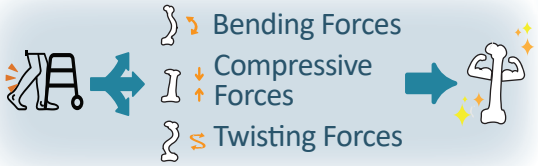
BARE BONES PODCAST

Get Moving and Loading

Bare Bones Podcast Episode 6

Exercises may increase bone density!

Bone adapts to the weight and force placed upon it. **Weight-bearing exercise** (standing upright against gravity) and **muscle strength training** produce 3 different types of force on bones to prevent or treat low bone mass or osteoporosis.



Did you know?

Exercises to improve bone strength are site-specific

1. What kind of exercises are recommended for people with spinal cord injury?

Neuromuscular Electrical Stimulation (NMES) Exercise

- Uses electrical current to cause muscles to contract.
- Used during muscle strength training.

Functional Electrical Stimulation (FES) Exercise

- A similar technique to NMES.
- Used during functional tasks such as walking, rowing, or cycling.

Passive Standing

- Can be performed in a standing frame, standing wheelchair, tilt table or other devices.

A prescription from a healthcare professional is required before doing these exercises.

Following SCI, PREVENT BONE LOSS with:

At least **1 Hour** of **Passive standing** x **5 days** a week

OR

At least **30 mins** of **FES or NMES** with visible leg muscle contraction and some resistance* x **3-5 days** a week

If you already have low bone mass, INCREASE BONE MASS with:

At least **30 mins** of **FES or NMES** with visible leg muscle contraction and increasing resistance over time* x **3-5 days** a week

*A healthcare professional will set up the stimulation parameters and exercise resistance required for you to achieve the best result.

2. Are there any other exercises I can try?

Depending on your level of function, you could try: active standing, walking, weight training etc. Normally, exercises involving more muscle contraction have greater effect on bone. Consult with your doctor about the best exercise options for you.

To Do List

Rehabilitation Therapy For Bone Health

- [ ] If you are at the early stage of SCI, start passive standing, FES or NMES exercise to prevent bone density decline.
- [ ] If you already have low bone mass or osteoporosis, start FES or NMES exercise to maintain or improve your bone mineral density.
- [ ] It will take at least 1 year of consistent, routine exercise to see a change in your bone density and bone strength. Continue training to maintain the beneficial effects long term over your lifetime.

Exercise Is Good For You, But Passive Standing And Electrical Stimulation Based Activity Can Increase Bone Health In Your Legs.

Learn More

SCI Fragments:
www.scifragments.ca

The information contained in these handouts & podcast are not intended to replace medical advice. Readers are advised to discuss their individual circumstances with their doctor & rehab care team.

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www.cravenlab.ca