



MODULATION OF COAGULATION AND PLATELET FUNCTION WITH RED WINE: INSIGHTS FROM CLINICAL EVIDENCE

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BACKGROUND AND AIMS

Understanding the relationship between diet and cardiovascular health, particularly the effects of red wine (RW), on coagulation and platelet function, is critical in elucidating its role in preventing thrombosis and atherosclerosis.

METHODS

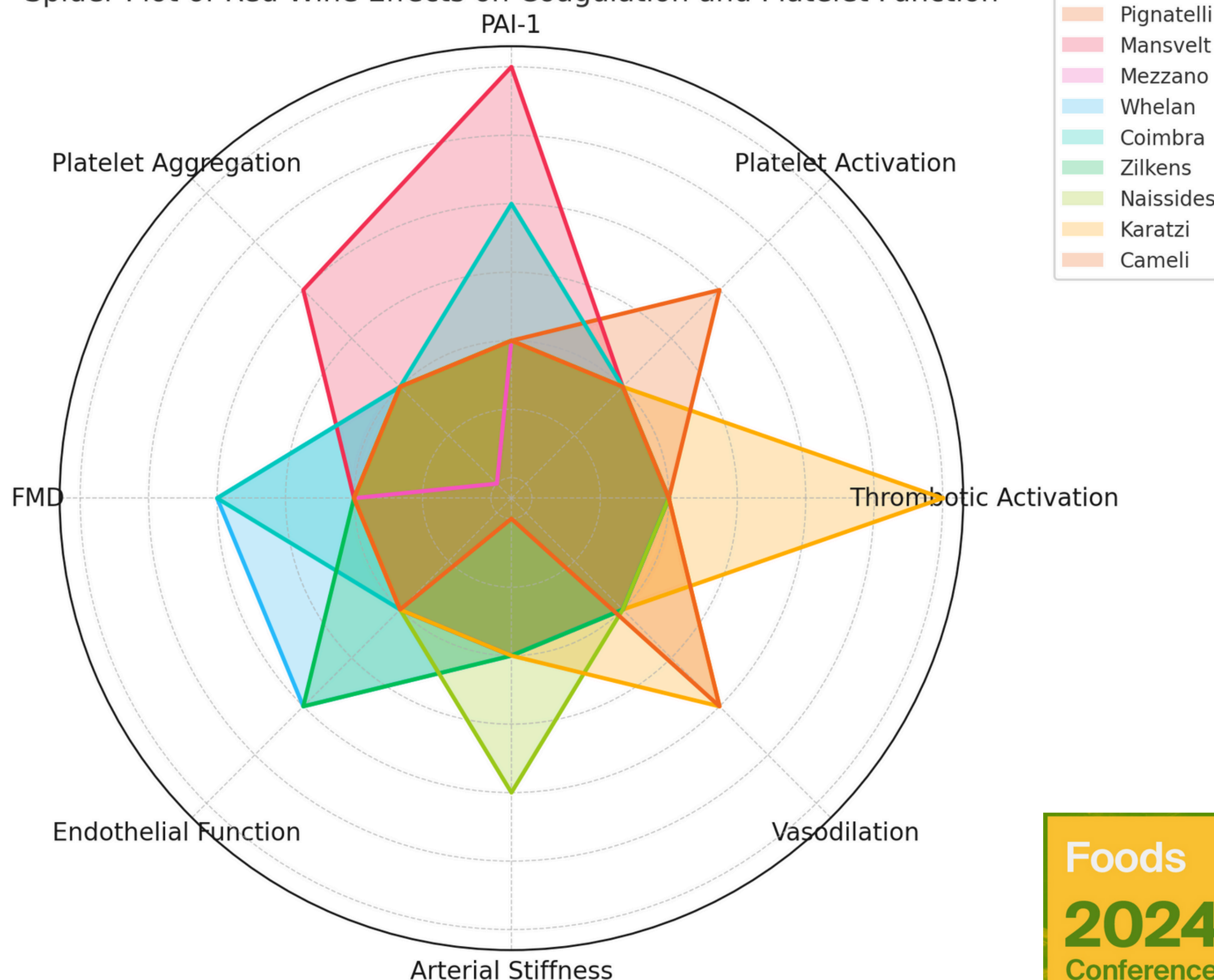
A comprehensive review of clinical studies was conducted, focusing on the effects of RW consumption on coagulation markers, including prothrombin fragments, activated factor VII, fibrinogen levels, and platelet aggregation.

RESULTS

The findings indicate a general trend towards decreased thrombotic activation, platelet activation, and plasma viscosity, with some studies noting improvements in endothelial function, reduced arterial stiffness, and beneficial changes in gene expression related to atherosclerosis.

First Authors	Main Findings
Ceriello, Pignatelli	↓ Thrombotic activation, ↓ Plasma viscosity, ↓ Platelet activation
Mansvelt, Coimbra	↓ PAI-1, ↓ Platelet aggregation, ↑ FMD, ↑ Nitric oxide
Mezzano, Kaul	↑ Platelet aggregation, = Bleeding time, = Fibrinogen, = D-dimer
Whelan, Zilkens	= Carotid plaque volume, = Endothelial function, ↑ FMD
Naissides, Karatzi	↑ Arterial stiffness, ↑ Vasodilation post-smoking
Cameli, Huang, Estruch	↑ EPC levels, ↓ LV function, ↑ RV function, ↑ Vasodilation
Chiva-Blanch	↓ Atherosclerosis genes

Spider Plot of Red Wine Effects on Coagulation and Platelet Function



CONCLUSIONS

Research shows potential cardiovascular benefits associated with red wine, such as reduced thrombotic and platelet activation and improved endothelial function. However, the results are inconsistent and, given the high risk associated with long-term alcohol consumption, there is no reason to start consuming it for cardiovascular health.

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