

Antimycotic effects of DXN Ganozhi Toothpaste containing *Ganoderma lucidum* against *Candida albicans* - in vitro study



Content: 150 gr or set 4 pcs of 40 g

Toothpastes are the most common means of delivering the active substances into the oral cavity. In 2010, the study focused on **effects of a DXN Ganozhi toothpaste containing *Ganoderma lucidum* against *Candida albicans*** was conducted at the Institute of Dental Research in India.

***Candida albicans* is the most common oral fungal yeast associated with oral infection.** It is a yeast pathogen that inhabits anatomically different sites such as the oral cavity, skin, intestinal tract and vagina. It occurs at any age, especially in the oral cavity of young children and older age groups. **Rapid proliferation of *Candida* and its infiltration into the mucosa results in a pathogenic infection.** This is known as Candidiasis. **Oral candidacy may occur in patients with prolonged use of antibiotics and in patients undergoing chemotherapy and radiotherapy.** Various antimycotics are used to combat this fungus, and research is continuing on other anti-*Candida*-containing agents. However, many current anti-yeast medications have undesirable side effects, leading to a rapid development of resistance to these drugs and a negative impact on human health.

***Ganoderma lucidum* is a fungus that has been used for thousands of years for its medicinal properties in Traditional Chinese Medicine.** It contains many biologically active components giving it antimicrobial, antiviral, immunomodulatory, antioxidant, antitumor and anticancer properties.

DXN Ganozhi toothpaste showed significant anticonvulsant effects on the tested organisms. The tests showed the recommendation to use *Ganoderma* Dental Ganozhi containing toothpaste because it has proven beneficial for application to mucous membranes, dental replacements and tooth cleansing.

This study explains why DXN Ganozhi is often used as a first aid for minor skin injuries.

Different *Candida* species are presently the fourth most common cause of bloodstream infections in USA and are attributed to a mortality rate of 30%.

For the current population, the **following *Candida albicans* values** were recorded in the oral cavity:

- 45% in newborns
- 45% – 65% in healthy children
- 30% – 45% in healthy adults
- 50% – 65% in those who wore a removable denture
- 65% – 88% in people in acute or long-term healthcare facilities
- 90% in patients with acute leukemia undergoing chemotherapy
- 95% in HIV patients

Patients who are in critical condition in intensive care units are the primary target for parasitic hospital infections, mainly due to various *Candida* species. Virtually all doctors are confronted with a positive *Candida* every day. The high-risk area for *Candida* infection includes the neonatal and pediatric wards, as well as the adult and post-operative adult departments. **Dental replacements have always been found to be a good environment for *Candida albicans*.**

The results of various tests have shown that dental plaque containing *Candida* can cause not only oral candidiasis such as prosthetic stomatitis, but also dental caries, root decay, and periodontitis of supporting teeth. Approximately 60 different stem-cell cultures were evaluated for the detection of antimicrobial secondary metabolites. According to them, ***Ganoderma lucidum* produced the most effective anticonvulsant components.**

The results have shown that **this toothpaste could be suitable for patients with HIV infections, radiotherapy or chemotherapy patients, immunocompromised people, high risk areas such as hospital and postoperative facilities, topical use for dental prostheses and pharyngeal candidiasis.**

The original study is available for inspection in the office DXN International CZ s.r.o.

