



Unani Management of Dyslipidemia: Classical Formulations and Modern Pharmacological Evidence

Dr. Sayyed Minhaj¹, Dr. Jameel Ahmed Ghulam Rabbani², Dr. Shaikh Imtiyaz³

¹ Assistant Professor, Department of Amraze Atfal wa Naumaulood, Mohammadia Tibbia College (MTC) & Assayer Hospital, Mansoor, Malegaon, Maharashtra, India.

Email: minhajmdnium@gmail.com

² Associate Professor, Department of Amraze Jild wa Tazineeyat, Al Amin Unani Medical College, Malegaon, Maharashtra, India.

Email: jameelrabbani1978@gmail.com

³ Assistant Professor, Department of Moalejat, Mohammadia Tibbia College (MTC) & Assayer Hospital, Mansoor, Malegaon, Maharashtra, India.

Email: drimtiyaznium@gmail.com

Abstract

Dyslipidemia is characterized by an adverse concentration or distribution of circulating lipids. Its management is intended to lower cardiovascular and cerebrovascular risk rather than merely normalize a laboratory value. In Unani medicine, related metabolic concerns are commonly approached through dietary regulation, lifestyle measures, and medicinal preparations, particularly when excess body weight or impaired metabolism is also present. This narrative review critically considers that framework together with selected clinical investigations and contemporary guidance on lipid management. Literature was identified through focused searches, and the article is not a systematic synthesis of all published evidence. Small clinical trials have evaluated Safoof-e-Muhazzil, Jawarish Falafili, and Majoon-e-Seer Alvi Khan, reporting changes in cholesterol or triglyceride concentrations over periods ranging from six weeks to three months. Limited sample sizes and brief follow-up prevent dependable conclusions about sustained effectiveness and safety. Failure to detect a statistically significant difference from atorvastatin cannot be interpreted as

proof of therapeutic equivalence. Similarly, laboratory evidence concerning antioxidant, anti-inflammatory, or lipid-modifying activity does not establish prevention of cardiovascular events. Classical concepts may inform hypotheses, but they should not be translated directly into claims about modern pharmacological mechanisms. Future investigations require standardized products, appropriately designed comparator groups, and extended surveillance. At present, Unani formulations warrant careful research and should not displace evidence-based lipid-lowering therapy when clinically indicated.

Keywords: *Dyslipidemia; Unani medicine; Safoof-e-Muhazzil; Jawarish Falafili; lipid lowering; cardiovascular risk.*

Introduction

Dyslipidemia encompasses elevated low-density lipoprotein cholesterol (LDL-C), hypertriglyceridemia, and other unfavourable lipid profiles. Clinical decisions should reflect the individual's total risk, including age, hypertension, diabetes, tobacco exposure, family history, and

established cardiovascular disease. The 2026 guideline from the American College of Cardiology and American Heart Association emphasizes lifestyle intervention and risk-based pharmacotherapy. When medication is required, statins continue to occupy a central role.[1]

Interest in traditional treatment is common, particularly when abnormal lipids coexist with obesity or other metabolic disturbances. Contemporary Unani literature interprets such presentations through concepts involving digestion, constitutional temperament, hepatic function, and accumulation of body fat. Management is described as a combination of food-related measures, regulation of daily activities, and compound formulations.[2]

These perspectives can be discussed respectfully without extending conclusions beyond the data. Historical use does not remove the need for controlled clinical evaluation. Likewise, improvement in a lipid value during a brief study cannot determine long-term effectiveness, safety, or prevention of cardiovascular events. This review therefore separates traditional rationale from the level of support provided by measured outcomes.

Aim and review approach

The review aims to describe the Unani framework relevant to dyslipidemia, critically appraise selected studies of frequently cited formulations, and identify the evidence required before firmer clinical recommendations are justified.

