



What is MGF?

Mechano-growth factor (MGF) is an anabolic peptide found in muscle, bone, tendon, neural, and cardiac tissue following periods of increased stress. It is a split variant or isoform of insulin-like growth factor-1 (IGF-1), also known as IGF-1Ec. MGF functions to increase stem cell proliferation in given tissues, allowing for more rapid recovery.

Why put MGF and PEG together?

Since MGF has a relatively short half-life (5-7 minutes), MGF is pegylated. Pegylation is the addition of polyethylene glycol (PEG) to the peptide. The addition of the PEG group is a safe and effective way to increase the MGF half-life to 48-72 hours. Conveniently, the PEG group does not bind itself to other substances in the body and is excreted rapidly via urination.

What forms of PEG-MGF are available?

PEG-MGF is available as a reconstituted injectable.





Who can benefit from using Mechano-Growth Factor?

Primarily, MGF is used in conditions requiring anabolic enhancement, including bony and soft tissue repair (e.g., tendon, ligament, muscle) following injury, sarcopenia (muscle wasting), stroke, or heart attack. MGF is especially beneficial for individuals requiring enhanced recovery and muscle building following eccentric muscle loading.

Mechano-Growth Factor is beneficial in:



MUSCLE



HEART



JOINT



BONE



BRAIN

What you need to know:

PEG-MGF is a safe and effective option for use in patients who are looking to improve recovery and repair through anabolic signaling. PEG-MGF should be used with caution in patients who are prone to hypoglycemia. Furthermore, patient-specific dosing and injection schedules are vital to avoid unwanted tissue hypertrophy.