

B) TCBS

thiosulfate + citrate + bile + sucrose

Indicator: bromothymol blue

Yellow
ferments sucrose

Green
inhibits to ferment sucrose

Vibrio cholera

S. aureus
pH Indicator: phenol red

high salt -- 7.5% NaCl

Mannitol sugar

indicator + selectivity

Differential media

A) MacConkey's

peptone + lactose + bile salts

selective for Enterobacteria

pH indicator: neutral red

pink: ferment lactose
pale: can't ferment lactose

Simple media the bare minimum

A) peptone water

peptone + 0.5% NaCl

protein-rich substance

enhances & supports the bacteria's growth

base of sugar media

add sugar to peptone water to observe bacteria's fermentation ability

B) nutrient broth

meat extract

enhances & supports bacteria's growth

C) nutrient agar plate

nutrient broth + 2% agar agar

boiled @ 100°C

gel-like at room temp.

appropriate for *S. aureus*

B) chocolate agar

nutrient agar heated @ 100°C
+ blood Hb → haematin

Haemophilus
Neisseria

enriched media

necessary for fastidious bacteria

A) blood agar

nutrient agar heated @ 45°C
+ sheep blood

Streptococci
Strept. pyogenes

complete hemolysis (α)

Strept. pyogenes
S. aureus

partial hemolysis (β)

S. viridans
Pneumococci

no hemolysis (γ)

enterococci

CULTURE MEDIUMS

الشيء الذي أنتهت به من العلم والتميز والكمال



selective media

allows for the growth of certain organisms & inhibits others

A) Lowenstein-Jensen

malachite green

Mycobacterium tuberculosis

B) blood tellurite

potassium tellurite

C. diphtheriae