## **Just Fitter Ketone Test Strips Instructional Guide**

**INTRODUCTION:** "In normal circumstances, the body's cells use glucose as their primary form of energy. Glucose is typically derived from dietary carbohydrates. The body breaks these down into simple sugars. Glucose can either be used to fuel the body or be stored in the liver and muscles as glycogen.

If there is not enough glucose available to meet energy demands, the body will adopt an alternative strategy in order to meet those needs. Specifically, the body begins to break down fat stores to provide glucose from triglycerides. Ketones are a by-product of this process, excess Ketones that build up in the blood and are eliminated in urine."

FOR LOW-CARB DIETERS: "During a ketogenic diet, the lack of carbohydrate (glucose) mimics the "starvation" metabolic pathway in the body, in that the liver creates more ketones since less glucose is available. And the best part is that there's no hunger, but you get the benefits of burning fat for fuel.

In addition, protein intakes stay within normal ranges and so muscle loss is minimal, and lean body mass stays within healthy ranges. You lose fat instead of valuable muscle mass."<sup>2</sup>

**PRODUCT DESCRIPTION:** Just Fitter Ketone Strips are reagent strips that changes color as it reacts to ketones in the urine. Color is compared to the color chart printed on the box and/or bottle label.

#### **Precaution:**

- Just Fitter Ketone Test Strips are for diagnostic use only. DO NOT CONSUME.
- Just Fitter Ketone Test Strips are used for urine testing only. DO NOT USE for blood testing.
- Store Test Strips in the original container only.



# HOW TO GET THE BEST RESULTS WHEN USING THE JUST FITTER KETONE TEST STRIPS:

- 1. We suggest testing for Ketones the first time you urinate right after waking.
- 2. Get a sample of your urine in a clean container. Start collecting the sample mid-stream.
- 3. Dip the strip in the sample for a second. Alternatively, you may pass the strip through the urine mid-stream.
- 4. Shake off any excess urine from the strip.
- 5. Wait 15 seconds.
- 6. Match the color to the color chart found in the packaging of the product.
- 7. Remember that when handling the Ketone Test Strips, make sure to hold or touch only the white portion of the strip which is the part of the strip that sticks out the bottle. Touching or holding the colored area may compromise the accuracy of the results.

HOW TO STORE YOUR KETONE STRIPS: Store the Ketone Test Strips in its bottle at room temperature. Your Just Fitter Ketone Test Strips are made of imported quality materials which make it very durable and stay "fresh" in the package. This allows the test strips to provide accurate results.

#### **ABNORMAL TEST RESULTS:**

- 1. Check 'Expiration' date. If 'Expiration' date has passed, or it is 60-90 days past the date the seal was broken, discard strips and repeat test with new strips.
- 2. Check for discoloration of unused reagent strips. Discoloration may occur if bottle cap was not completely closed, or if bottle was stored in extreme heat or cold. Repeat test with strips from new bottle.

At times when the color on the strip does not match the chart, choose the closest shade, or you may also run another test and make sure to carefully follow the instructions provided above.

**LIMITATIONS:** Strongly colored urine samples may mask color of Test Strips and may cause negative result to appear as positive. Compounds that contain a sulfhydryl group, such as MESNA (2-mercaptoethane-sufonic acid), may cause false positive results.<sup>3</sup>

**TEST PRINCIPLE:** Just Fitter Ketone Test Strips are specific for acetoacetic acid (Ketones). When urine is absorbed into the reagent strip, any acetoacetic acid present reacts with nitroprusside to cause color change. Color produced by the reaction ranges from beige (negative, 0 mmol/L) to maroon (positive, 16 mmol/L). Each color block represents a range of ketone values. Ketone levels that fall between color blocks may results for either color block because of urine and reading variability.

### **CHEMICAL COMPOSITION:**

7.1% W/W Sodium Nitroprusside.

#### REFERENCES:

- Josh McIntosh, <u>Ketosis: What is Ketosis?</u>, Medical News Today, 21 March 2017
- Metabolic Pathways: How the Body Uses Energy, Ketogenic-Diet-Resources.com
- 3. G. Csako, CLINCHEM, 33/2, 289 (1987)



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