## 2. EPITHELIAL TISSUE AS A COMPONENT OF THE IMMUNE SYSTEM

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**Introduction**. Epithelial tissue is an essential component of the human body, not only for its basic functions such as protection, secretion and absorption, but also for its significant contribution to the immune system. This tissue covers the body's external surface, airways, digestive tract, and many other internal surfaces, forming a primary barrier against pathogens. Although, at first glance, the epithelial tissue may seem more like a passive protector, it has an active role in the body's immune response.

**Aim of study.** The purpose of the study is to explore and highlight the role of epithelial tissue within the immune system, the interactions of epithelial tissue with immune cells, the mechanisms by which epithelial tissue contributes to the detection and neutralization of pathogens, and how it may be involved in abnormal immune reactions, such as allergies or autoimmune diseases.

**Methods and materials.** Analysis of specialized literature from the electronic database PubMed, for the terms "Immune role", "Epithelial tissue".

**Results.** Following the analysis of the literature, it was found that epithelial cells play an active role in the detection and recognition of pathogens. They express different receptors and immunosensors that allow them to identify bacteria, viruses and other potential threats. This early recognition is due to intercellular communication in the epithelial tissue. By means of these mechanisms epithelial cells communicate with neighbouring immune cells to coordinate local immune responses. This communication can have a significant impact on the evolution of inflammatory processes and immunity.

**Conclusion.** This literature review provides a comprehensive insight into the importance of epithelial tissue in the immune system and highlights the need for future research to further unravel the complexity of these interactions. Deeper understanding of these interactions could lead to the development of more effective therapies and treatments for a diverse range of immune and inflammatory conditions.