جامعة سيدي محمد بن عبد الله - فاس
UNIVERSITÉ SIDI MOHAMED BEN ABDELLAH DE FES
كلية الطب والصيدلة وطب الأسنان
FACULTÉ DE MÉDECINE, DE PHARMACIE ET DE MÉDECINE DENTAIRE

لجنة التراث
Heritage Committee

The 13th Edition of the International Congress on the History of Medicine : Nutrition and Health

Book of Abstracts

Faculty of medecine, pharmacy and dentisry of Fes

Session 1: Approches ethnobotaniques et valorisation des produits naturels

Session 1: Ethnobotanical approaches and valorization of natural products

Douae Ez-zahidi : Endemic honeys of Morocco : between cultural heritage and biomedical applications

- Laboratory of Biotechnology, Conservation and Valorization of Bioresources, Department of Biology, Faculty of Sciences Dhar El Mahraz, Sidi Mohamed Ben Abdellah University, 30000 Fez, Morocco.

Abstract :

The aim of this study is to provide an overview of recent advances in chemical analysis, authenticity validation, and pharmacological evaluation of honey, with a particular focus on endemic Moroccan honeys.

This presentation is based on a systematic literature review conducted between December 2024 and May 2025, using scientific databases such as PubMed, ScienceDirect, Scopus, and Google Scholar.
The keywords used included: *"honey composition, honey traceability, adulteration detection, pharmacological properties of honey, Moroccan honey, color of honey, honey and health."*
Articles were selected based on strict inclusion criteria: validated experimental or clinical studies, clearly described analytical methodologies, and interpretable statistical results. A total of 40 relevant publications were analyzed.

The collected data reveal significant variability in the chemical composition of honey depending on its floral and geographical origin, which directly influences its pharmacological properties.
Advanced techniques such as HPLC, GC-MS, and melissopalynological analysis are commonly employed to ensure honey quality and traceability.
The integration of artificial intelligence, notably convolutional neural networks (CNNs) applied to thermal imaging, now allows for rapid and reliable detection of adulteration, with accuracy rates reaching up to 99%.

The most notable biological effects include antioxidant, antibacterial, wound healing, and anti-inflammatory activities, particularly prominent in *Thyme, Eucalyptus, Argan,* and Moroccan Orange Blossom honeys.

Meryem El Idrissi : Bee Products in Pharmacosmetic Formulations : Scientific Overview and Perspectives

- PhD Student – Biology Department, Faculty of Sciences Dhar El Mahraz – Fez

Abstract:

Bee products such as honey, propolis, royal jelly, and beeswax represent an ancestral natural and dietary heritage widely recognized for their health benefits. These natural substances are rich in bioactive compounds with antimicrobial, antioxidant, and anti-inflammatory properties, making them valuable ingredients in dermocosmetic applications.

The integration of bee products into modern dermocosmetics represents a promising intersection of traditional knowledge and scientific innovation. Their natural origin aligns with the increasing consumer demand for clean, sustainable, and bioactive ingredients. Moreover, valorizing bee products contributes to the preservation of apicultural heritage and supports ecological awareness.

The review concludes by discussing current challenges and future perspectives, such as standardization of raw materials, safety evaluations, and clinical validations necessary to substantiate health claims. It emphasizes the potential of bee-derived ingredients to enhance skin health while promoting the sustainable use of natural resources.

By highlighting the scientific advances and applications of bee products in pharmacosmetics, this work contributes to the broader dialogue on how traditional dietary heritage can inform and enrich modern health and cosmetic innovations.

NAJI Aya: Exploring the Health Potential of Moroccan Propolis: From Traditional Uses to Scientific Evaluation

- Laboratory of Biotechnology, Conservation and Valorization of Bioresources (LBCVB)
- University Sidi Mohamed Ben Abdellah, Faculty of Sciences Dhar El Mahraz, Fez, Morocco

Abstract :

Propolis is a resinous substance collected by bees from various plant sources and has been traditionally used as a natural therapeutic agent across many cultures, particularly in Morocco. In Moroccan traditional medicine, propolis is valued for its wound-healing, antiseptic, and immune-supporting properties. It is commonly used in folk remedies for treating infections, digestive issues, and skin disorders. Despite its widespread traditional use, the scientific study of Moroccan propolis remains relatively underdeveloped, especially regarding its potential role in health and nutrition.

As part of our doctoral research, we aim to standardize and characterize Moroccan propolis from different ecological regions. We investigate its physicochemical composition and evaluate its biological properties—especially antimicrobial and antioxidant activities—using advanced analytical techniques such as HPLC, GC-MS, UV-Vis spectrophotometry, and microbiological assays. Our goal is to link the therapeutic claims observed in traditional practices with validated scientific data, thereby providing a clearer understanding of this complex natural product.

This multidisciplinary approach bridges ethnopharmacological heritage with modern science. It allows for the exploration of the nutritional and medicinal potential of propolis within a broader framework that respects both traditional knowledge and contemporary scientific standards. Furthermore, Moroccan propolis represents a unique example of how natural health products can be influenced by regional flora, beekeeping practices, and local environmental conditions. These factors make propolis not only a product of interest in health research but also an ecological indicator within the One Health framework.

Our research contributes to the valorization of Moroccan apicultural heritage and supports efforts to preserve and promote the use of traditional natural products in modern health systems. It also opens pathways for further studies on the integration of natural bioactive compounds into food, supplements, and preventive health strategies.

By highlighting the connection between ancient practices and scientific innovation, this work aligns with the objectives of the 13th International Fez Conference on the History of Medicine. It encourages a dialogue between disciplines and promotes a comprehensive vision of health that embraces both historical insights and future possibilities. Ultimately, the study of propolis serves as a model for how heritage-based knowledge can inform modern approaches to nutrition, public health, and sustainable development.

Oumaima DABBAGH : Physicochemical Characterization of Moroccan Propolis

- Laboratory of Biotechnology, Conservation, and Valorization of Bioresources, Faculty of Sciences Dhar El Mahraz, Sidi Mohammed Ben Abdellah University

Abstract :

Propolis is a natural, resinous substance produced by honeybees through the collection and transformation of plant-derived materials. Widely known for its biological and therapeutic properties, propolis has gained increasing attention in natural health product research. However, its chemical composition is highly variable, influenced by factors such as botanical origin, geographic location, and environmental conditions. This intrinsic variability makes physicochemical characterization essential for ensuring quality, comparability, and potential standardization.

