

Service: **Respiratory**

# Mannitol Challenge



## What is a Mannitol challenge test?

Mannitol is a naturally occurring sugar. A “Mannitol challenge” test is a simple test that involves inhaling a fine mannitol powder, via an inhaler.

## Why do I need to have this test?

The doctor has requested that you have this test to assess the sensitivity of the airways in your lungs.

## What happens during the test?

You will be asked to breathe in different concentrations of mannitol powder, via an inhaler. The concentration of the powder is gradually increased to assess the effect it has on your lungs. After each inhalation you will be asked to perform a simple breathing test, which you have probably done before.

The whole test will last for approximately one hour.

## Will I experience any discomfort or side effects?

You should not experience any discomfort during this test. Sometimes the test can cause a mild spasm of the airways, which may make you cough or short of breath. This is easily reversed by a common medication (Salbutamol) that is given routinely at the end of the test. The powder may make your throat slightly dry which will be relieved with a drink of water.

## Important information

- **Please stop taking all of your inhalers and asthma/allergy medications (including antihistamines and montelukast) 4 days prior to this test. If required you can take Salbutamol (Ventolin) and Bricanyl up to 8 hours prior to the test.** This is important because these medications can cause the results of this test to be

inaccurate and may result in you not being able to perform the test.

- Please **do not** smoke for 6 hours prior to your appointment.
- Please **avoid** foods and drinks that contain caffeine (tea, coffee, chocolate, cola and energy drinks) on the day of your appointment. **You can continue to drink all other fluids.**
- Please avoid vigorous exercise on the day of your appointment.
- Please inform us if you are pregnant or currently breast-feeding as you may be unable to perform the test.

If you are unsure about whether you need to stop your medications or have any other questions about this test please contact us using the phone number on the back of this leaflet.

Thank you for your co-operation. This will help us to obtain accurate information about your lungs and enable us to provide you with the most appropriate treatment.

## Reference

Brannan, J.D., Anderson S.D., Perry C.P., Freed-Martens R., Lassig A.R. (2005) The safety and efficacy of inhaled dry powder mannitol as a bronchial provocation test for airway hyperresponsiveness: a phase 3 comparison study with hypertonic saline. *Respir Res.* **6:14**

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If you or the individual you are caring for need support reading this leaflet please ask a member of staff for advice.

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