

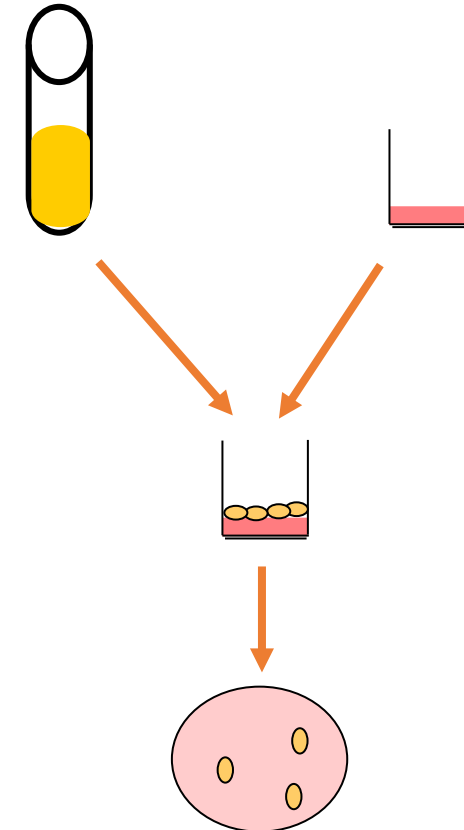
**Controls candida infection**

# Incidences

- More than of 70% of healthy women have vaginal Candidiasis.
- The most common affected area
  - Gastrointestinal tract (mainly mouth cavity)
  - Vaginal mucosa
  - Skin.
- Predisposing factors:
  - Immunocompromised states (disease & stress),
  - Old age
  - Antibiotic treatment

# In-vitro adhesion inhibition assay

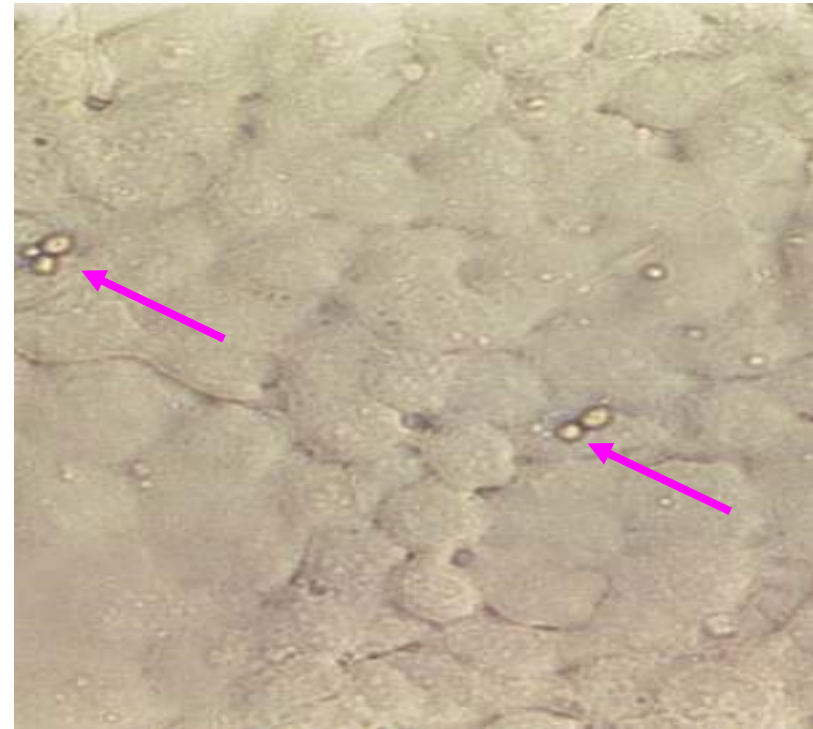
1. Prepare monolayer of **FaDu cells** in 24-well plate
2. Mix Specific IgY (CA) with *Candidia albicans* ( $5 \times 10^6$  CFU/ml)
3. Incubate at 37 C for one hr
4. Add 500 $\mu$ l of the mixture to cells
5. Incubate at 37 C for one hr
6. Wash with PBS
7. Count the CFU in YPD agar



PBS-treated



Specific IgY (CA) -treated



MP:X200

# Inhibition of *Candidia albicans* adherence by Specific IgY (CA)

| <b>Trial</b>               | <b>1<sup>st</sup></b> | <b>2<sup>nd</sup></b> | <b>3<sup>rd</sup></b> | <b>4<sup>th</sup></b> | <b>5<sup>th</sup></b> |
|----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <b>Challenge dose</b>      | $1 \times 10^3$       | $7 \times 10^3$       | $7 \times 10^6$       | $3.4 \times 10^6$     | $5 \times 10^6$       |
| <b>Specific IgY (CA) *</b> | 1.46                  | 1.1                   | 3.3                   | 2.9                   | 2.3                   |
| <b>PBS treated*</b>        | 2.48                  | 2.8                   | 6.2                   | 5.8                   | 5.9                   |
| <b>Inhibition ratio</b>    | 90.33                 | 97.3                  | 99.90                 | 99.87                 | 99.98                 |

\* Log 10 of adhered CFU/ml

# Pilot study

## Protocol of the study

Number of volunteer: Two

Length of treatment: 3 month (3 steps)

1. First step: Treatment with 500 mg/day for one month (5 tablets a day).

One tablet contains 100 mg of Specific IgY (CA) .

