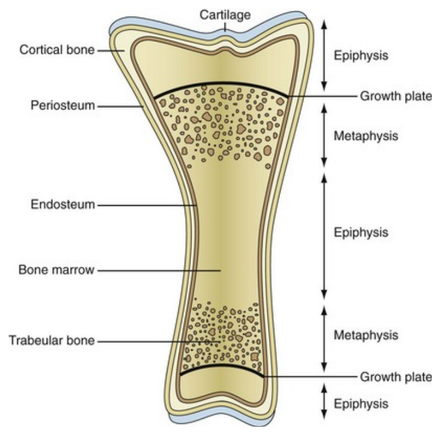
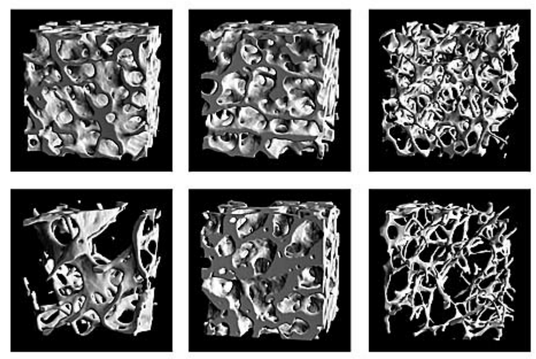
Micro Fracture Creation





What are micro-fractures?Micro-fractures are small, microscopic cracks in the bone caused by pressure or stress. They are a critical part of the direct method for growing taller because they stimulate bone remodeling and growth when subjected to proper conditions like optimal nutrition, hormones, and strategic recovery.

When bones experience stress or injury, the body's natural response is to repair and reinforce them, often making them denser and stronger. By carefully inducing and managing micro-fractures, we harness this principle to promote vertical bone growth. This process works alongside theories like Wolff's Law, which states that bones adapt based on the stresses placed upon them. Techniques like bone remodeling and chondrocyte differentiation further facilitate the expansion of shinbones and spine, contributing to increased height.

Direct vs. Indirect Methods
The indirect method focuses on overall environmental factors like nutrition, hormones, sleep, and posture, which support bone and cartilage health. In contrast, the direct method actively induces changes in bone structure by creating micro-fractures and fostering conditions for their optimal repair and expansion.

How are micro-fractures created?
Micro-fractures can result from various forms of physical stress, such as impacts, repetitive strain, or targeted exercises. Examples include activities like sprinting, jumping, martial arts conditioning (e.g., Muay Thai shin conditioning), and controlled methods such as weighted exercises. These activities place localized stress on bones, triggering micro-damage that the body repairs and fortifies.

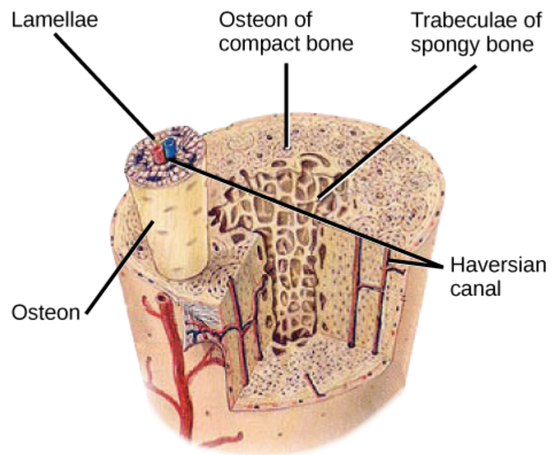
HERE IS A BASIC OUTLINE OF WHAT WE NEED TO DO:

Step 1: Create Micro-Fractures
This is achieved through exercises and techniques that exert controlled pressure on specific areas of the bone.

Step 2: Stretch Fascia and Cortical Bone Layers
After creating micro-fractures, stretching ensures that these fractures expand, promoting increased length over time.

Step 3: Counter Decompression
Spinal decompression techniques, such as using inversion tables, are vital to reduce the compressive forces from gravity and facilitate elongation.

Step 4: Optimize the Growth Environment
Nutrition, hormones, and a recovery-friendly environment are essential to repair the micro-fractures with bone tissue, leading to increased density and size.



