



**COMPARISON OF TITULOMETRIC AND SPECTROPHOTOMETRIC APPROACHES TOWARDS THE DETERMINATION OF TOTAL SOLUBLE AND INSOLUBLE CARBOHYDRATES IN FOODSTUFF**

**Eduardo Ramirez Asquieri<sup>1\*</sup>, Aline Gomes de Moura e Silva<sup>1</sup>, Dianiny de Cássia Sousa Mendes<sup>2</sup>, Rayssa Dias Batista<sup>2</sup>**

<sup>1</sup>*Faculty of Pharmacy, Federal University of Goiás, 74605-170, Goiania - GO, Brazil*

<sup>2</sup>*School of Agronomy, Federal University of Goiás, 74690-900, Goiania-GO, Brazil*

\* *asquieri@gmail.com*

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**ABSTRACT**

Total sugars and carbohydrates can be determined in foodstuff through several methods whose analytic principle may significantly differ. In view of this, the aim of this study was to evaluate the use of titrimetric and spectrophotometric methods to quantify soluble sugars and total carbohydrates in foods. Therefore, DNS, Somogyi-Nelson, Lane-Eynon, and Luff-Schoorl methods were used in the determination of total, reducing, and non-reducing sugars in three nectar-based products and soft drinks. Moreover, the analysis results of total carbohydrates were henceforth used to establish a comparison between the findings of wheat bran, cassava flour and canjica, which were assayed using Phenol-sulfuric and Anthrone methods. Results showcased that some samples presented different results according to the method therein used, what suggests the dependency of the findings to the analytical principle of the method. Thence, a deeper understanding of methodology might enhance results reproducibility regarding foodstuff analysis.