A selective narrative method was followed. Unani reviews and identified clinical studies served as initial sources, after which targeted searches were used to confirm formulation names, trial details, publication information, and current lipid-management recommendations. Accessible full texts, abstracts, and bibliographic databases were examined. Classical ideas are reported through the cited Unani literature; the present work does not constitute an independent analysis of original manuscripts. No original patient data were obtained, no pooled effect size was generated, and study bias was not evaluated formally. Relevant publications may therefore remain outside the scope of this review.

Understanding the traditional framework

Recent Unani writing relates abnormal circulating lipids to Fasaad-e-Tashahhum-e-Dam and often

discusses the condition alongside Siman-i-Mufrit, denoting excessive obesity. Consideration is also given to Mizaj, or temperament, and Su-e-Mizaj, which indicates an altered state of temperament. Within this explanatory model, the liver has a prominent function in digestion and metabolic transformation.[2,3]

These expressions arise from a traditional conceptual system and are not laboratory indicators of LDL-C, hepatic enzymes, or insulin resistance. An account of disturbed hepatic temperament, for instance, should not be equated with a contemporary diagnosis of liver pathology. Maintaining this distinction strengthens interdisciplinary comparison: classical theory can generate research questions, while standardized clinical and biochemical methods determine whether those questions are supported.

Management is commonly organized into Ilaj-bit-Ghiza for dietary intervention, Ilaj-bit-Tadbeer for regimental measures, and Ilaj-bit-Dawa for medicinal treatment. Ilaj-bit-Tadbeer may encompass physical activity as well as other procedures. Evidence supporting exercise, however, cannot be generalized automatically to every intervention placed within the broader regimental category.[2]

Diet and daily habits

Dietary recommendations are most likely to be followed when they are compatible with a patient's usual food pattern, financial circumstances, and daily schedule. Useful measures include lowering intake of saturated fats, increasing whole grains, vegetables, fruits, and nuts, and avoiding frequent consumption of sugar-rich foods. Regular activity, appropriate weight reduction, and smoking cessation are also established components of cardiovascular risk management.[4]

Traditional terminology may offer a culturally familiar way to discuss these changes, but advice must remain concrete and reviewable. A general instruction to 'correct metabolism' does not tell the patient what action to take. Meal portions, cooking practices, affordable alternatives, and an achievable activity plan should be addressed explicitly. Clinical studies must document these co-interventions because they can influence outcomes otherwise attributed to the investigational medicine.

Table 1 aligns selected traditional concepts with specific questions that future clinical research should address.

Table 1 Traditional ideas and questions for clinical research

Traditiona l idea	Place in this review	Question that needs testing
Siman-i-Mufrit	Traditional context for excessive body weight	Does improvement in waist circumference or weight account for any observed lipid response?
Mizaj and Su-e-Mizaj	Concepts used in traditional clinical evaluation	Can investigators define reproducible criteria before comparing treatment response?
Ilaj-bit-Ghiza	Use of food-related measures within management	Which dietary plan was actually followed, and was it comparable across study arms?
Ilaj-bit-Tadbeer	Physical activity and other regimental interventions	What precise intervention was delivered, and what beneficial and harmful outcomes occurred?
Ilaj-bit-Dawa	Administration of a specified medicinal product	When added to usual management, does the standardized product confer clinically useful benefit?

Clinical evidence for selected formulations

Safoof-e-Muhazzil

Safoof-e-Muhazzil is traditionally described as a formulation used in the management of obesity.[3] Jahangir et al. enrolled 90 participants with hyperlipidemia and allocated 30 to each of three arms: powdered Safoof-e-Muhazzil, its compressed tablet form, or atorvastatin. After six weeks, reported reductions in total cholesterol were 7.35%, 9.11%, and 26.3%, respectively.[5]

The study provides preliminary justification for additional evaluation, but interpretation must retain the substantially larger cholesterol reduction observed with atorvastatin. A six-week period cannot determine durability of response or detect uncommon harms. Moreover, the results relate to the precisely studied powder and tablet products and should not be generalized to every preparation carrying the same name.

