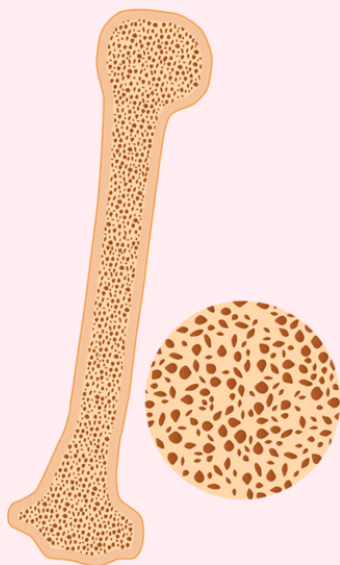


STRONG BONES, STRONGER YOU

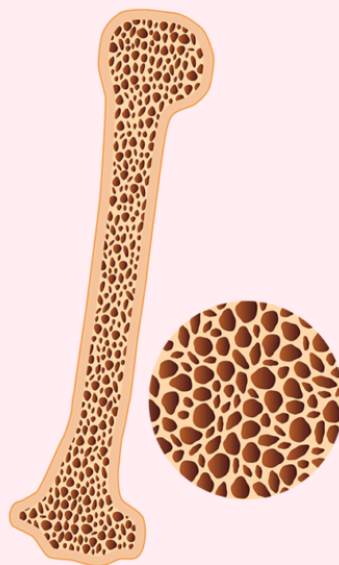
WHAT IS OSTEOPOROSIS? ¹

OSTEOPOROSIS IS A SILENT DISEASE -- UNTIL A FRACTURE HAPPENS.

BY: ADAM ROSE, RANI BAROT, MASON DILL, JANIAH RICHARDS, AND
MADISON MCDONALD (GROUP 3)



**NORMAL
BONE**



**OSTEOPOROTIC
BONE**

OSTEOPOROSIS IS A CHRONIC CONDITION CHARACTERIZES BY WEAKENED, BRITTLE BONES THAT ARE MORE SUSCEPTIBLE TO FRACTURES. IT DEVELOPS WHEN BONE LOSS OUTPACES THE BODY'S ABILITY TO PRODUCE NEW BONE.

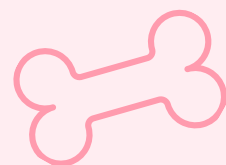
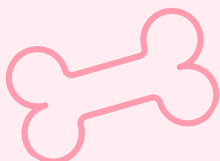
BONE IS LIVING TISSUE AND IS CONSTANTLY BEING BROKEN DOWN AND REBUILT. AS WE AGE, BONE BREAKDOWN OUTPACES BONE BUILDING, WHICH LEADS TO A LOSS OF BONE MASS AND WEAKER STRUCTURE.

WHY IT MATTERS AFTER 50

BONE HEALTH BECOMES CRITICAL AFTER MENOPAUSE

ESTROGEN LOSS SPEEDS BONE BREAKDOWN ²

AFTER MENOPAUSE, LOWER ESTROGEN LEVELS ACCELERATE BONE LOSS BECAUSE IT NORMALLY REGULATES BONE REMODELING.

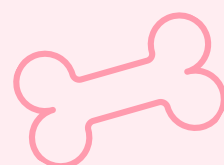


FRACTURE RISK SKYROCKETS ³

ABOUT 1 IN 3 WOMEN OVER AGE 50 WILL EXPERIENCE AN OSTEOPOROSIS-RELATED FRACTURE. ABOUT 20% OF WOMEN AGED 65+ HAVE OSTEOPOROSIS, WITH AN ADDITIONAL 50% HAVING LOW BONE MASS.

SERIOUS CONSEQUENCES OF HIP FRACTURES ⁴

HIP FRACTURES BECOME MORE SEVERE WITH AGE. OLDER WOMEN FACE A 30% MORTALITY RATE WITHIN ONE YEAR OF A FRACTURE DUE TO RESULTING IMMOBILITY AND INFECTION. FRACTURES OFTEN LEAD TO A LOSS OF INDEPENDENCE; ABOUT HALF OF OLDER ADULTS DO NOT FULLY RECOVER.



SPINAL FRACTURES CAN BE HIDDEN ⁵

UP TO 50% OF WOMEN OVER 50 MAY SUFFER SPINE FRACTURES WITHOUT OBVIOUS SYMPTOMS. THESE INJURIES CAN RESULT IN CHRONIC PAIN AND POSTURE DEFORMITIES.

PREVENTION ACROSS THE LIFESPAN

BEFORE DIAGNOSIS

REGULARLY ENGAGING IN HEALTHY BEHAVIORS IS ESSENTIAL TO OSTEOPOROSIS PREVENTION.

- GET 1200 MG OF CALCIUM, 800 IU OF VITAMIN D, AND 1.0 TO 1.2 G OF PROTEIN PER 1.0 KG OF BODY WEIGHT.
- DO WEIGHT BEARING EXERCISES LIKE WALKING, DANCING, AND RESISTANCE TRAINING.
- AVOID SMOKING AND EXCESSIVE ALCOHOL USE
- MAINTAIN A HEALTHY WEIGHT
- WEAR PROTECTIVE EQUIPMENT FOR SPORTS AND ACTIVITIES

EARLY DETECTION

- MAINTAIN A HEALTHY DIET WITH ADEQUATE NUTRITION
- TAKE MEDICATIONS LIKE REPLACEMENT ESTROGEN OR TESTOSTERONE
- REGULAR VITAMIN AND MINERAL SUPPLEMENTS
- REGULAR EXERCISE AND WORKING WITH A PHYSICAL THERAPIST

AFTER DIAGNOSIS

- STRENGTH TRAINING, ESPECIALLY FOCUSING ON SLOW, CONTROLLED MOVEMENTS
- WALKING
- STABILITY AND BALANCE EXERCISES
- ABSORB ENOUGH VITAMIN D
- MORE FREQUENT EXERCISE WITH PHYSICAL THERAPIST

KNOW YOUR RISK

YOU MAY BE AT A HIGHER RISK FOR DEVELOPING OSTEOPOROSIS IF YOU:

- ARE 65 YEARS OLD OR OLDER
- HAVE A FAMILY HISTORY OF OSTEOPOROSIS
- HAVE A HISTORY OF FRACTURES
- HAVE A LOW BODY WEIGHT
- SMOKE OR DRINK ALCOHOL
- LIVE A SEDENTARY LIFESTYLE

TALK TO YOUR HEALTHCARE PROVIDER ABOUT YOUR BONE HEALTH TODAY!

RESOURCES AND SUPPORT

CLICK ON THE RESOURCE TO ACCESS THE WEBSITE

[NATIONAL
OSTEOPOROSIS
FOUNDATION](#)



[NIH OSTEOPOROSIS
RESOURCE CENTER](#)



[MAYO CLINIC
OSTEOPOROSIS](#)



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