Menisci are semi-lunar wedge-shaped fibrocartilage tissue structures located in the knee joint between the femur and tibia. They stabilize the joint and distribute load between articular cartilage surfaces, preventing overload and damage. Menisci are composed of cells and extracellular matrix (ECM), predominantly type I collagen (COL) and glycosaminoglycan (GAG). In many cartilaginous tissues, ECM underlie the tissue mechanical properties and change with maturation. This study found that cellularity, GAG, and COL content in bovine menisci change with maturation and tissue region. These results suggest that biomechanical properties of meniscus may change with maturation, and reflect age- and site-varying mechanical demands.