



## **Calcium Home Test**

Catalog No. M0229

## 2 tests

## INTENDED USE

Autobio Ca home test is intended for the qualitative detection of calcium level in urine and milk samples, aiding in the diagnosis of calcium level in human body, guiding the correct supplement of calcium uptake and preventing calcium deficiency. It is suitable for regular health examinations and screening tests in healthcare institutions as well as self-tests at home.

#### INTRODUCTION

Calcium is the most important mineral element and its concentration in the human body is the greatest among all the mineral elements, which accounts for 2 percent of the body weight, and distribute widely over all tissues and organs of body. About 99 percent of calcium in the human body is held in the bones and teeth; the remainder circulates in the bloodstream, where it performs a variety of important functions. In fact, all functions of all systems in the human body are relevant with calcium. The balance of calcium metabolism plays a crucial role in maintaining life and health. Calcium deficiency in children or babies can lead to a variety of disorders that include rickets, dental problems, muscular tics, night terror, night crying, hyperkinetic syndrome and allergic disease, such as eczema, dropsy, asthma...etc. Calcium deficiency in pregnant women can lead to some pregnancy complications (for example hypertension), tics, osteomalacia, pain in waist and legs...etc. Calcium deficiency in old people can lead to osteoporosis and bone element hyperplasia, and it has been found that diabetes mellitus, hyperlipidemia, Obesity, blood vessel disease and senile dementia are relevant to calcium deficiency.

At present, the commonly evaluation methods of the calcium nutrition contain hair calcium, serum calcium and urine calcium (milk calcium). Serum calcium belongs to the wound determination, so the wound may infect some diseases. Beside this, when the diagnostic result of hair calcium or serum calcium is lack of calcium, adjust function of the human body to calcium has lain in decomposition stage, organs of human body have been influenced by the lack of calcium, and the clinic symptoms begin to present. So serum calcium and hair calcium can't early discover calcium deficiency, causing the treatment to be delayed. On the other hand, immediately after the human body lacks the calcium, the body will reduce calcium excretion to maintain calcium equilibrium within the body; therefore urine calcium and milk calcium determination can early reflect the dynamic variety of calcium and accurately measure the metabolic level of the calcium *in vivo* and human milk.

## BIOLOGICAL PRINCIPLE OF THE PROCEDURE

Samples with different calcium concentrations would display different colors when reacting with the reagent contained in this assay.

#### **MATERIALS PROVIDED**

- 1. Capped Test Tube: 3 different types for children, adults and milk tests, respectively (2)
- 2. Dropper: (2)

## STORAGE OF TEST KIT AND INSTRUMENTATION

1. Unopened test kits should be stored at room temperature upon receipt. The test kit may be used throughout the expiry date of the kit (1 year from the date of manufacture). Refer to the package label for the expiry date.

SPECIMEN COLLECTION, PREPARATION, TRANSPORT AND STORAGE

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- Collect the first morning urine without having breakfast, or the urine after without taking water for 1
  hour, for both children and adults.
- 2. Collect the early morning milk for milk tests.
- 3. Collect all samples with disposable cups.

#### PRECAUTIONS AND WARNINGS

- 1. For *in vitro* diagnostic use only.
- 2. Use a new disposable cup for each sample collection. Absorb samples with the dropper accompanying the assay.
- 3. Carry out the test immediately after the inner packaging is opened. Otherwise, the components may be dampened.
- 4. The amount of sample added must be accurate. Open the blue cap of the test tube, add the sample, if trace amount of solid material or big bubbles are present on the surface of the liquid when the graduation mark is nearly reached, slightly shake the tube to dissolve the solids. After that, add the sample to the graduation mark.
- 5. Once upon the sample is added, replace the cap immediately. Shake vertically to get the reagents inside the cap and the tube totally dissolved in the sample
- 6. Results must be read within 3 minutes. Results read after 3 minutes are invalid.
- 7. If the resulting color is not red purple or blue, or a purple blue color, which is the cut-off color, is observed, a re-test should be carried out on the other day.
- 8. Samples from nephritis patients may generate an elevated calcium result, hence should be treated differently.
- 9. Urine test is very sensitive, inconsistent results resulting from changes in diet styles or the intake of nutritional products containing trace elements do not have any clinical implications. In such cases, tests must be carried out many times until result are consistent.
- 10. This product should be operated by an adult. Desiccants and used test tubes must be disposed of properly to avoid contact with children.

## ASSAY PROCEDURE

Keep adding the sample into the test tube with a dropper, until the graduation mark is reached. Cap the tube tightly, shake along the tube vertically to fully dissolve the reagents within the tube and the cap. Aft the reaction is totally finished, observe the color of the solution.

#### INTERPRETATION OF RESULTS

A blue color indicates calcium deficiency. A purple or red purple color indicates calcium normal.

### **SYMBOLS**

LOT	BATCH CODE
$\subseteq$	USE BY
	MANUFACTURER
Σ	CONTAINS SUFFICIENT FOR <n> TESTS</n>
IVD	IN VITRO DIAGNOSTIC MEDICAL DEVICE
2 °C	TEMPERATURE LIMITATION
REF	CATALOGUE NUMBER
Ţ <u>i</u>	CONSULT INSTRUCTIONS FOR USE

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# for orders and inquiries, please contact



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