

*Replacement of dietary saturated fat with unsaturated fats increases numbers of circulating endothelial progenitor cells and decreases number of microparticles: findings from the randomized, controlled DIVAS study*

Article

Accepted Version

Weech, M. ORCID: <https://orcid.org/0000-0003-1738-877X>, Altowaijri, H., Mayneris-Perxachs, J., Vafeiadou, K., Madden, J., Todd, S. ORCID: <https://orcid.org/0000-0002-9981-923X>, Jackson, K. G. ORCID: <https://orcid.org/0000-0002-0070-3203>, Lovegrove, J. A. ORCID: <https://orcid.org/0000-0001-7633-9455> and Yaqoob, P. ORCID: <https://orcid.org/0000-0002-6716-7599> (2018) Replacement of dietary saturated fat with unsaturated fats increases numbers of circulating endothelial progenitor cells and decreases number of microparticles: findings from the randomized, controlled DIVAS study. *American Journal of Clinical Nutrition*, 107 (6). pp. 876-882. ISSN 0002-9165 doi: 10.1093/ajcn/nqy018 Available at <https://centaur.reading.ac.uk/75013/>

work. See [Guidance on citing](#).

To link to this article DOI: <http://dx.doi.org/10.1093/ajcn/nqy018>

Publisher: American Society for Nutrition

All outputs in CentAUR are protected by Intellectual Property Rights law, including copyright law. Copyright and IPR is retained by the creators or other copyright holders. Terms and conditions for use of this material are defined in the [End User Agreement](#).

[www.reading.ac.uk/centaur](http://www.reading.ac.uk/centaur)

## **CentAUR**

Central Archive at the University of Reading

Reading's research outputs online

**Supplemental Table 2. Independent predictors of baseline EPC, EMP and PMP numbers determined by stepwise regression**

Independent predictors	Mean $\pm$ SE	$\beta$ (SE( $\beta$ )) <sup>1</sup>	<i>P</i>
EPC, <i>n</i> =141			
Augmentation index, %	15.6 $\pm$ 1.0	-18.0 (4.6)	<0.001
Night DBP, mm Hg	63.3 $\pm$ 0.6	18.7 (7.7)	0.016
Dietary sugar, % total energy	20.1 $\pm$ 0.5	-19.5 (9.4)	0.039
EMP, <i>n</i> =140			
Augmentation index, %	15.4 $\pm$ 1.0	0.72 (0.21)	0.001
P-selectin, ng/mL	40.4 $\pm$ 1.1	0.55 (0.20)	0.007
TNF $\alpha$ , pg/mL	1.12 $\pm$ 0.05	9.03 (3.99)	0.025
C reactive protein, mmol/L	2.32 $\pm$ 0.30	-1.95 (0.73)	0.008
PMP, <i>n</i> =138			
Augmentation index, %	15.5 $\pm$ 1.0	2.58 (1.12)	0.023
LDI response to acetylcholine, PU	678 $\pm$ 71	-0.04 (0.02)	0.029

<sup>1</sup> For the stepwise regression models, unstandardized  $\beta$  coefficients (defining the impact that 1 unit change of the independent variable had on numbers of EPC (/mL of blood) or microparticles (/μL of blood)) were considered significant if  $P \leq 0.05$  (determined by t-tests). Abbreviations: DBP: diastolic blood pressure, EMP: endothelial microparticles, EPC: endothelial progenitor cells, LDI: laser Doppler imaging, PMP: platelet microparticles, PU: perfusion units.