

## **EXPOSURE OF STUDENTS FROM A PUBLIC UNIVERSITY IN BRAZIL TO DIETARY ADVANCED GLYCATION PRODUCTS (AGE'S)**

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**INTRODUCTION.** Food is something inherent to human beings and has an impact on the development and worsening of Chronic Noncommunicable Diseases (NCDs). The chemical compounds formed from the use of different thermal processing techniques of food have been increasingly studied, due to their potential toxic effect on the body and consequent risk to the health of the population. Food processing techniques produce advanced glycation end products (AGEs). **OBJECTIVE:** To evaluate the exposure of UEM university students to dietary AGEs and estimate the possible risk of developing NCDs. **MATERIAL AND METHODS:** A cross-sectional study was carried out, using a self-administered questionnaire, which in addition to social, clinical and demographic characteristics, included a 24-h dietary recall to estimate exposure to the AGE, Carboxymethyllysine (CML) expressed in kilounits/day (kU/day). The calculations to quantify the macronutrients of the diet were performed using the Dietbox software, and the CML was quantified from a database of AGEs in foods. **RESULTS AND CONCLUSION:** Of the 147 students evaluated, it was possible to estimate an average CML consumption of  $15,185.89 \pm 9,604.33$  kU/day, representing a risk factor linked to the development of NCDs because it is above 15,000 kU/day. The university students presented a dietary pattern characterized by the highest content of AGEs, marked by a high consumption of protein sources; refined carbohydrates and ultra-processed foods; low consumption of natural foods. Furthermore, it was evident that the white and male population was more exposed to AGEs when compared to the black/brown/yellow and female population. The dietary profile identified among the university students interviewed is associated with greater exposure to dietary AGEs and represents a health risk due to the ability of these substances to increase oxidative stress and inflammatory conditions in the body, corroborating the appearance of NCDs.

**Keys words:** Advanced glycation end products, Diet, Exposure Assessment.

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