## Ontvangen veiligheidsgegevens van Ashwagandha

Er zijn meerdere wetenschappelijke onderzoeken gedaan naar de veiligheid van Ashwagandha.

* 300 mg Ashwagandha voor 8 weken is veilig voor mannen en vrouwen [1] <https://www.sciencedirect.com/science/article/pii/S0965229920319099>)
* Ashwagandha dosis van 750 mg/dag ×10 dagen, 1 000 mg/dag × 10 dagen, 1250 mg/dag × 10 dagen is ook veilig [2] (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3487234/>)
* Voorlopige studies hebben verschillende bestanddelen van ashwagandha gevonden die een verscheidenheid aan therapeutische effecten vertonen met weinig of geen bijbehorende toxiciteit [3]. (<https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=2bdff82eb23a373885252c87b53135b2fc9adde4>)
* Er zijn talrijke studies uitgevoerd door verschillende onderzoekers om de giftige effecten van Ashwagandha te evalueren. Het wordt beschouwd als een gezond, veilig en betrouwbaar middel [4]. (<https://www.sciencedirect.com/science/article/abs/pii/S0378874119339182>)
* Geen één deelnemer heeft bijwerkingen ervaren tijdens de studieperiode van 10 weken waarbij de deelnemers 300 mg Ashwagandha consumeerden (<https://assets.cureus.com/uploads/original_article/pdf/22928/1612429213-1612429205-20210204-18204-14l5ome.pdf>) [5].

1. Verma, N., Gupta, S. K., Tiwari, S., & Mishra, A. K. (2021). Safety of ashwagandha root extract: a randomized, placebo-controlled, study in healthy volunteers. Complementary therapies in medicine, 57, 102642.
2. Raut AA, Rege NN, Tadvi FM, Solanki PV, Kene KR, Shirolkar SG, Pandey SN, Vaidya RA, Vaidya AB. Exploratory study to evaluate tolerability, safety, and activity of Ashwagandha (Withania somnifera) in healthy volunteers. J Ayurveda Integr Med. 2012 Jul;3(3):111-4. doi: 10.4103/0975-9476.100168. PMID: 23125505; PMCID: PMC3487234.
3. Mishra, L. C., Singh, B. B., & Dagenais, S. (2000). Scientific basis for the therapeutic use of Withania somnifera (ashwagandha): a review. Alternative medicine review, 5(4), 334-346.
4. Zahiruddin, S., Basist, P., Parveen, A., Parveen, R., Khan, W., & Ahmad, S. (2020). Ashwagandha in brain disorders: A review of recent developments. *Journal of ethnopharmacology*, *257*, 112876.
5. Langade, D., Kanchi, S., Salve, J., Debnath, K., Ambegaokar, D., & Langade, D. G. (2019). Efficacy and safety of Ashwagandha (Withania somnifera) root extract in insomnia and anxiety: a double-blind, randomized, placebo-controlled study. Cureus, 11(9).

Ashwagandha, a herb commonly used in traditional medicine, has been the focus of numerous studies evaluating its safety and efficacy. While some sources indicate that Ashwagandha and its components are generally safe for consumption (Shohag et al., 2022; Siddiqui et al., 2021; Trivedi, 2017), there are reports linking its usage to potential risks. Specifically, instances of drug-induced liver injury (DILI) have been associated with Ashwagandha consumption (Patel et al., 2022; Bokan, 2023). Despite these reported cases, Ashwagandha is still considered safe by many (Cheah et al., 2021; Gopal et al., 2021).

Research has highlighted various benefits of Ashwagandha, including its adaptogenic properties, stress-relieving effects, and ability to improve sleep quality (Cheah et al., 2021; Mazur et al., 2021; Salve et al., 2019). Moreover, Ashwagandha has shown positive effects on cardiorespiratory endurance, muscle strengthening, and immune modulation (Choudhary et al., 2015; Majeed, 2023; Raut et al., 2012). Additionally, studies suggest that Ashwagandha can be safely used alongside certain medications, indicating its compatibility with other treatments (Kasarla et al., 2022; Wang et al., 2021).