Methods for Creating Micro-Fractures

1. Ankle-Weights Off-the-Bed Method (OTBM)
Attach ankle weights (5-35 lbs depending on strength) and allow them to hang off the bed while supporting the knees. This creates stress in the shinbones and ankles over prolonged periods (30-60 minutes).

Put them on your ankles, and lay on your bed with a pillow directly under your knees and any point below your knees off of your bed. You can do this while sleeping (if you have the willpower), or just whenever you are tired or can do it for extended periods of time.

2. Resistance Band Method (RBM)
Using resistance bands tied to stable objects, apply tension to the ankles or knees to generate stress. While primarily for extending existing micro-fractures, this method complements other fracture-inducing exercises.

Find resistance bands that suit your strength, and find the perfect intensity that you can hold for over 30 minutes, but can also feel slight discomfort. You need discomfort for growth.

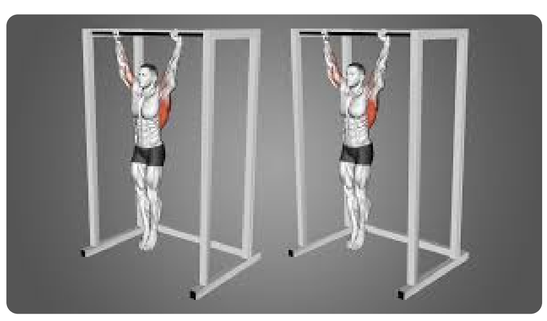
There are multiple methods you can use with RBs, but the best one would be laying down and tying a forceful band to both your ankles and around a bed frame or another object and laying down whilst the band extends and places pressure on either your: heels, ankles, or knees.

You can also do this same exact concept on your arms to lengthen them (KEEP IN MIND, THIS WILL EXTEND MICRO FRACTURES MORE THAN ACTUALLY CREATE THEM! DO THIS METHOD IN CONJUNCTION WITH OTHER MICRO-FRACTURE-CREATING METHODS..)

3. Dead Hangs
Hanging from a pull-up bar stretches the spine and leg bones. Perform scapular pulls or half-pull-ups for additional stimulation.

This is also a micro-fracture extension method, so do this after creating micro-fractures to “stretch” them, as shown in the step-by-step protocol.

Get a pull-up bar, or anything you can hang on, and simply hold your position, potentially even doing slight variations of scapular pulls or half-pull ups. Hang as long as you can to stretch the micro fractures in your spine, legs, shinebones, etc.



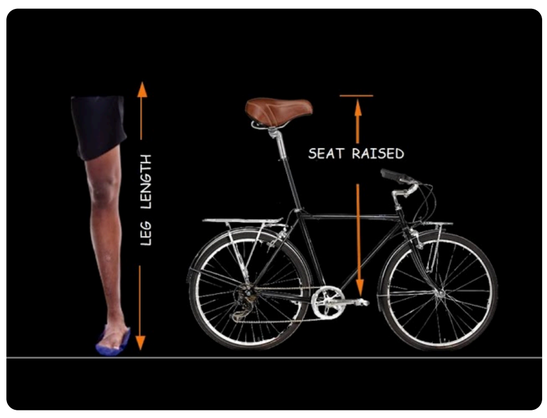
4. Extended Leg Cycling (ELC)
Raise the seat of a stationary bike to force full leg extension during pedaling, creating torsional stress in the knees and shinbones.

This is a very simple yet effective technique to generate torsional forces on the leg and cartilage in the knee, it is much safer as well.

Sit on a bike/cycle, raise the seat as high as possible so your legs must extend with every thrust, the goal here is that you can still touch the pedals, but with increasingly high discomfort as you keep cycling.

The saddle/seat height should be the same height as your leg (please measure this), so that when you sit on the cycle with your legs FULLY stretched, you should almost be unable to touch the pedals with the arch/heel of your feet (not the upper section.)

Your feet should touch the pedals inside the triangle area of your foot (the very middle section), not with the toes or balls of your foot, since this will remove torsional force and add less tension.