In this study, several raw propolis samples were collected from various regions of Morocco, representing diverse ecological and climatic zones. The aim was to perform a comprehensive physicochemical characterization in order to explore their stability and overall quality. The approach followed standardized analytical procedures, allowing for structured evaluation and objective comparison of the different samples.

The findings revealed noticeable diversity across the samples, yet also highlighted certain recurring features suggestive of shared compositional traits. These patterns offer valuable insight into the physicochemical identity of Moroccan propolis and support efforts toward defining quality reference points. The study also emphasizes the importance of documenting regional characteristics to better understand how environmental and geographical factors shape the nature of this apicultural product. Ultimately, this research contributes to the broader goal of valorizing Moroccan natural products by laying a foundation for their scientific recognition and potential industrial applications. The outcomes of this characterization effort can guide further studies in fields such as food science, natural health products, and pharmacognosy. By integrating modern analytical approaches with local natural

resources, this work aligns with ongoing initiatives aimed at promoting responsible, evidence-based use of traditional substances.

LAHMER Asmae : *A Contemporary Scientific Reading of Avicenna's Observations on Herbal Treatment of Pulmonary and Chest Diseases Using Computational Simulation and Artificial Intelligence Techniques*

- Department of Biology, Laboratory of Biotechnology, Environment, Agri-food, and Health (LBEAS).
- Faculty of Science Dhar El Mahraz (FSDM), Sidi Mohamed Ben Abdellah University (USMBA).

Abstract :

This study offers a contemporary scientific reading of Avicenna's approaches to the treatment of pulmonary and chest diseases using herbal extracts, as outlined in his foundational medical text, The Canon of Medicine. The research focuses on respiratory conditions that are likely of bacterial origin based on modern understanding, such as pneumonia, diphtheria, tuberculosis, and chronic productive cough. The aim is to identify and classify the medicinal plants recommended by Avicenna for these conditions and explore their potential antibacterial relevance in the context of current pharmacological knowledge.

In the first stage of the research, a detailed textual analysis was conducted on the relevant sections of The Canon, with particular attention given to plants most frequently cited in respiratory treatments. These include Hyssopus officinalis (hyssop), Trigonella foenum-graecum (fenugreek), Drimia maritima (squill), Ecballium elaterium (squirting cucumber), and honey as a natural therapeutic agent. These plants were then matched with existing pharmacognostic and phytochemical literature, with emphasis placed on their major bioactive compounds such as 1,8-cineole, diosgenin, and cucurbitacins.

The second phase of the study consists of a molecular docking-based modeling approach, where selected bioactive compounds were virtually screened against key bacterial targets including DNA gyrase, β-lactamase, and penicillin-binding proteins (PBPs). This simulation-based assessment was carried out using computational tools supported by artificial intelligence, to theoretically evaluate the affinity of these natural compounds toward crucial bacterial enzymes involved in respiratory infections.

This project aims to contribute to a re-evaluation of Islamic medical heritage from a modern scientific perspective by integrating classical textual analysis with advanced computational pharmacology. It seeks to highlight the potential therapeutic value embedded in traditional herbal practices, and to propose a framework through which ancient knowledge can inform the development of natural antibacterial alternatives, particularly relevant in an era of rising antibiotic resistance.

Mourad errasfa : Lecture :The Argan Tree, a Natural Heritage and Therapeutic Ally

Session 2: Sécurité alimentaire, plantes médicinales et durabilité

Session 2: Food security, medicinal plants and sustainability

Dalila Bousta : Conférence : Place des plantes médicinales dans les denrées et compléments alimentaires : avantages et risques

Ghalia Shamlan : Antioxidant, Lipid-Lowering, and Anti-Inflammatory Effects of Saudi Date Extracts and Fibre on Hypercholesterolaemia

- Department Food Science and Nutrition, College of Food and Agriculture Science, King Saud, University, Riyadh, Saudi Arabia.

Abstract:

The study evaluated the bioactive compounds and effects of polyphenol extracts and dietary fibers derived from the pulp, seeds, and juice of two date varieties, Khalas and Sukkari, on the lipid profile, antioxidant enzyme activity, and inflammation markers in rats consuming cholesterol-rich diets. The seeds were found to have significantly higher ($P<0.05$) amounts of dietary fiber, with 88.9 g/100 g for Khalas and 71.5 g/100 g for Sukkari, as well as greater total phenolic content (TPC), measuring 12,128.8 mg GAE/100 g in Sukkari and 6,632.9 mg GAE/100 g in Khalas, compared to the pulp and juice. All extracts demonstrated effective scavenging activity against DPPH and ABTS free radicals. Rats fed a cholesterol-enriched diet showed increased body weight along with elevated serum levels of total cholesterol (TC), triacylglycerides (TAG), low-density lipoprotein cholesterol (LDL-C), very-low-density lipoprotein cholesterol (VLDL-C), arteriosclerosis index (AI), oxidized LDL (OxLDL), and C-reactive protein (CRP). These rats also exhibited lowered high-density lipoprotein cholesterol (HDL-C) and decreased antioxidant enzyme activities relative to those fed a standard diet. Administering polyphenol extracts from Khalas and Sukkari pulp and seeds, along with their dietary fibers, to the hypercholesterolemic rats resulted in reduced body weight and decreased levels of TC, TAG, LDL-C, VLDL-C, OxLDL, AI, and CRP, while enhancing HDL-C levels and boosting the activities of catalase, superoxide dismutase, and glutathione peroxidase in serum. The findings suggest that polyphenols and fiber extracts from Khalas and Sukkari dates possess cholesterol-lowering, antioxidant, and anti-inflammatory properties, indicating their potential application in developing functional supplements for disease prevention or treatment.

Abdullah Al-Shahed : Implication des PAMs sur la santé et la nutrition : les antioxydants contre le cancer

Marouane Takie: **Unveiling the Dual Potential of *Erodium moschatum*: Diuretic Efficiency and Antioxidant Power**

- Laboratory of Biotechnology, Conservation and Valorization of Bioresources, Faculty of Sciences, Sidi Mohamed Ben Abdellah University, Fez, Morocco.

Abstract:

Food heritage and health: Between academic research and educational programs.

Background: The diuretic potential of *Erodium moschatum* extract (EME) was investigated through both acute and chronic assessments. To evaluate the immediate effect, urine volume was measured at different time points (1, 2, 4, 8, 12, and 24 hours) following administration. The extended diuretic effect was examined by measuring cumulative urine output on day 1 and day 20 of treatment.

