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“Menstrual Cycle: The Importance of Both the Phases and the Transitions Between Phases on Training and Performance” - Authors’ Reply to Carina Enea et al.’s Comments

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Dear Editor,

We thank Dr Enea and colleagues for their correspondence [1] concerning our recent publication [2] and appreciate the positive remarks. The primary aim of our opinion piece was to highlight the overt need for further research to support applied practice by better understanding how the day-to-day variation in hormones translates to readiness, and therefore ultimately helping female athletes perform optimally on any day in their menstrual cycle. Recent media coverage from world leading athletes further illustrates the urgency of this contemporary issue [3]. Enea and colleagues present some highly relevant points, and we entirely agree that education for all athletes and support personnel needs to be the starting point in applied practice. We also appreciate the point raised highlighting the use of individual case studies as these are particularly useful and recognise the individualized nature of the menstrual cycle, which might otherwise be lost in cohort studies reporting the group response. We believe that high-quality large cohort studies are also essential to robustly characterise the female athlete population and to gain a more complete understanding of symptom aetiology and optimal symptom management. However, where relevant, we implore that these studies attempt to evaluate the entirety of the cycle, and the premenstrual phase in particular. The utility of studies only evaluating select phases (or timepoints) will inevitably miss significant disturbances in athlete readiness on specific days and are therefore of limited use in applied practice. We re-affirm our stance—female athletes need to be able to train and perform on any day of their cycle.

Finally, we thank Dr Enea and colleagues for raising the point regarding the need to consider menstrual dysfunctions. Given the known challenges associated with identifying

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dysfunctions, a lack of education around what is atypical (e.g., athletes thinking it is normal not to menstruate) or medical challenges associated with screening (e.g., endometriosis, which can take several years to diagnose), this is very important, and more work is needed to provide education and to create screening tools to identify key flags associated with menstrual dysfunction. Further, in our opinion an improved understanding within all sports around the world of menstrual function and hormonal contraceptive use is essential to identify and help athletes experiencing problems associated with reproductive health.

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References

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2. Bruinvels G, Hackney AC, Pedlar CR. Menstrual cycle: the importance of both the phases and the transitions between phases on training and performance. *Sports Med.* 2022;52:1457–60. 10.1007/s40279-022-01691-2. [PubMed: 35486372]
3. European Championships: Dina Asher-Smith reveals ‘girl stuff’ as cause of 100m cramp. *BBC Sport* 2022. <https://www.bbc.com/sport/av/athletics/62595209>. Accessed 18 Aug 2022.