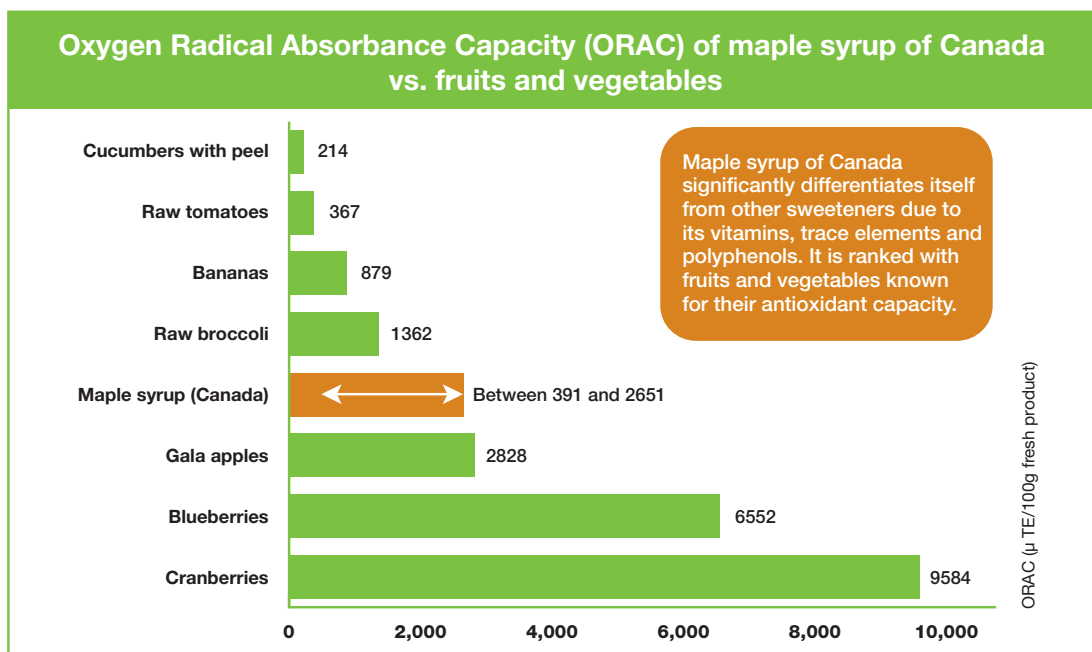


## Promotional Spec Sheet: Antioxidant capacity for maple syrup of Canada

### Summary

- Maple syrup of Canada contains active antioxidant elements: polyphenols, trace elements, and vitamins.
- Its antioxidant activity is comparable to that of Gala red apples, broccoli, or bananas.
- A 60 ml serving of syrup (1/4 cup) provides 10 to 38% of the recommended daily allowance of antioxidants according to certain nutritionists in the United States.

### Results



Source: USDA National Nutrient Database for Standard Reference <http://www.nal.usda.gov/fnic/foodcomp/search/>

The antioxidant capacity of maple syrup of Canada was determined with the ORAC method. Three laboratories were involved in this large-scale study (18 to 45 samples of various grades from three regions of Quebec; all laboratories received the same samples). The table above shows that the antioxidant capacity of maple syrup is quite variable. This variation should be studied thoroughly, since none of three laboratories involved in the analysis of the samples showed an equivalent ORAC value despite having equivalent samples. The maple syrup grade seems to have an impact on the antioxidant capacity, since the average antioxidant value of Dark syrup is three times greater than that of Extra-Light syrup.

Based on the minimum (391 µmolTE/100 g fresh product) and maximum (2,651 µmolTE/100 g fresh product) values observed, a serving of maple syrup of Canada provides 10 to 38% of the recommended daily allowance of antioxidants according to certain nutritionists in the United States, which amounts to 3,000 to 5,000 ORAC units per day.

### Applications and outlooks

The antioxidant capacity of maple syrup of Canada gives it a prime position among fruits and vegetables. Used as a food ingredient, it enhances the quality of prepared dishes with an added health benefit. Additional studies are necessary to explain the variation in values.

**Collaborators:** Mr. Richard Béliveau, Ph.D., cancer researcher at Sainte Justine Hospital in Montreal and co-author of the bestseller *Foods to Fight Cancer*. Mr. Boxin Ou, Ph.D., principal research scientist at Brunswick Laboratories, affiliated with the United States Department of Agriculture (USDA)

© 2010 Federation of Quebec Maple Syrup Producers. All rights reserved. No part of this publication may be reproduced without the prior written consent from the Federation of Quebec Maple Syrup Producers.