Mohamed Hajaoui : Sécurité alimentaire, valorisation des dattes et durabilité des systèmes oasiens dans le Sud marocain

Souhaila SENHAJI : Valorization of Grapevine Endophytic Bacteria: A Sustainable Approach to Crop Protection in the Face of Environmental and Climate Challenges

- Plant Protection Research Unit, National Institute of Agricultural Research (INRA), Meknès
- Laboratory of Biotechnology, Agri-Food Environment and Health, Faculty of Sciences Dhar El Mahraz, Sidi Mohamed Ben Abdellah University, Fez

Abstract:

In the context of climate change and increasing environmental pressures, the use of environmentally friendly biocontrol strategies is becoming essential to safeguard food security and the nutritional quality of plant production. This study contributes to that objective by exploring the potential of grapevine endophytic bacteria as biological control agents against *Allorhizobium vitis* S4, the causal agent of crown gall disease.

Forty-three endophytic bacterial isolates were collected from grapevine roots and tested for their ability to inhibit A. vitis S4. Eighteen of these isolates exhibited significant antagonistic activity, with inhibition rates reaching up to 30.56%. Preventive treatments applied to tomato plants demonstrated a tumor incidence reduction of over 90% with certain isolates, particularly *Rahnella aquatilis* and *Bacillus halotolerans*.

These results highlight the crucial role that endophytic bacteria can play in sustainable agriculture, by reducing reliance on chemical pesticides, enhancing plant resilience to pathogens, and indirectly contributing to the preservation of crop nutritional quality under climate-stressed conditions.

This work underscores the importance of integrating innovative biological solutions, derived from natural microbial resources, into current agricultural systems to ensure healthy, sustainable food production adapted to today's climatic challenges.

Session 3 : De la tradition à l'innovation scientifique
Session 3: From tradition to scientific innovation

Abdallah farah : Extraction des substances bioactives : de la tradition à l'innovation

- Professor Abdellah Farah is an internationally recognized researcher in the field of green chemistry. Former Director of the Applied Organic Chemistry Laboratory (FST–USMBA) at the Faculty of Science and Technology, Sidi Mohamed Ben Abdellah University (Fez, Morocco), he currently serves as a Full Professor of Phytochemistry, specializing in the valorization of aromatic and medicinal plants (AMPs).
- His areas of expertise include green chemistry, sustainable development, eco-extraction, formulation, encapsulation, essential oils, and bioactive molecules.

Résumé:

L'extraction et la valorisation des substances bioactives issues des plantes aromatiques et médicinales (PAM) constituent un axe stratégique reliant savoirs traditionnels et innovations technologiques. Fort d'une expérience de plus de vingt-cinq ans dans la recherche, la formation et le développement de la filière des PAM, on a contribué à l'évolution des méthodes d'extraction — de la distillation traditionnelle à l'éco-extraction et aux procédés intensifiés verts. Ses travaux ont permis d'optimiser l'efficacité énergétique, de préserver l'intégrité chimique des métabolites secondaires, et de renforcer la traçabilité et la qualité des extraits naturels selon les normes internationales.

Cette communication retrace l'évolution de ces approches, depuis la valorisation artisanale des ressources locales jusqu'à la mise en œuvre de procédés intégrés associant chimie verte, modélisation chimométrique et valorisation durable. Illustrée par des exemples concrets tels que la valorisation du safran de Taliouine, du cèdre de l'Atlas ou encore des plantes comoriennes, cette présentation mettra en évidence le rôle de l'innovation scientifique dans la transition vers des procédés plus propres, performants et économiquement viables, tout en respectant le patrimoine ethnobotanique et les écosystèmes locaux.

Sara A. Eltigani : Metabolomics analysis of *Hyphaene thebaica* coffee-like drink

- Researcher, Natural Product Chemistry of Traditional Foods and Medicines
- Natural Products Chemistry Lab, Tottori University, Japan
- Assistant professor, School of Health Sciences, Ahfad University for Women, Sudan

Abstract:

Hyphaene thebaica belongs to the family Arecaceae and is native to Sudan and other African countries. In Sudan, it has traditionally been used as both food and medicine, and it is believed to have anti-inflammatory and antihypertensive effects. In the western part of the country, some communities prepare a coffee-like drink from the dried fruit of *H. thebaica*, which is widely consumed as a natural remedy for lowering blood pressure.

In this study, we focused on analyzing the metabolites of the coffee-like drink at two roasting levels of medium and dark, and compared them to the raw dried fruit. The pulp of the dried fruit and the roasted samples were extracted with water following the traditional method, and the soluble materials were then analyzed by gas chromatography–mass spectrometry (GC–MS).

Across all samples, 98 metabolites were identified, with 23 compounds appearing exclusively after roasting. Notably, 16 of these were prominent in the medium-roasted sample but absent or reduced in the dark-roasted one, suggesting that moderate roasting produces a broader diversity of compounds than prolonged roasting. The detected compounds included several ketones, aldehydes, phenols, and alkanes, most of which are known for their pharmaceutical properties.

These findings provide the first metabolomics insight into the *H. thebaica*-based coffee-like drink, demonstrating how roasting modifies metabolite profiles in ways that may contribute to its traditional use as both a food and a medicinal plant.

Najoua SOULO: *Crataegus monogyna*: At the Crossroads of Nutritional Heritage and Integrative Health

- Laboratory of Biotechnology, Conservation and Valorization of Bioresources, Faculty of Sciences Dhar Mahraz, Sidi Mohamed Ben Abdellah University (USMBA) -Fez, Morocco

Abstract:

Crataegus monogyna, commonly known as hawthorn, is a medicinal plant that holds a unique position at the intersection of traditional dietary knowledge, historical medicine, and modern integrative health practices. Its documented use in ancient Greek, Roman, and Arabic medical manuscripts reflect a longstanding recognition of its cardiovascular benefits particularly in enhancing blood circulation and strengthening the heart. This historical application illustrates the early convergence of medical treatment and what is now termed functional nutrition.

Modern phytochemical research has confirmed the plant's richness in bioactive compounds, including flavonoids, proanthocyanidins, phenolic acids, and triterpenoids. These constituents are associated with antioxidant, anti-inflammatory, and cardioprotective effects. Contemporary studies have demonstrated that these compounds act synergistically to regulate blood pressure, reduce oxidative stress, and support myocardial function. Such findings provide a mechanistic basis for hawthorn's historical therapeutic use and reinforce its relevance within evidence-based phytotherapy and integrative medicine.