Jawarish Falafili

Ain et al. performed an open-label randomized comparison of Jawarish Falafili and atorvastatin lasting 90 days. Seventy-four individuals underwent randomization, while 60 completed follow-up, leaving 30 completers in each arm. Both groups showed reductions in total cholesterol, triglycerides, and LDL-C, and the investigators reported no statistically significant between-group differences.[6]

Absence of statistical significance is not evidence that the two interventions are equally effective. In a small trial, clinically important differences can remain undetected. A valid equivalence or noninferiority conclusion requires an appropriate study design, a prespecified acceptable margin, and sufficient statistical power. The study also provides no evidence that the two approaches confer comparable protection from myocardial infarction or stroke.

Majoon-e-Seer Alvi Khan

Quamri et al. assessed Majoon-e-Seer Alvi Khan in a single-blind randomized controlled investigation of 40 participants. The test formulation was given to 30 individuals and atorvastatin to ten; standardized lifestyle advice accompanied both interventions. Following 60 days of treatment, the authors described favourable changes in lipid parameters.[7]

Generalization is limited by the small sample and markedly unequal group sizes. Changes in diet or activity may also have contributed to the outcome. The trial is best regarded as an initial signal requiring confirmation, not as adequate support for routine replacement of standard treatment or for combining the formulation with a statin. The main features of all three trials are presented in Table 2.

Table 2 Selected trials and the limits of their findings

Formulation	Trial size and duration	Main finding	Main limit
Safoof-e-Muhazzil[5]	90 participants in three arms; 6-week intervention	All arms showed lower total cholesterol, with the greatest reduction in the atorvastatin arm.	Brief follow-up and absence of cardiovascular endpoint data
Jawarish Falafili [6]	74 randomized; 60 completers; 90-day intervention	Both arms improved lipid parameters; the between-group comparison was not statistically significant.	Not designed to prove equivalence ; 14 randomized participants did not complete follow-up
Majoon-e-Seer Alvi Khan[7]	40 participants allocated 30:10; 60-day intervention	Lipid parameters changed favourably while both groups also received lifestyle guidance.	Small unequal arms and uncertainty about persistence of effect

What laboratory research can explain

Published reviews summarize experimental investigations involving botanicals such as *Emblica officinalis*, *Cyperus rotundus*, and *Nigella sativa*. Reported observations concern lipid parameters, oxidative processes, and inflammatory pathways.[2] Such findings may assist in selecting candidates for clinical evaluation, but they cannot define an effective dose in humans or demonstrate that a multi-ingredient formulation reproduces the activity of an isolated plant.

Hypotheses proposed for Safoof-e-Muhazzil include modulation of lipid metabolism, oxidative stress, and inflammation.[3] Each hypothesis must be investigated in the complete standardized formulation. Antioxidant activity in an in-vitro assay, for example, does not prove prevention of arterial injury in patients. Terms such as Muhazzil, Mufatteh, and Mulattif should remain situated within their traditional meanings rather than being presented as confirmed labels for discrete molecular mechanisms.

A robust mechanistic programme would link the characterized composition of a tested batch with a demonstrable biological effect and a patient-relevant clinical endpoint. It should also establish whether absorbed constituents attain concentrations capable of producing the experimental effect. In the absence of these connections, a plausible explanation remains only a hypothesis.

Product quality and safety

Reproduction of a clinical study depends on precise characterization of the investigational product. Reports should specify every ingredient, verified botanical identity, plant part, quantity, manufacturing process, administered dose, producer, and batch identifier. Any mineral, animal-derived, or other nonbotanical component also requires clear identification and processing details. The WHO manual on quality control of herbal materials offers relevant methodological guidance.[8]

A future quality-assurance plan should incorporate appropriate authentication methods, chemical profiling, contaminant testing, defined storage, and stability evaluation. These measures are proposed to make research repeatable. Identical product names do not guarantee comparable batch composition. Powdered and compressed-tablet forms must therefore be described and evaluated separately rather than presumed to be interchangeable.

