This is provisional English translation of an excerpt from the original full report.

Safety Assessment Report

Alpha-amylase produced using MAM strain

(Genetically Modified Food)

Food Safety Commission of Japan (FSCJ)
January 2022

ABSTRACT

The FSCJ conducted a safety assessment of a food additive, α-amylase produced using MAM strain.

This additive is α-amylase produced using MAM strain which was generated through the introduction of the α-amylase gene derived from *Geobacillus stearothermophilus* into *Bacillus subtilis* DS18174 strain as a host. This enzyme hydrolyzes α-1, 4-D-glucoside bonds of starch and others. It lowers molecular weight and is used to maintain the quality in bread production.

Referring to "Standards for Safety Assessments of Genetically Modified Food Additives produced Using Genetically Modified Microorganisms"[1], the FSCJ confirmed the following:
i. the safety of the inserted gene; and
ii. the toxicity and allergenicity of the protein produced from the inserted gene, and others.
Consequently, any new safety concerns were not identified, compared with conventional additives.

The FSCJ concluded that "α-amylase produced using MAM strain" has no concern relevant to human health.

[1] Decision of the FSCJ dated March 25, 2004