Australian Standard®

Food microbiology

1997 ed.

Method 2.9: Examination for specific organisms—*Vibrio parahaemolyticus*

PREFACE

This Standard was prepared by the Standards Australia Committee on Food Microbiology to supersede in part AS 1766.2Add.2—1977.

METHOD

1 SCOPE This Standard sets out a method for estimating the most probable number (MPN) of *Vibrio parahaemolyticus* in foods.

2 REFERENCED DOCUMENTS The following documents are referred to in this Standard:

AS
1766 Food microbiology
1766.1.2 Method 1.2: General procedures and techniques—Preparation of dilutions
1766.1.6 Method 1.6: General procedures and techniques—Estimation of most probable number (MPN) of microorganisms
1766.3.1 Method 3.1: Examination of specific products—Meat and meat products other than poultry
1766.3.2 Method 3.2: Examination of specific products—Poultry
1766.3.3 Method 3.3: Examination of specific products—Dehydrated foods
1766.3.4 Method 3.4: Examination of specific products—Frozen foods
1766.3.5 Method 3.5: Examination of specific products—Molluscs, crustaceans and fish, and products thereof
1766.3.6 Method 3.6: Examination of specific products—Margarine
1766.3.7 Method 3.7: Examination of specific products—Heat-processed foods in hermetically-sealed containers
1766.3.8 Method 3.8: Examination of specific products—Eggs and egg products
1766.5 Method 5: Preparation of media, diluents and reagents

3 PRINCIPLE Two sequential liquid selective enrichments and solid selective media are used for the isolation of presumptive *V. parahaemolyticus* and for their subsequent biochemical confirmation.

A flow diagram of the examination procedure is shown in Figure 1.

4 CULTURE MEDIA, REAGENTS AND REFERENCE CULTURE

4.1 General The culture media and reagents specified in this Clause shall be made up according to the formulations given in AS 1766.5 or in Appendix A. The culture media listed in Clause 4.3 require an appropriate addition of sodium chloride to provide a concentration of 30 g/L NaCl after sterilization.

4.2 Media

4.2.1 *Alkaline peptone water*

4.2.2 *Thiosulfate citrate bile-salts sucrose (TCBS) agar*

4.2.3 *Salt tolerance media*—containing 0 g/L, 80 g/L and 110 g/L NaCl.

4.2.4 *Decarboxylase broth base (Moeller's) and decarboxylase broths containing lysine, ornithine and arginine*—with 10 g/L NaCl added (see Appendix A).