

Response to Amato and Giordano

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To the Editor: The authors truly appreciate the point raised by Amato and Giordano in that the current version of the visceral adiposity index (VAI) is not suitable for clinical use in the non-Caucasian and pediatric population (1). Their comment is legitimate and has merits. Nevertheless, the authors wish to emphasize that although the numerical constants for the current version of VAI was derived from adult Caucasians, it does have its own strengths when applied to different populations. As it is, the current VAI model is highly associated with adiponectin and glycemic disturbances in Arab adults (2) and interestingly, associated with glucose in Arab children (3). Whether or not these findings will hold true once different numerical constants are established for children and other ethnic groups, our investigations on the current version of VAI do highlight its strengths and weaknesses even if used for less suitable groups. Moreover, the studies serve to reinforce the need to have a more appropriate VAI for other populations at risk. To claim that it is not correct to use the current VAI version when there are no other versions for comparison, for other groups including children, weakens its maximum clinical potential when despite the caveats, there is promising though limited evidence for future clinical applications. The use of the current version of VAI for other ethnic groups is similar in the use of European data for use by Sub-Saharan, Eastern Mediterranean,

and Middle-Eastern populations for diagnosing metabolic syndrome since no data are available and therefore consensus needs to be established (4).

Finally, we are truly looking forward in the ongoing investigation of Amato and Giordano in establishing a VAI suitable for pediatric use. It will not only shed light on some controversies in pediatric obesity, it will also offer new and perhaps landmark insights with respect to the clinical significance of the pediatric VAI version.

Disclosure: The authors have nothing to disclose.

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REFERENCES

1. Amato MC, Giordano C. The current version of the visceral adiposity index is not suitable for application in pediatric populations: Comments on the article by Al-Daghri NM *et al.* *Pediatr Res*, 2014; this issue.
2. Al-Daghri NM, Al-Attas OS, Alokail MS, et al. Visceral adiposity index is highly associated with adiponectin values and glycaemic disturbances. *Eur J Clin Invest* 2013;43:183–9.
3. Al-Daghri NM, Al-Attas OS, Alokail M, et al. Does visceral adiposity index signify early metabolic risk in children and adolescents?: association with insulin resistance, adipokines, and subclinical inflammation. *Pediatr Res* 2014;75:459–63.
4. Kassi E, Pervanidou P, Kaltsas G, et al. Metabolic syndrome: definitions and controversies. *BMC Med* 2011;9:48.