

Litmus Milk:—

24 hours. No change.

48 hours. No change in colour or consistency; on shaking numerous small gas bubbles appear and form a foam on surface.

6 days. Coagulated, moderately firm curd, lilacinous in colour. About a quarter of the tube is whey, and much darker in colour (atro-violaceous).

3 weeks. There is a reddish ring at the surface, considerable digestion, whey occupying three-quarters of the tube, isabellinus in colour. Curd flocculent, avellaneus; odour slightly cheesy.

Potato:—

24 hours. Growth moderate, filiform, slightly raised, cream-yellow colour. This increases, and in

6 days growth is moderate, raised, rugose, moist, shiny; dirty cream-yellow, darker in centre where growth is most massive.

3 weeks. No further change.

A. 3.

Medium-size bacillus with rounded ends, resembles A. 1 in appearance. Active motile, stains well with methylene blue, and is gram negative.

Gelatine Plates:—

24 hours. Just visible to the naked eye. Growth rapid.

48 hours. Colonies are 2-5 mm. in diameter, round. Liquefaction saucer-shaped, inner ring dense, caused by deposited bacilli. With $\frac{1}{2}$ objective the edges of the colonies are fimbriate centre grumose and flocculent. Masses of the bacteria can be seen in movement.

3 days. Colonies increase to 12 mm. in diameter, saucer-shaped liquefaction, whitish in centre, more transparent at the margin. To the naked eye the edges are entire, but with a microscope slightly fimbriate. There is a cheesy smell on opening the plates.

4 days. Plates are liquefied.

Gelatine Stick:—

24 hours. Resembles A. 1, but slightly less growth.

48 hours. Line of bacteria is filiform, smooth on surface. Liquefaction strati-form, 4 mm. deep. Liquefaction continues.

10 days. Liquefaction is 1 cm. deep with medium beneath darker in colour, but clear.

Agar Plates:—

48 hours. Colonies are 1-3 mm. in diameter, round, raised, yellowish-white. With $\frac{1}{2}$ objective edges are entire, dark in centre, granular, gradually becoming lighter to margin, which is clear.

3 days. Colonies are round, white, edges entire, brownish in centre. Convex.

4 days. No change.

Agar Slope, 37°C.:—

24 hours. Very slight growth, filiform.

7 days. No further change.

Glucose Agar Slope, 20°.—

A spreading, flat, white, shiny growth; agar beneath very cloudy. Cream yellow. No gas.