

# EVIDENCE BASED STATEMENT

DOMAIN **12**, Statement **04**

TOPIC: “**Diet regimens for venous-lymphatic disease patients.**”

## SEARCH TERMS & SOURCES

(diet) AND ((venous) OR (lymphedema) OR (lipedema))

### INCLUSION CRITERIA

- Lower limb only
- Systematic Reviews, Meta-Analysis, Reviews, RCT
- Publication < 10 years, only ENG

## SEARCH RESULT BEFORE - AFTER SELECTION

90/8

### PERTINENT LITERATURE NOT IDENTIFIED BY THE LITERATURE SEARCH

1. Di Renzo L, Cinelli G, Romano L, et al. Potential Effects of a Modified Mediterranean Diet on Body Composition in Lipoedema. *Nutrients*. 2021 Jan 25;13(2):358
2. Barber GA, Weller CD, Gibson SJ. Effects and associations of nutrition in patients with venous leg ulcers: A systematic review. *J Adv Nurs*. 2018 Apr;74(4):774-787.
3. Nanavati R, Jasinski P, Adrahtas D, Gasparis A, Labropoulos N. Correlation between pelvic congestion syndrome and body mass index. *J Vasc Surg*. 2018 Feb;67(2):536-541.
4. Olas B. Dietary Supplements with Antiplatelet Activity: A Solution for Everyone? *Adv Nutr*. 2018 Jan 1;9(1):51-57.
5. Morelli VM, Lijfering WM, Bos MHA, Rosendaal FR, Cannegieter SC. Lipid levels and risk of venous thrombosis: results from the MEGA-study. *Eur J Epidemiol*. 2017 Aug;32(8):669-681
6. Davies HO, Popplewell M, Singhal R, et al. Obesity and lower limb venous disease - The epidemic of phlebesity. *Phlebology*. 2017 May;32(4):227-233.
7. Molnar JA, Vlad LG, Gumus T. Nutrition and Chronic Wounds: Improving Clinical Outcomes. *Plast Reconstr Surg*. 2016 Sep;138(3 Suppl):71S-81S.

# EVIDENCE BASED STATEMENT

## Domain 12; Statement 4

### IDENTIFIED REFERENCES

1. Khan N, Huayllani MT, Lu X, et al. Effects of diet-induced obesity in the development of lymphedema in the animal model: A literature review. *Obes Res Clin Pract.* 2022 May- Jun;16(3):197-205.
2. Pantic N, Pantic I, Jevtic D, et al. Celiac Disease and Thrombotic Events: Systematic Review of Published Cases. *Nutrients.* 2022 May 23;14(10):2162.
3. Tsoupras A, Lordan R, Zabetakis I. Thrombosis and COVID-19: The Potential Role of Nutrition. *Front Nutr.* 2020 Sep 25;7:583080.
4. Cooper ID, Crofts CAP, DiNicolantonio JJ, et al. Relationships between hyperinsulinaemia, magnesium, vitamin D, thrombosis and COVID-19: rationale for clinical management. *Open Heart.* 2020 Sep;7(2):e001356.
5. Haughey L, Barbul A. Nutrition and Lower Extremity Ulcers: Causality and/or Treatment. *Int J Low Extrem Wounds.* 2017 Dec;16(4):238-243.
6. Lippi G, Mattiuzzi C, Franchini M. Vegetables intake and venous thromboembolism: a systematic review. *Blood Coagul Fibrinolysis.* 2016 Apr;27(3):242-5.
7. Lippi G, Cervellin G, Mattiuzzi C. Red meat, processed meat and the risk of venous thromboembolism: friend or foe? *Thromb Res.* 2015 Aug;136(2):208-11.
8. Mattiuzzi C, Cervellin G, Franchini M, et al. Fish Intake and Venous Thromboembolism: A Systematic Literature Review. *Clin Appl Thromb Hemost.* 2016 May;22(4):309-13.