Method 5: Weighted Calf/Toe Raises

This method is not as effective, but a good addition to add to your overall workout routine for some extra micro fractures.

Simply do weighted calf raises, and weighted toe raises at high pressure. Do them at an inwards and outwards angle.

This applies progressive force on the shinbones and also builds calf muscle.

Method 6: Maasai Jumps

Maasai jumps are extremely important, they are one of the only exercises that not only create micro-fractures, but send a stimulus to the brain to literally GROW taller to reach an objective.

Brief history on the maasai tribe, one of the tallest tribes out there: they regularly consume raw milk and raw blood and do jumping competitions, they can jump almost 3x the height that professional NBA players can- and are extremely tall (6'2-6'8.)

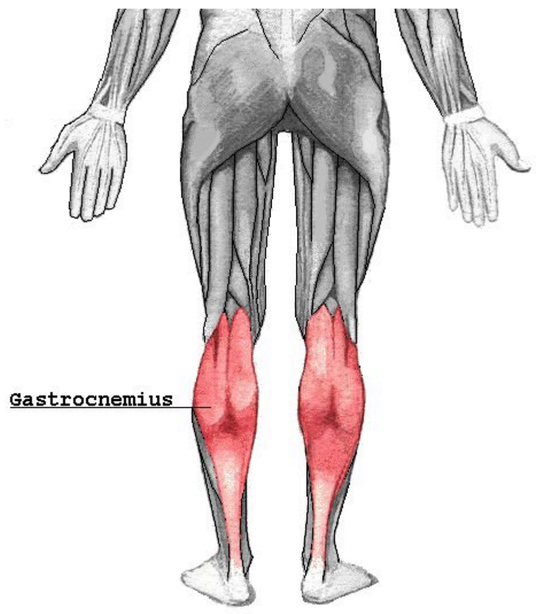
We can speculate that they are this tall because of the micro fracture creation they obtain from the jumping and the nutrition they get from raw milk.

The AVERAGE male height in the maasai is 6'4.

How do you do it? Firstly I suggest you watch some videos on their jumping competitions so you can get a general gist.

– Jump as if you are imagining yourself on a trampoline or bouncy matter below you
– Do not let your heels touch the ground, it should be tip-toe jumps
– Minimal pressure/engagement in the upper-leg muscles, the glutes should be engaged
– Jump as high as possible, without extending the legs as much as you can

Doing these regularly will create tensional forces on the leg bones, create micro fractures, and send stimulus to grow taller (if you are reaching for something, hint: jump reaches)



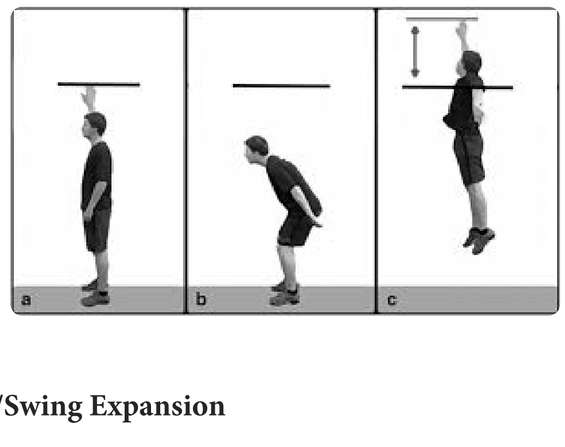
Method 7: Jump Reaches (The Stimuli Method)
Jump reaches are extremely important because they:

1. Create Micro-Fractures
2. Send the brain a stimulus for a specific objective (that is possible)
3. Stretch the fascia outwards

It is my favorite exercise for height growth.

Find an object, ceiling, anything that is around 1-6 (nothing more than 6) inches away from your hand when you jump and reach for an object.

Now jump, then reach, then jump, then reach. Whilst you jump you should be trying your HARDEST to reach that object. Keep doing this over and over.



Method 8: Collarbone Twist/Swing Expansion

Seg. 1:
This method is effective for the upper body, at widening your collarbones. It consists of two segments and different swings.

