



STARCH DIGESTIBILITY AND GLYCEMIC INDEX OF COOKIES PARTIALLY SUBSTITUTED WITH UNRIPE BANANA FLOUR.

ABSTRACT

The Mexican government declared that overweight and obesity are Mexico's principal public health problems. Because of this problem the development of nutraceutical foods with a low glycemic index is necessary. Cookies with unripe banana flour (UBF) were prepared with very few ingredients in the formulation to avoid fat and digestible carbohydrates. Proximate composition and starch digestibility were carried out. Moisture and dietary fiber content increased, but protein and fat decreased when the UBF level increased in the cookie. Total starch in cookies added with UBF increased when this ingredient was increased in the formulation. A similar pattern was found for available and resistant starch. Resistant starch content is important due to the beneficial effects associated with its fermentation in the colon. Hydrolysis percentage and predicted glycemic index decreased when the UBF increased in the composite that is related with the resistant starch content. When the amount of UBF was increased in the cookies, the rapidly digestible starch decreased and the slowly digestible starch increased. Addition of UBF to simple formulation for cookie preparation is important to obtain a product with high level of indigestible carbohydrates.

<http://www.sciencedirect.com/science/article/pii/S0023643811003367>

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