

11/01/2013 rev1

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# **Certificate of Analysis**

# Customer: NewGen Direct Ltd Sample Identification:

Batch #: B-13065h BL ID #: 13-0766 Description: NewGen Superfoods Plus, powder, 21930000N1052 Date Received: 10/23/2013

#### **Results:**

Analysis	Result	Units
Antioxidant power against peroxyl radicals (ORAC)	14,176	µmole TE/daily serving
Antioxidant power against hydroxyl radicals (HORAC)	17,170	µmole TE/daily serving
Antioxidant power against peroxynitrite (NORAC)	978	µmole TE/daily serving
Antioxidant power against super oxide anion (SORAC)	49,276	µmole TE/daily serving
Antioxidant power against singlet oxygen (SOAC)	8,676	µmole TE/daily serving
Total ORAC <sub>FN</sub> (sum of above)	90,276	µmole TE/daily serving

\* The acceptable precision of the ORAC assay is < 15% relative standard deviation.

There are five predominant reactive species found in the body: peroxyl radicals, hydroxyl radicals, peroxynitrite, super oxide anion, and singlet oxygen. Total  $ORAC_{FN}$  provides a measure of the total antioxidant power of a food/nutrition product against the five predominant reactive species.

The ORAC result is expressed as micromole trolox equivalency (µmole TE) per daily serving.

Daily serving is 25.0 g.

No animal testing has been conducted in these tests.

## Released on behalf of Brunswick Laboratories by

Jin Ji, Ph.D. Chief Technology Officer

## **REFERENCES:**

- [1] Ou, B. et al., J Agric and Food Chem, 2001, 49 (10): 4619-4626.
- [2] Huang, D. et al., J Agric and Food Chem, 2002, 50 (7): 1815-1821.
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- [5] Dubost, N.J. et al., Food Chem, 2007, 105 (2): 727-735
- [6] Zhang, L. et al., J Agric and Food Chem, 2009, 57(7): 2661-2667.
- [7] Ou, B. et al., Method for assaying the antioxidant capacity of a sample. US Patent 7, 132, 296 B2.

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