

Ashwagandha — aka Winter cherry, Indian ginseng (Withania somnifera)

Common Indications:

- Adaptogen
- Immune system enhancement, including support against cancer and diabetes
- Chemoprotection

General Comments:

Ashwagandha, has been an important herb in Ayurvedic medicine for over 3000 years. Although not truly a ginseng derivative is has long been referred to as "Indian ginseng" given its Ayurvedic roots. Its traditional use has been as a general tonic for stress and fatigue and in support of cognition and mental duress.

Benefits & Mechanism of Action:

Adaptogen

The active components in Ashwagandha are hundreds of different steroid alkaloids known as with anolides which possess an anti-inflammatory effect mitigated via inhibition of COX-

2. They also offer an adaptogenic impact that alters the stress response thus enhancing general performance in physical and mental challenges. ^{1,2,3} These compounds are similar in structure to steroid hormones and precursors that act on the adrenal cortex. ^{4,5}

Immune system enhancement, including support against cancer and diabetes

Ashwagandha has been shown to possess an an immunostimulatory effect. ^{6,7,8} Ashwagandha's antioxidant property, noted above, contributes to this immune impact as any stress modulation confers benefit to the immune response. ^{2,9,10,11-19} A human study demonstrated the impact as it ashwagandha significantly reduced the reactive oxygen species (ROS), cell death and improved metal ion concentration in infertile men. ²⁰

Chemoprotection

Ashwagandha has been studied for possible anti-tumor effects, as well as a radiosensitizer when administered with radiation therapy. ^{21,22,23} It also inhibits angiogenesis and is anti-genotoxic. ^{24,25,26}

Dose:

General

- 400-900mg daily of a standardized extract.
- Ashwagandha should be pulsed and not used continuously. Recommendation is to use it alternating 2 weeks on and 2 weeks off. Full effect may take several cycles to emerge.

Standardization:

Ashwagandha products should be standardized to contain at least 1.5% withanolides and 1% alkaloids.

Cautions & Side Effects:

Ashwagandha has been reported to be safe in recommended doses.

Ashwagandha should be avoided during acute phases of infections, especially when accompanied by a high fever.

Medication Interactions:

Medications with increased effects while taking ashwagandha include:

- Sedatives and hypnotics, including barbiturates as their effect may be enhanced.
- Thyroid hormone medications as it may alter hormone levels.

Nutrient Interactions:

Iron: Ashwagandha is rich in iron; use caution if taking iron supplementation or on low- iron diets.

References:

Adaptogen

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Chemoprotection

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