

# The 4-4-4 Sugar Challenge

An at-home challenge for you to consider with your doctor

## 3 Simple Steps

### Step 1:

Stir **4 tablespoons** of ordinary table sugar into a **4 ounce** glass of water. Mix until sugar is completely dissolved.

### Step 2:

Drink it on an empty stomach.

### Step 3:

See if symptoms such as bloating, gas and diarrhea occur during the next **4-8 hours**; this suggests sugar intolerance is possible.



## ADDITIONAL INFORMATION

Below is a link to a report which includes a listing of publications of clinical studies in which sucrose challenges, similar to the **4-4-4 Sugar Challenge**, were used to cause GI symptoms to permit the evaluation of the patients' response to sucrose.

For more information, please go to [www.sucroseintolerance.com/444SugarStudy](http://www.sucroseintolerance.com/444SugarStudy)

## IMPORTANT WARNINGS

1. You may have relatively **SEVERE SYMPTOMS**. If you do have sucrose intolerance, this challenge may cause relatively severe gas, bloating and diarrhea. Please plan to take the challenge on a weekend or other day when GI symptoms will not cause you to miss work or other important events.
2. **THIS CHALLENGE SHOULD NOT BE GIVEN TO INFANTS, VERY YOUNG CHILDREN, OR TO PEOPLE WITH SEVERE SYMPTOMS OR WHO ARE DIABETIC.** You and your doctor should take into account personal health considerations.
3. **THIS IS NOT A DIAGNOSTIC TEST** and cannot be used to confirm sucrose intolerance. Only a doctor can tell you if your symptoms are caused by Congenital Sucrase-Isomaltase Deficiency (CSID).

For more information, please email [info@sucroseintolerance.com](mailto:info@sucroseintolerance.com) or call 1-888-871-1589

# FOR DOCTOR



**NOTE:** This information is for use by a healthcare professional.

Dear Doctor,

The following is to provide you with information about a disease called **Congenital Sucrase-Isomaltase Deficiency (CSID)**. Your patient has taken a short quiz that suggests there is a possibility that he or she *may* have CSID.

Below you will find a brief discussion about the disease and information about a FREE test that may aid in the diagnosis of CSID. If you have questions, please call **1-888-871-1589** or email **info@sucroseintolerance.com**.

## What is CSID?

**Congenital Sucrase-Isomaltase Deficiency (CSID)**, also known as **Congenital Sucrase-Isomaltase Deficiency (CSID)**, is a disorder that causes a reduction of the enzyme activity needed to break down and absorb table sugar (sucrose) and other sugars from starch. Symptoms of Congenital Sucrase-Isomaltase Deficiency include chronic, watery diarrhea, gassiness, bloating, abdominal pain, and even constipation. The symptoms can vary from mild to severe. Infants, children, and adults can suffer from the disease.

Diagnosing CSID can be difficult because the symptoms are similar to several other more common gastrointestinal disorders including toddler's diarrhea, IBS-D, celiac disease or lactose intolerance.

Sucrase deficiency may be more common than you think. In a recent retrospective analysis of 27,875 small intestinal biopsy samples taken during an endoscopy and sent to a specialty laboratory for assessment of starch digestion enzyme activity, 9.3% of the samples showed a sucrase deficiency.<sup>1</sup>

1. Nichols BL, Adams B, Roach CM, Ma C, Baker S. Frequency of Sucrase Deficiency in Mucosal Biopsies. *J Pediatr Gastroenterol Nutr.* 2012; 55 (Suppl 2):S28-S30.

## FREE Test That Aids in Diagnosing CSID

- The sucrose intolerance hydrogen breath test aids in the diagnosis of sucrose intolerance by testing levels of methane and hydrogen in the breath.
- The test is noninvasive, short in duration, and can be administered by patients at home.
- Test kits are provided at no charge.
- Patients follow the simple instructions included in each kit and ship the test kit back to the lab via a prepaid shipping label.
- Test results are provided to the physician's office within 24 hours of receiving the completed test.
- Patients with sucrase deficiency may experience symptoms due to the large consumption of sucrose.
- This test is not specific for CSID and may produce false negative or false positive results.
- If you are interested in ordering a **FREE hydrogen breath test kit**, please call **1-888-871-1589**.
- There are a number of tests that are beneficial in the diagnosis of CSID. The disaccharidase assay test is the gold standard for diagnosis. The hydrogen breath test and the congenital test can be important aids in the diagnosis of CSID.

For more information, please email **info@sucroseintolerance.com** or call **1-888-871-1589**