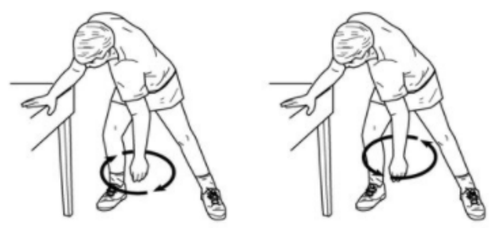
Stand straight up, firmly, with correct posture (posture section below)
Put your arms on your sides
Start by rotating your left arm anti-clockwise or backwards in a circular rotation

Then start swinging your other arm in the same direction, but alternate the rotations between both arms. Do this with normal pace and then build up to higher amoutns of reps, speed, and even intensity.

Alternating rotations: whilst your right arm is going UP your left arm should be going DOWN or vice versa

Seg. 2
The same exact thing as seg 1. but WITHOUT alternating rotaions (for full range of movement and micro fracture creation.)

Watch out for any sudden fascia injuries while doing this- build up from slow to fast, and warm-up with dynamic movements.



Pendulum Swing Exercise

BASIC Routine for Micro-Fracture Creation

This schedule prioritizes high-impact micro-fracture creation exercises earlier in the day and concludes with lower-impact, expansion-focused techniques like ankle weights and resistance bands later. Recovery and optimal nutrition throughout the week are essential for maximizing results.

Monday: Lower Body (Shins, Ankles, and Knees)

- **Morning (7:00 AM)**:
  - Maasai Jumps: 4 sets of 50 jumps.
  - Jump Reaches: 3 sets of 12 jumps reaching for a high object.
- **Evening (8:00 PM)**:
  - Ankle-Weights Off-The-Bed Method (OTBM): 30-60 minutes while resting or sleeping.

Tuesday: Upper Body and Spine

- **Morning (7:00 AM)**:
  - Collarbone Twist/Swing Expansion (Segment 1 and 2): 3 sets of 20 rotations per arm.
  - Dead Hangs: 4 sets of 60 seconds each.
- **Evening (8:00 PM)**:
  - Resistance Band Method (RBM): 30 minutes targeting the spine and shoulders.

Wednesday: Recovery and Light Full-Body Stimulation

- **Morning (7:00 AM)**:
  - Weighted Calf and Toe Raises: 4 sets of 15 reps with progressive weight.
  - Extended Leg Cycling (ELC): 20 minutes at high saddle height.
- **Evening (8:00 PM)**:
  - Ankle-Weights Off-The-Bed Method (OTBM): 30 minutes.

Thursday: High-Impact Lower Body Conditioning

- **Morning (7:00 AM)**:
  - Sprinting Intervals: 6 x 100m sprints with 60 seconds rest in between.
  - Muay Thai Shin Conditioning (light strikes or rolling): 10 minutes.
- **Evening (8:00 PM)**:
  - Resistance Band Method (RBM): 30 minutes on lower legs and ankles.

Friday: Upper Body and Spine Stimulation

- **Morning (7:00 AM)**:
  - Jump Reaches: 3 sets of 12 jumps with maximal effort.
  - Dead Hangs: 4 sets of 60 seconds with scapular pulls.
- **Evening (8:00 PM)**:
  - Resistance Band Method (RBM): 30 minutes targeting the spine and shoulders.

Saturday: Full-Body Shock Stimulus

- **Morning (7:00 AM)**:
  - Maasai Jumps: 4 sets of 50 jumps.
  - Sprinting Intervals: 6 x 100m sprints with 60 seconds rest.
- **Evening (8:00 PM)**:
  - Extended Leg Cycling (ELC): 20 minutes at high saddle height.

Sunday: Recovery and Expansion

- **Morning (7:00 AM)**:
  - Light Collarbone Twist/Swing Expansion: 3 sets of 15 rotations per arm.
  - Yoga and Spinal Stretches: 20-30 minutes of cobra stretch, child’s pose, and cat-cow pose.
- **Evening (8:00 PM)**:
  - Ankle-Weights Off-The-Bed Method (OTBM): 30-60 minutes.

This plan balances stress-inducing exercises with recovery-focused activities and progression over time. Adjust intensity based on your physical ability and recovery capacity. Alwa