

**Smile reader** helps you

START THE FAMILY YOU HAVE  
ALWAYS DREAMT OF.



smilelab

## COMPANY INTRODUCTION

**Smilelab** aims to be a strong supporter during the process of pregnancy, childbirth, and parenting for prospective parents who are planning to have a family. The main products are the ovulation test and pregnancy test; the ovulation test has the highest market share of more than 50% in the relevant market in South Korea and is the first in the market share.

The main products are 'Smilereader' and '6days ahead'; combined with the ovulation test and mobile application, 'Smilereader' makes it easy and convenient to track the ovulatory phase to alert the optimal fertile period during the pregnancy preparation process so it increases the possibility of pregnancy. In addition, '6days ahead' with the high sensitivity of pregnancy confirmation identifies 6 days ahead of the next menstrual period and solves questions of prospective parents who are expecting pregnancy so that they can prepare the pregnancy period promptly and lead to the stable settlement of fetus.

By operating our customer service in real-time, we're striving to solve customer inquiries in real-time and reflect improvements to provide better software. We're also making an effort to provide an integrative solution from pregnancy to childcare through continuous product research and development.

### Company Overview

Company Name	Smilelab Co., Ltd.
CEO	Song Young Hun
Establishment	2013.06.14
Main Business	Smilereader : The product range of ovulation test and pregnancy test that are available for application
Address	Suite 1004, 464, Dunchon-daero, Jungwon-gu, Seongnam-si, Gyeonggi-do, 13229, Republic of Korea
Homepage	<a href="http://www.smilelab.co">http://www.smilelab.co</a>

#### Track & Log on the Go

Even if you are at work or running errands, easily check your results by using the mobile App.

Just Scan your ovulation test strips with SmileReader app and know exactly what your results are – no guesswork needed, no insecurity or doubts if the test is positive or negative? If you are ovulating? Or if it is a fertile time now.

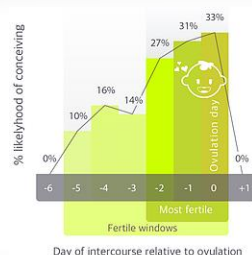
The App will simply process the test strip and let you know when you are ovulating or not, and if today is a fertile, "enjoy having contact with your partner baby making" kind of day.



#### Take Charge of your Fertility

Before your decision to have a child, If you were not aware of the small changes in your body that occur during your menstrual cycle, that has to change. It is time to take charge of your fertility and the SmileReader App will do that with digital ease and precision.

Not only will it tell you when the most fertile days are for you, it will also track your cycle information so you are aware of when your expected next period will be. Other than your test results, you can also use the app to log in basal body temperature, changes in your cervical mucus, and even your mood and weight to increase the accuracy of prediction.



#### A True Partnership

It truly takes two to tango and this is extremely true if you are trying to have a baby.

It is important your partner gets involved so that you both can go proceed on this journey together with the least amount of stress and drama as possible.

Your partner can also download the mobile App and once you are both connected and synced, he will also be informed of your fertile days and your cycle in general to help manage expectations.

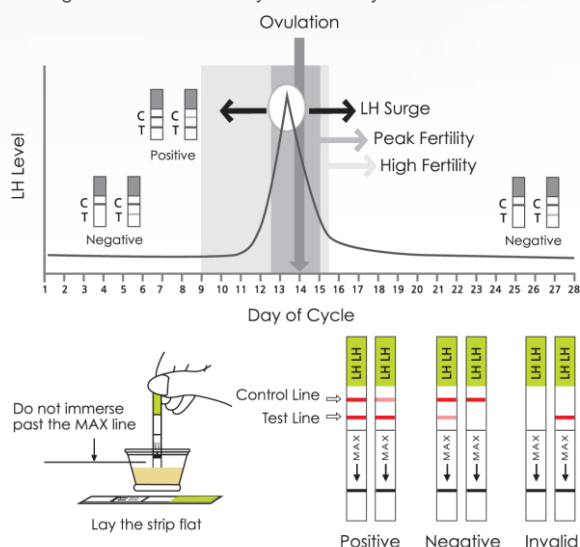


# SMILEREADER -ovulation test-

## Summary

- Hormone density in urine confirms ovulation
- Advanced algorithms in the mobile application provide hormone value, situational messages and various useful information to easily and conveniently track the ovulation day.
- 30 strips of an ovulation test (LH test strips)
- Mobile application (iOS, Android)

Ovulations is the release of an egg from the ovary and is the time during the cycle when a woman is more likely to become pregnant. Ovulation can be determined by monitoring the level of luteinizing hormone(LH) in the urine. LH is always present in the urine in small amounts. An increase ("surge") in LH is an indication that ovulation will occur within the next 24-34 hours. Smilereader ovulation test is a rapid and easy-to-use test. It is a qualitative test that can predict when there is a LH surge and in turn when you are likely to ovulate.