Although Ashwagandha is generally perceived as safe and effective for managing stress, anxiety, and overall well-being (Burns, 2023; Patnaik, 2015), it is crucial to consider individual health conditions and potential interactions with other substances. Research indicates that Ashwagandha may have abortifacient properties in large doses and could act as a mild central nervous system depressant (Shukla et al., 2012). Therefore, it is advisable for individuals to consult healthcare professionals before incorporating Ashwagandha into their routine, especially if they have pre-existing health conditions or are taking medications that may interact with the herb.

In conclusion, while Ashwagandha is widely regarded as safe and beneficial for various health purposes, caution should be exercised, particularly in cases where there may be underlying health concerns or the potential for interactions with other substances.

References:

* Bokan, G. (2023). Herb-induced liver injury by ayurvedic ashwagandha as assessed for causality by the updated rucam: an emerging cause. Pharmaceuticals, 16(8), 1129. https://doi.org/10.3390/ph16081129
* Burns, J. (2023). Common herbs for stress: the science and strategy of a botanical medicine approach to self-care. Journal of Interprofessional Education & Practice, 30, 100592. https://doi.org/10.1016/j.xjep.2022.100592
* Cheah, K., Norhayati, M., Yaacob, L., & Rahman, R. (2021). Effect of ashwagandha (withania somnifera) extract on sleep: a systematic review and meta-analysis. Plos One, 16(9), e0257843. https://doi.org/10.1371/journal.pone.0257843
* Choudhary, B., Shetty, A., & Langade, D. (2015). Efficacy of ashwagandha (withania somnifera [l.] dunal) in improving cardiorespiratory endurance in healthy athletic adults. Ayu (An International Quarterly Journal of Research in Ayurveda), 36(1), 63. https://doi.org/10.4103/0974-8520.169002
* Gabay, C., Medinger-Sadowski, C., Gascon, D., Kolo, F., & Finckh, A. (2011). Symptomatic effects of chondroitin 4 and chondroitin 6 sulfate on hand osteoarthritis: a randomized, double‐blind, placebo‐controlled clinical trial at a single center. Arthritis & Rheumatism, 63(11), 3383-3391. https://doi.org/10.1002/art.30574
* Gopal, S., Ajgaonkar, A., Kanchi, P., Kaundinya, A., Thakare, V., Chauhan, S., … & Langade, D. (2021). Effect of an ashwagandha (withania somnifera) root extract on climacteric symptoms in women during perimenopause: a randomized, double‐blind, placebo‐controlled study. Journal of Obstetrics and Gynaecology Research, 47(12), 4414-4425. https://doi.org/10.1111/jog.15030
* Hovinen, T., Korkalo, L., Freese, R., Skaffari, E., Isohanni, P., Niemi, M., … & Suomalainen, A. (2021). Vegan diet in young children remodels metabolism and challenges the statuses of essential nutrients. Embo Molecular Medicine, 13(2). https://doi.org/10.15252/emmm.202013492
* Jomphe, C., Gabriac, M., Hale, T., Héroux, L., Trudeau, L., deBlois, D., … & Souich, P. (2007). Chondroitin sulfate inhibits the nuclear translocation of nuclear factor‐κb in interleukin‐1β‐stimulated chondrocytes. Basic & Clinical Pharmacology & Toxicology, 102(1), 59-65. https://doi.org/10.1111/j.1742-7843.2007.00158.x
* Kasarla, S., Borse, S., Kumar, Y., Sharma, N., & Dikshit, M. (2022). In vitro effect of withania somnifera, ayush-64, and remdesivir on the activity of cyp-450 enzymes: implications for possible herb−drug interactions in the management of covid-19. Frontiers in Pharmacology, 13. https://doi.org/10.3389/fphar.2022.973768
* Majeed, M. (2023). A standardized ashwagandha root extract alleviates stress, anxiety, and improves quality of life in healthy adults by modulating stress hormones: results from a randomized, double-blind, placebo-controlled study. Medicine, 102(41), e35521. https://doi.org/10.1097/md.0000000000035521
