Leptin

- 16kDa protein;
- Mainly secreted by adipose tissue but also has paracrine secretion;
- Positively associated with BMI;
- Higher in synovial fluid of those with knee OA;
- In our previous study (Ding et al ARD 2008), we reported:
  - Serum levels were negatively associated with knee cartilage volume.
  - The association between body fat and cartilage volume was mediated by leptin.
- Associations between leptin and hip OA have not been reported.
Schematic description of roles of leptin/IL-6 in obesity associated hip joint space narrowing