The natural origin of an ingredient does not ensure harmlessness. General guidance for herbal and dietary supplements highlights possible interactions, contamination, and differences between marketed products and research preparations. Evidence is commonly inadequate for pregnant or breastfeeding individuals and for children.[9] The adult studies summarized here cannot resolve safety in these populations.

Before initiating any formulation, clinicians should obtain a complete record of prescribed medicines, nonprescription drugs, and supplements. Assessment must consider the actual ingredient list, coexisting illness, and interaction potential. Laboratory surveillance should be individualized to the product and the patient's clinical risk rather than applied uniformly. Emerging symptoms and suspected adverse reactions require documentation and appropriate evaluation.

WHO benchmarks also address standards for quality and safety in Unani practice.[10] These benchmarks encourage responsible delivery of care but do not establish efficacy of an individual product in dyslipidemia. Ongoing safety review and defined referral arrangements remain essential when traditional preparations are used alongside conventional medicines.

Place in clinical care

Management should begin with a complete lipid evaluation and estimation of overall cardiovascular risk. Established cardiovascular disease, very high LDL-C, and other high-risk states may make proven lipid-lowering treatment particularly urgent. Selection and intensity of therapy should be consistent with relevant guidelines and individualized clinical circumstances.[1]

Individuals considering Unani treatment need a transparent explanation of both available findings and remaining uncertainty. The small trials largely studied a formulation as an alternative to a comparator drug; they did not determine whether adding it to statin therapy is effective or safe. Combination treatment therefore requires assessment of the specific formulation and patient. Prescribed medication should not be discontinued merely because a traditional product has been introduced.

Follow-up should review adherence to the agreed regimen, new or worsening symptoms, adverse effects, and progress toward individualized lipid targets. Acceptability supports long-term adherence, but patient preference alone cannot demonstrate treatment efficacy. Genuine shared decision-making combines respect for that preference with an accurate account of benefits, limitations, and uncertainty.

Priorities for future research

Future trials should investigate one standardized formulation and enrol a sample capable of answering a narrowly defined clinical question. An important early question is whether the product offers additional benefit when added to established management. Both arms could receive identical usual care and lifestyle support, followed by random allocation to the investigational formulation or a suitable placebo. Indicated lipid-lowering medicines should not be withdrawn for the convenience of study design.

A treatment phase of 12–24 weeks could evaluate biochemical response, followed by longer surveillance for durability and safety. This interval is a suggested research design rather than a validated therapeutic course. Change in LDL-C may serve as the prespecified primary endpoint. Secondary outcomes could include non-HDL cholesterol, triglycerides, body weight, and waist circumference, with analytical safeguards against overinterpreting multiple comparisons.

Prospective trial registration should occur before enrolment. Methodological confidence would be improved by adequate random sequence generation, concealed allocation, blinded outcome evaluation, and analysis according to original assignment. Adherence, dropouts, changes in diet or activity, concomitant medication, and adverse events must be reported. Results should present treatment-effect estimates with confidence intervals rather than relying solely on P values.

Only substantially longer and larger investigations can evaluate cardiovascular events. Before undertaking such trials, researchers should demonstrate reproducible product composition, a credible and consistent effect on lipid parameters, and acceptable short-term safety. Pharmacokinetic and interaction research on relevant constituents would also guide selection of combinations suitable for clinical testing.

Discussion

The principal conclusion is that the clinical evidence is considerably more limited than the claims sometimes attached to these formulations. Three small studies describe short-term changes in lipid parameters, but they do not demonstrate prevention of cardiovascular events, dependable long-term safety, or equivalence to established lipid-lowering

drugs. Nevertheless, their findings help define focused questions for more rigorous investigation.

