



Tendons versus Ligaments:

Tendons: Primarily composed of Type I collagen and transmit the forces of muscle activity across a joint while assisting in the regulation muscle tension and length feedback.

Ligaments: Also predominantly contain Type I collagen, but they may have a higher proportion of other collagen types like Type III, which contributes to their elasticity. Ligaments provide joint stability and provide proprioceptive feedback.

Both Tendons and ligaments have a very poor blood supply meaning that they do not have any blood vessels that travel through them, which is partially what makes them very strong and resistant to stretch. However, because of this they do not heal quickly,

Low Metabolic Rate: Ligaments and tendons have a lower metabolic rate than muscles, meaning they require less energy and have a slower rate of cell turnover, which also contributes to slower healing.

Scar Tissue Formation: Ligament injuries often result in scar tissue formation, which is less flexible and strong than the original ligament tissue. This scar tissue can also hinder the full restoration of the ligament's original function.