

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} $\xrightarrow{1 \text{ ml or } 0.1 \text{ ml}}$ PcA \longrightarrow 3 days/37°CCarbonated 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} $\xrightarrow{1 \text{ ml or } 0.1 \text{ ml}}$ Acidic medium \longrightarrow 5 days/37°CCarbonated 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} $\xrightarrow{1 \text{ ml or } 0.1 \text{ ml}}$ YEA \longrightarrow 5-7 days/20-
25c°.