[Letter to the Editor]

Dear Dr Wojtys:

Re: Etchison WC, Bloodgood EA, Minton CP, et al. Body mass index and percentage body fat as indicators for obesity in an adolescent athletic population. *Sports Health*. 2011;3:249-252.

Thank you for recognizing the merit of this study. Your comments are well received.

In this retrospective study of 34 000 adolescents, we chose the Skyndex 1 caliper because it was one of the only calipers at that time that would give us a quick body fat percentage reading. It came programmed with the Jackson-Pollock formula, which is recommended by the American College of Sports Medicine. We are aware that there is some question regarding its use on adolescents. For the measurement taken, the caliper was set to the lowest possible age group (18 years). Because the caliper performed the calculation, the 3 individual skinfold measurements were not recorded, only the final calculation of body fat percentage was recorded; therefore, recalculation using the existing data is impossible.

We read the report of Valizadeh and associates in which 3 equations (Brozek, Slaughter, and Jackson-Pollock) were used to calculate body fat percentage in 45 Iranian adolescents.² When the formulas were compared, it is interesting to note that although the Jackson-Pollock formula underestimated body

fat percentage and the Slaughter et al equation overestimated body fat percentage, the Brozek prediction equation held more promise for estimating body fat percentage.

We would also refer readers to the article by Lohman in *Exercise and Sports Science Reviews*.¹ In this article, there is reference to the fact that, in both males and females, large deviations in skinfold distribution with growth are not apparent and that chemical maturity occurs between 15 and 18 years of age. By this criterion, 69% of the student athletes in our study were at or near chemical maturity.

In the report of the study by Valizadeh et al,² the authors indicated the need for further studies. We also believe that our study, along with others, has merit. However, we hope the methods used for predicting body fat will continue to be the subject of further research.

Respectfully,
William C. Etchison, MS
The Hughston Foundation

REFERENCES

1. Lohman TG. Applicability of body composition techniques and constants for children and youths. *Exerc Sport Sci Rev*. 1986;14:325-357.
2. Valizadeh A, Hosini MK, Siahkohiyan M, et al. Comparison of three prediction equation of body fat percentage via skinfold thickness method with segmental multi-frequency bioimpedance in Caucasian area adolescent boys. *Res J Biol Sci*. 2007;2:625-629.