## WHEN TO START TESTING

- ① First you must determine the length of your menstrual cycle. This is the number of days from the first day of your menstrual bleeding to the day before your next bleeding begins again.
- ② Please refer to the chart to determine when you should start testing
- ③ If your cycle is shorter than 21 days or longer than 38 days, consult your doctor.
- ④ If you do not know your cycle length, you may begin the test 11days after your first period since the average cycle length is 28days.  
Perform 1 test each day over a 5 day period or until the LH surge has been detected.

Length of Cycle	21 or less	22	23	24	25	26	27	28	29
Day	6	6	7	7	8	9	10	11	12
Length of Cycle	30	31	32	33	34	35	36	37	38
Day	13	14	15	16	17	18	19	20	21

Count the Day your period starts as Day 1  
Start testing on the Day shown under your length of cycle.

## URINE COLLECTION

- ① Do not use first morning urine samples. LH is synthesized early in the morning and it takes time to circulate in the body to go into urine.
- ② The best time to collect your urine is 10a.m.-8p.m.
- ③ Collect urine at about the same time each day.
- ④ Reduce liquid intake about 2 hours before collecting your urine as a diluted urine sample can prevent the test from detecting LH surge.

## TEST PROCEDURE

- ① Allow the sealed LH test pouch, patient's urine sample and control solution to reach room temp.(15°~30°C)
- ② Remove the LH tests strip out from the sealed pouch.
- ③ Immerse the test strip with arrow downside into the urine for about 5 seconds and lay the strip flat on a clean, dry, non-absorbent surface. Do not exceed the market line.
- ④ Wait for colored bands to appear. Depending on the concentration of LH in the test specimen, positive results may be observed in as short as 40 seconds. However, to confirm negative results, the complete reaction time(10 minutes) is required. Do not read results after 30 minutes.

## READING OF TEST RESULT

- ① Positive  
If two colored bands are visible and the test band is equal to or darker than the control band, one will probably ovulate in the next 24-48 hours. If one wants to be pregnant, the best time to have intercourse is after 24 but before 48 hours.
- ② Negative  
only one color band appears in the control region or the test band is lighter than the control band. There is no LH surge.
- ③ Invalid  
A total absence of color in both regions indicates that the result is invalid. No visible band at all. Repeat test with a new test strip.

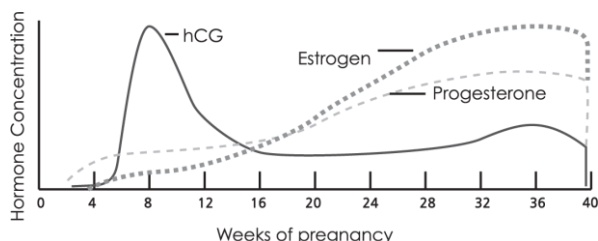
# SMILEREADER –pregnancy test-

## Summary

- Hormone density in urine confirms whether or not the user is pregnant
- 10 strips of an pregnancy test (HCG test strips)
- Mobile application (iOS, Android)

Human chorionic gonadotropin(HCG) is a glycoprotein hormone secreted by the developing placenta shortly after fertilization. HCG can be detected in the urine and serum of pregnant women as early as 6 to 15 days after conception. The concentration of HCG increases to 5-50mIU/ml one week post implantation and reaches about 100mIU/ml at the time of the first missed menstrual period and peaks at 100,00-200,000mIU/ml at the end of the first trimester. The appearance of HCG soon after conception and its subsequent rise in concentration during early gestation growth make it an excellent marker for the early detection of pregnancy.