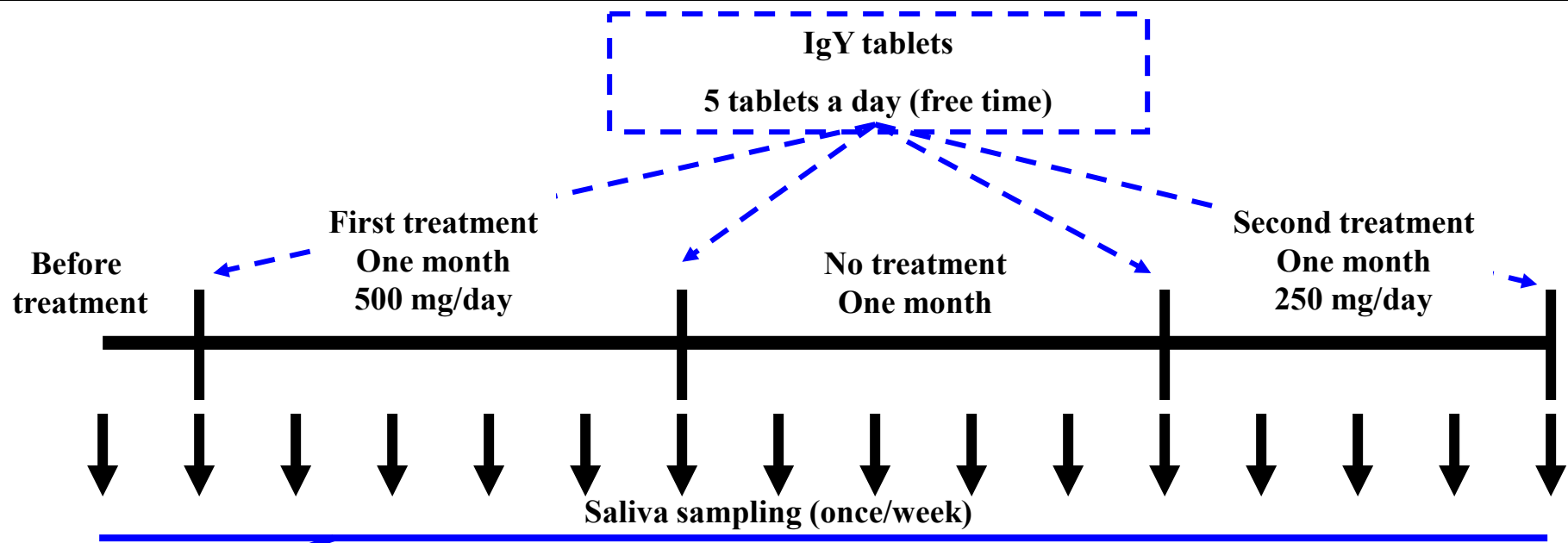
2. Second step: Stop of treatment for one month

3. Third step: Treatment with 250 mg/day for one month (5 tablets a day).

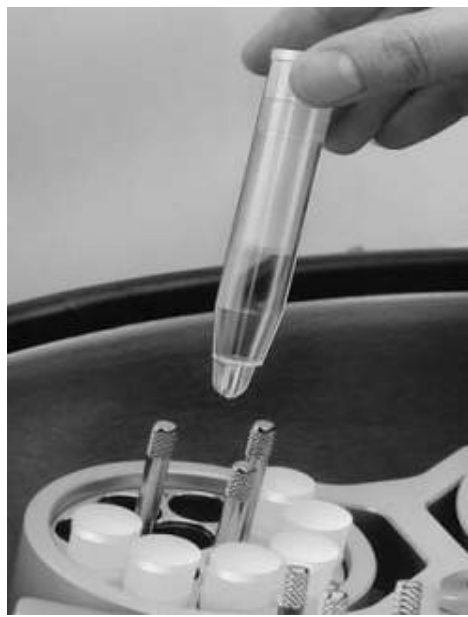
One tablet contains 50 mg of Specific IgY (CA) .

Sample: Saliva sample

Candida count: Count on Candida GE agar and Candida ID agar



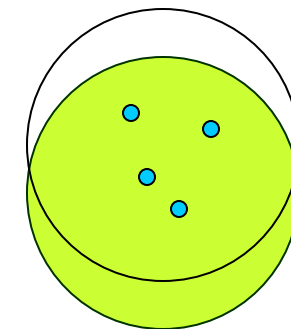
**Sample collection**



**Centrifugation**



**Remove cotton**



**Serial dilution  
and CFU count**

# Pilot trial result

