Summary

• Results are presented as a GI value spectrum, taking account of the average value and the rate of variation. The minimum and maximum GI values observed for maple syrup of Canada are 11 and 191 respectively, for an average value of 78 ± 43. The analysis of the results shows that in terms of GI, the sweeteners are equivalent, because their values vary between a low GI and a high GI.

• The high rate of variation in GI for each of the sugars tested (42% and up) is directly related to the metabolism of each individual. This rate of variation in GI is reported in several scientific articles. (Reference: Chlup, R. et al. Biomed. Papers no 148(1), 2004, p. 17-25)

Results

The clinical study on the glycemic index (GI) of maple syrup of Canada and four other sweeteners performed on 34 healthy individuals at Sainte Justine Hospital in Montreal reveals that the average GI value of maple syrup is 78 ± 43. The other GI values are 55 ± 31 for honey, 74 ± 84 for agave syrup, 99 ± 51 for Okinawa syrup and 127 ± 54 for corn syrup. There is no significant difference between maple syrup from the current year (3 weeks after harvest) and that of the previous year (1 year after harvest).

• This clinical study was carried out using a proven methodology on maple syrup from Canada. The validity of the results is founded on the following measures: validation of the protocol by the research ethics committee of the Sainte Justine Hospital UHC, blood samples taken intravenously, selection of 34 individuals with health checkup, analysis of sugar profile by HPLC, number of repetitions for each sugar tested.

Applications and outlooks

• This clinical study confirms certain prior studies on the wide variability of the GI value from one individual to another.

• All of the sweeteners tested are therefore equivalent in terms of GI, given the spectrum of values obtained.

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