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Certificate of Analysis

Customer: NewGen Direct Ltd
Sample Identification:
Batch #: B-13065b
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)	7,088	µmole TE/daily serving
Antioxidant power against hydroxyl radicals (HORAC)	8,585	µmole TE/daily serving
Antioxidant power against peroxynitrite (NORAC)	489	µmole TE/daily serving
Antioxidant power against super oxide anion (SORAC)	24,638	µmole TE/daily serving
Antioxidant power against singlet oxygen (SOAC)	4,338	µmole TE/daily serving
Total $ORAC_{FN}$ (sum of above)	45,138	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 12.5 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.
[3] Ou, B. *et al.*, *J Agric and Food Chem*, **2002**, 50 (10): 2772-2777.
[4] Zhang, L. *et al.*, *Free Radic.Bio Med*, **2007**, 43 (suppl. 1): S17.
[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.