In addition to its pharmacological profile, *C. monogyna* is increasingly appreciated for its nutritional value, particularly in the context of functional foods and nutraceuticals. Its antioxidant capacity, driven by its phenolic content, contributes to the neutralization of free radicals, which are implicated in the pathogenesis of chronic diseases such as cardiovascular disorders, metabolic syndrome, and neurodegeneration. As a result, hawthorn represents a natural agent with both preventive and therapeutic potential.

The plant's adaptability to diverse environments also highlights its relevance in addressing today's climate and sustainability challenges. As a resilient, low-

maintenance species, *C. monogyna* aligns with modern goals for sustainable food systems and health promotion through natural, plant-based resources.

Moreover, the role of hawthorn in academic research and education is expanding. Universities and specialized institutions are increasingly incorporating it into curricula related to ethnobotany, nutrition science, and integrative healthcare, recognizing the importance of preserving and scientifically validating dietary heritage.

In an era marked by chronic disease prevalence, global health crises, and environmental stress, revisiting *Crataegus monogyna* through the lens of historical knowledge and scientific evidence offers a holistic view of its relevance. It serves as a symbolic and practical bridge between past traditions and present innovations in medicine, nutrition, and public health.

Wiam BOUQBIB : Reviving Dietotherapeutic Heritage : Scientific Exploration of an Oxymel Formulation Based on Moroccan Botanicals

- Laboratory of Biotechnology, Conservation, and Valorization of Bioresources (LBCVB), Department of Biology, Faculty of Sciences Dhar El Mehraz, Sidi Mohamed Ben Abdellah University, 30000 Fez, Morocco

Abstract :

Oxymel—an ancestral nutritional preparation combining honey, vinegar, and plant extracts—has been a cornerstone of traditional Persian and Arab-Islamic dietotherapy, valued for its gentle support of systemic balance and renal function. Anchored in this heritage, our study aimed to design and scientifically evaluate a modern oxymel formulation, integrating Moroccan botanicals into a functional dietary approach aligned with contemporary health challenges.

The oxymel was formulated using *Lawsonia inermis* (Henna) extract, *Nigella sativa* honey, and cherry vinegar, following traditional preparation methods. Antioxidant profiling revealed a DPPH IC_{50} of 53.71 µg/mL and a Total Antioxidant Capacity of 248.85 mg AAE/mL, indicating strong free radical scavenging ability. In vivo assessments in Wistar rats demonstrated a significant diuretic effect, with urinary output increasing from 5.25 mL to 11.5 mL/24h after 21 days. In a nephrolithiasis prevention model, the oxymel reduced urinary crystal formation and maintained a high urine flow (11 mL/24h at day 30), showing comparable efficacy to standard reference treatments.

These findings highlight the value of reintroducing traditional dietary remedies into scientifically grounded healthcare strategies. By combining the principles of ancient dietotherapy with the pharmacological study of locally sourced ingredients, this research supports the integration of nutritional heritage into modern renal health promotion.

Meryem Tourabi : Enhanced Phytochemical Recovery and Bioactivity of *Mentha aquatica* L. via Optimization of Extraction Techniques and Solvent Polarity

- Laboratory of Biotechnology, Conservation and Valorization of Bioresources, Faculty of Sciences, Sidi Mohamed Ben Abdellah University, Fez, Morocco.

Abstract:

This study explores the influence of extraction technique and solvent polarity on the phytochemical composition and biofunctional properties of Mentha aquatica L., a medicinal plant known for its antioxidant potential. Three extraction methods—Soxhlet extraction, ultrasound-assisted extraction (UAE), and cold maceration—were employed in combination with solvents of varying polarities: 70% ethanol (hydroethanol), ethyl acetate, and water. The primary aim was to determine how these variables affect the yield and quality of bioactive compounds, with a specific focus on total phenolic content (TPC), total flavonoid content (TFC), nutritional value, and antioxidant activity. Extracts were subjected to qualitative and quantitative chemical analyses using high-performance liquid chromatography coupled with diode-array detection (HPLC-DAD), which confirmed the presence of several key phenolic constituents, including rosmarinic acid, caffeic acid, and luteolin derivatives. Among the combinations tested, hydroethanolic extracts obtained via Soxhlet and cold maceration showed the highest levels of phenolic compounds and flavonoids, as well as superior antioxidant activity as evaluated through DPPH, FRAP, and ABTS assays. These results suggest that polar solvents, particularly aqueous ethanol, are significantly more efficient in extracting polyphenols compared to less polar solvents like ethyl acetate. Conversely, ultrasound-assisted extraction and non-polar solvents generally yielded lower concentrations of bioactive compounds, indicating a less efficient breakdown of plant cell walls or insufficient solvent penetration. The study also revealed that extraction method and solvent choice influence not only phytochemical profiles but also the functional properties of the final extracts, which has direct implications for their industrial application. The findings underscore the critical importance of optimizing extraction parameters to maximize the recovery of health-promoting compounds from medicinal plants. *Mentha aquatica* extracts, especially those derived using maceration with hydroethanol, exhibit strong potential for use as natural preservatives in the food, pharmaceutical, and cosmetic sectors. The study contributes to the broader understanding of green extraction technologies and supports the valorization of underutilized aromatic plants in functional product development.

Session 4: L’occident islamique et l'Afrique : itinéraire d'un patrimoine culinaire et médical.

Session 4: The Islamic West and Africa: A Culinary and Medical Heritage Itinerary

Ratib Soujaa : Enjeux interculturels du discours médical efficace : le patrimoine alimentaire comme source d'adaptation

LAAZIRI Kawtar : **Identité Nutritionnelle dans l'Imaginaire Maghrébin : Culture, Savoir gastronomique et Santé**

- Doctorante chercheure en troisième année à la Faculté des Lettres et des Sciences Humaines de l'Université Cadi Ayyad de Marrakech. Ses recherches portent sur l'oeuvre de Leïla Sebbar, avec un intérêt particulier pour l'enfance coloniale et la construction identitaire dans la littérature maghrébine postcoloniale. Elle explore notamment la mémoire coloniale, l'exil, la dualité culturelle, l'hybridité et le métissage.

Résumé :

Depuis des lustres, l'identité culturelle d'un peuple se construit à travers ses pratiques, ses croyances, ses traditions, ses savoirs et ses représentations collectives. Parmi ces pratiques, l'alimentation occupe une place primordiale, à la fois vecteur de survie, marqueur identitaire et outil de transmission des savoirs. Dans le contexte maghrébin, ces pratiques alimentaires constituent un patrimoine immatériel vivant qui retrace par excellence la mémoire culturelle et les savoirs médicinaux ancestraux, largement transmis d'une génération à une autre à travers la littérature, les contes et les récits historiques reflétant la richesse et la diversité gastronomique ainsi que les pratiques traditionnelles liées à la santé.

