

**Loomasööt. Enterococcus spp. (*E. faecium*) isoleerimine ja loendamine**

**Animal feeding stuffs - Isolation and enumeration of Enterococcus (*E. faecium*) spp.**

EVS

**EESTI STANDARDI EESSÕNA**

**NATIONAL FOREWORD**

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ICS 65.120

English Version

## Animal feeding stuffs - Isolation and enumeration of Enterococcus (*E. faecium*) spp.

Aliments des animaux - Isolement et dénombrement de  
l'Entérocoque (*E. faecium*) spp.

Futtermittel - Keimzählung von *Enterococcus* spp. (*E.*  
*faecium*)

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Management Centre: Avenue Marnix 17, B-1000 Brussels

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## Foreword

This document (EN 15788:2009) has been prepared by Technical Committee CEN/TC 327 “Animal feeding stuffs”, the secretariat of which is held by NEN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by March 2010, and conflicting national standards shall be withdrawn at the latest by March 2010.

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## Introduction

This methodology has been developed to enumerate enterococci (*E. faecium*) to enable the European Commission to control proper labelling of animal feeding products (EU project SMT4-CT98-2235 - "Methods for the official control of probiotics (microorganisms) used as animal feeds") [1]. The method is based on an extensive screening of 12 pre-selected, commercially available media for the detection and enumeration of enterococci. The described methodology was validated in an interlaboratory study [2].

This method is not selective for probiotic enterococci (*E. faecium*) but can be applied to enumerate enterococci in additives, premixtures and feeding stuffs assuming that the probiotic enterococci (*E. faecium*) is present in far higher numbers than any other enterococci.

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## 1 Scope

This European Standard defines general rules for the enumeration of enterococci in feed samples (additives, premixtures and feeding stuffs) that contain enterococci (*E. faecium*) as a single microorganism component or in a mixture with other microorganisms. This standard is not applicable to mineral feeds which are defined as complementary feedingstuffs composed mainly of minerals and containing at least 40% crude ash (Council Directive 79/373/EEC) [3].

There are different categories of feed samples:

- a) Additives containing about  $10^{10}$  colony forming units (CFU)/g;
- b) Premixtures containing  $10^8$  CFU/g;
- c) Feeds, meal or pellets which contain about  $10^6$  CFU/g and include complete feeding stuffs, and milk replacers.

The detection limit is as defined in EN ISO 7218.

## 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN ISO 6887-1, *Microbiology of food and animal feeding stuffs - Preparation of test samples, initial suspension and decimal dilutions for microbiological examination - Part 1: General rules for the preparation of the initial suspension and decimal dilutions (ISO 6887-1:1999)*

EN ISO 7218, *Microbiology of food and animal feeding stuffs - General requirements and guidance for microbiological examinations (ISO 7218:2007)*

ISO 6498, *Animal feeding stuffs – Preparation of test samples*

## 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

### 3.1

#### ***enterococcus faecium* (described by their characteristics as used for this standard)**

*enterococcus faecium* is characterised as a bacterium which forms colonies fitting the description of the species on the specified selective medium after incubation of 24 h at a temperature of 37 °C under aerobic conditions:

- a) morphology of colonies on selective medium;
- b) circular;
- c) convex to dome-shaped;
- d) entire;