Dear editor

The article “Consumption of school meals provided by PNAE among Brazilian public school adolescents”¹, published in v. 47, n. 5 of this journal, evaluated adherence to school meal and associated factors among Brazilian adolescents, based on a national school-based study. The objective of the study is relevant, but there are some methodological problems.

One of the major problems is the categorization of the variables. In the Questionnaire used in the Study of Cardiovascular Risk in Adolescents (ERICA)², there are two variables that deal with food consumption at school: (1) “Do you eat the food offered by school?”, with the following answer categories: (i) “My school does not offer meals”; (ii) “I don’t eat school meal”; (iii) “Eat school meal sometimes”; (iv) “Eat school meal almost every day” and; (v) “Eat school meal every day” and; (2) “Do you buy snacks at the school canteen?”, with the categories (i) “There is no canteen at my school”; (ii) “I don’t buy snacks at the school canteen”; (iii) “I buy snacks at the school canteen sometimes”; (iv) “I buy snacks at the school canteen almost every day” and; (v) “I buy snacks at the school canteen every day”. In the paper, authors reported in the section “study variables”, one variable “Consumption of food offered in schools”, which is classified into (i) “absence of cafeteria”; (ii) “does not consume a snack from the school cafeteria”; (iii) “sometimes consumes a snack from the school cafeteria”; (iv) “consumes cafeteria snack almost every day” and; (v) “consumes cafeteria snack every day”. It appears that the two questions were mixed up.

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Another problem with that variables is that the students who reported not having a cafeteria at school were allocated in the category “does not consume/irregular consumption”. How many are they? This is not a correct form of categorization once the option of consuming or not the snack in the cafeteria does not apply to all students.

A National School Health Survey-PeNSE\textsuperscript{3}, an epidemiological survey from Brazilian public and private schools indicates that there is no provision of school meals\textsuperscript{3,4} and presence of canteens in all public schools\textsuperscript{4}. In a recent analysis of this database, students who were not provided with school meals were excluded from analysis and results of consumption of school meals up to twice a week was 64.2%, a value below that found by the authors, 82.8%. Thus, the categorization used by the authors may be overestimating the low adherence to school meal.

Another major problem is the definition of socioeconomic status (SE) in low, medium and high without any support from the literature, given there is an association between socioeconomic variables and adherence to school meal\textsuperscript{5,6,7}. The authors firstly defined SE according to the Brazilian Economic Classification Criteria (CCEB), which considers the possession of goods, the presence of domestic workers and the education level of the head of the family. But, the authors used another socioeconomic score, due to the high prevalence of non-response regarding maternal education. However, in the ERICA Questionnaire\textsuperscript{2} there are four questions related to the theme, so it is important to correctly justify not using the CCEB. Also, the socioeconomic score chosen\textsuperscript{8} is a continuous variable, without reference to use tertiles as proxy for high, medium and low SE, besides 81.5% of adolescents were classified in medium SE, a percentage unexpected for Brazil. We believe the treatment of the variable should be better clarified and the categorization used rethought, so that can better represent the income distribution in the sample.

An additional point is the choice of confounders based on bivariate analysis. As already established in the literature, this should be based on a theoretical framework and not purely on statistical significance. The collinearity between variables is one of the problems for using this single criterion, which makes the model imprecise, and tends to occur, for example, between the variables of income and race, used in this article.

It is worth mentioning the minor revisions:

1. There are no continuous variables in the analyses therefore it is inadequate to indicate in the methods section that measures of position and central tendency would be calculated for the descriptive analysis.
2. Table 1 needs a revision of the formatting to correct the alignments of the variables and their categories, as well as the need to include two columns to present the absolute and relative frequencies.
3. There is no need to indicate the significance of p-values because confidence intervals are present.
4. The results of the article do not support the development of rules for the food marketing outside of school, as this has not been evaluated.

**REFERENCES**