



Health  
Canada

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Canada



**STATUS DECISION OF CONTROLLED  
AND NON-CONTROLLED SUBSTANCE(S)**

Substance: Gamma Oryzanol

Based on the current information available to the Office of Controlled Substances, it appears that the above substance is:

Controlled   
Not Controlled

under the schedules of the *Controlled Drugs and Substances Act* (CDSA) for the following reason(s):

- The substances are not similar to any of the substances listed in the CDSA.

Prepared by: \_\_\_\_\_ Date: Aug 23<sup>th</sup> 2010  
Evelyn Soo

Verified by: \_\_\_\_\_ Date: \_\_\_\_\_  
Marianne Tang

Approved by: \_\_\_\_\_ Date: \_\_\_\_\_  
DIRECTOR, OFFICE OF CONTROLLED  
SUBSTANCES

**This status was requested by:** Saumea Thayalan of the Inspectorate - presence in a nutritional supplement.

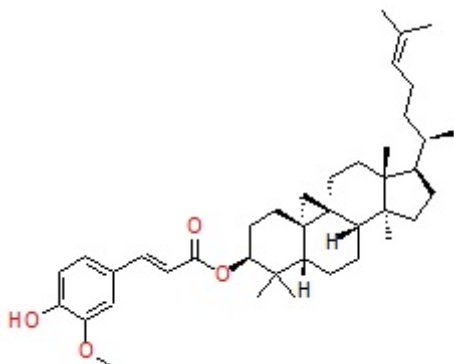
## Drug Status Report

**Drug:** Gamma Oryzanol

**Drug Name Status:** Gamma Oryzanol is the common name.

**Chemical Name:** 9,19-Cyclo-9-beta-Ianost-24-en-3beta-ol 4-hydroxy-3-methoxycinamate

**Chemical Structure:**



**Molecular Formula:** C<sub>40</sub>H<sub>58</sub>O<sub>4</sub>

**Pharmacological class / Application:** Phytosterol

**CAS-RN:** 11042-64-1

**International status:**

US: The substance is not listed specifically in the CSA and is not mentioned anywhere on the DEA website.

United Nations: The substance is not listed on the Yellow List - List of Narcotic Drugs under International Control nor the Green List - List of Psychotropic Substances under International Control.

Canadian Status: Gamma oryzanol is a phytosterol ferulate mixture that is obtained from rice bran oil and has been shown in the scientific literature to have antioxidant properties<sup>1</sup>. The substance is claimed to be an ingredient in a dietary supplement known as "Body Builder™", which is marketed for horses, dogs as well as humans, and available over the internet at <http://www.equidade.com/>, but there is no evidence in the literature that gamma oryzanol displays any anabolic activity.

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<sup>1</sup>Ismail, M. *et al.* (2010) Gamma-oryzanol rich fraction regulates the expression of antioxidant and oxidative stress related genes in stressed rat's liver, *Nutr. Metabolism*, 7: Art No 23.

Gamma oryzanol is not listed specifically in the CDSA and is not structurally similar to any of the substances listed in the Schedules to the CDSA.

**Recommendation:** Gamma oryzanol is not similar to any of the substances included in the Schedules to the CDSA and is not a controlled substance.

**Date:** 23 August 2010