1. INTRODUCTION

1.1 Why challenge test
1.2 Information that can be derived from challenge testing
1.3 Safety measures to be observed during challenge testing

2. CHALLENGE TESTING PROCEDURE

2.1 Scope of the challenge test
2.2 Product characteristics
  2.2.1 Product pH
  2.2.2 Water activity (Aw)
  2.2.3 Heat treatment
  2.2.4 Packaging
2.3 Choice of organisms
2.4 Choice of strain
  2.4.1 Pathogens
  2.4.2 Spoilage organisms
2.5 Experimental matrix
  2.5.1 Number of batches of product
  2.5.2 Sampling frequency during the challenge test and number of replicate samples
2.6 Culture maintenance and preparation
  2.6.1 Maintenance of cultures
  2.6.2 Adaptation of cultures
  2.6.3 Preparation of inoculum
  2.6.4 Concentration of the inoculum
2.7 Inoculation of product and maintenance of sample integrity
2.8 Storage conditions
  2.8.1 Chilled storage
  2.8.2 Ambient storage
2.9  Product analysis
2.10 Calculation and interpretation of results
2.11 Controls to be included in challenge tests

3. USE OF PREDICTIVE MICROBIOLOGY AS A CHALLENGE TEST TOOL

APPENDICES
I. CHALLENGE TESTING ACID PRESERVED FOODS ACCORDING TO THE CIMSCEE CODE
II. CHALLENGE TESTING WITH PSYCHROTROPHIC C. BOTULINUM
III. SHELF LIFE STUDIES IN ACCORDANCE WITH EU REGULATION 073/2005 ON MICROBIOLOGICAL CRITERIA FOR FOODSTUFFS

REFERENCES AND FURTHER READING
GLOSSARY OF TERMS