

# MOVE & IMPROVE

## Tissue healing

The human body is amazing in its capacity to heal and repair.

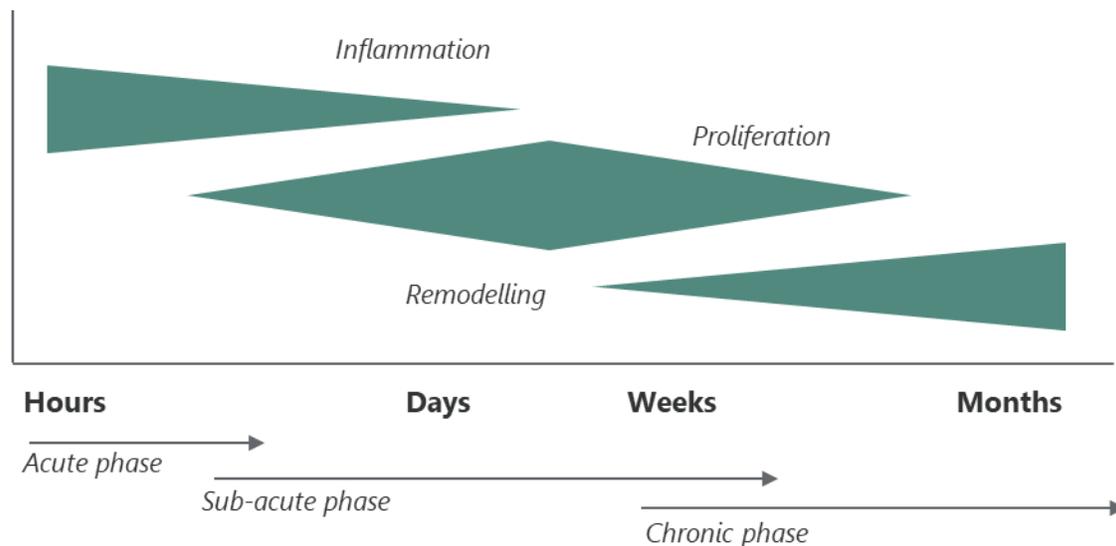
Understanding how it does this can assist you in supporting this natural ability by providing the optimal conditions for healing to take place.

Following injury your tissues will bleed, how much will depend on the extent of the injury and the rates of healing will depend on the type of tissue injured.

### Healing rates for various tissue types

Tissue	Time to return to approximately normal strength
Bone	12 weeks
Ligament	40-50 weeks
Muscle	6 weeks up to 6 months
Tendon	40-50 weeks

There are **3 stages** of healing that all overlap:



### Stage 1 Inflammation

This stage usually starts within a few hours of injury and is at its greatest over the first 3 days and then tails off over a couple of weeks.

Inflammation is essential to healing (so this is why there is debate about the use of anti-inflammatories at this early stage) as inflammation ensures the necessary building blocks are available for tissue repair and also ensures debris is removed from the area.

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The bleeding following the injury and the swelling associated with the inflammation also provide a scaffold onto which the new tissue framework can be laid.

As this phase settles so do the constant background 'aches and pains' that so often bother people constantly and disturb sleep in the first few days following injury.

***Immediately after a soft tissue injury, do no harm and let PEACE guide your approach***

<b>P</b>	<b>Protection</b> Avoid activities and movements that increase pain during the first few days after injury
<b>E</b>	<b>Elevation</b> Elevate the injured limb higher than the heart as often as possible
<b>A</b>	<b>Avoid anti-inflammatories</b> Avoid anti-inflammatory medication as they reduce the tissue healing. Avoid ice.
<b>C</b>	<b>Compression</b> Use elastic bandage or taping to reduce swelling.
<b>E</b>	<b>Education</b> Your body knows best. Avoid unnecessary passive treatments and medical investigations and let nature play its role.

## **Stage 2 Proliferation of new tissue**

This begins within 1-2 days after injury but remains weak and relatively disorganized initially. As more tissue is laid down it will be able to tolerate greater load.

This phase is strongly influenced by how much you expose the new tissue to movement and loading. Over exposure can impede repair whilst lack of exposure can result in weak poorly developed new tissue.

## **Stage 3 Tissue Remodeling**

This phase is believed to start within the first 2 weeks of injury but can continue for months. It is during this phase that the repaired/scar tissue is organized in response to normal movement and load in to a mobile, strong new tissue that effectively mends the damage.

# M O V E & I M P R O V E

*After the first days have passed, soft tissues need LOVE*

<b>L</b>	<b>Load</b> Let pain guide your gradual return to normal activities. Your body will tell you when it's safe to increase load.
<b>O</b>	<b>Optimism</b> Condition your brain for optimal recovery by being confident and positive.
<b>V</b>	<b>Vascularization</b> Choose pain-free cardiovascular activities to increase blood flow to repairing tissues.
<b>E</b>	<b>Exercise</b> Restore mobility, strength and proprioception by adopting an active approach to recover.

<https://blogs.bmj.com/bjism/2019/04/26/soft-tissue-injuries-simply-need-peace-love/>