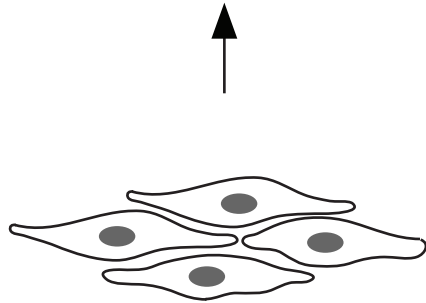


# Keratinization



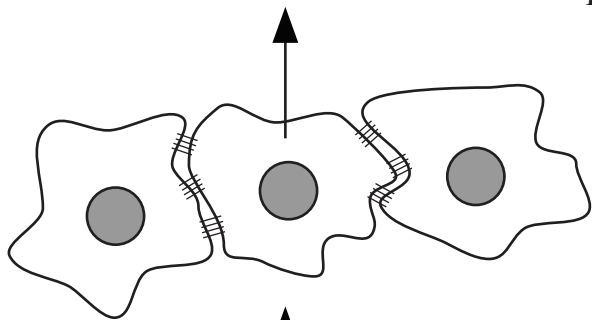
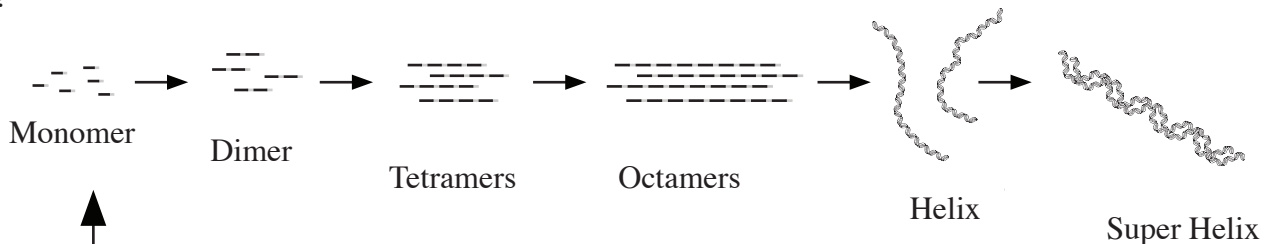
Tissue cells eventually get so far away from the basement membrane and the vascular support tissue take life support is challenged. Cells respond by undergoing an apoptotic process. What is left behind is a sheet of keratin called the stratum corneum.



As differentiation continues, apical cells take on characteristic squamous morphology.

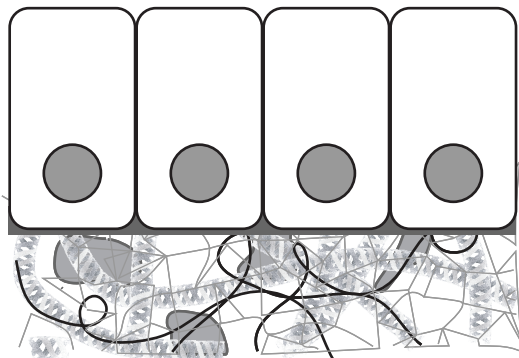
Continued Differentiation

Within the Keratinocytes, keratin monomers are formed. Monomers then form Dimers. The Dimers then form Tetramers, and tetramers form Octamers. As the process continues, polymers of keratin form double helices. The double helices themselves form helices called a super helix. A keratin fibril has formed!



Keratinocytes form desmosomes (≡), where the interlocking junctional proteins cross-link the cytoskeletons of adjacent cells.

Differentiation



Stem Cells of Stratum Basalis  
Divide and differentiate into keratinocytes

Basement Membrane

Loose Areolar  
Connective Tissue