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

Safety Assessment Report

Glucose oxidase produced using ZGL strain

(Genetically Modified Foods and Feeds)

Food Safety Commission of Japan (FSCJ)
December 2020

ABSTRACT

FSCJ conducted a safety assessment of an additive, glucose oxidase, produced using ZGL strain based on the documents submitted by the applicant.

This additive is glucose oxidase produced using the ZGL strain which was generated through the introduction of the glucose oxidase gene derived from *Penicillium chrysogenum* into *Aspergillus niger* ISO-528 strain as a host. This additive is an enzyme that oxidizes β-D-glucose into D-glucono-1,5-lactone, and used to improve the flexibility of dough in making bread and confectionary process.

The safety of the inserted gene, and toxicity and allergenicity of the protein produced from the inserted gene and others were evaluated based on the "Standards for Safety Assessments of Food Additives Produced Using Genetically Modified Microorganisms[1]". Consequently, newly produced adverse effects on humans derived from this additive are unlikely based on the comparison between this line and the conventional counterpart.

Consequently, FSCJ concluded that glucose oxidase produced using ZGL strain has no concern relevant to human health.

[1] Decision of the Commission dated 25 March 2004.