

Background

Vegetable consumption is particularly low in childhood and is one of the main concerns about diet in this age range. Vegetable consumption is associated with better cardiovascular health and the prevention of other chronic non-communicable diseases. Therefore, it is important to find strategies to promote vegetable consumption at early ages, since eating habits established in childhood tend to persist into adulthood. The purpose of this study is to evaluate the impact of using a digital game on knowledge about vegetables and his consumption, in preschool children.

Methods

This is an experimental study conducted in a Portuguese preschool, with children from 3 to 6 years ($n=39$). A pre- and post-test were conducted to determine vegetable intake (carrot, lettuce, cucumber, tomato and purple cabbage) and knowledge about vegetables. The intervention consisted of 20-minutes educational sessions with the digital game Veggies4myHeart, once a week for five weeks. A 6-month follow-up was realized.

Results

There was a statistically significant increase in the consumption of all vegetables from the pre- test to the post-test. Intake at follow-up was higher than pre-test for the five vegetables and the intake of cucumber and tomato was higher in the follow-up than in post-test. In the knowledge assessment, a higher number of correct answers were obtained in the post-test.

Conclusions

The use of the digital game 'Veggies4myHeart' had a positive impact on the consumption and knowledge about vegetables in preschool children. The use of digital games could be a useful tool for conducting nutrition education with preschool children.

Keywords: child, preschool, video games, vegetables, health education.

Veggies4myHeart—a digital game to promote vegetable consumption in preschool children

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