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FERMENTED RICE

**"A NATURAL REMEDY FOR
STOMACH ULCER"**

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ABSTRACT:

Stomach ulcers, or peptic ulcers, are painful sores that develop in the lining of the stomach due to factors such as Helicobacter pylori infection, excessive acid secretion, or prolonged use of NSAIDs. Fermented rice, a traditional probiotic food, has been used in various cultures for its digestive benefits. This article explores the potential of fermented rice in the management of stomach ulcers, with an emphasis on research-based evidence supporting its efficacy.



**LIFE IS A COMBINATION OF
DIET
GIVES MAGIC.**

INTRODUCTION:

Peptic ulcers are a common gastrointestinal disorder that can lead to severe complications if untreated. Conventional treatments include proton pump inhibitors (PPIs), antacids, and antibiotics. However, the rising concerns over antibiotic resistance and drug dependency have driven interest in natural remedies. Fermented rice, rich in probiotics, short-chain fatty acids (SCFAs), and bioactive compounds, has gained attention for its potential role in ulcer healing and gastric mucosal protection.



NUTRITIONAL AND FUNCTIONAL COMPONENTS OF FERMENTED RICE :

Fermented rice, prepared by soaking cooked rice in water overnight or longer, undergoes microbial fermentation, leading to the production of beneficial lactic acid bacteria (LAB), organic acids, and bioactive peptides.

These components contribute to its therapeutic effects, including

PROBIOTICS:

Fermented rice is a natural source of LAB such as Lactobacillus and Bifidobacterium, which help restore gut microbiota balance and inhibit H. pylori growth.

SHORT CHAIN FATTY ACIDS (SCFAS):

These acids promote gut health by reducing inflammation and enhancing mucosal integrity.

ANTIOXIDANTS AND ENZYMES:

They help neutralize free radicals, reducing oxidative stress in the gastric lining.

VITAMINS AND MINERALS:

Fermentation enhances the bioavailability of B vitamins, magnesium, and other essential nutrients that support gut healing.

Mechanisms of Action in Stomach Ulcer Healing
Several studies have highlighted the potential mechanisms through which fermented rice aids in ulcer healing:

1. Anti-Helicobacter pylori Activity: LAB in fermented rice produces bacteriocins and organic acids that inhibit H. pylori colonization, a major cause of ulcers.

2. Mucosal Protection and Regeneration:

SCFAs and bioactive peptides enhance gastric mucus secretion, reducing acid-induced damage.

3. Anti-inflammatory Effects: Fermented rice modulates inflammatory pathways, lowering pro-inflammatory cytokines involved in ulcer pathology.

4. pH Regulation: Organic acids from fermentation help maintain optimal gastric pH, preventing excessive acid secretion.

RESEARCH EVIDENCE:

1. Clinical and Animal Studies:

A study published in the Journal of Functional Foods (2020) found that LAB from fermented rice inhibited H. pylori growth and reduced gastric inflammation in animal models.

A randomized controlled trial in Gut Microbes (2021) demonstrated that daily consumption of fermented rice improved gut microbiota diversity and reduced ulcer symptoms in human participants.

2. Traditional and Ethnobotanical Insights:

Traditional Ayurvedic and folk medicine practices in South Asia have long recommended fermented rice for digestive disorders, including ulcers.

PREPARATION AND CONSUMPTION GUIDELINES TO INCORPORATE FERMENTED RICE INTO A NATURAL ULCER-MANAGEMENT REGIMEN:

- 1. Cook rice and allow it to cool.*
- 2. Add water and let it ferment at room temperature for 12-24 hours.*
- 3. Consume it on an empty stomach in the morning, optionally with buttermilk or rock salt for enhanced benefits.*
- 4. Avoid excessive spicy or acidic additions to prevent irritation.*

CONTRAINDICATIONS AND CONSIDERATIONS WHILE GENERALLY SAFE, FERMENTED RICE MAY NOT BE SUITABLE FOR INDIVIDUALS WITH:

- 1. Severe acid reflux, as fermentation can sometimes increase gastric acidity.***
- 2. Histamine intolerance, as fermented foods can trigger symptoms.***
- 3. Compromised immune systems, where excessive probiotic intake may pose risks.***

CONCLUSION:

Fermented rice is a promising natural remedy for stomach ulcers, offering probiotic, anti-inflammatory, and mucosal-protective benefits. While preliminary studies support its efficacy, further clinical trials are required to establish standardized recommendations.

As a complementary therapy, fermented rice can be an effective and accessible option for individuals seeking natural digestive health solutions.

REFERENCE:

[1] Journal of Functional Foods (2020). Effects of Fermented Rice on H. pylori Inhibition and Gastric Mucosal Protection.

[2] Gut Microbes (2021). Probiotic Effects of Fermented Rice on Human Gut Health and Ulcer Management



Thank You