

عنوان مقاله:

Antioxidant and Chemical Activity of South American Chocolate

محل انتشار:

مجله Medbiotech, دوره 2, شماره 1 (سال: 1397)

تعداد صفحات اصل مقاله: 6

نویسندگان:

Candy Bobadilla - *Centro de Innovación del Cacao, Lima, Perú*

Rosario Roja - *Centro de Innovación del Cacao, Lima, Perú*

خلاصه مقاله:

Cocoa (*Theobroma cacao* L.), and its derived product chocolate, are foods with recognized beneficial health properties, mainly associated with their high content of polyphenols and other bioactive compounds. In Perú there are several companies engaged in the manufacture of products based on Peruvian cacao. There is for example La Ibérica, a Peruvian company located in Arequipa, with over 100 years of recognized experience. The aim of this study was to analyze the chocolate (52% cocoa solids) of La Ibérica, in order to assess its nutritional potential and content of health beneficial compounds. Proximate analysis of chocolate showed high carbohydrate (53.9%), fat (32.7%) and protein (6.5%) contents. The fatty acid profile, determined by gas chromatography, showed mainly the presence of palmitic (26.5%), stearic (32.0%) and oleic (38.3%) acids. The concentration of theobromine (0.4 g/100g chocolate), assessed by HPLC chromatography, was 2.4 times greater than caffeine (0.17 g/100g chocolate). The content of total phenolic compounds, quantified by spectrophotometric method, was 1.5%. The epicatechin concentration, measured by HPLC chromatography, was 1.9 times greater than catechin (63.7 and 34.2 mg/100 g chocolate, respectively). The antioxidant activity in the DPPH test, expressed as median effective concentration, was 0.14 mg/mL. Antioxidant activity in the ORAC test was 489.1 μmol Trolox equivalents/g chocolate. This chocolate contains a good amount of methylxanthines and antioxidant compounds that may be beneficial for the prevention of cardiovascular diseases. However, moderate consumption of this product is recommended, due to its high energy value and fat content.

کلمات کلیدی:

Antioxidant, chocolate, fatty acids, methylxanthines, phenolics

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1017038>

