

Polyphenols in cocoa and cocoa products: is there a link between antioxidant properties and health?.

ABSTRACT

Cocoa and cocoa products have received much attention due to their significant polyphenol contents. Cocoa and cocoa products, namely cocoa liquor, cocoa powder and chocolates (milk and dark chocolates) may present varied polyphenol contents and possess different levels of antioxidant potentials. For the past ten years, at least 28 human studies have been conducted utilizing one of these cocoa products. However, questions arise on which of these products would deliver the best polyphenol contents and antioxidant effects. Moreover, the presence of methylxanthines, peptides, and minerals could synergistically enhance or reduce antioxidant properties of cocoa and cocoa products. To a greater extent, cocoa beans from different countries of origins and the methods of preparation (primary and secondary) could also partially influence the antioxidant polyphenols of cocoa products. Hence, comprehensive studies on the aforementioned factors could provide the understanding of health-promoting activities of cocoa or cocoa products components.

Keyword: Cocoa; Polyphenols; Antioxidants; Methylxanthines.