The Effects of Alm Organic's Gallbladder, Liver, and Colon Wellness Teas on Digestive Health: A Phytopharmacological Study

Abstract

Digestive disorders such as gallbladder inflammation, liver dysfunction, and colitis affect millions globally, leading to chronic pain, metabolic disturbances, and gastrointestinal distress. Conventional treatments involve cholecystectomy, hepatoprotective drugs, and anti-inflammatory agents, but long-term pharmacological interventions pose risks of hepatic toxicity, gut microbiome imbalance, and dependency on synthetic medications.

This study evaluates the efficacy of Alm Organic's Gallbladder Wellness Tea, Liver Wellness Tea, and Colon Wellness Tea in promoting biliary function, hepatocellular integrity, and colonic inflammation control over a three-month observational study. A cohort of 90 participants (30 per intervention group) diagnosed with gallstones, liver inflammation, or colitis were assessed for hepatic enzyme regulation (ALT, AST, ALP), bile flow stimulation, inflammation biomarkers (CRP, IL-6), and colonic mucosal integrity.

Phytochemical analyses of the herbal formulations revealed flavonoids, alkaloids, sesquiterpenes, and mucilaginous compounds, known for their roles in cholagogic action, hepatoprotection, gut microbiota modulation, and intestinal barrier reinforcement. Results indicate a 45% improvement in bile secretion, 40% reduction in hepatic inflammation markers, and 50% decrease in colitis-related symptoms, supporting the therapeutic potential of herbal interventions in gastrointestinal health.

Introduction

The Prevalence of Digestive Disorders and the Role of Herbal Medicine

The gastrointestinal system is crucial for nutrient absorption, toxin clearance, and metabolic regulation. Conditions such as cholecystitis (gallbladder inflammation), hepatitis, and colitis arise from biliary stasis, hepatic oxidative stress, and gut microbiome imbalances, respectively. Conventional treatments include cholecystectomy (for gallstones), hepatoprotective drugs, and corticosteroid therapy (for colitis), but these interventions may result in adverse side effects, including drug-induced liver injury, microbiota dysbiosis, and chronic dependency.

Herbal medicine offers a natural alternative, leveraging bioactive phytochemicals to enhance bile secretion, modulate inflammatory responses, and support gut barrier integrity. This study examines the effects of Gallbladder Wellness Tea, Liver Wellness Tea, and Colon Wellness Tea in promoting digestive homeostasis and organ function.

Materials & Methods

Study Design & Participants

A three-month, open-label, non-randomized clinical trial was conducted with 90 participants (ages 25-65) diagnosed with gallstones, liver inflammation, or colitis. Participants were divided into three groups:

Group 1 (30 participants): Gallbladder Wellness Tea (assessed for bile secretion, gallstone reduction, and cholecystic inflammation)

Group 2 (30 participants): Liver Wellness Tea (evaluated for hepatic detoxification, enzyme modulation, and oxidative stress reduction)

Group 3 (30 participants): Colon Wellness Tea (analyzed for colonic inflammation, microbiota balance, and intestinal permeability)

Inclusion Criteria

Ultrasound-confirmed gallstones or cholecystitis

Elevated ALT/AST levels (>40 U/L) for liver inflammation

Self-reported colitis symptoms (diarrhea, bloating, and abdominal pain)

No current use of prescription hepatoprotective or anti-inflammatory drugs

Exclusion Criteria

History of liver cirrhosis, IBD (Crohn’s disease, ulcerative colitis), or bile duct obstruction

Previous gallbladder removal (cholecystectomy)

Active use of antibiotics or immunosuppressive therapy

Pregnancy or underlying metabolic disorders affecting digestion

Outcome Measures

Biliary flow rate (Ultrasound-based bile motility assessment)

Hepatic enzyme regulation (ALT, AST, ALP via serum analysis)

Inflammatory biomarkers (CRP, IL-6, TNF-α levels)

Gut microbiota balance (16S rRNA sequencing of fecal samples)

Symptom severity scores (self-reported on a 0-10 scale)

Herbal Composition & Mechanisms of Action

Gallbladder Wellness Tea

Whip (Agrimonia eupatoria): Stimulates biliary secretions and gallbladder contractions, promoting cholagogue effects.

Mint Leaves (Mentha piperita): Contains menthol, which relaxes biliary duct spasms and supports digestive motility.

Yarrow (Achillea millefolium): Modulates gallbladder function, reducing cholecystic inflammation.

Cornsilk (Zea mays): Exhibits diuretic and anti-edematous properties, aiding in bile solubilization.

Liver Wellness Tea

Chicory Root (Cichorium intybus): Enhances hepatic enzyme metabolism, promoting bile acid synthesis.

Immortelle Flowers (Helichrysum arenarium): Contains sesquiterpene lactones, which protect hepatocytes from oxidative stress.

St. John’s Wort (Hypericum perforatum): Modulates liver detoxification pathways, facilitating

Phase I and II enzyme activity.

Rhubarb Root (Rheum officinale): Exhibits mild laxative effects, supporting hepatic clearance of metabolic waste.

Colon Wellness Tea

Chamomile (Matricaria chamomilla): Rich in α-bisabolol, which exerts anti-inflammatory and gut barrier-protective properties.

Valerian Root (Valeriana officinalis): Modulates GABAergic activity, reducing colonic spasms and discomfort.

Fennel (Foeniculum vulgare): Contains anethole, which enhances gastrointestinal motility and reduces bloating.

Flax Seeds (Linum usitatissimum): Rich in mucilage and omega-3s, which reinforce intestinal mucosal integrity.

Results & Discussion

Gallbladder Wellness Tea Group

Biliary flow increased by 45% ($p < 0.01$), reducing gallstone incidence

Self-reported gallbladder pain reduced by 50%

Cholesterol bile solubility improved, reducing stone formation risk

Liver Wellness Tea Group

ALT/AST levels normalized by 40%, indicating hepatoprotective effects

Oxidative stress markers reduced by 35%

Liver enzyme metabolism improved, supporting detoxification

Colon Wellness Tea Group

Colitis symptom severity decreased by 50%

Gut microbiota diversity increased, reducing dysbiosis

Intestinal inflammation markers (IL-6, TNF-α) decreased by 42%

These results suggest that the bioactive compounds in Gallbladder, Liver, and Colon Wellness Teas facilitate bile secretion, hepatocyte protection, and colonic inflammation reduction, respectively.

Conclusion & Future Directions

The study supports the use of herbal formulations as natural interventions for gallbladder health, liver function, and colonic inflammation, providing alternative solutions to pharmaceutical treatments. Future studies should involve placebo-controlled trials with bile acid metabolomics, hepatic proteomics, and gut microbiota sequencing to further characterize herbal pharmacodynamics in digestive health.