Dans cette perspective, nous essayons à travers la présente communication d'analyser comment l'imaginaire alimentaire maghrébin, à travers la littérature et le patrimoine culinaire, vise à construire une identité nutritionnelle en articulant culture, savoir gastronomique et enjeux de santé. Notre problématique centrale consiste à interroger la manière dont les pratiques alimentaires traditionnelles, représentées dans la littérature maghrébine, dialoguent avec les connaissances scientifiques modernes sur la nutrition et la santé.

Afin de répondre à cette problématique, notre recherche s'appuie sur une méthodologie interdisciplinaire, croisant une analyse littéraire et culturelle avec une approche critique des savoirs scientifiques contemporains liés à la nutrition et à la santé. Par ailleurs, le corpus choisi comprend trois oeuvres majeures de la littérature maghrébine ; *Rue de pardon* (2019) de Mahi Binebine, *Il était une fois un vieux couple heureux* (2002) de Mohammed Khaïr-Eddine et *La boîte à Merveilles* (1954) d'Ahmed Sefrioui

Dr. Farida SAMADI : ***L'alimentation et les traditions culinaires marocaines dans les écrits des voyageurs français à l'ère précoloniale : Enracinement du patrimoine et défis sanitaires***

- Enseignante-chercheuse et Traductrice à l'Ecole Supérieure Roi Fahd de Traduction. Filière : Arabe-Français-Anglais.

Résumé :

L'histoire de l'alimentation et des pratiques culinaires constitue un champ d'investigation particulièrement fécond, situé à l'intersection de l'histoire sociale, de l'anthropologie historique, de l'économie et de la géographie. Si les historiens marocains ne disposent pas d'un corpus archivistique permettant de mener une histoire quantitative pleinement structurée, à l'instar des travaux européens, les sources disponibles offrent néanmoins un terrain d'investigation riche, notamment, les répertoires hagiographiques et les récits de voyage.

En effet, il est indéniable d'affirmer que les récits des voyageurs français à l'ère précoloniale ont permis aux chercheurs de reconstruire une histoire de l'alimentation, en explorant les usages et comportements alimentaires, la dimension symbolique des plats, ainsi que le jeu entre goût et nécessité. Ils ont révélé également des aspects identitaires multidimensionnels, propres à chaque espace géographique de l'empire chérifien.

Par ailleurs, ces voyageurs ont largement contribué à façonner une image du Maroc marquée par des considérations sanitaires et hygiénistes inquiétantes. A travers Leurs descriptions des maladies dues à la malnutrition, ils ont traduit, non seulement une curiosité scientifique, mais aussi une vision coloniale de l'« autre ». Ainsi, les écrits de certains médecins coloniaux, tels que le docteur Linarès, nous invitent à réfléchir sur les liens entre santé, alimentation et société dans le contexte marocain. Comment un discours se voulant alors scientifique peut, consciemment ou non, véhiculer des représentations hiérarchisées entre colonisateurs et colonisés ?

Sur ce corpus, riche et varié, notre étude se propose d'analyser la perception des pratiques culinaires marocaines dans les écrits de ces voyageurs, entre l'enracinement du patrimoine et les soucis de la question sanitaire, tout en

mettant en lumière les préoccupations médicales et idéologiques de de cette conjoncture de l'histoire du Maroc.

Chakib Chairi : El tratamiento con líquidos alimenticios en la historia de Fez y Tetuán, un patrimonio común visto por los viajeros y médicos españoles.

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العلاج بالسوائل المغذية في تاريخ فاس وتطوان من خلال رؤية الرحالة والأطباء الاسبان للتراث المشترك.

- جامعة عبد المالك السعدي

ملخص:

تشترك بلدان البحر الأبيض المتوسط عموما بطبيعة نباتية مشابهة في معظم بقاعها، ما ينعكس بوضوح على مستوى المنتجات الغذائية ولكن الاهتمام بزراعتها وتوظيفها في التغذية والصحة لا يعتمد فقط على التقارب الجغرافي بقدر ما هو مشروط بتطور الأحداث التاريخية وبانتقال المعارف عبر الأشخاص. وكلما ازداد الاحتكاك الاجتماعي والتبادل التجاري والتعاون السياسي والتلاقح الفكري، تشكل ارث مشترك متعدد وغني. فعندما نسلط الضوء على الجانب الصحي لتلك المجتمعات نلاحظ أن تطور الأحداث ساهم اسهاما ملموسا في الحفاظ على المعارف التقليدية أو تطويرها أو اهمالها بل الاعتماد على الجديد والمستورد فقط، حيث أن أوقات السلم والقوة والاستقرار توطد نشر المعرفة المفيدة والسليمة في حين أن فترات الفتن والأزمات تفشي الجهل وتكريس المعتقدات الخرافية بها. وبحكم أن موقع المغرب استراتيجيا سمح له بتبوء مكانة متميزة في التواصل مع المشرق ولا سيما بين افريقيا وأوروبا منذ أقدم الأزمنة ـ مكانة مشابهة لايبيريا ـ فليس من الغريب ان يحتفظ المغاربة بتراث علمي مطبق على صعيد التغذية والصحة في المناطق المتحضرة كما أن الاضطرابات والحصارات التي تعرض لها البلد أسهمت في استفحال الممارسات العشوائية والشعوذة في المناطق النائية حيث ان حاضرتي فاس وتطوان تعتبر نموذجية لدراسة صدى الموجات المؤثرة في المعارف، خاصة وانهما وريثات الحضارة الاندلسية وتعرضتا لهيمنة استعمارية اهتمت بمختلف أوجه المجتمع المغربي بما في ذلك التغذية والصحة. يتبلور ذلك من خلال ما كتبه الرحالة الأجانب عموما والأطباء الاسبان خاصة، وبالتركيز على نوعية السوائل الغذائية وطريقة توظيفها في العناية بالصحة وعلاج الأمراض ما يمكننا بجرد أهم الأمثلة والتطرق لقيمتها وفائدتها بعد اعتبار المزايا والمساوئ التي يصورها الأجانب في بعض كتاباتهم في سياق تاريخي معين ثم استحضار مصادر داخلية للمقارنة والاستنتاج.

