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LETTER TO THE EDITOR

Cycling and adolescent bone health

Ciclismo y salud ósea del adolescente

Go ahead the numerous benefits that cycling has on health such as improvements in cardiovascular risk factors, decreased mortality, body fat, cardiovascular risk and suffer different types of cancer¹. However, we must ensure the present and future health of the practitioner, making this practice safer and minimizing risk.

For the adolescent athlete, in many cases, the line between benefits and harms is narrow. Focusing on the issue before us, the bulk of human skeletal development occurs during childhood and adolescence and largely determines the future bone health². While many types of sports, especially those bearing the total body weight are associated with increases in bone mineral content³, those who do not like cycling, appear to be associated with lower bone mass acquisition⁴ although the data in adolescents are very limited^{5, 6}.

In general we can say that in adult cycling training seems to have an effect on best neutral on bone health, with a large proportion of professional cyclists at risk of osteopenia or osteoporosis⁷. Above all, road cycling dealing with health and against other recreational sports such as mountain biking⁸.

Recently it has established a research line funded by the Instituto de Salud Carlos III (DPS2008-56009) in order to observe the status of bone of adolescent cyclists and the effect of cycling during adolescence. The first data show that Spanish adolescent cyclists with an average of 10 hours of training per week have lower levels of bone mass than adolescents of the same age who do not practice any competitive sport⁴. In addition, we have observed that after 17 years the differences are more evident, suggesting that intense practice of cycling appears to decrease or slow bone development⁴.

Although the issue is of great importance, their study seems complicated. The peculiarity of individualized training in this discipline makes the dispersion of adolescents to be a major difficulty for participation in these studies. Tradition in training also makes difficult interventions in this population of athletes reluctant to changes in their routines. In this sense, it is desirable that federations,

clubs and coaches would reflect the problems and motivate young cyclists to include osteogenic exercises in their training like strength training or plyometric jumps to help stimulate the normal development the skeleton.

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