

Project Acronym:	NUTRISHIELD
Grant Agreement number:	818110 (H2020-SFS-2018-IA)
Project Full Title:	Fact-based personalised nutrition for the young

Are digital interventions effective for weight control in childhood?

October 5, 2022

One of the many changes that the COVID-19 pandemic has brought to our lives has been the rapid transition to the provision of health services through digital tools. Thus, many people who try to manage their weight in the last two years have changed their "traditional" appointments with a Dietitian-Nutritionist with electronic sessions, conducted from the comfort of their personal space. For adults, this was a rather safe procedure. After all, science has shown that electronic weight loss interventions are efficient, with weight loss achieved through electronic interventions being equal to or slightly less than that achieved through traditional methods. But when we talk about children and adolescents, the situation is not necessarily the same.

Until recently, it was known that digital interventions in children and adolescents were effective in increasing physical activity and improving various dietary behaviors, such as increasing fruit and vegetable consumption, reducing the consumption of sugary soft drinks and reducing fat consumption. However, none of the above interventions appeared to lead to a significant improvement in the weight of children and adolescents.

In order to evaluate the impact of digital interventions on the burden of children and adolescents, a scientific team from Harokopio University recently published a relevant consolidated analysis, in the framework of the Nutrishield* project, funded by the European Union (scientific coordinator for Harokopio University: Mr. Demosthenes Panagiotakos, Professor). The analysis included 8 studies with a total of 582 children and adolescents. The majority of technological means were used in support of conventional therapy and these complex interventions were compared with conventional therapy alone or with conditions without any intervention. The results suggest that technology-based interventions significantly reduce the Body Mass Index (a measure of weight status) of children and adolescents. Their effectiveness is evident especially if the studies last at least 6 months, and regardless of the method of providing the digital intervention, i.e. whether it is carried out online or mobile. In addition, the results highlighted the importance of parental involvement, as interventions were only effective when parents were also involved in some way, either by actively supporting the process or by aiming to reduce their body weight themselves.

Therefore, adding technological tools to an intervention to manage the weight of children and adolescents is not only feasible but also more efficient, especially when it lasts at least 6 months, and if it involves parents / guardians. As obesity is a disease that must be treated in the long term, the COVID-19 pandemic does not need to deprive people with obesity of access to health services, as it seems that weight management can be done efficiently and safely by combining remote intervention.

*NUTRISHIELD: EU funded H2020 project, Fact-based personalised nutrition for the young, <https://nutrishield-project.eu/>