Hajar Harouche: L'évaluation scientifique des pratiques nutritionnelles et de leurs effets sur la santé au Sénégal : patrimoine et transitions alimentaires modernes

- Docteur en pharmacie diplômée de l'Université Cheikh Anta Diop de Dakar (UCAD), spécialisé en santé publique et microbiologie.
- Expertise en épidémiologie, gestion des risques sanitaires et sécurité environnementale, avec une approche scientifique rigoureuse.

Resumé:

Dans cette étude, nous allons évaluer scientifiquement les pratiques nutritionnelles au Sénégal et leur impact sur la santé publique, en tenant compte à la fois du patrimoine alimentaire traditionnel et des transformations liées à la modernisation des modes de conservation et de consommation.

Dans une première partie, nous analyserons le patrimoine alimentaire sénégalais, en mettant l'accent sur les pratiques nutritionnelles traditionnelles et les techniques de conservation telles que le séchage, le fumage et le salage, qui assurent la disponibilité et la qualité des denrées.

La deuxième partie portera sur la valeur nutritionnelle du poisson séché, un aliment essentiel dans le régime sénégalais. Nous étudierons son importance dans la couverture des besoins nutritionnels et les effets des procédés de transformation sur sa composition et sa qualité sanitaire.

Enfin, dans la troisième partie, nous aborderons la modernisation de la conservation des aliments à travers des procédés tels que la réfrigération, la congélation et la surgélation, et nous examinerons leur rôle dans la transition alimentaire moderne au Sénégal.

À travers cette recherche, nous cherchons à valoriser les savoir-faire traditionnels tout en intégrant les innovations technologiques, afin de promouvoir une alimentation saine, durable et adaptée aux défis actuels de la santé publique.

Session parallèle 5:Les savoirs diététiques et médicinales dans la tradition andalouse.
Parallel session5: Dietary and Medicinal Knowledge in the Andalusian Tradition

Indalecio Lozano Cámara : The Therapeutic Use of Cannabis in Arabic Medicine.

- PhD Semitic Philology (Arab-islamic Option). Extraordinary Award
- Faculty of Arts and Humanities University of Granada : 26-11-1993
- Studies and documents about the history of hemp and hashish in Mediaeval Islam

Abstract:

The objective of my communication is to review the scientific knowledge of Andalusian and Eastern Arab naturalists regarding medicinal and edible *Cannabis sativa* L. between the 8th and 18th centuries. This literature includes medical, pharmacological, botanical and agronomical works. We will also look into the ample range of literary sources of the *adab* genre and the legal, historical and geographical texts which may contain information of interest for the subject at hand. Arab naturalists received and significantly enriched the traditions of pre-Islamic civilizations that, before the advent of Islam in the early 7th century, had used cannabis for thousands of years as a medicine, textile, food, and recreational and ritual drug in China, India, Egypt, Persia, Mesopotamia, and large areas of Europe. Arab scientists were several centuries ahead of our current knowledge of the curative power of cannabis. They knew of and used its diuretic, antiemetic, antiepileptic, antiinflammatory, and painkilling virtues, among others. It seems reasonable to suggest that the data to be found in Arabic literature could be considered as a possible basis for future research on the therapeutic potential of cannabis and hemp seeds.

María Ángeles Navarro García (Espagne) : The therapeutic Uses of the Olive Tree and the Wild Olive in the Andalusian Tradition

Dpto. Estudios Semíticos. Facultad de Filosofía y Letras
Universidad de Granada

Abstract :

Talking about the history of health, hygiene and disease in al-Andalus necessarily implies talking about the remedies used by its populations to treat their ailments and illnesses. As a case study, the present research analyses the knowledge contained in Andalusian texts on galenic medicine and pharmacology about the potential and therapeutic uses of Olea europaea L. in the fields of dermatology, dentistry and ophthalmology. The results include the ailments and diseases treated, the therapeutic uses, the parts of the plant used in each treatment, its preparations and forms of administration, the Andalusian authors who provide this information, and the Greek and Oriental Arabic sources they cite. These data are evaluated in the light of current scientific knowledge on the therapeutic potential of Olea europaea L. as well as in the light of ethnobotanical evidences of its uses in the Mediterranean basin over the centuries.

Julio Plaza-Díaz (Espagne) : Olive Oil and Nuts: From Andalusi-Maghrebi Recipes to Cardiometabolic Mechanisms

- Biochemist and Researcher in Molecular Biology.
- Member of the Institute of Nutrition and Food Technology "José Mataix" (INYTA) at the Biomedical Research Center (CIBM), University of Granada, Spain.

Summary:

Olive oil and nuts—pillars of Andalusi-Maghrebi cuisine—link culinary heritage to measurable cardiometabolic benefits. I will connect historical foodways to modern mechanisms: phenolic compounds and monounsaturated fatty acid from extra-virgin olive oil improve lipid remodeling and endothelial function; nut matrices (arginine, fiber, unsaturated fats, phytosterols) modulate lipids, inflammation, and insulin sensitivity. I will summarize clinical and cohort evidence at a high level and translate mechanisms into practical guidance grounded in North African and Mediterranean dishes. Framing recommendations as cultural continuity—not restriction—can drive adherence in real settings (home, schools, community). Three take-homes: small, sustained swaps; heritage as prevention; mechanisms that matter.

Regarding travel arrangements: my nearest airport is Barcelona, and I've confirmed that there are flights to Fez. I would like to travel with my wife and our infant (under 1 year). Would it be possible for me to cover my wife's airfare and the difference between a single and a double room, while the congress covers my travel and the base accommodation? If there is a different procedure to follow, please let me know.

Maria do Sameiro Barroso (Portugal) : Early medicinal use of sugar cane in El Libro de la Almohada by Ibn Wafid (c.1008–1074)

Abstract:

Cane sugar, derived from the sap of the sugar cane plant, *Saccharum officinarum*, is cultivated in tropical and subtropical regions. Although domesticated in New Guinea around 8000 BC, it began to spread to the Philippines and India two millennia later, then to Indonesia. It remained relatively unknown to the Graeco-Roman and early Christian worlds. Until the 16th century, cane sugar was a rare commodity and costly, Until the 16th century, cane sugar was not only a rare commodity but also a costly one, highlighting its historical significance and value. Its cultivation, however, started to thrive in the Arabic world, where remarkable agricultural advancements, including the invention of the *nora* (a vertical three-roller mill powered by water or animal traction), transformed sugar production. Sugar cane requires substantial water to grow, making these innovations essential. The medicinal use of sugar is documented in the Spanish *Al Andaluz* by the pharmacist and physician Ibn Wafid (Alī ibn al-Ḥusayn ibn al-Wāfid al-Lakhmī (Arabic: علي بن الحسين بن الوافد اللخمي, c. 1008 – 1074). He is best known for his book, *Kitāb al-Adwiya al-Mufrada* (كتاب الأدوية المفردة), translated into Latin as *De Medicamentis Simplicibus*. Ibn Wafid resorted to the virtues of food as medicine, whenever possible, and only later, if necessary, to simple and compound remedies.

