## Second-Generation Antipsychotics (SGAs), Prolactin, Diet & Activity



Prolactin is a hormone that regulates breastfeeding in women.

Your prolactin levels may go up if you take some second-generation antipsychotics (SGAs), like risperidone or olanzapine.

High prolactin in some girls may delay puberty or affect menstrual periods. It can also cause nipple discharge.

High prolactin in some boys can delay puberty or cause sexual problems. It can also result in breast enlargement or nipple discharge.

## What about Prolactin & Bones?

If your prolactin levels are high for a long time, it may cause your bone density to decrease. That can lead to osteoporosis later in life.

Osteoporosis is a disease where a person's bones become weaker. Since bone building happens mainly in the first 20 years of life, it is especially important to support your bone building during this time.

Ways to support bone building:

- Good nutrition especially calcium and vitamin D
- > Regular physical activity it has been proven to increase bone density
- Avoid smoking

## **Nutrition and Bone Building**

You need calcium and vitamin D to build strong bones. When your prolactin levels are high, it is important to make sure your intake of calcium and vitamin D meets the recommended amount. You may need a supplement if you are not getting enough of these important nutrients from the foods you eat.

Age (years)	Recommended Calcium Intake	Recommended Vitamin D Intake
1-3	700 mg/day	600 IU/day
4-8	1000 mg/day	600 IU/day
9-18	1300 mg/day	600 IU/day

# Which Foods Contain Calcium?

Food Source	Amount of Calcium (mg)
Milk, whole, 2%, 1%, skim (1 cup)	291-324
Fortified rice or soy beverage (1 cup)	319
Cheese, hard (50 g)	370
Yogurt (3/4 cup)	250
Tofu, made with calcium sulphate (150 g)	230-350
Almonds (1/4 cup)	93
Salmon, canned with bones (75 g)	208
Orange juice, fortified (1/2 cup)	185

## Which Foods Contain Vitamin D?

Food Source	Amount of Vitamin D (IU)
Milk, whole, 2%, 1%, skim (1 cup)	103
Fortified rice or soy beverage (1 cup)	88
Orange juice, fortified (1/2 cup)	53
Egg yolk (1)	25
Salmon, canned (75 g)	200-500*

<sup>\*</sup>pink and sockeye have the highest amounts

It can be difficult to meet your needs for vitamin D through diet. Talk to your dietitian or doctor about taking a supplement.

# How Much Calcium is in Your Diet?

Food or Drink	Calcium (mg)
Total Calcium	1:





Developed by the health care

## **Activity and Bone Building**

Any kind of physical exercise is great for your health. The best activities for bones are weight-bearing – any activity where you are in a standing position.

**Bone-building activities:** walking, soccer, tennis, running, volleyball, hiking, ice or field hockey, dancing, skiing, soccer, skateboarding, gymnastics, in-line skating, basketball, lifting weights, jumping rope, aerobics.

To build stronger bones, we recommend three or more sessions of weight-bearing exercise per week. The longer the sessions, the better it is for your bones.

Spend less time sitting and more time on your feet and moving.

## What Can Be Done to Keep Track of My Bone Mineral Density?

- > Get the prolactin levels in your blood tested regularly
- Have a bone density scan to see how close you are to the average bone density for your age. Your bone density can be measured with dual-energy x-ray absorptiometry (DEXA scan)
- A DEXA scan shows if you have osteopenia or osteoporosis - decreased bone density

Children and youth find it easier to make changes when the whole family does it too!

### Ready? Set a Goal!

Now you have some ideas on ways to help keep your bones strong while on an SGA. It's time to make some goals!

Goals that work are usually:

- > Small
- > Achievable
- > Planned out

#### **EXAMPLE:**

**Small:** I need to drink more milk.

**Achievable:** I usually drink milk once a day. I like milk, so I'm going to try to drink it twice a day.

**Plan:** I'm going to drink a glass of milk every morning before school and another glass with my dinner. I've asked my mom to remind me so I won't forget.

#### **MY GOAL:**

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### Want to Learn More?

### Mental Health Metabolic Program:

www.keltymentalhealth.ca/metabolic or call (604) 875-2010

#### **Mental Health Information:**

www.keltymentalhealth.ca

#### **Medication Information:**

www.keltymentalhealth.ca/finding-help/medications/antipsychotics

#### **General Information About Healthy Eating:**

www.healthlinkbc.ca/dietitian or call 8-1-1

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