

# Bee Pollen

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## **COMMON NAMES:** <sup>1-4</sup>

- Bee Pollen Nuggets
- Bee Pollen Power Extract
- Super Bee Pollen Complex
- Buckwheat pollen
- Maize pollen
- Pine pollen
- Pollen d' Abeille
- Pollen
- Pollen pini
- Puhuang
- Rape pollen
- Sonfuuaafen
- Typha pollen

## **SCIENTIFIC NAMES:** None

## **DESCRIPTION OF ACTIVE INGREDIENTS:** <sup>2,4</sup>

- 55% carbohydrates
- 30% protein
- 1-2% lipid
- 3% minerals/vitamins/trace elements (including vitamin C)

(Note: Concentrations of each component vary depending on product.)

## **MECHANISM OF ACTION:** <sup>1-4</sup>

- None of the components of bee pollen have been linked to therapeutic effects.

## **CURRENT INDICATIONS AND EFFICACY:** <sup>1,2,5-6</sup>

### *Indications*

- Used as a nutritional supplement, appetite stimulant, diuretic, skin care product, and product to increase athletic stamina and ability
- Used to prevent aging, hay fever or allergic rhinitis, mouth sores, rheumatism, painful urination, prostate conditions, diarrhea, nosebleed, cerebral hemorrhage, and menstrual problems
- Used to treat constipation, diarrhea, enteritis, colitis, anemia, mental illness, and obesity
- Used to detect allergies and foster immunity

### *Efficacy*

- Bee pollen is likely ineffective when taken orally for increasing athletic stamina.
  - In one study, the components of bee pollen were not associated with any physiological effects as demonstrated in the laboratory. The details of the study were not disclosed.
- There is insufficient reliable information available about the effectiveness of bee pollen for its other uses.

**CONTRAINDICATIONS / ALLERGIES:** 1,2,7-8

*Contraindications*

- Bee pollen is contraindicated in those with pollen allergies or hypersensitivity to bee pollen.
- Children, pregnant women, nursing mothers should not ingest bee pollen due to the lack of data for use in these populations.

*Allergies*

- Allergic reactions manifested by itching, swelling, shortness of breath, light-headedness, and anaphylaxis have been associated with the ingestion of bee pollen.
  - In a case report, the ingestion of commercially processed bee pollen caused potentially life-threatening consequences in a 19-year-old male diagnosed with asthma and allergies. He experienced a sore throat, facial itching and swelling, and difficulty in breathing lasting two hours after ingestion.
- Chronic allergy symptoms include GI symptoms, neurologic symptoms, and eosinophilia have been associated with the ingestion of bee pollen.
  - A 37-year-old female ingested bee pollen with the intention of boosting her energy level. After 3 weeks, she developed general malaise, headache, nausea, abdominal pain, diarrhea, myalgia, pruritis, and a rash. She went to the physician complaining of disorientation and decreased memory where lab values revealed hypereosinophilia, which could not be attributed to another cause. After discontinuing the bee pollen supplement, her symptoms resolved.

**DOSAGE FORMS / RECOMMENDED DOSES / DURATION:** 2,5

- Capsule, extract, granules, liquid, tablet
- 1-3g daily, dosage varies depending on product

**DRUG INTERACTIONS AND DRUG-DISEASE INTERACTIONS:** 1,9-11

*Drug Interactions*

- No known drug interactions

*Drug-Disease Interactions*

- Liver disease - bee pollen has been associated with 2 cases of acute hepatitis.
  - A 33-year-old female was taking 2 tsp. of pure bee pollen per day for several months and developed sharp, right-upper quadrant pain. She was diagnosed with acute hepatitis. After discontinuing the product, she experienced complete resolution of symptoms within 6 weeks.
  - A 69-year-old male was taking 14 tablets/day of a mixed herb preparation containing chaparral and bee pollen for 6 weeks and developed nausea, pruritis, anorexia, weight loss, and jaundice. After discontinuing the

preparation, his symptoms and liver function abnormalities resolved within 8 weeks.

- Pollen allergies - bee pollen increases the risk of allergic reactions.
  - A 56-year-old female with perennial allergic rhinitis developed pruritis, urticaria, dyspnea, fatigue, and other symptoms consistent with anaphylaxis within 20 minutes of drinking a milk shake containing bee pollen.
  - A 46-year-old male with a past history of seasonal allergic rhinitis ingested 1 tsp. of bee pollen to treat his hay fever and within 15 minutes, he developed angioedema, urticaria, dyspnea, wheezing, and light-headedness. He was given epinephrine, corticosteroids, and diphenhydramine and his symptoms resolved.

#### **OTHER SAFETY ISSUES:**<sup>5</sup>

- There is little risk of toxicity since the components of bee pollen have not been linked to therapeutic effects.

#### **REFERENCES:**

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