Smilereader pregnancy test is a rapid test to detect the presence of HCG in urine specimens in a qualitative format. The test utilizes a combination of monoclonal and polyclonal antibody reagents to selectively detect elevated level of HCG in urine. The immunological specificity of the test virtually eliminates cross reactivity interferences from the structurally related glycoprotein hormones hFSH, hLH and hTSH at physiological levels.



## URINE COLLECTION

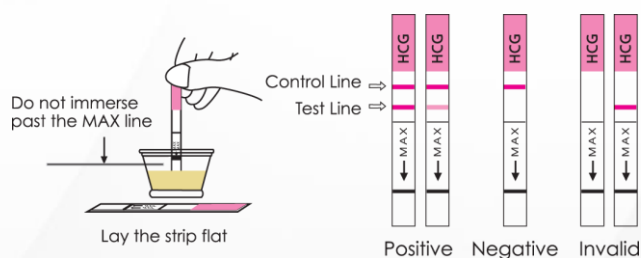
- ① The test can be used at any time of day. But early morning urine specimen is highly recommended as it contains the highest concentration of HCG.
- ② Please do not drink too much water one hour before the test to avoid diluting HCG

## TEST PROCEDURE

- ① When you are ready to begin testing, open the sealed pouch by tearing along the notch. Remove the test from the pouch.
- ② Immerse the strip into the urine with the arrow end pointing towards the urine. Do not immerse past the MAX(maximum) line. Take the strip out after 3 seconds and lay the strip flat on a clean, dry and non-absorbent surface(e.g. mouth of the urine container).
- ③ Wait for red lines to appear, depending on the concentration of HCG in the test specimen. Positive results may be observed in as short as 40 seconds. However, to confirm negative results, the complete reaction time(5 minutes) is required. Do not read results after 10 minutes.

## READING OF TEST RESULTS

- ① Positive  
Distinct red lines appear on the control and test regions. Both test line and control lines indicate that you are pregnant. Color intensity of the test lines may vary. Different stages of the pregnancy have different concentrations of HCG level.
- ② Negative  
Only one red line appears on the control region. No apparent line on the test region. There is no pregnancy.
- ③ Invalid  
No visible line at all. Repeat test with a new test strip.



## LIMITATIONS

- ① A confirmed pregnancy diagnosis should only be made by a physician after evaluating all clinical and laboratory findings.
- ② Low concentration of HCG in very early pregnancy can give a negative result. In this case, another specimen should be collected at least 48 hours later and tested.
- ③ The presence of HCG in urine can be caused by a few conditions other than pregnancy. Check with your doctor if you do not have consistent results.



## SMILEREADER-APP-

### Summary

1. You can check the objective values of the concentration of the contrast line (C) and the result line (T) through mobile. If you reach the highest value, you will see the message "You got a peak Today, you have the maximum charge of conception" with an image of a baby's smiley face.
2. Since the mobile application records and stores your tests, it's convenient to process and store a test.
3. Push notification for a test allows you to give a test at the specified time.
4. Other app. Features:
  - Hubby notification feature (share information of the relevant period with your partner)
  - Calendar feature (fill in your menstrual period/the date you had sex/the expected ovulation date/your temperature/the status of ovulation mucus/symptoms/other memos)
  - Chart feature (visually identify the change of LH concentration through the recorded test results)
  - Related information is available
  - Real-time Q&A is available



#### Result Check Window1

You will see different messages based on your test results. If you reach the highest value, "You got a peak Today, you have the maximum charge of conception" with an image of a baby's smiley face.

Another example is "As LH surge has passed, you are ovulating today!, today is the last day of highest likelihood of conception. If this is the first time you try out and there's no result, you'll see "NEW START, please take a test now."

