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Title: The effect of n-3 fatty acids and coenzyme Q10 supplementation on neutrophil leukotrienes, mediators of inflammation resolution and myeloperoxidase in chronic kidney disease

Authors: Anne E. Barden, Sujata Shinde, Valerie Burke, Ian B. Puddey, Lawrence J. Beilin, Ashley B. Irish, Gerald F. Watts, Trevor A. Mori

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The effect of n-3 fatty acids and coenzyme Q10 supplementation on neutrophil

leukotrienes, mediators of inflammation resolution and myeloperoxidase in chronic

kidney disease

Anne E. Barden<sup>1</sup>, Sujata Shinde<sup>1</sup>, Valerie Burke<sup>1</sup>, Ian B Puddey<sup>1</sup>, Lawrence J Beilin<sup>1</sup>,

Ashley B Irish<sup>2</sup>, Gerald F Watts<sup>1</sup>, Trevor A Mori<sup>1</sup>.

School of Medicine, University of Western Australia and <sup>2</sup>Department of Nephrology and

Transplantation, Fiona Stanley Hospital, Perth Western Australia.

Address for correspondence: Professor Anne Barden, School of Medicine and

Pharmacology, University of Western Australia, Medical Research Foundation Building, GPO

BOX X2213, PERTH. Western Australia. 6847. Phone: 618 9224 0272,

Fax: 618 9224 0246 Email: anne.barden@uwa.edu.au

Highlights:

• n-3 FA supplementation increased neutrophil LTB<sub>5</sub>.

• n-3 FA increased neutrophil 18-HEPE, and E-series resolvins derived from EPA

• n-3 FA increased neutrophil 17-HDHA and resolvin D5 derived from DHA

n-3 FA supplementation reduced plasma myeloperoxidase

**Abstract** 

**Background:** Neutrophils release leukotriene (LT)B<sub>4</sub> and myeloperoxidase (MPO) that may

be important mediators of chronic inflammation in chronic kidney disease (CKD). The n-3

fatty acids (n-3 FA) eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA) have the

potential to attenuate inflammation through production of LTB5 and the Specialized

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