Cognitive carbohydrate restriction: a new proposal for the diet mentality in the era of low-carb diets

Jônatas de Oliveira^{1*} 💿

Dear Editor,

Low-carb diets have been considered again for weight loss in trials, and their spread goes hand in hand with the increase in unsupervised practices, as seen in intermittent fasting strategies¹. Even if the results of controlled studies indicate more consistent results, the discussions also reach the lay public, who will make food choices, considering information dissipated on the Internet and by health professionals². Feinman et al. evaluated an online support forum with 86,000 members discussing low-carb, "Active Low-Carber Forums³," and recently investigated this practice among university students in Brazil. In 2018, 25% of students practiced low-carb⁴.

However, analyses of this behavioral profile and how food choices are made still lack appropriate methodologies to understand the low-carb phenomenon. Considering all the information and the various types of low-carb diets¹, how do these people plan their eating behaviors to ensure this restriction? In other words, eating attitudes (i.e., thoughts, beliefs, and feelings), specifically about the food source of this macronutrient, are elements of choice that determine consumption. Considering this problem, we adapted the cognitive restriction subscale of the Three Factor Eating Questionnaire, which assesses how willing, in terms of thoughts and behaviors, individuals are to restrict food in order to change shape and body weight⁵. The change was to identify this carbohydrate-directed diet mindset⁶. An example is question #3, "*I do not eat some foods because they make me fat*," which was adapted to "*I do not eat some foods (source of carbohydrates) because they make me fat*." Low-carb dieters showed more remarkable cognitive restraint and more significant cognitive restriction of carbohydrates compared to non-dieters. Nevertheless, the overall score for cognitive restraint on carbohydrates correlated positively with guilt for food cravings in low-carb dieters⁷.

These findings indicate that unsupervised and popularly advertised diets will not always be aligned with healthy eating behavior, requiring further studies regarding diet mentality and other ways of thinking about food from an attitudinal point of view, which can be worked on in psychoeducational proposals and treatment programs.

REFERENCES

- 1. Freire R. Scientific evidence of diets for weight loss: different macronutrient composition, intermittent fasting, and popular diets. Nutrition. 2020;69:110549. https://doi.org/10.1016/j. nut.2019.07.001
- Astrup A, Hjorth MF. Low-fat or low carb for weight loss? It depends on your glucose metabolism. Ebiomedicine. 2017;22:20-1. https:// doi.org/10.1016/j.ebiom.2017.07.001
- Feinman RD, Vernon MC, Westman EC. Low carbohydrate diets in family practice: what can we learn from an internet-based support group. Nutr J. 2006;5(1):26. https://doi.org/10.1186/1475-2891-5-26
- Oliveira J, Figueredo L, Cordás TA. Prevalência de comportamentos de risco para transtornos alimentares e uso de dieta "low-carb"

em estudantes universitários. J Bras Psiquiat. 2019;68:183-90. https://doi.org/10.1590/0047-2085000000245

- Stunkard AJ, Messick S. The three-factor eating questionnaire to measure dietary restraint, disinhibition and hunger. J Psychosom Res. 1985;29(1):71-83. https://doi.org/10.1016/0022-3999(85)90010-8
- Oliveira J, Colombarolli MS, Figueredo LS, Cordás TA. Cognitive restraint directed at carbohydrates in individuals on low-carb diet with binge eating: the role of guilt about food cravings. Einstein. 2021;19:eAO5599. https://doi.org/10.31744/einstein_ journal/2021AO5599
- Colombarolli MS, Oliveira J, Cordás TA. Craving for carbs: food craving and disordered eating in low-carb dieters and its association with intermittent fasting. Eat Weight Disord Stud Anorexia Bulim Obes. 2022;27(8):3109-17. https://doi.org/10.1007/s40519-022-01437-z

Conflicts of interest: the authors declare there is no conflicts of interest. Funding: none. Received on May 21, 2023. Accepted on May 25, 2023.



¹Universidad de São Paulo, School of Medicine – Sao Paulo (SP), Brazil.

^{*}Corresponding author: oliveira.jonatas@usp.br