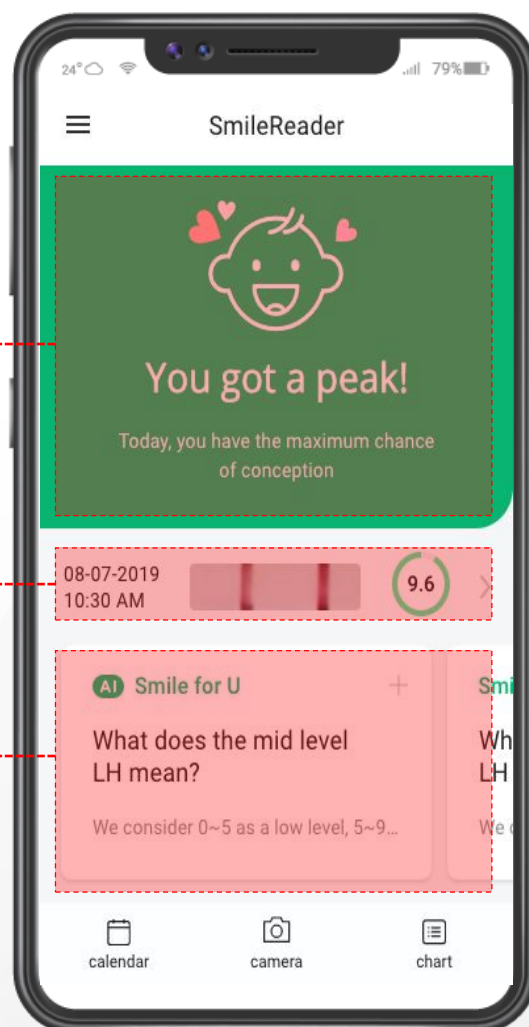
There are lots of messages based on test results.

#### Result Check Window2

The shooting date, shooting sample, and figures are identified. If you click on it, the screen will move to the 'Test Record Check Mode.'

#### Related Info Window

Based on the results, relevant information is provided. For example, when the LH surge appears high, you see find information on when it is good to have sex.

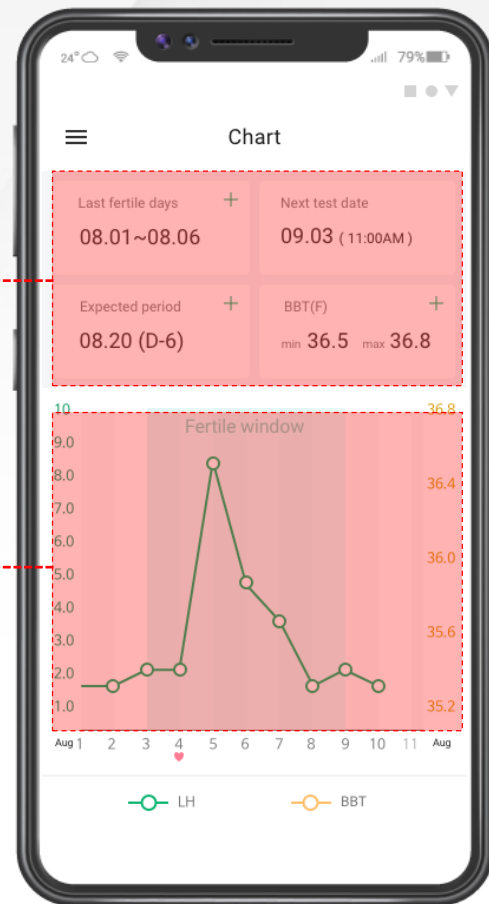


#### ■ Related Info Window

Last fertile days  
Next test date  
Expected period  
BBT (Basal Body Temperature)

