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Why did you decide to undertake this study?

Regular participation in physical activity is associated with both positive physical (for example, a reduction in coronary heart disease) and mental health (for example, depression). Moreover, it is known that population levels of physical activity are worryingly low. However, to date, little research has been carried out on the association between physical activity and oral health. It is plausible that physical activity may lead to better oral health through similar mechanisms as other conditions. For example, literature has shown that physical activity is associated with a favourable inflammatory profile and periodontal disease is characterised by an inflammatory process. Owing to a high frequency of poor oral health throughout Europe and low levels of physical activity, we deemed it important to investigate the

association between physical activity and poor oral health in a Spanish population.

Did any of the results surprise you?

We found physical activity to be potentially protective against dental caries, gingival bleeding, tooth movement, and missing tooth but increasing the risk of the presence of dental material. The finding that physical activity increases the risk of the presence of dental material was somewhat surprising. However, when considering potential mechanisms this can be explained. Dental material is associated with tooth erosion and dental caries, and sport participation (one domain of physical activity) is associated with a higher prevalence of tooth erosion and dental caries, likely owing to a higher consumption of sports drinks and drying of the mouth.

What do you think the next steps should be considering your findings?

The present study was cross-sectional in nature and future research should therefore investigate the present observed associations using a longitudinal design. Once future research has been carried out to either confirm or refute the present findings recommendations for policy and practice may be made. ■