

USER GUIDE

Always read the manual first!

1. Remove the cap of urine specimen bottle
2. Collect 20ml morning urine specimen into the bottle
3. Remove the cap from the reactant's vial
Please note! You need to count the number of drops.
Dripping: you need to wait 30 seconds and shake the urine specimen bottle between each drops of the reactant (**do not pour – feed it drop by drop**)
4. Count the number of drops. After each drop shake the urine specimen bottle. Continue dripping until a swirling, brownish precipitate (solid form) appears, indicating the end of the test.
5. As soon the solid forms appears, stop the test.
6. Remember or take a mark of the number of drops.
7. Empty the urine specimen bottle into the toilet, put the cap back on the bottles and dispose them (waste bin).

INTRODUCTION

The aim of the ioFIT test device for self-checking ioFIT is to detect urinary iodide level. The IOI Blue 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, iodine 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 Urine specimen bottle numbered 1 with screw cap;

1 piece of Vial numbered 2 containing the IOI Blue 0.5 reactant with cap to perform one test
1 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!

Store the product in dry place, away from direct sunlight, between 5-30 Celsius degrees.

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

Top up with collected urine specimen 'bottle 1' until the mark (20 ml). Please, always use the first morning urine (ideally at least 100 ml) for sampling.

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

In most cases, the urine poured into the urine specimen bottle 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 (in a fridge if possible). When the urine is settled, the urine specimen bottle should be filled up with the top, clear section of the urine until the 20ml mark.

Step 2: Testing the sample

Prepare Vial 2 with pipette containing the IOI Blue 0.5 reactant solution and prepare urine specimen bottle 1 filled with urine.

For testing, the reactant of the vial must be dripped (and counted) into the urine drop by drop.

Continue dripping and counting until a swirling, brownish precipitate (solid form) appears.

STOP dripping after the precipitate appears!

The result of the test is the number of drops dripped from Vial 2 into the urine specimen bottle 1.

Caution: Wait 30 seconds before adding a new drop!

After adding each drop of IOI Blue 0.5 reactant, shake the urine to blend the reactant, and wait 30 seconds before adding the next drop of IOI Blue 0.5 reactant. Even after adding the first drop of IOI Blue 0.5 reactant, a colour-change can be detected: the characteristically yellow urine starts turning green. The changing colour does not affect the result. You must only watch out of the swirling, brownish precipitate. After the swirling, brownish precipitate from the urine has started to form, maximum 1 more drop of IOI Blue 0.5 reactant needed. The final number of drops indicates the end of the test.

The test must be performed very carefully: If the urinary iodide level is high, even the first drop of IOI Blue 0.5 reactant can trigger the appearance of the swirling, brownish precipitate. Precipitation can be expected to start between adding 1 to 10 drops of IOI Blue 0.5 reactant. The swirling, brownish precipitate needs time to form – this is why the waiting time must be complied with.

Step 3: Evaluating the received result

The result of the test – namely, the concentration of urinary iodide – is determined by the number of drops of IOI Blue 0.5 reactant which triggered the formation of the swirling brownish precipitate. The more drops necessary, the less iodide released by the human body.

EVALUATION

If the amounts of drops of IOI Blue 0.5 reactant dripped into the sample is:

- 1-2 drops: the measured urinary iodide level indicates **excess iodine**
- 3-4 drops: the measured urinary iodide level indicates moderately excess iodine
- 5-6 drops: the measured urinary iodide level indicates optimal level
- 8-10 drops: the measured urinary iodide level indicates iodine deficiency

EXPECTABLE RESULTS

The ioFIT quick test determines the value of urinary iodide between different ranges. Urinary iodide level may fluctuate throughout the day. In order to get a precise result about your body's iodide level, it is recommended to perform the test multiple times.

THE URINE SAMPLE

The urine sample must be collected in a clean, dry glass. It is recommended to use the first morning urine, as urinary iodide

concentration is usually the highest in this urine. Nevertheless, urine samples can be used from any time of the day. In order to have a clean sample at hand, let the urine sample settled if needed, and only collect the top clear urine specimen to the bottle to the mark.

ABOUT IODINE DEFICIENCY

About 2.2 billion people (more than a quarter of Earth's population) suffer from the consequences of iodine deficiency. One third of them are underage. Insufficient iodine intake during childhood can cause intellectual disabilities.

The most common symptoms of iodine deficiency are endemic goitre and cretinism (a high degree of intellectual disability alongside dwarfism).

Common symptoms of hypothyroidism are leg edema, hair and eyebrow thinning, slow thinking, reducing pulse rate, slow breathing and bowel function, as well as lowered body temperature.