

In biology, adipose tissue Listeni/ˈædɪˌpoʊs/ or body fat or just fat is loose connective tissue composed mostly of adipocytes. In addition to adipocytes, adipose tissue contains the stromal vascular fraction (SVF) of cells including preadipocytes, fibroblasts, vascular endothelial cells and a variety of immune cells (i.e., adipose tissue macrophages [ATMs]). Adipose tissue is derived from preadipocytes. Its main role is to store energy in the form of lipids, although it also cushions and insulates the body. Far from hormonally inert, adipose tissue has, in recent years, been recognized as a major endocrine organ, as it produces hormones such as leptin, estrogen, resistin, and the cytokine TNF $\alpha$ . Moreover, adipose tissue can affect other organ systems of the body and may lead to disease. The two types of adipose tissue are white adipose tissue (WAT), which stores energy, and brown adipose tissue (BAT), which generates body heat. The formation of adipose tissue appears to be controlled in part by the adipose gene. Adipose tissue – more specifically brown adipose tissue – was first identified by the Swiss naturalist Conrad Gessner in 1551.

**Fat** is an ideal **sealant** because it is impermeable to water.

see **fat graft**

---

Allogeneic **adipose tissue-derived mesenchymal stem cells** (ADMSCs) refer to a type of **stem cell** that is derived from **adipose tissue (fat)** and can be used for therapeutic purposes. These stem cells have the ability to differentiate into various cell types and possess immunomodulatory properties.

From:  
<https://neurosurgerywiki.com/wiki/> - **Neurosurgery Wiki**

Permanent link:  
[https://neurosurgerywiki.com/wiki/doku.php?id=adipose\\_tissue](https://neurosurgerywiki.com/wiki/doku.php?id=adipose_tissue)

Last update: **2024/06/07 02:55**

