

EVIDENCE BASED STATEMENT

DOMAIN **8**, Statement **10**

TOPIC: “SUPPLEMENT OR DIETARY DERIVED PRODUCTS MEANING IN CHRONIC VENOUS DISEASE MANAGEMENT”

SEARCH TERMS & SOURCES

("venous insufficiency"[MeSH Terms]) AND (diet OR supplement) //PubMed, Embase and Cochrane Library

INCLUSION CRITERIA

Indexed Journal, English Language, lower limb
Reviews, <10 y.

SEARCH RESULT BEFORE - AFTER SELECTION

23 (before) - 2 (after selection)

PERTINENT LITERATURE NOT IDENTIFIED BY THE LITERATURE SEARCH

1. de Souza T, Monteiro JDC, Curioni CC, et al. Nutrients with Antioxidant Properties and Their Effects on Lower-Limb Ulcers: A Systematic Review. Int J Low Extrem Wounds. 2022 Jan 24:15347346221074861
2. Muela-Molina C, Perelló-Oliver S, García-Arranz A. False and misleading health-related claims in food supplements on Spanish radio: an analysis from a European Regulatory Framework. Public Health Nutrition: 24(15), 5156–5165.
3. McDaniel JC. Dietary supplement use by older adults with chronic venous leg ulcers. Wound Repair Regen. 2020 ;28(4):561-572
4. Kulprachakarn K, Abkom P, Pongtam O, et al. Higher Level of Chicken Consumption Associated With Less Severe Venous Disease. Int J Low Extrem Wounds. 2017 Dec;16(4):251-254.
5. Huang HY, Caballero B, Chang S, et al. Multivitamin/mineral supplements and prevention of chronic disease. Evid Rep Technol Assess (Full Rep). 2006;(139):1-117
6. Lees JS, Chapman FA, Witham MD, et al. Vitamin K status, supplementation and vascular disease: a systematic review and meta-analysis. Heart. 2019;105(12):938-945.
7. Cancio A, Eliason MJ, Mercer J, et al. Third-party certification of dietary supplements: prevalence and concerns. Mil Med. 2012;177(12):1460-3.

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IDENTIFIED REFERENCES

(from the most recent down)

1. Haughey L, Barbul A. Nutrition and Lower Extremity Ulcers: Causality and/or Treatment. Int J Low Extrem Wounds. 2017 Dec;16(4):238-243.
2. Violi F, Lip GY, Pignatelli P, Pastori D. Interaction Between Dietary Vitamin K Intake and Anticoagulation by Vitamin K Antagonists: Is It Really True?: A Systematic Review. Medicine (Baltimore). 2016 Mar;95(10):e2895.

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TEXT FOR INCLUSION IN THE DOCUMENT

(300 words, not counting the references)

DOMAIN 8, Statement 10, TOPIC: “SUPPLEMENT OR DIETARY DERIVED PRODUCTS MEANING IN CHRONIC VENOUS DISEASE MANAGEMENT”

A recent publication demonstrated the urgency of false claims counteraction related to supplements.

More than 80% of the function claims included in the analysed advertisements are not authorised by the European Food Safety Authority, while more than 20% of disease claims are not allowed by United Europe regulation. More than 70 % of analyzed substances are illicit in the case of reduction of disease risk claims.

[Muela-Molina C, Perelló-Oliver S, García-Arranz A. False and misleading health-related claims in food supplements on Spanish radio: an analysis from a European Regulatory Framework. Public Health Nutrition: 24(15), 5156–5165].

An alarming 2012 publication already pointed out how only 12% of the available products were certified by an independent scientific agency, therefore exposing the consumers to the risk of not properly validated over-the-counter dietary supplements.

The issue is of particular concern considering over 50% of the general population has been reported to use these products.

[Cancio A, Eliason MJ, Mercer J, Tran T, Deuster PA, Stephens MB. Third-party certification of dietary supplements: prevalence and concerns. Mil Med. 2012 Dec;177(12):1460-3].

Back in 2006 a revision of the literature pointed out the absence of evidence for the benefit of supplements in the prevention of cardiovascular disease.

[Huang HY, Caballero B, Chang S, et al. Multivitamin/mineral supplements and prevention of chronic disease. Evid Rep Technol Assess (Full Rep). 2006;(139):1-117]

A more recent revision on the general effect of nutrients with antioxidant properties on chronic ulcer healing reported a potential benefit of Omega-3 fatty acids, magnesium, zinc, vitamins A, C, D, and resveratrol along with probiotics.

The benefit is more evident in the cases showing an initial deficiency of the related nutrient.

Nevertheless, up to the authors knowledge, no solid evidence-based data support a recommendation in the use of dietary supplements in venous disease patients and further properly conducted investigations are needed.

***[de Souza T, Monteiro JDC, Curioni CC, et al. Nutrients with Antioxidant Properties and Their Effects on Lower-Limb Ulcers: A Systematic Review. Int J Low Extrem Wounds. 2022 Jan 24:15347346221074861]**

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STATEMENT FOR PUBLIC EVIDENCE-BASED AWARENESS

DOMAIN 8, Statement 10

“Up to the knowledge of this experts panel, no supplement or dietary derived has demonstrated to significantly improve venous and or lymphatic function in a significant way.”

4 SELECTED REFEREENCES

1. **Muela-Molina C, Perelló-Oliver S, García-Arranz A. False and misleading health-related claims in food supplements on Spanish radio: an analysis from a European Regulatory Framework. Public Health Nutrition: 24(15), 5156–5165**
2. **Cancio A, Eliason MJ, Mercer J, Tran T, Deuster PA, Stephens MB. Third-party certification of dietary supplements: prevalence and concerns. Mil Med. 2012 Dec;177(12):1460-3**
3. **Huang HY, Caballero B, Chang S, et al. Multivitamin/mineral supplements and prevention of chronic disease. Evid Rep Technol Assess (Full Rep). 2006;(139):1-117**
4. ***de Souza T, Monteiro JDC, Curioni CC, et al. Nutrients with Antioxidant Properties and Their Effects on Lower-Limb Ulcers: A Systematic Review. Int J Low Extrem Wounds. 2022 Jan 24:15347346221074861**

identified LITERATURE BIAS

Lack of objective measures in homogeneous study populations

In many countries several natural flavonoids are registered under the name of dietary suplemen to facilitate the registration proces, with no need of the confirmation of their activity and efficacy in proposed doses and administration

SUGGESTED NEXT LINES OF RESEARCH and ACTION

Randomized comparative trials on different supplements use, assessing objective outcomes in homogenous study populations. Starting medical society provoked discussion with the Medicine Registration Agencies on the weekness and consequences of the registration proces of the dietary supplements registered in venous disease indication