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The Impact of Nut Consumption on **Adolescents' Academic Performance**



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There is strong scientific evidence that regular nut intake is associated with several health benefits in adults, such as a reduced risk of cardiovascular diseases, obesity, hypertension, and diabetes, among other health conditions.

These benefits have been attributed to their particular nutritional composition, as nuts are nutrient and energy-dense foods, sources of essential nutrients and bioactive compounds, such as 'healthy' fats, plant protein, fiber, vitamins, minerals and antioxidant molecules.

Although the aforementioned health benefits of nuts have been demonstrated in adults, there is still a lack of evidence on how nuts could benefit younger populations.

This study, published in the European Journal of Nutrition, was carried out by researchers from Brazil, Chile, Paraguay and Spain, with the aim to explore the association between nut consumption and academic performance in a group of Spanish adolescents. The study also set out to examine the role of sociodemographic, anthropometric, and lifestyle covariates in this association (1).

Despite the Spanish Society of Community Nutrition recommendation of consuming from 3 to 7 servings weekly of nuts (20-30 grams of nuts/serving) for healthy adults, the study results showed that the average nut consumption was almost three servings per week in these groups of adolescents.

In order to evaluate the association between nut consumption and academic performance, three groups of adolescents were established in relation to their nut intake: 1) no consumption or lower than 1 serving/week; 2) from 1 to 2 servings/week; and 3) ≥ 3 servings/week. One serving of nuts was equivalent to

Surprisingly, the study found that the adolescents who consumed more than 3 servings of nuts per week had higher academic performance and showed



Recent research has demonstrated that regular nut intake is associated with higher academic performance in youths.

higher grades in language, combined language and math, grade point average, and the average of all school records. These results were in line with another study, published in the journal Nutrients in 2018.

This research also observed that lower consumption of healthy foods (e.g., fish, fruit, and vegetables) and higher consumption of unhealthy foods (e.g., fast and ultra-processed food) were both linked to lower academic performance in this young population. Researchers highlighted the importance of better dietary patterns and high adherence to a Mediterranean diet, based on higher consumption of fruits, vegetables, fish, cereals and nuts.

It is worth noting that, adolescents who followed a high-quality diet reported higher scores for organizational strategies, self-regulation, critical thinking, effort, study habits and intrinsically oriented goals, in addition to lower anxiety linked to academic contexts.

In conclusion, adolescents who follow a healthy diet including nuts may have higher academic performance and higher grades in some subjects.

These interesting observational results have to be confirmed with other investigations using other study designs and larger samples of adolescents in order to establish evidence-based causality. In addition, it is important to study potential mechanisms explaining these associations in the future.

References

1. López-Gil. J. F., Martínez-Vizcaíno, V., Amaro-Gahete, F. J., Medrano, M., Pascual-Morena, C., Álvarez-Bueno, C., & Mesas, A. E. (2022). Nut consumption and academic performance among adolescents: the EHDLA study. European journal of nutrition, 10.1007/s00394-022-02985-x. Advance online publication. 2. Chacón-Cuberos, R., Zurita-Ortega, F., Martínez-Martínez, A., Olmedo-Moreno, E. M., & Castro-Sánchez, M. (2018). Adherence to the Mediterranean Diet Is Related to Healthy Habits, Learning Processes, and Academic Achievement in Adolescents: A Cross-Sectional Study. Nutrients, 10(11), 1566.