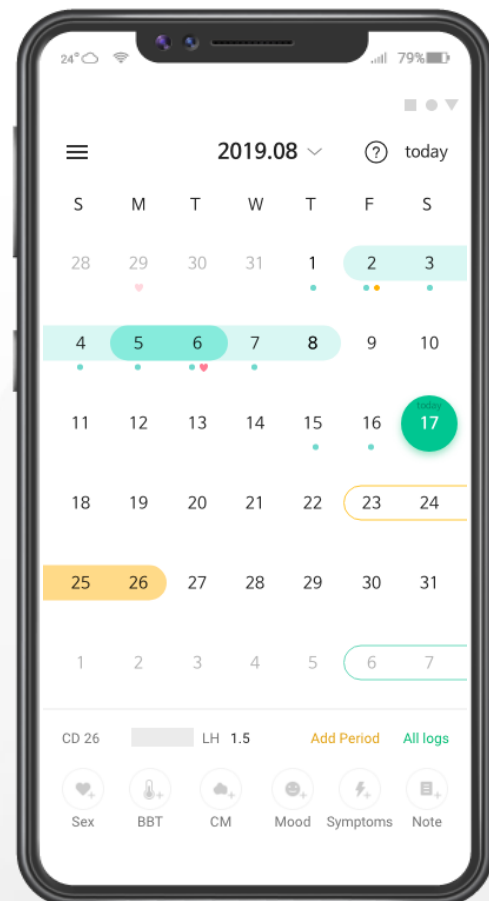
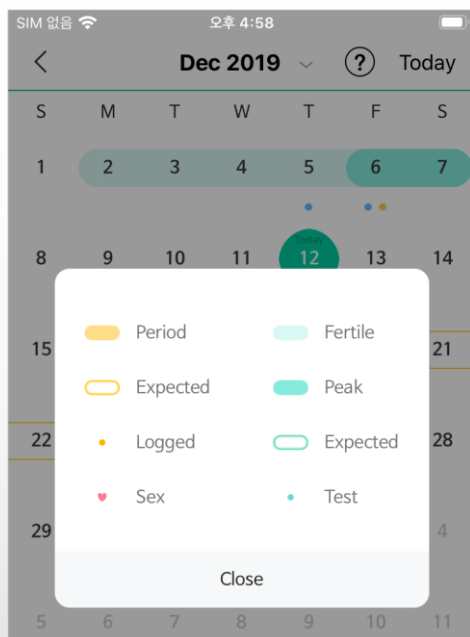
#### ■ Chart Window

The result of recent test progress can be identified in a chart  
Fertile window (the fertile period)  
Ovulation takes place 2 to 3 days after the date of the highest LH concentration. And considering that sperms survive for 3 to 5 days and an egg survives for 12 to 24 hours, a fertile period is marked in light mint color. If you have sex with your partner, the possibility of pregnancy becomes high.



#### ■ Calendar Feature

Fill in and check the menstrual period/the date you had sex/ the expected menstrual period/the expected ovulation date/ your temperature/the status of ovulation mucus/symptoms/other memos.



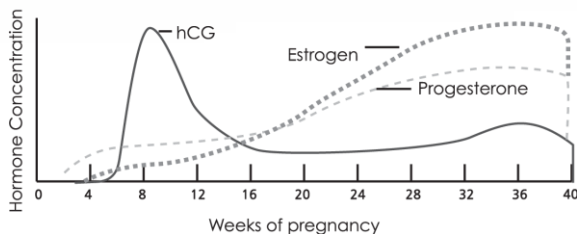
## 6DAYS AHEAD pregnancy test

### Summary

- Check whether or not you're pregnant through the HCG hormone density in the urine.
- By increasing sensitivity of the hormone detection density more than existing pregnancy tests at 25mIU/mL, detection is available with 10mIU/mL of hormones. It's available to check 6 days earlier the next expected menstrual period whether or not the user is pregnant.

Human chorionic gonadotropin(HCG) is a glycoprotein hormone secreted by the developing placenta shortly after fertilization. HCG can be detected in the urine and serum of pregnant women as early as 6 to 15days after conception. The concentration of HCG increases to 5-50mIU/ml one week post implantation and reaches about 100mIU/ml at the time of the first missed menstrual period and peaks at 100,000-200,000mIU/ml at the end of the first trimester. The appearance of HCG soon after conception and its subsequent rise in concentration during early gestation growth make it an excellent marker for the early detection of pregnancy.

6DAYS AHEAD pregnancy test is a rapid test to detect the presence of HCG in urine specimens in a qualitative format. The test utilizes a combination of monoclonal and polyclonal antibody reagents to selectively detect elevated level of HCG in urine. The immunological specificity of the test virtually eliminates cross reactivity interferences from the structurally related glycoprotein hormones hFSH, hLH and hTSH at physiological levels.



### URINE COLLECTION

- ① The test can be used at any time of the day. But early morning urine specimen is highly recommended as it contains the highest concentration of HCG.
- ② Please do not drink too much water one hour before the test to avoid diluting HCG

### TEST PROCEDURE

- ① When you are ready to begin testing, remove the test midstream from the sealed pouch and take the cap off.
- ② Hold the stick by the thumb grip with the exposed Absorbent Tip pointing downward. Urinate on the Absorbent Tip only until it is thoroughly wet about 3seconds. (If you prefer, you can urinate into a clean and dry container, then dip only the Absorbent Tip of the test midstream into the urine for at least 10 seconds.)
- ③ Read result as 5 minutes but no longer than 15 minutes

### Caution

- For in vitro diagnostic use.
- Keep out of reach of children.
- Do not use the test strip after expiration date
- The test strip should not be reused
- Please read the instruction sheet inside before use.

