#### Pendulum<sup>3</sup>

### **Polyphenol Booster**

# Increase antioxidants to protect cells from damage

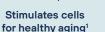
Considered "lifespan essentials," polyphenols help protect the body and neutralize free radicals that cause damage to cells and can increase risk for certain health conditions.

#### Help your microbiome thrive

Polyphenols are considered *prebiotics* because they help shape the environment in the gut microbiome. By doing so, they benefit the good bacteria, like *Akkermansia muciniphila*, and promote a healthy gut.

It's not easy to get polyphenols simply through a healthy diet. These twice daily capsules are a convenient way to boost polyphenol intake.







Supports heart health<sup>2,3</sup>



Boosts Akkermansia levels for gut health<sup>4,5</sup>

#### How do polyphenols help?

- ✓ Introducing higher levels of polyphenols to the microbiome has been shown to increase Urolithin A, a metabolite that stimulates cellular function and reduces cellular degradation to support healthy aging.<sup>6</sup>
- Green tea and grape seed both contain high amounts of catechins, a subgroup of polyphenols that support cardiovascular health.
- Polyphenol Booster is shown to increase levels of Akkermansia muciniphila and other beneficial bacteria through polyphenol extracts that stimulate a prebiotic effect in the microbiome.



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<sup>2</sup>Chacko, S. M., Thambi, P. T., Kuttan, R., & Nishigaki, I. (2010). Beneficial effects of green tea: A literature review. *Chinese Medicine*, 5(1), 13. https://doi.org/10.1186/1749-8546-5-13

Parasuraman, S., Anand David, A., & Arulmoli, R. (2016). Overviews of biological importance of quercetin: A bioactive flavonoid. *Pharmacognosy Reviews*, 10(20), 84. https://doi.org/10.4103/0973-7847.194044

<sup>4</sup>Henning, S. M., Summanen, P. H., Lee, R. P., Yang, J., Finegold, S. M., Heber, D., & Li, Z. (2017). Pomegranate ellagitannins stimulate the growth of *Akkermansia muciniphila* in vivo. *Anaerobe*, 43, 56–60. https://doi.org/10.1016/j.anaerobe.2016.12.003

<sup>5</sup>Jeong, H. W., Kim, J. K., Kim, A. Y., Cho, D., Lee, J. H., Choi, J. K., Park, M., & Kim, W. (2020). Green Tea Encourages Growth of Akkermansia muciniphila. Journal of Medicinal Food, 23(8), 841–851. https://doi.org/10.1089/jmf.2019.4662

<sup>o</sup>D'Amico, D., Andreux, P. A., Valdés, P., Singh, A., Rinsch, C., & Auwerx, J. (2021). Impact of the Natural Compound Urolithin A on Health, Disease, and Aging. *Trends in Moleculal Medicine*, 27(7), 687–699. https://doi.org/10.1016/j.molmed.2021.04.009

#### Good to know

#### **Powerful Polyphenols**

Polyphenol Booster contains a unique blend of antioxidants and polyphenols. Through in vitro testing, polyphenols were shown to increase the levels of *Akkermansia muciniphila*, a keystone bacterial strain found in healthy people. For best results, pair with Pendulum Akkermansia.

#### **Healthy Gut**

Microbiome diversity is an excellent indicator of gut health. By supporting the proliferation of probiotic strains like *Akkermansia*, an increase in polyphenols can result in stronger gut barrier function, eased digestion, and greater overall gut health. Take 2 capsules a day to maximize the effectiveness of *Akkermansia* and boost digestive health.

#### **Potent Blend**

Polyphenol Booster is derived from natural, plant-based ingredients: pomegranate (90% ellagic acid), grape seed (70% proanthocyanidins), and green tea (95% EGCG). The combination of these ingredients effectively supports the proliferation of beneficial microbiota in the gut microbiome.

## Bring this innovative approach into your practice

Help your patients find optimal health by harnessing the power of the gut microbiome with Pendulum's clinically-studied strains. Create an account to access education, resources, and special healthcare pricing.

#### Set up your healthcare account

Scan the QR code or email **hcpinfo@pendulumlife.com** to set up your account.



PendulumLife.com/hcp

