Subcutis (Hypodermis) The subcutis is the innermost, fatty layer of the skin closest to the muscles and consists of a network of fat and collagen cells. The subcutis, also known as the hypodermis or subcutaneous layer, functions as both an insulator to conserve the body's heat and as a shock– absorber, protecting the inner organs. The thickness of the subcutis layer varies throughout the body and from person to person. The blood vessels, nerves, lymph vessels, and hair follicles also cross through this layer. It also stores fat as an energy reserve for the body.