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TECHNICAL PRODUCT INFORMATION

Catalog No: T1300 COOKED MEAT MEDIUM

Catalog No: T1350 COOKED MEAT w/DEXTROSE, HEMIN & VITAMIN K

INTENDED USE:
Cooked Meat Medium is used for the cultivation and maintenance of aerobic and anaerobic microorganisms and for determination of biochemical properties of anaerobic microorganisms, especially *Clostridium* species.

PRINCIPLES:
Cooked Meat Medium is a liquid, non-selective medium used for the cultivation and maintenance of a large spectrum of aerobic and anaerobic microorganisms. The incorporation of beef heart, peptone and a small amount of glucose provides the nutritional requirements needed by most bacteria for growth. The glucose concentration is sufficient to supply the energy requirements but is not in high enough concentration to allow for the accumulation of toxic metabolic end products, a feature contributing to its suitability as a maintenance medium.

Proteolysis of meat is observed in Cooked Meat Medium and may be used as a key to the identification of *Clostridium* species. Proteolytic organisms will hydrolyze the protein of the beef heart to form amino acids. Proteolysis or digestion will be evidenced by breakdown of the solid particles. Proteolytic fermenters will decompose and blacken the meat with the formation of foul smelling sulfur compounds.

Saccharolytic organisms rapidly produce acid and gas in the medium. The culture may have a slightly sour odor with accompanying reddening of the meat.

FORMULA:
COOKED MEAT MEDIUM

Component (per liter of purified water)	Amount
Beef Heart Solids	100.0 g
Casein/Meat Peptone	20.0 g
Dextrose	2.0 g
Sodium Chloride	5.0 g

Final pH: 7.2 ± 0.2 @ 25°C

COOKED MEAT w/DEXTROSE, HEMIN & VITAMIN K

Component (per liter of purified water)	Amount
Beef Heart Solids	100.0 g
Casein/Meat Peptone	20.0 g
Dextrose	5.0 g
Sodium Chloride	5.0 g
Yeast Extract	5.0 g
Hemin	5.0 g
Vitamin K	1.0 mg

Final pH: 7.2 ± 0.2 @ 25°C

PRECAUTIONS:
Since living organisms used with this material can be infectious to the user, proper handling and disposal should be established by the laboratory director.
This product is for IN VITRO DIAGNOSTIC USE.

STORAGE:
Cooked Meat Medium and Cooked Meat w/Dextrose should be stored at 2-8°C and brought to room temperature prior to inoculation.

SPECIMEN COLLECTION:
Anaerobic bacteria are generally present in all types of clinical specimens. Because of their fastidious nature, special precautions and techniques should be used in the collection and handling of clinical specimens that may contain anaerobes.

Clinical specimens may be collected by a variety of methods. Various specimens may be collected as follows.

Method of Collection	Specimen
Syringe & needles aspiration (swabs are not recommended)	Abscesses
Plastic catheters introduced deep into wound	Draining wounds or sinus tracts
Thoracentesis	Pleural fluids
Transtracheal aspiration	Pulmonary sources
Syringes & intravenous plastic catheter	Uterine
Suprapubic aspiration of urine	Urinary tract

TRANSPORTATION of SPECIMEN:
Transportation of specimen is best accomplished by any of the following methods:

a. CO2 (carbon dioxide) filled stoppered tubes
b. PRAS, semi-solid Cary-Blair, or Amie's medium
c. Serum bottles filled with CO_2 for fluid specimens
d. Container filled with CO_2 for tissue specimens
e. Specimens should be transported to the laboratory promptly.

PROCEDURE:
Clinical specimens should be cultured immediately after collection since most anaerobes are quite oxygen sensitive and will die rapidly in the presence of oxygen. Specimens collected on swabs should never be allowed to dry out before processing. When specimens cannot be processed promptly, the material should be transferred to a holding medium containing a reducing agent. Important considerations in the processing of clinical specimens for cultivation of anaerobic bacterial are as follows:

a. Prompt processing of specimens after collection
b. Employment of proper cultivation media
c. Provision of proper anaerobic conditions
d. Prepare stained smears from clinical materials

PERFORMANCE TEST RESULTS:

Organisms Characteristics	Growth Characteristics	Differential
Clostridium bifermentans	Adequate growth	Black/digestion
Clostridium tertium	Adequate growth	Gas
Clostridium perfringens	Adequate growth	Black
Escherichia coli	Adequate growth	Gas
Staphylococcus aureus	Adequate growth	No Change
Uninoculated Control	No Growth	No Change

QUALITY CONTROL:
It is recommended that the laboratory confirm the performance characteristics of this media. Careful selection of test organisms must be made so maximum information on product suitability is obtained.

REFERENCES:

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5. Journal Pathology and Bacteriology, 20:327, 1916
6. Journal Pathology and Bacteriology, 21:344, 1917
7. Journal Bacteriology, 4:149, 1919
8. DHEW Pub. No. CDC 74:8272, 1974