# Pediatric Endocrinology Fact Sheet Metformin: What I Need to Know

## What is metformin used for?

• Prediabetes, Type 2 Diabetes

#### How does it work?

 Metformin helps keep blood sugars in a normal range by helping our body use our own insulin better. It also causes the liver to make less sugar.

### What forms does metformin come in?

- Metformin immediate release

   500 mg tablets, 850 mg tablets, 1000 mg tablets, Liquid suspension
   500mg/5mL
- Metformin extended release (ER)

   500 mg tablet, 750 tablet, 1000 mg tablet

#### How will my metformin be dosed?

- Usually, patients start at a lower dose of metformin and then increase to a goal dose. This can help decrease sideeffects. Discuss titration with your provider.
- Immediate release metformin is dosed twice a day and extended release (ER) is dosed once a day

#### Can I crush metformin?

• You can crush immediate release metformin but not extended release

#### What if I miss a dose?

- If it has been less than 2 hours since the missed dose take the dose otherwise skip that dose.
- DO NOT take missed dose and usual dose doses at the same time.

#### What are common side effects?

- Loose stools, upset stomach, gas
- Less common- Vitamin B12 deficiency (can be associated with anemia)
- Some patients say that metformin has a "fishy" smell but that is normal, and it is not an indication that there is something wrong with the medication

# What can help make my side effects better?

- Less side effects with the extended release (ER) form
- Taking with food
- Taking before bed
- Smaller dose (talk with your prescriber before changing the prescribed dose)
- Time! Usually symptoms decrease over a few weeks of continued use

#### Who should not use metformin?

- Those whose kidneys do not work well
- Those with too much acid in the blood (metabolic acidosis or DKA)

#### What are serious side effects of metformin?

- Lactic acidosis (a form of too much acid in the blood)
- Low blood sugars (when combined with other drugs that lower blood sugar such as insulin)
- Severe allergic reaction

# When should I not take my metformin?

- If you are vomiting and/or are dehydrated
- If you are scheduled for a medical or dental procedure or imaging study (such as a CT scan or an MRI)- do not take metformin for 48 hours before and 24 hours after

#### When should I call my doctor?

- Side effects of nausea/diarrhea/gas/upset stomach that do not go away in 2 weeks
- Severe allergic reaction (e.g. rash, hives, wheezing, tight chest, swelling in face)
- If you have symptoms of too much lactic acid (e.g. weakness, severe stomach pain, sleepiness, fasting and shallow breathing, muscle cramping)

#### **References:**

Merck. Glucophage (Metformin hydrochloride). U.S. Food and Drug administration website.

www.accessdata.fda.gov/drugsatfda\_docs/lab el/2017/020357s037s039,021202s021s023lbl. pdf. Revised April 2017. Accessed April 27, 2022.



Copyright © 2022 Pediatric Endocrine Society. All rights reserved. *The information contained in this publication should not be used as a substitute for the medical care and advice of your pediatrician. There may be variations in treatment that your pediatrician may recommend based on individual facts and circumstances*