

# Pinella™



## Applications

- Detoxification Support
- Neurological Support
- Gastrointestinal Support
- Microbial Support
- Antioxidant Support

## Introduction

**NutraMedix Pinella™** is a hydro-ethanol extract made from **pimpinella stem** (*Pimpinella* spp.). *P. anisum* belongs to the Apiaceae family, the most well-known of which is *Pimpinella anisum*.

**Pimpinella** contains monoterpenoids such as alpha- and beta-pinene, camphor, and borneol; triterpenoids such as betulinic acid, ursolic acid, and oleanolic acid; sesquiterpenes such as beta-caryophyllene, germacrene D, and beta-selinene; flavonoids and their glycosides, such as quercetin, apigenin, and kaempferol; and organic acids such as vanillic acid, rosmarinic acid, and salicylic acid.<sup>1</sup>

Pimpinella stem also contains volatile oils such as *trans*-anethole and eugenol, fatty acids such as palmitic and oleic acids, 18% mass of protein, and 4% mass of carbohydrate. Anethole is a phytoestrogen.<sup>2,3</sup> Some studies show that the whole plant may consist of up to 57.4% *trans*-anethole.<sup>4</sup>

Traditionally, *Pimpinella* spp. such as *P. anisum* have been used to support gastrointestinal health, urinary health, and respiratory health.<sup>1</sup>

**NutraMedix Pinella** is made at our U.S. manufacturing facility using a specialized proprietary extraction process that optimizes the constituents of the herbs in their original, unprocessed state to obtain broad-spectrum

concentration. Because our extracts are made in our own facility, we control all aspects of quality, including stringent ID testing, microbial testing, and heavy metal testing. NutraMedix rigorously follows current good manufacturing practices (cGMP), as do our suppliers.

## Detoxification Support

**Pimpinella** (*P. anisum*) may help promote the body's natural detoxification systems, supporting and maintaining liver and kidney health.<sup>5,6</sup> *P. anisum* may help maintain levels of urea, uric acid, and creatinine already within the normal range.<sup>6</sup>

## Neurological Support

The eugenol found in **pimpinella** (*P. anisum*) may help support neurological health and may help maintain brain electrical discharges already within the normal range.<sup>7</sup> *P. anisum* may also help maintain neurological health by supporting healthy neuroplasticity.<sup>8</sup>

## Gastrointestinal Support

**Pimpinella** (*P. anisum*) may help with gastrointestinal support by maintaining healthy gastric mucosa.<sup>9</sup> In addition, it may help with gastrointestinal microbial support.<sup>10</sup> It may also

help maintain bowel regularity,<sup>11</sup> and has been used traditionally to support gastrointestinal smooth-muscle relaxation.<sup>1</sup>

## Other Support

### Microbial Support

**Pimpinella** (*P. anisum*) may help with microbial support.<sup>10,12-15</sup> An in vitro study with ethanolic leaf extract showed comprehensive microbial support.<sup>12</sup> An in vitro study with a methanolic seed extract attributed the microbial support to phenolic compounds—specifically polyphenolic acids and flavonoids.<sup>13</sup> A hot water extract also showed microbial support.<sup>14</sup>

### Antioxidant Support

**Pimpinella** (*P. anisum*) may help with antioxidant support,<sup>13,15</sup> as quantified by 2,2-diphenyl-1-picrylhydrazyl (DPPH), 2,2'-azino-bis(3-ethylbenzothiazoline-6-sulfonic acid (ABTS), and iron-reducing assays.<sup>13</sup>

## Safety and Cautions

**Pimpinella** (*P. anisum*) is generally well tolerated. There have been reports of allergic reactions

to *P. anisum*, which may include dermatologic, respiratory, or gastrointestinal symptoms.<sup>16</sup>

*P. anisum* should not be used when trying to conceive as it may inhibit the implantation of the fertilized egg.<sup>3,16</sup> The alcohol extract should be avoided in pregnancy.<sup>16</sup> It should also be avoided during childbirth, as it has inhibited uterine contractions in rats. This is attributed to the inhibition of both calcium entry via calcium channels and calcium release from stores.<sup>17</sup>

*P. anisum* currently has no known drug interactions.<sup>18</sup> Theoretically, *P. anisum* may increase the effects and adverse effects of hypoglycemic drugs and codeine.<sup>19</sup> Theoretically, it may also interfere with oral contraceptives, estrogens, and tamoxifen.<sup>19</sup>

Safety is not documented in breastfeeding or pregnant women, or in children under age 3, due to insufficient safety research.

