

# Body fat distribution and obesity

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## Body fat distribution and obesity: a comparison of upper and lower body adipose tissue biology in humans

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- 1. Measurement of abdominal and femoral intravascular adipose tissue blood flow with non-invasive percutaneous Doppler ultrasound is technically feasible, and this method is able to detect the expected fat depot-differences and postprandial increase in adipose tissue blood flow in healthy individuals - this thesis (Chapter 3)
- 2. Upper and lower body adipose tissue and adipocytes are characterized by distinct inflammatory signatures in postmenopausal women with normal weight or obesity *this thesis (Chapter 4)*
- 3. The oxidative machinery is functionally impaired in upper compared to lower body adipose tissue and adipocytes in humans *this thesis (Chapter 5)*
- Oxygen partial pressure alters the expression and secretion of several adipokines in differentiated human abdominal and femoral adipocytes derived from people with obesity but not normal weight - *this thesis (Chapter* 6)
- 5. Hippocrates wrote "Corpulence is not only a disease itself, but the harbinger of others", recognising that obesity is a medical disorder that also leads to many comorbidities. (Halsam, Lancet 2005; 366: 1197-209)
- 6. Medicine is a science of uncertainty and an art of probability. (Sir William Osler)
- 7. Medicine is not only a science; it is also an art. It does not consist of compounding pills and plasters; it deals with the very processes of life, which must be understood before they may be guided. (Paracelsus; 1493 1541)
- 8. The present work underlines the presence and importance of adipose tissue depot differences, indicating that abdominal and femoral adipose tissue differ in blood flow, the oxidative machinery, and inflammatory signatures. (This thesis, Valorisation Addendum)
- Ό βίος βραχύς, ἡ δὲ τέχνη μακρή, ὁ δὲ καιρὸς ὀξύς, ἡ δὲ πεῖρα σφαλερή, ἡ δὲ κρίσις χαλεπή. Life is short, art long, opportunity fleeting, experience perilous, decision difficult. (Hippocrates, Aphorisms; 460 - 370 BC)
- 10. If you look for a meaning, you'll miss everything that happens. (Andrei Tarkovsky. 'The Sacrifice', 1986).