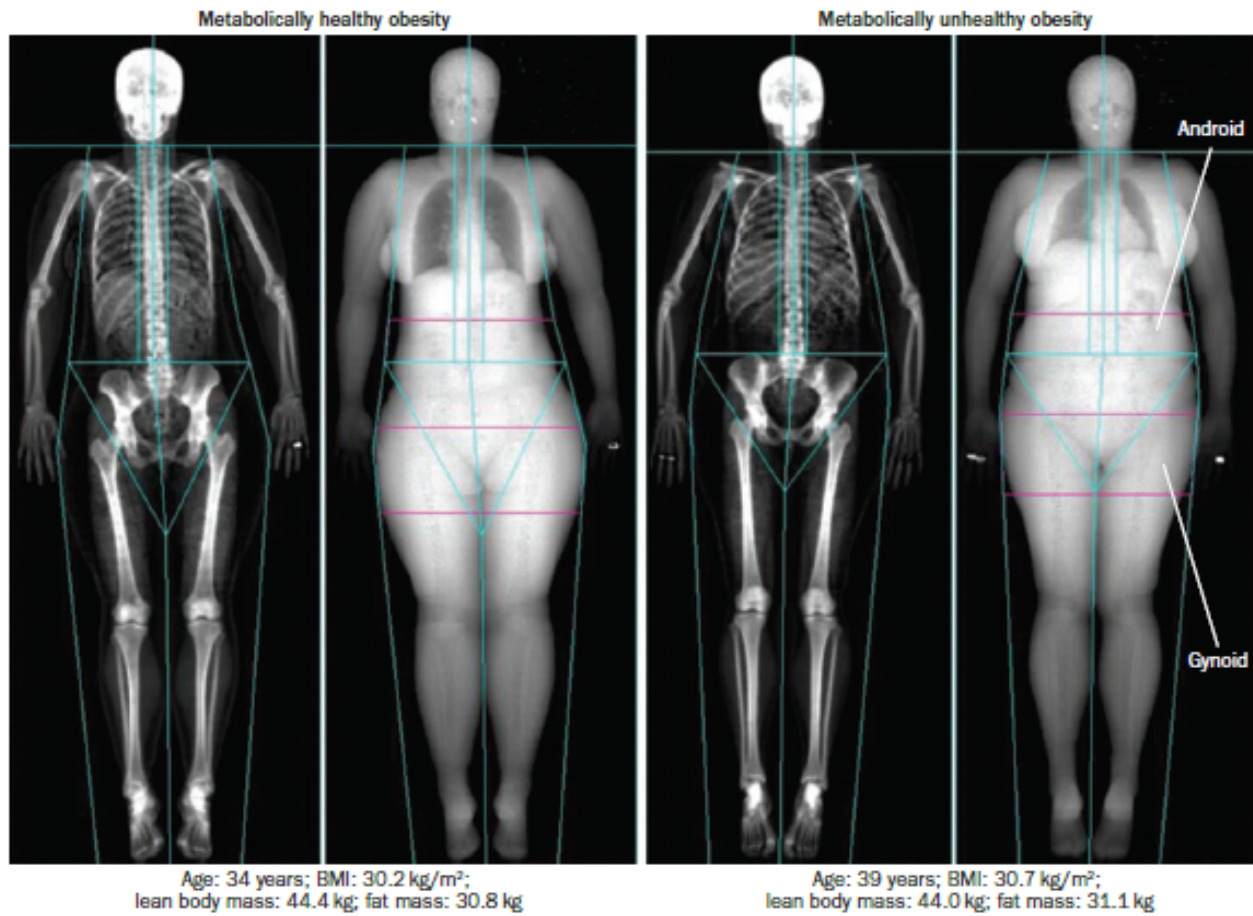
EAT can be differentiated from paracardial adipose tissue by Catmull-Rom spline interpolation of the pericardium.

EAT (purple) with a CT attenuation number of -190 to -30 Hounsfield units lies inside the pericardial contour, in contrast to

paracardial and thoracic adipose tissue (yellow), which lies outside of the pericardial contour.

BMI, body mass index.

- DXA – upper body (trunk) vs lower body fat
- - lower body fat mass attenuates increased disease risk associated with Upper body fat distribution



Karpe, F. & Pinnick, K. E. *Nat. Rev. Endocrinol.* **11**, 90–100 (2015);

Biology of upper-body and lower-body adipose tissue—link to whole-body phenotypes

Fredrik Karpe and Katherine E. Pinnick

Subjects matched for age and BMI