Traditional accounts provide reasons for selecting particular formulations and emphasize the contribution of food and daily routine to care. Their usefulness does not require a forced one-to-one translation into contemporary pharmacology. A more defensible method is to report the classical indication, characterize the exact research product, and appraise each measured clinical outcome independently.

This review has several methodological limitations. Sources were selected through targeted searching, some studies were examined through abstracts or bibliographic records, and no formal risk-of-bias appraisal was completed. It is therefore a critical narrative account of selected publications, not an exhaustive hierarchy of Unani interventions or a prescribing standard. The evidence cannot support claims about formulations or patient populations that were not studied.

Conclusion

Unani medicine provides a traditional approach that integrates food, physical activity, obesity management, and medicinal treatment. Small clinical studies of *Safoof-e-Muhazzil*, *Jawarish Falafili*, and *Majoon-e-Seer Alvi Khan* have described favourable short-term lipid changes, but sustained efficacy, batch consistency, and safety remain uncertain. These products should not substitute for indicated evidence-based therapy. Meaningful progress will require fully characterized formulations, adequately powered controlled trials, extended follow-up, and outcomes relevant to both laboratory risk markers and patient health.

References

1. Blumenthal RS, Morris PB, Gaudino M, Johnson HM, Anderson TS, Bittner VA, et al. 2026 ACC/AHA/AACVPR/ABC/ACPM/ADA/AGS/APhA/ASPC/NLA/PCNA guideline on the management of dyslipidemia: a report of the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guidelines. *J Am Coll Cardiol*. 2026;87(19):2624–2757. doi:10.1016/j.jacc.2025.11.016.
2. Rouf T, Ahmed I. Therapeutic approaches to dyslipidaemia in Unani medicine: a narrative review. *J Holistic Integr Pharm*. 2026;7(1):1–10. doi:10.1016/j.jhip.2026.01.002.
3. Urooj S, Jahangir U, Maaz M, Azam R. Dyslipidemia from Unani prospective and its management with *Safoof e Muhazzil*: an update. *Phytomedicine Plus*. 2021;1(4):100103. doi:10.1016/j.phyplu.2021.100103.
4. National Heart, Lung, and Blood Institute. Blood cholesterol: treatment [Internet]. Bethesda (MD): NHLBI; 2024 Apr 19 [cited 2026 Sep 22]. Available from: <https://www.nhlbi.nih.gov/health/blood-cholesterol/treatment>
5. Jahangir U, Khan AA, Kapoor P, Jalees F, Urooj S. Evaluation of a classical unani pharmacopeial formulation *safoof-e-muhazzil* in hyperlipidemia: a randomized, standard controlled clinical study. *J Pharm Bioallied Sci*. 2014;6(3):167–179. doi:10.4103/0975-7406.130975.
6. Ain Q, Nawab M, Ahmad T, Kazmi MH, Naikodi MAR. Evaluating the safety and efficacy of a polyherbal Unani formulation in dyslipidaemia-a prospective randomized controlled trial. *J Ethnopharmacol*. 2022;289:115036. doi:10.1016/j.jep.2022.115036.
7. Quamri MA, Wahab A, Alam MA, Ali BF. Efficacy of *Majoon-e-Seer Alvi Khan* in dyslipidemia: a single blind randomized standard controlled clinical trial. *Drug Metab Pers Ther*. 2021;36(4):271–279. doi:10.1515/dmpt-2021-0117.
8. World Health Organization. Quality control methods for herbal materials. Geneva: World Health Organization; 2011.
9. National Center for Complementary and Integrative Health. Using dietary supplements wisely [Internet]. Bethesda (MD): NCCIH; [cited 2026 Sep 22]. Available from: <https://www.nccih.nih.gov/health/using-dietary-supplements-wisely>
10. World Health Organization. WHO benchmarks for the practice of Unani medicine. Geneva: World Health Organization; 2022.