Book

# Anatomy, Fascia

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## Excerpt

Researchers do not agree on one comprehensive "fascia" definition. Despite the scientific uncertainty, there is an agreement with medical text that the fascia covers every structure of the body, creating a structural continuity that gives form and function to every tissue and organ. The fascial tissue has a ubiquitous distribution in the body system; it is able to wrap, interpenetrate, support, and form the bloodstream, bone tissue, meningeal tissue, organs, and skeletal muscles. The fascia creates different interdependent layers with several depths, from the skin to the periosteum, forming a three-dimensional mechano-metabolic structure .

**The Fascia and Its Effect on Individual Health**

Three large groups of scholars have attempted to define fascia. The Federative Committee on Anatomical Terminology (FCAT), founded in 1989 from the General Assembly of the International Federation of Associations of Anatomists (IFAA), introduced the term "fascia superficialis" and "fascia profunda." The superficial fascia is a "whole loose layer of subcutaneous tissue lying superficial to the denser layer of fascia profunda." The deep fascia, according to this definition, lies below the superficial fascia, highlighting two fasciae. In 2011, the Federative International Programme on Anatomical Terminologies (FIPAT), in agreement with FCAT, defined the fascia as "a sheath, a sheet, or any other dissectible aggregations of connective tissue that forms beneath the skin to attach, enclose, and separates muscles and other internal organs." The FIPAT builds on the text of international anatomical terminology. The second definition specifies the term connective tissue, which functions to divide, separate, and support different structures. The connective tissue or fascia begins under the skin, excluding the epidermis from the fascia set.

The third group of scholars is the Fascia Nomenclature Committee (2014), born from the Fascia Research Society founded in 2007. The board gave the following description of fascia: "The fascial system consists of the three-dimensional continuum of soft, collagen-containing, loose and dense fibrous connective tissues that permeate the body. It incorporates elements such as adipose tissue, adventitia, and neurovascular sheaths, aponeuroses, deep and superficial fasciae, epineurium, joint capsules, ligaments, membranes, meninges, myofascial expansions, periosteum, retinacula, septa, tendons, visceral fasciae, and all the intramuscular and intermuscular connective tissues including endo-/peri-/epimysium. The fascial system interpenetrates and surrounds all organs, muscles, bones and nerve fibers, endowing the body with a functional structure, and providing an environment that enables all body systems to operate in an integrated manner." This is the broadest definition of fascia. The concept of a continuum of the collagen and connective structure, the cellular diversity that makes up the fascia, is emphasized. It is this continuum itself that assures the health of the body.

These scientific definitions allow healthcare practitioners to make some deductions about fascia. The fascia includes everything that presumes the presence of collagen/connective tissue or from which it is derived. All the tissue considered as "specialized connective tissue" of mesodermal derivation is inserted into the fascial system. These include blood, bone, cartilage, adipose tissue, hematopoietic tissue, and lymphatic tissue. The fascial system has no discontinuity in its path, with layers of different characteristics and properties overlapping.

A further research group for the nomenclature of the fascia founded in 2013: FORCE - Foundation of Osteopathic Research and Clinical Endorsement. The FORCE group has recently written several articles, highlighting new concepts to understand the concept of the fascia better: " The fascia is any tissue that contains features capable of responding to mechanical stimuli. The fascial continuum is the result of the evolution of the perfect synergy among different tissues, liquids, and solids, capable of supporting, dividing, penetrating, feeding, and connecting all the districts of the body: epidermis, dermis, fat, blood, lymph, blood and lymphatic vessels, tissue covering the nervous filaments (endoneurium, perineurium, epineurium), voluntary striated muscle fibers and the tissue covering and permeating it (epimysium, perimysium, endomysium), ligaments, tendons, aponeurosis, cartilage, bones, meninges, involuntary striated musculature and involuntary smooth muscle (all viscera derived from the mesoderm), visceral ligaments, epiploon (small and large), peritoneum, and tongue. The continuum constantly transmits and receives mechano-metabolic information that can influence the shape and function of the entire body."



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