GOSLAR BIOTECH
Your Partner in Sera

Product Data Sheet

SNYDER TEST AGAR (BCG DEXTROSE AGAR)
Product No. GB-DCM-00060-1A

INTENDED USE
For estimation of Lactobacilli, an indication of caries activity.

Product Description
Dental caries results from microbial acid and plaque formation. Plaque sets the stage for caries because it collects the acid forming bacteria on the tooth surface, supplies an anaerobic environment for fermentation, traps the acids and excludes the protective saliva. Caries lesions are basically the outcome of chemical attack on the enamel and dentin. Demineralization of the tooth alternates with periods of re-mineralization. If demineralization exceeds re-mineralization, a subsurface carious lesion becomes a clinical cavity with extension of the decay into the dentine. For determining the rate and amount of acid produced by microorganisms in saliva, Snyder described a colorimetric method. The procedure makes use of an agar medium that is known as Snyder Test Agar. Later on Alban modified the procedure and reported it to be more accurate than the original procedure. Snyder Test Procedure: Collect specimens of saliva before breakfast, before brushing the teeth or just before lunch or dinner. Collectspecimen of saliva in a sterile tube or bottle after patient chews paraffin for 3 minutes. Shake the specimen thoroughly and transfer 0.2 ml of this to a sterile Snyder Test Agar tube melted and cooled to 45°C. Mix the inoculum by rotating the inoculated tubes and incubate at 37°C for 72 hours in an upright position. The rate of acid production is graded as, marked for 24 hours, moderate and slight if colour changes within 48 and 72 hours respectively.

Incubation hours	Colour	Caries activity
24	Yellow	Marked
48	Greenish yellow	Moderate
72	Yellowish green	Slight

Alban Modified Test Procedure:
Collect the saliva specimen (unstimulated) to just cover the medium in the tube. When specimen collection is difficult, dip a sterile cotton swab into the saliva under the tongue or rub on tooth surfaces and place the swab just below the surface of the medium. Incubate the tubes at 35°C along with uninoculated control. Examine tubes daily for 4 days and compare the colour change with the control tube.

Record the results as:

No colour changes negative	: -
Colour beginning to change to yellow	: +
Half medium yellow	: ++
Three fourths of medium yellow	: +++
Total medium yellow	: ++++

The daily readings indicate the rapidity and amount of acid production. To establish a reference point at least two specimens collected within 2-4 days must be obtained.

GOSLAR BIOTECH
Your Partner in Sera

Product Specifications

Ingredients	Gms / Ltr
Peptone	20.000
Dextrose(Glucose)	20.000
Sodium chloride	5.000
Bromocresol green	0.020
Agar	20.000

PRINCIPLE

This is a differential medium based on the rate of acid production from dextrose, by oral acidogenic microorganisms from buccal cavity and is evidenced by a change in colour of the indicator - bromo cresol green from blue-green to yellow. Peptone provides carbon, nitrogen, long chain amino acids, vitamins and minerals. Dextrose is the carbohydrate source and bromo cresol green is the pH indicator.

Microorganism	ATCC	Inoculum (CFU)	Growth	Acid production	Incubation Temperature	Incubation Period
Lactobacillus acidophilus	314	50-100	Good-Luxuriant	Positive reaction, yellow colour	35-37°C	24-72 Hours
Lactobacillus casei	9595	50-100	Good-Luxuriant	Positive reaction, yellow colour	35-37°C	24-72 Hours
Lactobacillus fermentum	9338	50-100	Good-Luxuriant	Positive reaction, yellow colour	35-37°C	24-72 Hours
Staphylococcus aureus subsp. aureus	25923	50-100	None-poor	Negative reaction, no colour changes	35-37°C	24-72 Hours

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

Product Deterioration:

Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

Precautions and Disclaimer

- Dissolve 65.02 gramsin 1000 ml distilled water.
- Heat to boiling to dissolve the medium completely.
- Dispense in 10 ml amounts into test tubes and sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Allow the tubes to cool in an upright position, do not overheat the medium.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder:	Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium:	Emerald green coloured, clear to slightly opalescent gel forms in tubes.
PH (at 25°C):	4.8±0.2

This product is for research use only.

Goslar Biotech, 255A Barking Road East Ham, London E6 1LB, United Kingdom
Email: info@goslarbiotech.com, Website: www.goslarbiotech.com