* Mazur, K., Lewicki, M., Mazur, D., & Smoleń, A. (2021). Efficacy and safety of ashwagandha root extract in the treatment of insomnia, anxiety and reducing stress – literature review. Journal of Education Health and Sport, 11(12), 197-202. https://doi.org/10.12775/jehs.2021.11.12.013
* Monfort, J., Pelletier, J., Garcia-Giralt, N., & Martel‐Pelletier, J. (2008). Biochemical basis of the effect of chondroitin sulphate on osteoarthritis articular tissues. Annals of the Rheumatic Diseases, 67(6), 735-740. https://doi.org/10.1136/ard.2006.068882
* Patel, A., Pinsker, B., Wall, A., Arbogast, M., King, L., & Sherzoy, S. (2022). Itching to find a diagnosis. Clinical Liver Disease, 20(3), 77-80. https://doi.org/10.1002/cld.1230
* Patnaik, N. (2015). Role of brahmi and ashwagandha in anti-ageing. Journal of Biosciences and Medicines, 03(10), 102-104. https://doi.org/10.4236/jbm.2015.310014
* Pettersen, B., Anousheh, R., Fan, J., Jaceldo‐Siegl, K., & Fraser, G. (2012). Vegetarian diets and blood pressure among white subjects: results from the adventist health study-2 (ahs-2). Public Health Nutrition, 15(10), 1909-1916. https://doi.org/10.1017/s1368980011003454
* Raut, A., Rege, N., Tadvi, F., Solanki, P., Kene, K., Shirolkar, S., … & Vaidya, A. (2012). Exploratory study to evaluate tolerability, safety, and activity of ashwagandha (withania somnifera) in healthy volunteers. Journal of Ayurveda and Integrative Medicine, 3(3), 111. https://doi.org/10.4103/0975-9476.100168
* Sakkas, H., Bozidis, P., Touzios, C., Kolios, D., Athanasiou, G., Athanasopoulou, E., … & Gartzonika, C. (2020). Nutritional status and the influence of the vegan diet on the gut microbiota and human health. Medicina, 56(2), 88. https://doi.org/10.3390/medicina56020088
* Salve, J., Pate, S., Debnath, K., & Langade, D. (2019). Adaptogenic and anxiolytic effects of ashwagandha root extract in healthy adults: a double-blind, randomized, placebo-controlled clinical study. Cureus. https://doi.org/10.7759/cureus.6466
* Shohag, S., Akhter, S., Islam, S., Sarker, T., Sifat, M., Rahman, M., … & Sharma, R. (2022). Perspectives on the molecular mediators of oxidative stress and antioxidant strategies in the context of neuroprotection and neurolongevity: an extensive review. Oxidative Medicine and Cellular Longevity, 2022, 1-20. https://doi.org/10.1155/2022/7743705
* Shukla, S., Bhatnagar, M., & Khurana, S. (2012). Critical evaluation of ayurvedic plants for stimulating intrinsic antioxidant response. Frontiers in Neuroscience, 6. https://doi.org/10.3389/fnins.2012.00112
* Siddiqui, S., Ahmed, N., Goswami, M., Chakrabarty, A., & Chowdhury, G. (2021). Dna damage by withanone as a potential cause of liver toxicity observed for herbal products of withania somnifera (ashwagandha). Current Research in Toxicology, 2, 72-81. https://doi.org/10.1016/j.crtox.2021.02.002
* Tomova, A., Bukovsky, I., Rembert, E., Yonas, W., Alwarith, J., Barnard, N., … & Kahleová, H. (2019). The effects of vegetarian and vegan diets on gut microbiota. Frontiers in Nutrition, 6. https://doi.org/10.3389/fnut.2019.00047
* Trivedi, M. (2017). Evaluation of immunomodulatory parameters in female &amp;lt;i&amp;gt;sprague dawley&amp;lt;/i&amp;gt; rats after oral administration of the biofield energy healing treated herbomineral formulation. American Journal of Bioscience, 5(6), 104. https://doi.org/10.11648/j.ajbio.20170506.12
* Wang, J., Zhang, H., Kaul, A., Li, K., Priyandoko, D., Kaul, S., … & Wadhwa, R. (2021). Effect of ashwagandha withanolides on muscle cell differentiation. Biomolecules, 11(10), 1454. https://doi.org/10.3390/biom11101454