

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

## Insulin and SGAs

Insulin is a hormone made in your pancreas. Insulin takes sugar from your blood and helps to bring it into your cells.

Cells in your body can become resistant to insulin and stop responding to it. This causes your pancreas to make more insulin.

High insulin can be a warning that your pancreas is working too hard and will get too tired to make insulin. If your pancreas stops making insulin, you develop diabetes.

Your insulin levels may go up when you take second-generation antipsychotics (SGAs), such as risperidone or olanzapine.

## What Are Your Numbers?

Date	Your Numbers	Target Numbers
		$\leq 100$ pmol/L (100 or less)
		$\leq 100$ pmol/L
		$\leq 100$ pmol/L
		$\leq 100$ pmol/L

## How Does Diet Relate to Insulin Levels?

Your body makes insulin when you eat carbohydrates like sugars and grains.

Carbohydrates are important because they provide energy, but too much at once can make insulin levels high.

Carbohydrates are in many foods, such as:

- > Drinks made with sugar, such as pop, juice drinks, iced tea
- > Cookies, muffins, granola bars
- > Fruit and fruit juices
- > Grains like rice, pasta and bread
- > Milk products (except cheese)

## Diet and High Insulin

Some foods and ways of eating can help lower insulin levels.

**Eat regular meals and snacks:** If you snack all day, insulin levels stay high and the pancreas does not get a break. If you skip meals, it is also hard on the pancreas, especially if you skip breakfast.

- > It is best to have 3 meals and 2-3 snacks every day at set times

**Stay away from drinks sweetened with sugar:** Your body absorbs this type of sugar very fast and the pancreas has to work very hard. These drinks include pop, juice, energy drinks, slurpees, frappuccinos, sports drinks, etc. Look on labels for corn syrup or sugar, also called glucose or fructose.

“ 1 can (355 mL) of pop has 10 cubes or teaspoons of sugar! ”

**Choose high fibre grains more often:** Grains that are higher in fibre break down more slowly into sugar in the body. This means the pancreas will have to make less insulin at one time. Choose whole grain types of pasta, rice, bread and cereals that are high in fibre, such as:

- > “Stone-ground” whole wheat bread and sprouted grain breads
- > Brown rice (or mixed with white rice)
- > Add pearl barley to white rice
- > Whole wheat pasta - mix half with white pasta to get used to it

## Nutrition Facts Label

To find the amount of fibre and sugar in a food, look at the nutrition facts label.

Nutrition Facts	
Per 3/4 cup (100 g)	
Amount	% Daily Value
<b>Calories</b> 80	
<b>Fat</b> 1 g	1 %
Saturated Fat 0 g + Trans Fat 0 g	0 %
<b>Cholesterol</b> 0 mg	
<b>Sodium</b> 2 mg	0 %
<b>Carbohydrate</b> 15 g	5 %
Fibre 3 g	12 %
Sugars 7 g	
<b>Protein</b> 3 g	
Vitamin A 1 %	Vitamin C 2 %
Calcium 1 %	Iron 3 %

Look for:  
← more fibre  
← less sugar

## Sleep and Insulin

If you don't get enough sleep, your body becomes more resistant to insulin.

### Need help with sleep?

Check out the Healthy Living resources for families: [www.keltymentalhealth.ca/healthyliving](http://www.keltymentalhealth.ca/healthyliving).

There are tips to help with getting a good night's sleep.

## How Does Activity Relate to My Insulin Level?

Regular exercise can reduce your chances of developing high insulin levels.

Daily physical activity will help to keep your insulin levels within the normal range.

It is recommended that children get a minimum of 60 minutes of physical activity every day. Start small and work your way up!

## Activity and High Insulin

**Schedule in daily activity for the whole family:** That way everyone will have a positive health benefit. Don't forget to make it FUN!

**Stand more, sit less:** New research tells us that being active by just standing or walking more (and sitting less) can improve insulin levels.

**Limit screen time:** Have household rules that limit the amount of time family members can spend on screens – it is recommended that kids spend no more than 2 hours on screens per day. Take activity breaks (e.g. walking, jumping jacks) during longer periods of screen time.

**Do light activity after meals:** Going for a walk after dinner helps your body manage blood sugars better.

“ Think small changes for big effect. Starting with small goals and achieving them builds confidence! ”

## Ready? Set a Goal!

Now you have some ideas for things that may help lower your insulin while taking an SGA medication. It's time to make some goals!

Goals that work are usually:

- > Small
- > Achievable
- > Planned out

### EXAMPLE:

**Small:** *I need to drink less pop.*

**Achievable:** *I normally drink pop about once a day during the week and twice a day on weekends. I think I can try to cut down to pop once during the week when we go out for food.*

**Plan:** *I will only have pop during the week when we go out for food. The rest of the time, I'm going to drink water or milk.*

### MY GOAL:

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

## Want to Learn More?

**Mental Health Metabolic Program:**  
[www.bcchildrens.ca/our-services/mental-health-services](http://www.bcchildrens.ca/our-services/mental-health-services) or call (604) 875-2010

**Mental Health Information:**  
[www.keltymentalhealth.ca](http://www.keltymentalhealth.ca)

**Medication Information:**  
[www.keltymentalhealth.ca/antipsychotic-medications](http://www.keltymentalhealth.ca/antipsychotic-medications)

**General Information About Healthy Eating:**  
[www.healthlinkbc.ca/dietitian-services](http://www.healthlinkbc.ca/dietitian-services) or call 8-1-1