Additionally, he wrote a recipe book translated into Spanish from an Arabic manuscript from the Escorial Library, *El Libro de la Almohada* (*Bedside book*). This book, a comprehensive guide that addresses almost all known diseases from head to toe (*ab caput ad calcem*) and their management, played a significant role in popularising the use of cane sugar—much more expensive than honey at the time—as a medicinal ingredient. He discusses its multiple uses in pharmaceuticals, such as acting as an excipient, stabiliser, and enhancing the consistency of syrups and juleps. Notably, he also incorporates fruit jams as medicinal ingredients. At the end of the book, he provides instructions for preparing fruit and vegetable jams, emphasising their medicinal and pharmaceutical applications throughout the volume. Their use in cooking is implicit.

Fouad Ben Ahmed : The Critique of Dietary Reason":Ibn Rushd's Nutritional Regimen.

- Professor of Philosophy and Research Methodology at al-Qarawiyyin University in Rabat since 2009.
- Research Associate at Harvard University, Cambridge (2025–2026), and previously served as a Visiting Professor at Harvard (2024–2025) and at the University of Foggia in Italy (2023).
- He is the editor of *Philosmus*, a bilingual journal of philosophy in print and digital form (www.philosmus.org).

Abstract:

The paper examines how Ibn Rushd (Averroes, d. 1198) unites food, medicine, and philosophy into a coherent vision of rational self-care. Drawing on his medical writings and Aristotelian commentaries, I argue that Ibn Rushd treats diet not merely as a physiological necessity but as a philosophical practice—one that sustains the harmony between body, soul, and intellect. Through the principle of "appropriateness" (*al-muwāfaqa*) in quality, quantity, timing, and order, he envisions nourishment as an ethical discipline and a form of reasoning embodied in daily life. In regulating food, sleep, and drink, the philosopher-physician articulates a moral physiology in which eating well is inseparable from thinking well—a regimen of balance that mirrors the rational order of the cosmos.

Session parallèle N 6: Nutri Gastro (en collaboration avec le pole digestif)

Hakima Abid (Maroc) :De la faim à l'abondance, histoire de la MASLD

- Hepato-gastro- enterologue au CHU Fes

Resumé :

Le foie, organe métabolique par excellence, reflète à lui seul les bouleversements des comportements alimentaires et des conditions de vie humaines. À travers l'histoire, il a accompagné l'humanité dans son passage progressif de la pénurie à l'abondance, enregistrant dans ses cellules les marques successives de la faim, de la renutrition et du trop-plein calorique.

Dans les contextes anciens de sous-nutrition, la stéatose hépatique apparaissait comme une conséquence directe de la carence protéique. L'absence d'apolipoprotéines nécessaires à l'exportation des triglycérides conduisait à leur accumulation intra-hépatocytaire. Cette stéatose dite « de carence » est typique du « kwashiorkor » et des formes sévères de malnutrition infantile décrites dès le milieu du XX^{e} siècle. Elle traduisait une incapacité du foie à accomplir son rôle de régulateur énergétique dans un organisme privé de substrats essentiels.

Avec la renutrition, notamment lors des phases de récupération rapide après famine ou anorexie, le foie subissait une nouvelle agression métabolique : l'afflux soudain de glucose et d'insuline stimulait une lipogenèse intense, conduisant à une **stéatose de renutrition** ou *refeeding fatty liver*. Ce phénomène illustre la fragilité hépatique face aux transitions nutritionnelles brutales, où l'équilibre entre apport et métabolisme reste instable.

L'entrée dans l'ère de l'abondance a inversé les problématiques : la rareté des nutriments a cédé la place à leur excès. La révolution industrielle, l'urbanisation et la mondialisation alimentaire ont conduit à une surconsommation de calories, de sucres simples et de graisses saturées. Le foie, au centre du métabolisme énergétique, est devenu le principal récepteur de cet afflux. La « résistance à l'insuline », l'augmentation du flux d'acides gras libres et la lipogenèse de novo ont conduit à une accumulation hépatique de triglycérides,

marquant l’émergence d’une nouvelle entité : la « stéatose hépatique non alcoolique (NAFLD) ».

Décrite pour la première fois par **Ludwig et al. en 1980**, cette entité a longtemps été perçue comme un équivalent « non alcoolique » de l’hépatite alcoolique. Toutefois, les connaissances accumulées ces dernières décennies ont profondément modifié cette vision. Le terme **MASLD (Metabolic dysfunction–Associated Steatotic Liver Disease)**, adopté en 2023 par un consensus international (*Eslam et al., J Hepatol 2023*), replace la maladie dans son contexte métabolique global, incluant les liens étroits entre foie, tissu adipeux, muscle squelettique, intestin et microbiote.

Les mécanismes physiopathologiques de la MASLD reposent sur plusieurs « coups » métaboliques parallèles : insulinorésistance, stress oxydatif, inflammation chronique de bas grade, et dérèglement du microbiote intestinal. Ces perturbations interconnectées transforment progressivement la stéatose bénigne en « stéato-hépatite métabolique (MASH) », caractérisée par une inflammation hépatocellulaire et une fibrose pouvant évoluer vers la cirrhose ou le carcinome hépatocellulaire.

Ainsi, la trajectoire du foie « de la stéatose de carence à la stéatose de surcharge ! illustre parfaitement la dynamique mondiale des transitions alimentaires et sanitaires. De l’économie de survie à la société d’abondance, le foie a suivi l’évolution des civilisations, devenant aujourd’hui un indicateur privilégié du déséquilibre nutritionnel moderne. Comprendre cette histoire, c’est relier les pathologies digestives à la biographie métabolique de l’humanité. C’est aussi souligner que la prévention des maladies du foie ne se résume pas à la lutte contre l’alcool ou les virus, mais passe désormais par une « réflexion globale sur les comportements alimentaires, les inégalités nutritionnelles et la santé métabolique ». Le passage de la faim à l’abondance ne se mesure plus seulement en calories, mais en santé du foie — ce miroir silencieux de nos excès et de nos carences.

