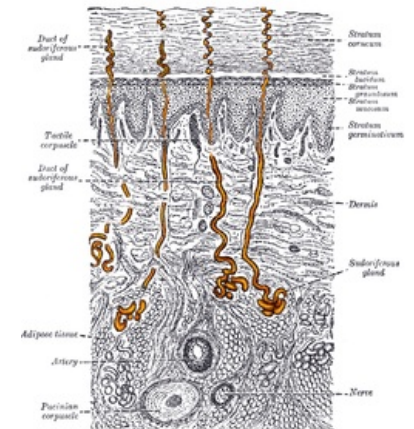


Eccrine sweat glands

Eccrine sweat glands are important for thermoregulation and hydration of the stratum corneum. They produce an isotonic NaCl solution, the ions of which are reabsorbed by the duct epithelium. These glands are everywhere except the nail bed, red lips, glans penis, prepuce, labia minora and clitoris. Most of them can be found on the soles of the feet, palms and foreheads. The secretory part is stored in the pars reticularis dermis, curled into a ball. It is made up of single-layered epithelium and myoepithelial cells. The duct is spirally coiled, lined with a two-layer cubic epithelium and opens into the epidermis.

They create sweat (a dilute solution of electrolytes), which removes heat from the body through evaporation. Sweat is originally odorless, it is created by bacteria on the surface of the body. Water from sweat is not absorbed due to *tight junctions*, therefore sweat is hypotonic and acidic (pH 5.5). At rest, the body produces about 200 ml per day, under extreme stress up to 10 l. Sweat production is increased by sympathetic.



Eccrine sweat glands (yellow)

Links

Related articles

- Skin adnexa
- Sebaceous glands
- Apocrine glands
- Nails
- Hair and Hair
- Skin Anatomy
- Physiology of the skin
- **Histology:** Thick-type skin (histological specimen) | Axilla/histological specimen

Source

- BENEŠ, Jiří. *Study materials* [online]. ©2007. [cit. 30.11.2010]. <<http://jirben2.chytrak.cz/>>.

Used literature

- ŠTORK, Jiří, et al. *Dermatovenereology*. 1. edition. Praha : Galén, Karolinum, 2008. ISBN 978-80-7262-371-6.
- LÜLLMANN-RAUCH, Renate. *Histology*. 1. edition. Grada Publishing a.s., 2012. 556 pp. ISBN 9788024737294.