

# Limitations and Future Directions for Research on Biomarkers and Endothelial Dysfunction in UAE Youth [Response to Letter]

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## Dear editor

We appreciate your concerns regarding some aspects like lifestyle, dietary patterns, and socioeconomic factors mentioned in the study.

UAE has undergone a wide transformation in the economy, lifestyle, dietary patterns, etc. leading to high rates of overnutrition.<sup>1</sup>

There has been enormous literature available which documents the impact of these factors in UAE nationals' health and occurrence of cardiovascular diseases.<sup>2-6</sup> However, not much data are available on youths who are especially vulnerable to the complications of these disorders and are generally less engaged in health-promoting and monitoring programs. Therefore, this unique study was designed to study the youth population to examine the association between the biomarkers for dyslipidemia, inflammation, and oxidative stress with endothelial dysfunction in obese UAE nationals.

Thanks for the suggestion, we have performed many anthropometric measurements and analyses including the waist circumference and neck circumference. Furthermore, we have measured the body fat composition using the TANITA TBF-300 machine. All these are mentioned in the methods section of the article.<sup>7,8</sup>

We agree with your suggestions, and are in the process of planning future longitudinal studies which will establish the clinical relevance of these biomarkers for cardiovascular disease.

Thanks for the feedback, we agree that UAE has a rich ethnic diversity and further stratification of data based upon the ethnicity would be of great interest. But this study mainly focused on the UAE national population, not any other ethnic group. Definitely, future studies on different ethnic groups and more variable and larger sample sizes would enable us to understand the UAE as whole. We are continuously studying the genetic factors link with the UAE population.<sup>9-11</sup>

In conclusion, we really thank the authors of the letter to the Editor for their valuable comments and some future insights to perform studies in the UAE.

## Disclosure

The authors report no conflicts of interest in this communication.

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