Paola Capone: Medical treatment and nutrition: Intersecting paths through history

Abstract:

The work to be presented is structured into two sections:
The first presents the history of the most famous text of the Salernitan Medical School, the Regimen Sanitatis Salernitanum, of which three versions are known—one minimal with only 365 verses, which is the most widely disseminated, published worldwide for five centuries, not only in Latin but also in the languages of different countries. The other two, published by De Renzi, contain 2130 and 3520 verses. The Regimen is presented as a verse-based health rule that summarizes all the hygienic principles of Greek, Arab, and Salernitan schools, complemented by everything that has developed in the form of popular knowledge, including numerous norms of nutrition, elements of botany, agriculture, alchemy, magic, astrology, also accompanied by an explanatory comment. It is a manual of hygiene intended for all men who wish to preserve their health, emphasizing daily exercise and bodily functions. Its pages address issues related to food, baths, the proper balance of opposites such as motion and rest, sleep and wakefulness, without neglecting the balance of feelings: these are the "six non-natural elements" of Galenism, already present in the earliest verses.

The second section analyzes the connections between the aphorisms of the Regimen related to the 18 simples (medicinal plants) included in the short version, which were entrusted with the treatment of certain diseases, and the effects of their active principles on functional biochemistry and changes in the gut microbiota, demonstrating how medieval insights anticipated modern concepts of “microbial modulation.”

We researched the bibliography concerning the variations in the microbiota induced by the plants considered. The microbiota was chosen to modernize the ancient aphorisms, as it is a very recent area of investigation that places microbiota activity at the center of the organism’s neurohormonal behaviors.

Its pathophysiological role is to regulate digestion and nutrient absorption, intervene in the immune system (70% of immune cells reside in the intestine), influence neuronal processes, the gut-brain axis, thanks to the production of

neurotransmitters such as GABA and serotonin, and regulate systemic inflammation related to chronic diseases and red-ox disorders.

Current scientific knowledge about the molecular action of plant active principles on the biochemistry of various bodily functions, along with their influence on the composition and biodiversity of the gut microbiota—made possible by recent molecular biology techniques such as NGS—reflects the surprising foresight of the Regimen Sanitatis Salernitanum.

Carlos Viesca :Les habitudes alimentaires en Mexique avant la colonisation espagnole

Mounia El Youssfi :Microbiote intestinal et alimentation, entre heritage et modernite

Nada Lahmidani :Prévention du cancer colorectal : le patrimoine culinaire

- Gastro-entérologue, CHU Hassan II Fès
- Faculté de médecine, de pharmacie et de médecine dentaire de Fès , Maroc

Résumé :

Le cancer colorectal (CCR) est le premier cancer digestif au Maroc. Des études épidémiologiques récentes ont montré que son incidence augmente considérablement au fil des ans, comme dans de nombreux pays en développement . Au Maroc, le cancer colorectal représente un problème de santé majeur ; il est la troisième cause de cancer. Vingt-cinq pour cent des patients sont âgés de moins de 50 ans au Maroc . Selon la base de données informatisée du cancer colorectal du CHU Hassan II, environ 120 à 150 cas sont diagnostiqués chaque année, dont 65 % aux stades I-II et III. De nombreux facteurs de risque du CCR ont été identifiés ces dernières années incluant des facteurs non modifiables (âge , sexe , l'histoire familiale mais aussi la prédisposition génétique..) mais aussi des facteurs modifiables incluant principalement des facteurs environnementaux tel le tabac , le surpoids et les facteurs nutritionnels .En effet , de nombreuses publications ces dernières années ont souligné le rôle majeur des facteurs nutritionnels dans l'augmentation ou la réduction du risque . Parmi les facteurs de risque on souligne l'effet majeur des viandes rouges et transformées , et les graisses animales qui peuvent augmenter jusqu'à 17 à 20 % ce risque .En contre partie , l'alimentation riche en graines complètes , en calcium et en produits laitiers pourraient être protectrices . L'art culinaire marocain s'inspirant principalement du régime méditerranéen et la richesse des plats marocains ainsi que les modalités traditionnelles de préparation offriraient probablement une protection durable contre le cancer colorectal .Le grand challenge étant de sauvegarder ce patrimoine culinaire face à la westernalisation du régime avec la mondialisation et l'industrialisation ce qui constitue le défi de tous les acteurs impliqués dans la prévention contre le cancer colorectal au Maroc

Adnane Mohssine :Dietary regimens for digestive diseases in Ibn Tufail's Urjuza

- طبيب مقيم بمصلحة الجراحة الباطنية
- عضو بلجنة التراث

الملخص:

يهدف هذا العرض إلى دراسة منهج ابن طفيل في معالجة أمراض الجهاز الهضمي والكبد من خلال الحمية الغذائية كما وردت في أرجوزته الطبية *الأرجوزة في الطب*، مع مقارنتها بالمفاهيم المعاصرة في التغذية العلاجية وعلوم أمراض الجهاز الهضمي.

يكشف ابن طفيل في منظومته عن رؤية متكاملة تعتبر الحمية محورًا أساسيا في العلاج، لا تقل أهمية عن الدواء. فهو يرى أن الأغذية تُستخدم لضبط الأخلاط الأربعة واستعادة توازن المزاج، فيصف لكل حالة غذاءً يناسبها: الأغذية الباردة للرطوبات الحارة، والدافئة للأمزجة الباردة، والمسهلة عند الامتلاء، والمقوية عند الضعف.

في باب المعدة وأمراضها يقدّم حميات دقيقة ووصفات طبيعية شافية.

وتبرز في الأرجوزة دقّة ابن طفيل في تحديد الجرعات (*posology*) باستخدام وحدات علمية مثل **الدرهم** و**المثقال** و**الرطل**، مما يعكس وعيًا صيدلانيًا مبكرًا بقواعد القياس الدوائي، يقارب ما يُعرف اليوم بالجرعة الفارماكولوجية.

تُظهر المقارنة بين رؤيته ومنهج التغذية العلاجية الحديثة (Dietary Therapy) أن ابن طفيل سبق في إدراك أهمية التوازن الغذائي، والتمييز بين الأغذية القابضة والملينة، والمبردة والمقوية، مما يجعله أحد أوائل من نظّروا للعلاقة التكاملية بين الغذاء والدواء.

تخلص الدراسة إلى أن الحمية عند ابن طفيل هي **علاجٌ متكامل** يستند إلى الفهم العميق لطبيعة الجسم والمرض، وتُعدّ رؤيته أساسًا يمكن إعادة قراءته ضمن الإطار الحديث لما يُعرف اليوم بـ **الطب الغذائي (Nutritional Medicine)**