

## Developing Serious Games to Increase Children's Knowledge of Diet and Nutrition

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**Abstract :** This research aims to identify and test whether serious games can help children learn and pick up healthy eating habits. The practical component takes the form of digitalizing an already existing educational board game called "All you can eat" (AYCE), designed with the nutritious subject matter in mind. This time with the added features of online playability, which will widen its availability and accessibility to reach more players compared to the physical iteration. The game will be deployed alongside the conducting of theoretical research, which also involves teachers leading children to play said digital version. The research methodology utilizes two experiments, such as handing out surveys to gather feedback from both the partners and students. The research was carried out in several countries, namely Brunei, Malaysia, and Taiwan. The results are to be used for validating the concept of "serious games," particularly when tied to the health aspect of the players, which in this case were children. As for the research outcomes, they can be applied to a variety of serious games that are related to health topics more broadly and not simply limited to healthy eating habits alone, adopting a balanced combination of practical and theoretical considerations. The study will also help other researchers in the correlated fields of serious game development and pediatrics to better comprehend the needs of children. On the theoretical side, these findings can enable further technological advancements to be made possible, a case in point being more serious games, to provide the appropriate social support precisely on the matter of health-related issues. Not just individuals but rather communities could benefit from improved health and well-being as a result of the project, which, when done right, will potentially improve their quality of life and have fun while doing it. AYCE will be demonstrated to support a wide range of health issues as a result of this research case.

**Keywords :** culture heritage, digital games, digitalization, traditional religious culture

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