

***Soft drink (non-carbonated soft drink)******Includes:***

- a) *Fruit juice.*
- b) *Concentrated juice.*
- c) *Sweeten juice.*
- d) *Artificial juice.*

***Microorganisms found in these products:***

- 1) *Lactobacillus spp. & Leuconostoc spp.*
- 2) *Acetic acid bacteria.*
- 3) *Mold & Yeast.*

***Carbonated soft drink, consist of:***

*86-92% water, 7-14 nutritive sweetness  $CO_2$  as (carbonic acid) & flavoring, alcohol not more than (0.5%), may contain benzoic acid 0.1%.*

***Content & factor affecting type of microorganisms:***

- i. *Water.*
- ii. *PH.*
- iii.  *$CO_2$ .*
- iv. *Acids.*

***Microorganisms found in carbonated soft drink:***

- a) *Yeast:*  
*Saccharomyces, Pichia.*
  
- b) *Mesophilic acid bacteria:*

*Lactobacillus spp. & Leuconostoc spp.*

c) *Mold:*

*Aspergillus.*

### **Procedure:**

*Diluent juice*

*Concentrated juice*  $10^{-2}$  1 ml or 0.1 ml *PcA* 3 days/37°C

—————>—————>

*Carbonated soft drink*  $10^{-3}$

\**PcA* = plate count agar (*N.A.* + 0.1 glucose + 0.5% trypton).

*Acidity test:*

A. *Diluent juice*

*Concentrated juice*  $10^{-2}$  1 ml or 0.1 ml *Acidic medium*

*days/37°C*

—————>

—————> 5

*Carbonated soft drink*  $10^{-2}$

\**Acidic medium*: Tween 80 (0.02%) + yeast glucose agar + Bromocresol purpul (0.004%).

B. *Mold & Yeast*

C. *diluent juice*

*Concentrated juice*  $10^{-2}$  1 ml or 0.1 ml *YEA* 5-7 days/20-25°C.

—————>—————>

