

## USER GUIDE

1. Remove the cap of Sample Jar and fill it up with urine until it reaches the mark (20 ml).
2. Remove the cap of Vial 2 containing the IOI White 0.5 reactant and add the reactant to the Sample Jar drop by drop. Caution: Do not let the liquid flow; instead, drip it slowly!
3. Count the number of drops. After each drop, wait 30 seconds and shake the jar. Drip until the sample starts to opalescent. Then wait two minutes and make sure that the precipitation has been removed, if there is no precipitation, continue to drip.
4. Once the precipitate has taken place, dip the supplied pH paper 0,5 cm into the test sample and hold the dark green control colour next to the figure, check that it matches the colouring of the pH paper. If the same or only slight difference is observed, the test has been completed successfully and the resulting droplet count is replaced in the evaluation table and the result is obtained. If the colouring of the pH paper differs significantly from the colour of the dark green control next to the figure, the test may be considered unsuccessful and repeated.
5. After finishing the test, pour the liquid from Sample Jar 1 into the toilet, then put the cap back on the jars and throw them into a municipal waste bin.

## INTRODUCTION

The aim of the mgFIT test device for self-checking mgFIT is to detect urinary magnesium ion level. The IOI White 0.5 solution forms precipitate when dripped into urine.

The result of the test is the number of drops dripped into the urine.

This way, magnesium ion deficiency can be determined in a few minutes. The received result can be checked in the table under the EVALUATION section of this

user guide. The received result is indicative only. Seek a specialist's help, and do not implement any kind of medical treatment without prior consultation.

### **CONTENTS OF THE BOX**

1 piece of Sample Jar numbered 1 with screw cap; 1 piece of Vial numbered 2 containing the IOI White 0.5 reactant with cap, containing enough reactant to perform one test, 1 piece pH paper and a user guide.

### **CAUTIONS**

Before use, please read this user guide carefully! Only after careful perusal and understanding of the user guide should you begin the test. If you have questions about using the test, please consult our webpage or our office.

Only use damage-free products!

Do not freeze the product!

Keep away from children!

The test is only for in vitro diagnostics purposes.

Do not take it into the mouth!

Do not swallow it!

### **TEST PROCEDURE**

#### Step 1: Sampling

Fill Sample Jar 1 with screw cap up with urine until it reaches the mark on its inside (20 ml). Please, always use the first morning urine (in ideal case) for sampling.

Caution: the test must be performed with clear, translucent urine!

In most cases, the urine poured into the Sample Jar is a clear, translucent liquid in a various hues of yellow.

If the urine is turbid (not entirely translucent), let it settle for 10 minutes. When the urine is settled, the Sample Jar should be filled up with the upper, clear section of the urine until it reaches the mark.

#### Step 2: Testing the sample

Prepare Vial 2 with pipette containing the IOI White 0.5 reactant solution, the Sample Jar 1 filled with urine and the yellow pH paper.

For testing, contents of the vial must be dosed into the urine drop by drop. Drip until the clean sample is opalescent. Then wait 2 minutes to check that the light-coloured, surging precipitation has occurred. If precipitation is not observed after opacity, continue to drip the IOI White 0.5 reagent and observe the formation of light-coloured, gripping precipitation.

### Step 3: pH check

Dip the supplied yellow pH paper into the sample and check that the colour matches with the colour of the control strip (observation of nuanced differences are acceptable). If identical, the test can be considered a success and the resulting droplet can be replaced in the evaluation section and the results of our body's magnesium supply are obtained. If the colour of the pH paper differs from the colour of the control strip, the test may be considered unsuccessful and repeated.

### **EVALUATION**

If the test sample is urine, the drip count of the drip IOI White 0.5 reagent can be used to infer the body's magnesium supply.

under 6 drops: high magnesium concentration  
between 5-9 drops: optimal magnesium concentration  
over 10 drops: low magnesium concentration

### **ABOUT MAGNESIUM DEFICIENCY**

Magnesium is vital for blood circulation, blood pressure control, calm sleep, proper functioning of nerves, a strong and effective immune system, preservation of bone and muscle health. In addition, magnesium interacts closely with other minerals and

vitamins, so magnesium deficiency can also affect these micronutrients.

The most common symptoms of magnesium deficiency are weakness, muscle spasms, cardiac arrhythmias, difficulty in concentration and irritability. Its absence increases the likelihood of developing many other pathologies such as hypertension, rapid heartbeat, osteoporosis, migraine, diabetes, hallucinations, depression, confusion, anxiety.