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### TEXT FOR INCLUSION IN THE DOCUMENT

DOMAIN 12, Statement 04, TOPIC: “**Diet regimens for venous-lymphatic disease patients.**”

Obesity is a recognized risk factor for lower limb venous disease,

**[Nanavati R, Jasinski P, Adrahtas D, Gasparis A, Labropoulos N. Correlation between pelvic congestion syndrome and body mass index. J Vasc Surg. 2018 Feb;67(2):536-541].**

while preliminary data are suggested that a low body mass index is associated with pelvic venous disorders.

**[Davies HO, Popplewell M, Singhal R, et al. Obesity and lower limb venous disease - The epidemic of phlebesity. Phlebology. 2017 May;32(4):227-233].**

In this context, body weight control by appropriate diet is of paramount importance, moreover considering that the inclusion of specific elements such as vitamin D and folic acid might even improve venous ulcer healing.

**\*[Haughey L, Barbul A. Nutrition and Lower Extremity Ulcers: Causality and/or Treatment. Int J Low Extrem Wounds. 2017 Dec;16(4):238-243].**

Moreover, diet-induced obesity was recently found associated with lymphedema development, suggesting the body weight impact on both the venous and lymphatic drainage.

**\*[Khan N, Huayllani MT, Lu X, et al. Effects of diet-induced obesity in the development of lymphedema in the animal model: A literature review. Obes Res Clin Pract. 2022 May-Jun;16(3):197-205].**

Proper nutrition demonstrated a possible role also in thrombosis management, particularly in COVID-19 time.

**[Tsoupras A, Lordan R, Zabetakis I. Thrombosis and COVID-19: The Potential Role of Nutrition. Front Nutr. 2020 Sep 25;7:583080].**

Nevertheless, specific regimen diets have not been compared head to head in homogenous study populations, limiting the possible recommendations on the topic. Empirically, a diet favoring proper hydration and low levels of oxidants could favor drainage fluidity and anti-inflammatory conditions, yet proper evidence is still needed and encouraged.

Recent literature focused on a modified Mediterranean diet for favoring a body composition counteracting lipedema alterations and leading to an improvement in patients quality of life. Further investigations are needed also on this topic, focusing on specific nutritional regimens.

**\*[Di Renzo L, Cinelli G, Romano L, et al. Potential Effects of a Modified Mediterranean Diet on Body Composition in Lipoedema. Nutrients. 2021 Jan 25;13(2):358]**

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### STATEMENT FOR PUBLIC EVIDENCE-BASED AWARENESS

DOMAIN 12, Statement 04

“Up to the knowledge of this experts panel, no specific diet has been scientifically validated for venous-lymphatic improvement. A diet aimed to avoid obesity, oxidative stress and excessive venous-lymphatic dilation should be preferred and customized on the specific subject case”

### SELECTED REFERENCES

1. Nanavati R, Jasinski P, Adrahtas D, Gasparis A, Labropoulos N. Correlation between pelvic congestion syndrome and body mass index. *J Vasc Surg.* 2018 Feb;67(2):536-541
2. Davies HO, Popplewell M, Singhal R, et al. Obesity and lower limb venous disease - The epidemic of phlebesity. *Phlebology.* 2017 May;32(4):227-233
3. Haughey L, Barbul A. Nutrition and Lower Extremity Ulcers: Causality and/or Treatment. *Int J Low Extrem Wounds.* 2017 Dec;16(4):238-243
4. \*Khan N, Huayllani MT, Lu X, et al. Effects of diet-induced obesity in the development of lymphedema in the animal model: A literature review. *Obes Res Clin Pract.* 2022 May-Jun;16(3):197-205
5. \*Tsoupras A, Lordan R, Zabetakis I. Thrombosis and COVID-19: The Potential Role of Nutrition. *Front Nutr.* 2020 Sep 25;7:583080
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### identified LITERATURE BIAS

Lack of investigations on standardized nutritional regimen for specific venous and lymphatic drainage impairment conditions

### SUGGESTED NEXT LINES OF RESEARCH

Single component diet variation in homogeneous study populations in terms of vein/lymphatic drainage compromise