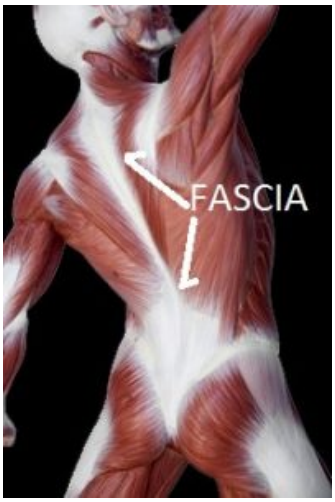
Fascia, What Is It ?

Fascia is a continuous 3D web of fibrous tissue from head to toe, made up of proteins that holds the tissue of the body in place and forming your soft tissue architecture. Your fascia interpenetrates every muscle, bone, nerve, artery and vein, it binds different muscles together and is an integral part of the way your muscles work together to exert force and generate stability and movement of the skeleton. Your fascia also extends to the organs and viscera, wrapping around them and holding them in place within the body cavity. Imagine biting into a wedge of orange and looking at the individually wrapped pods of juice, we're like that too!

If you could remove every piece of tissue from the body that was NOT fascia, you would have a perfect 3D model of the body, including bones, muscles, organs and vessels. In fact, the fact that fascia is everywhere is one of the very reasons that is was overlooked for so long. In dissections of the human body, most of it was cleanly removed and thrown away so that the cadaver would more closely resemble pictures in anatomy textbooks. If you think of a piece of rump steak, the red meaty parts are the muscle and the clear bands of fibrous tissue holding the meaty parts together is the fascia.



Traditionally fascia was thought to be important in certain areas, such as the arch of the foot and iliotibial band, where the fascia is quite thick and superficial. We now know this to be a continuous, interconnected systems of tissue from head to toe, where tension in one part of the system is capable of exerting a restriction or pull in other, often far reaching parts of the system.

Previously thought to be a static and inert piece of tissue, we now know that fascia responds to stress and load and is an integral part of the way your body responds to these stresses and load in an attempt to stabilise the body. Often this adaption results in thickening and loss of pliability of the fascial sheets in a particular area, resulting in restriction of movement and compression of joints and/or sensitive structures, resulting in pain and injury.

It is important for your fascia to remain well hydrated in order for it to function well. An important part of the functioning of the fascial system are proteins called glycosaminoglycans, or GAGs for short. These GAGs can glue layers of tissue together when water is absent, making them hard, tough and non pliable, or can assist in layers of tissue sliding on one another when water is present, allowing them to be springy and resilient.

So drink more water right? Unfortunately, it is not that simple, water is delivered to the fascia via a system of hoses called microvenules. When tissue is tight, overused or under constant compression, these hoses get compressed, decreasing water delivery to the tissues and drying them out. It is therefore important that you work on the tissue regularly to iron out the tight parts of the tissue, opening up the microvenules and restoring water flow to the tissues. Regular remedial massage, stretching and release work with rollers and balls is great for this. The harder the tissue is working, the more regularly you need to do this in order to keep everything functioning well.

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Movement also assist in getting hydration to the tissues. Sustained postures or repetitive movements in the same plane however, will tend to compress and stress certain areas of the tissue, setting up a pattern of fascial stiffness that can lead to injury and pain. It is important therefore to make sure that your training regime involves a variety of movement.

Rest is how the tissue re hydrates, when you do heavy exercise, you are squeezing the water out of the tissue in the same way as wringing out a sponge. When we rest and unload the tissue, again like a sponge, it will suck up more water and be ready for further loading. This is one of the major flaws of over training.

So be nice to your fascia, avoid sustained and poor postures, vary your exercise regime, get a regular massage and do regular release work and stay well hydrated and your fascia will be nice to you too.

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