

# BONE & JOINT HEALTH



## RISK FACTORS

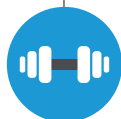
- Ageing
- Low calcium intake
- Low body weight (body mass index  $<19 \text{ kg/m}^2$ )
- Physical inactivity
- Maternal family history of hip fracture
- Smoking
- Vitamin D deficiency
- Excessive alcohol consumption

## BONE & JOINT HEALTH TIPS



### Eat a well-balanced diet rich in calcium and vitamin D

Adequate calcium and vitamin D intake helps to modify the rate of bone loss with ageing. Wholegrains, lean meats, fish, lots of green, leafy vegetables and dairy products help to nourish cells throughout the body to keep bones strong.



### Exercise

Building muscle can help to support bone and joint strength. It can also help to control weight in order to relieve stress on the body frame.



### Quit Smoking

Smoking increases the risk of developing bone and joint problems. Smoking cessation, even later in life, may help limit smoking-related bone loss.



### Avoid excessive alcohol consumption

Excessive alcohol consumption interferes with the absorption and levels of calcium in the body which can increase the risk of bone loss. Chronic alcohol intake has been associated with an increase in bone fractures.



### Consult your healthcare provider

Bone mineral density can be taken to find unknown bone-related conditions. A healthcare provider gives suggestions to minimise bone and joint problems.

## STAY ACTIVE HELPFUL EXERCISES



### AEROBIC OR ENDURANCE EXERCISES\*

- Includes:** walking, bicycling and swimming
- Helps with overall fitness
  - Supports weight control



### BODY AWARENESS EXERCISES\*

- Includes:** gentle forms of yoga and tai chi
- Helps to improve balance, posture and coordination
  - Promotes relaxation



### RANGE-OF-MOTION EXERCISES\*

- Includes:** head turns and knee lift
- Relieves stiffness
  - Improves mobility



### STRENGTHENING EXERCISES\*

- Includes:** running, jumping rope and lifting weights
- Helps to build muscle strength to support the body
  - Promotes bone growth and strength

\*Talk to your healthcare provider before starting any type of exercise programme for purpose of improving bone and joint health.

#### Sources:

- 1) [http://www.niams.nih.gov/health\\_info/bone/Osteoporosis/conditions\\_Behaviors/bone\\_smoking.asp](http://www.niams.nih.gov/health_info/bone/Osteoporosis/conditions_Behaviors/bone_smoking.asp) 2) <http://www.who.int/bulletin/volumes/81/9/Woolf.pdf> 3) <http://www.cdc.gov/physicalactivity/basics/glossary/>  
4) [https://static.medicine.iupui.edu/divisions/rheu/content/patienthandouts/ETR\\_ROM\\_brochure.pdf](https://static.medicine.iupui.edu/divisions/rheu/content/patienthandouts/ETR_ROM_brochure.pdf) 5) <http://www.mayoclinic.org/arthritis/art-200479717p-1>  
6) [https://www.michigan.gov/documents/mdch/Bone\\_and\\_Jt\\_Health\\_and\\_Smoking\\_fact\\_sheet\\_314042\\_7.pdf](https://www.michigan.gov/documents/mdch/Bone_and_Jt_Health_and_Smoking_fact_sheet_314042_7.pdf) 7) <http://pgh.com.sg/orthopaedic-advice-tips-common-joint-pain-problems/>