\*This statement has not been evaluated by the Food and Drug Administration. This product is not intended to treat, cure, or prevent any diseases.

## References

<sup>1</sup>Wu, J., Cao, Z., et al. (2023). *Molecules*, 28(4), 1571.

<sup>2</sup>LactMed. (2021). Anise. *Drugs and Lactation Database*. National Library of Medicine (US).

<sup>3</sup>Gardner, Z., & McGuffin, M. (2013). *American Herbal Products Association Botanical Safety Handbook* (2nd ed., pp. 657-659). CRC Press.

<sup>4</sup>Shojaii, A., & Abdollahi Fard, M. (2012). *ISRN Pharmaceuticals*, 510795.

<sup>5</sup>Asadollahpoor, A., Abdollahi, M., et al. (2017). *Journal of Research in Medical Sciences*, 22, 37.

<sup>6</sup>Amina, B., et al. (2016). *International Journal of Green Pharmacy*, 10(2), 91.

<sup>7</sup>Pourgholami, M.H., Majzoob, S., et al. (1999). *Journal of Ethnopharmacology*, 66, 211-215.

<sup>8</sup>Karimzadeh, F., Hosseini, M., et al. (2012). *BMC Complementary and Alternative Medicine*, 12(76), 1-9.

<sup>9</sup>Al Mofleh, I.A., Alhaider, A.A., et al. (2007). *World Journal of Gastroenterology*, 13(7), 1112-1118.

<sup>10</sup>Robles-Zepeda, R.E., Velázquez-Contreras, C.A., et al. (2011). *Journal of Medicinal Food*, 14(10), 1280-1283.

<sup>11</sup>Kreydiyyeh, S.I., Usta, J., et al. (2004). *Life Sciences*, 74(5), 663-73.

<sup>12</sup>AlBalawi, A.N., Elmetwalli, A., et al. (2023). *Microorganisms*, 11(4), 1024.

<sup>13</sup>Dawoud, T. (2023). *Biomedical Chromatography: BMC*, 37(12), e5739.

<sup>14</sup>Lee, J.B., Yamagishi, C., et al. (2011). *Bioscience, Biotechnology, and Biochemistry*, 75(3), 459-465.

<sup>15</sup>Gülçin, I., Oktay, M., et al. (2003). *Food Chemistry*, 83, 371-382.

<sup>16</sup>Brinker, F. (2001). *Herb Contraindications & Drug Interactions* (3rd ed., p. 31). Eclectic Medical Publications.

<sup>17</sup>Alotaibi M.F. (2020). *Journal of Ethnopharmacology*, 254, 112730.

<sup>18</sup>American Botanical Council. (2021). <https://www.herbalgram.org/resources/commission-e-monographs/approved-herbs/anise-seed/>.

<sup>19</sup>NatMed Pro. (2023). Anise [monograph]. <http://naturalmedicines.therapeuticresearch.com>

**NutraMedix.**

**PINELLA™**

**ANTIOXIDANT/  
DETOX SUPPORT †**

**Dietary Supplement**

**1 fl oz. (30mL)**

**Supplement Facts**  
Serving Size 10 drops  
Servings Per Container 60

Amount Per Serving	
Pimpinella spp. stems extract	0.5 mL*

\*Daily Value not established

Other ingredients: mineral water, ethanol (20-24%)

**NutraMedix.**  
Jupiter, Florida 33458 USA  
www.nutramedix.com  
561-745-2917

Lot #  
Exp.

**SHAKE WELL BEFORE EACH USE:**  
Put 10 drops in 4 oz (120mL) of water and wait one minute before drinking. May be taken several times per day, or for maximum support every 15 minutes, or as directed by your physician. Do not use if pregnant or nursing. Stop use if adverse reactions develop. Keep out of reach of children.

†These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.

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