



# PROTECT YOUR BONE HEALTH



Adolescence is an important period for bone growth and development. Medications used in gender-affirming care (puberty blockers, some therapies for menstrual suppression) can delay bone development that naturally occurs during puberty. It is not fully known how gender-affirming hormone therapy influences bone development; however, these recommendations apply to all youth



## TAKE A VITAMIN D SUPPLEMENT

Vitamin D deficiency occurs in about 50% of transgender youth. **All youth should take a daily supplement containing 1000 units of vitamin D.**



## AVOID SMOKING

Smoking weakens bones. Smoking (including vaping) may also increase the risk of blood clots with gender-affirming hormone therapy.



## GET ENOUGH CALCIUM

All youth should get about **1300 mg/day of elemental calcium**. Your pharmacist or doctor will help you decide if you need to take extra calcium.\*



## MAINTAIN A HEALTHY WEIGHT

Keep your weight within a healthy range with balanced eating and exercise.



## CHECK BONE DENSITY

If you are starting puberty blockers, your doctor will decide if a bone mineral density test (using a special x-ray) is needed



## EXERCISE REGULARLY

Weight-bearing exercises like walking, lifting weights, and stair climbing strengthen bones.





# CALCIUM & VITAMIN D



Calcium is important for building strong, healthy teeth and bones. When you don't get enough calcium in your diet, the calcium stored in your bones is used to supply the rest of your body. This can make your bones weak and more likely to fracture or break. Vitamin D helps your body to absorb calcium. Try to choose food sources of calcium and vitamin D as much as possible, but sometimes extra supplements are needed.



## CALCIUM

If you take a supplement, it is the amount of **elemental** calcium listed on the label that is important. A supplement label may say it contains 1250 mg of calcium carbonate, but the ingredients list 500 mg of **elemental** calcium. You can only absorb 500 mg of elemental calcium at once, so it is important to spread it out over the day. If you take other medications, ask your pharmacist if these can be taken at the same time. Calcium can cause constipation, so make sure you are drinking enough fluid.



## VITAMIN D

You may choose a supplement that contains both calcium and vitamin D, or you may take them separately. If you take a supplement with both, make sure you are getting enough vitamin D (1000 units daily) as some combination products do not contain enough vitamin D for youth. This may mean taking an additional vitamin D supplement to meet your daily requirements.



## YOUR PRESCRIPTION

NAME: \_\_\_\_\_ DATE: \_\_\_\_\_

CALCIUM (ELEMENTAL): \_\_\_\_\_ mg/dose FREQUENCY: \_\_\_\_\_/day

VITAMIN D: \_\_\_\_\_ units/dose FREQUENCY: \_\_\_\_\_/day





# CALCIUM & VITAMIN D CONTENT OF FOOD AND SUPPLEMENTS



## CALCIUM IN FOOD

Dairy is a good source of calcium:

Milk (1 cup) = 300 mg elemental calcium

Cheese (1 thumb-sized piece) = 300 mg elemental calcium

Yogurt (1 container) = 100 mg elemental calcium

Many foods contain calcium. If you do not consume dairy (milk, yogurt, cheese), you may need to take a calcium supplement. Talk to your doctor or pharmacist.



## CALCIUM IN SUPPLEMENTS

Common supplements include:

TUMS (Regular Strength) = 200 mg elemental calcium/tablet

TUMS (Extra Strength) = 300 mg elemental calcium/tablet

TUMS (Ultra Strength) = 400 mg elemental calcium/tablet

TUMS Chewies = 471 mg elemental calcium/chew

Caltrate Gummies = 250 mg elemental calcium/gummy (+ Vit D 400 units)



## VITAMIN D

Our bodies produce vitamin D from sun exposure to our skin. Vitamin D is also found in small amounts in fortified dairy products (milk) and naturally in fish. Because exposure to the sun is limited in Canada, all Canadian youth should take 1000 units/day in the form of supplements. Vitamin D is available as tablets, drops (that can be added to food or drink), chewable tablets, and gummies.