### READING of TEST RESULTS

- ① Positive  
Distinct red appear on the control and test regions.  
Both the test line and control line indicate that you are pregnancy.  
Color intensity of the test line may vary as different stages of the pregnancy have different concentration of HCG level
- ② Negative  
Only one red line appears on the control region.  
No apparent line on the test region. There is no pregnancy.
- ③ Invalid  
No visible line at all. Repeat test with a new test strip.



### LIMITATIONS

- ① A confirmed pregnancy diagnosis should only be made by a physician after evaluating all clinical and laboratory findings.
- ② Low concentration of HCG in very early pregnancy can give a negative result. In this case, another specimen should be collected at least 48 hours later and tested.
- ③ The presence of HCG in urine can be caused by a few conditions other than pregnancy. Check with your doctor if you do not have consistent results.

### STORAGE AND STABILITY

The test strip can be stored at temperature 35.6°F to 86°F in the sealed foil pouch and stay stable for duration of shelf life about 24 months.

Avoid direct sunlight, moisture and heat.

## **Other Products**

### **Smilereader Starter Kit**

It includes 5 LH test strips + 1 HCG test strips.  
(app included)

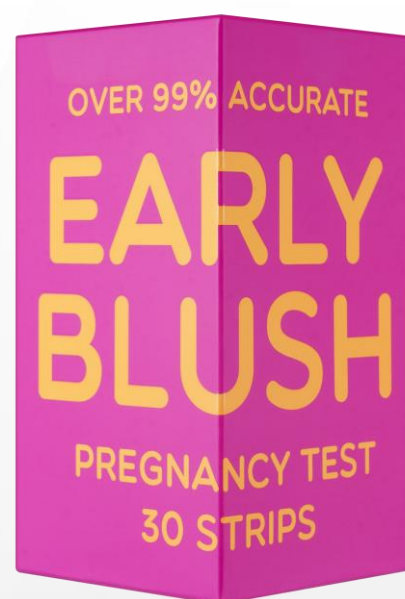


### **Early Blush Kit**

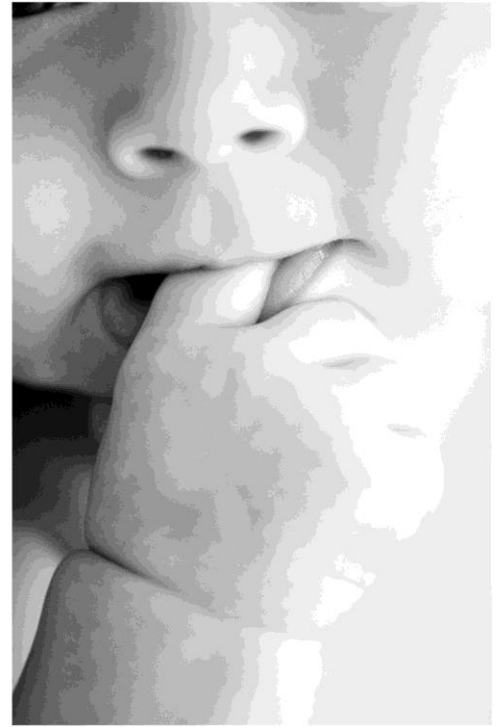
It includes 40 LH test strips + 15 HCG test strips.  
(no app included)

### **Early Blush Pregnancy Tests**

It includes 30 HCG test strips. (no app included)







**Smilelab Co., Ltd.**

Suite 1004, 464, Dunchon-daero, Jungwon-gu, Seongnam-si, Gyeonggi-do, 13229, Republic of Korea

W. <https://www.smilelab.co>

**Seungik Han** (for U.S. and South America) T. 956-890-2117 E. [han@smilelab.co.kr](mailto:han@smilelab.co.kr)

**Erin Lee** (for other countries) T. 82-70-4284-5777 E. [erinlee@smilelab.co.kr](mailto:erinlee@smilelab.co.kr)