Perspectives / Performance

Commentary on Effects of High-intensity Training on Performance and Physiology of Endurance Athletes

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Generally this article is a well done review of quasi-experimental studies of adding high intensity training to base training in endurance athletes. The authors have reviewed a large array of English language studies and have reduced the results to a weight-of-evidence format that provides an understandable and compelling picture that supports the importance of high-intensity training.

Philosophically, I would have included some of the studies of non-athletes, since I feel that, where better controlled, these studies make up for the lack of competitive experience in the subjects. One problem with many of the studies was the absence of a control group, and for these studies there was little or no baseline monitoring to establish that performance was stable before the training intervention. Granted that compliance with randomization to a control group is difficult with serious athletes, interpretation of longitudinal changes and attributable effects is problematic, when we can't be sure what changes would have occurred anyway. But, ultimately this is nitpicking and (in the spirit of full disclosure), as I was a co-author on two of the excluded studies, my view of how to evaluate changes in training pattern is clearly biased. At the least the work provides a well enough organized review of the contemporary literature to guide further research on observational and experimental studies aimed at quantifying the effects of high-intensity training.

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