# 70149 Nutrient Broth No 3

An inexpensive liquid medium which serves as base for the culture and accumulation of microorganisms.

## Composition:

| Ingredients | Grams/Litre |
| --- | --- |
| Meat extract | 1.0 |
| Yeast extract | 2.0 |
| Peptone | 5.0 |
| Sodium chloride | 5.0 |

Final pH 7.4 +/- 0.2 at 25°C

Store prepared media below 8°C, protected from direct light. Store dehydrated powder, in a dry place, in tightly-sealed containers at 2-25°C.

## Directions:
Add 13 g to 1 litre of distilled water. Mix well and distribute into final containers. Sterilize by autoclaving at 121°C for 15 minutes.

## Principle and Interpretation:
Nutrient media are basic culture media used for maintaining microorganisms (1), for purity checking prior to biochemical or serological testing. It is used for the cultivation and enumeration of bacteria which are not particularly fastidious. In semisolid form it is used for maintenance of control or standard organisms.
Nutrient Agar is ideal for demonstration and teaching purposes where a more prolonged survival of cultures, at ambient temperature is often required without risk of the overgrowth that can occur with more nutritious substrates. Addition of different biological fluids such as horse or sheep blood, serum, egg yolk etc. makes it suitable for the cultivation of related fastidious organisms (2).

Cultural characteristics after 18-48 hours at 35-37°C.

| Organisms (ATCC) | Growth |
| --- | --- |
| *Escherichia coli* (25922) | +++ |
| *Pseudomonas aeruginosa* (27853) | +++ |
| *Staphylocuccus aureus* (25923) | +++ |
| *Streptococcus pyogenes* (19615) | +++ |

References:
1. Lapage S., Shelton J. and Mitchell T., 1970, `Methods in Microbiology`, Norris J. and Ribbons D. (Eds.), Vol. 3A., Academic Press, London.
2. MacFaddin J., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. I. Williams and Wilkins, Baltimore
3.

## Precautions and Disclaimer
This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

The life science business of Merck KGaA, Darmstadt, Germany operates as MilliporeSigma in the US and Canada.