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

Substance: Triiodothyronine

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

- Controlled [x]
- Not Controlled [ ]

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

- The substance is not listed in the Schedules to the CDSA and is not similar to any of the substances included in the CDSA.

Prepared by: ________________ Date: June 15, 2011
Zack Li

Verified by: ________________ Date: __________
Mark Kozlowski

Approved by: ________________ Date: __________
DIRECTOR, OFFICE OF CONTROLLED SUBSTANCES

This status was requested by: Mark Amaral, RAPB
Drug Status Report

**Drug**: Triiodothyronine

**Drug Name Status**: Triiodothyronine is the common name.

**Chemical Name**: (2S)-2-amino-3- [4-(4-hydroxy-3-iodo-phenoxy)- 3,5-diiodo-phenyl]propanoic acid

**Other Names**: T₃; 3,3’,5-triiodo-L-thyronine; cyronine; 4-(4-hydroxy-3-iodophenoxy)-3,5-diiodophenylalanine

![Chemical structure](image)

**Molecular Formula**: C₁₅H₁₂I₃NO₄

**Pharmacological class / Application**: Thyroid hormone

**International status**:

US: The substance is not currently listed on the schedules to the US Controlled Substances Act and is not mentioned on the DEA website.

United Nations: The substance is not listed on the Yellow List - List of Narcotic Drugs under International Control, the Green List - List of Psychotropic Substances under International Control, nor the Red List - List of Precursors and Chemicals Frequently Used in the Illicit Manufacture of Narcotic Drugs and Psychotropic Substances Under International Control.
Canadian Status: Triiodothyronine is a hormone naturally produced by the thyroid gland in the human body\textsuperscript{1}. It is not listed in the CDSA and is not structurally similar to any of the substances included in the Schedules to the CDSA. The disubstituted analogue of triiodothyronine, 3,5-diiodothyronine, was also previously reviewed and found to be not controlled under the CDSA.

Recommendation: Triiodothyronine is not included in the schedules CDSA and is not a controlled substance.

**Date:** June 15, 2011

\textsuperscript{1}Brenta. G., et al (2011). Low plasma triiodothyronine levels in heart failure are associated with a reduced anabolic state and membrane damage. European Journal of Endocrinology **164**:937-942