

Multidisciplinary view of the use of artificial intelligence for natural weight loss as an adjunct to the plantago ovata plant in integrative and complementary health practices

Visión multidisciplinaria del uso de la inteligencia artificial para la pérdida de peso natural como complemento de la planta plantago ovata en prácticas de salud integrativas y complementarias.

Olhar multiprofissional do uso da inteligência artificial para emagrecimento natural como coadjuvante à planta plantago ovata em práticas integrativas e complementares em saúde

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Introduction: In daily nursing practice, there is a growing search for safe and effective strategies for weight loss, this being a recurring theme in the demands for health care and education. Among the alternatives studied, the plantago ovata, known as Psyllium, stands out, whose properties promote satiety and regulation of intestinal transit. With technological advances, especially in the field of artificial intelligence (AI), it has become possible to analyze large volumes of data with greater precision, expanding the understanding of the therapeutic effects of medicinal plants. AI, as an emerging tool in health, allows nurses to integrate clinical knowledge with cutting-edge technologies, using systems capable of simulating human cognitive processes, such as learning and decision-making, an application that is directly reflected in care practice, whether in the personalization of care, diagnostic support or the analysis of clinical data to optimize results. In this promising scenario, the implementation of Integrative and Complementary Health Practices (PICS) in nursing training remains incipient, reflecting a lack of robust scientific evidence regarding its effectiveness in the academic and care context¹⁻³.

Objective: Through an experience report, we propose to systematically review the literature on the effectiveness of Psyllium as an adjuvant in the weight loss process, while exploring the potential of AI in the interpretation of these data. The relevance of the research is justified by the need to incorporate technological approaches, expand therapeutic possibilities, and contribute to evidence-based care.

Methodology: This is a descriptive, qualitative, critically-reflexive study, configured as an experience report, developed by a nurse in the town of Santo André, State of São Paulo, Brazil, using the time frame from 2020 to 2025. Theoretical references from journals and scientific articles, located on specialized websites and researched in the Scientific Electronic Library Online (SciELO), Latin America and Caribbean Health Sciences Literature (LILACS), and PubMed databases were used. The inclusion criteria adopted were full-text publications, in Portuguese and English, with the use of specific descriptors and consultations with renowned databases. This approach ensured a comprehensive and rigorous process, which strengthened the validity and reliability of the findings, contributing to an evidence-based practice in the use of Psyllium as an adjuvant in weight loss and in the application of AI in the analysis of health data. The health descriptors used were Artificial Intelligence, plantago ovata, Weight Loss, Integrative and Complementary Practices, and Interdisciplinary Health Team. Considering that aesthetic care is intrinsically related to quality of life and the promotion of well-being.

Results and Discussion: In the experience report, in the nurse's history, the information was obtained through anamnesis, female, 50 years old, reported being overweight with a BMI of 33.5 kg/m², used Psyllium 500mg per day and aerobic exercise for 30 minutes per day from November 2024 to May 2025, with a weight loss of 8 kg. Given the literature, supplementation with this fiber plantago ovata (Psyllium), is beneficial for individuals with Metabolic Syndrome, especially in glycemic control and intestinal transit, in the field of technology applied to health, Artificial Intelligence



(AI) has been used to personalize interventions and predict weight changes in overweight and obese individuals. A 2024 study demonstrated that the combination of AI algorithms with the possibility of identifying factors that influence weight loss, offering support for more effective strategies, concomitant with the 2024 Guidelines of the Brazilian Diabetes Society, highlights the role of AI in personalizing the treatment of patients with comorbidities, which may include interventions aimed at controlling body weight. The information was obtained through the anamnesis of a female patient and Integrative and Complementary Health Practices (PICS), such as phytotherapy, acupuncture, auriculotherapy, and yoga, show positive results in reducing body weight, abdominal circumference, body mass index (BMI), and cholesterol levels. Official data from the Ministry of Health also indicate a significant growth in the offer of these practices in the Unified Health System (SUS), with a 67% increase in procedures performed in Primary Care

between 2022 and 2024, reinforcing their role as an integral part of health care^{4,5}.

Conclusion: This study demonstrated that psyllium is an effective adjuvant in weight control, especially when combined with adequate water intake (2 liters per day) and associated with integrative and complementary health practices. This approach has proven to be safe and accessible in the fight against obesity. Artificial intelligence plays an important role in weight loss research, enabling the analysis of large volumes of data and the personalization of treatments, which enhances therapeutic efficacy. It is essential that health institutions implement policies aimed at the well-being of professionals, promoting healthy habits and integrating practices such as acupuncture, phytotherapy, auriculotherapy, and physical exercise. Such initiatives facilitate the adoption of therapeutic strategies, promoting autonomy, self-care, and a comprehensive and humanized approach to health care.

References

1. Kassa MG, Teferi DA, Asemu AM, Belachew MT, Satheesh N, Abera BD, et al. Review on psyllium husk: nutritional, functional, health benefits, food industry applications, waste treatment, and potential negative effects. *CyTA - Journal of Food*. 2024;22(1). <https://doi.org/10.1080/19476337.2024.2409174>
2. Silva NCM, Costa ADMJ, Nascimento LS, Nunciaroni AT. Aplicação de práticas integrativas e complementares em estudantes de enfermagem: revisão integrativa da literatura. *Glob Acad Nurs*. 2022;3(4):e308. <https://dx.doi.org/10.5935/2675-5602.20200308>
3. Freitas PAS, Silva MRB, Santos MF, Silva HCDA, Deus FRS, Moreira JVS. A atuação do enfermeiro esteta: uma revisão de literatura. *Glob Acad Nurs*. 2023;4(Sup.2):e361. <https://dx.doi.org/10.5935/2675-5602.20200361>
4. Coelho RL, Esteves JP, Ragoonete IA, Costa AA, Teles MS, Moreira RM, Oliveira FC, Nascimento LM, Brito MA, Fernandes AV, Santos HR, Almeida CR, Ribeiro LA, Souza EM, Martins CP. Desafios e avanços na personalização diagnóstica e terapêutica na era da inteligência artificial na saúde. *Rev Bras Implant Ciênc Saúde*. 2024;6(1):1282–1290. doi: 10.36557/2674-8169.2024v6n1p1282-1290.
5. Ministério da Saúde (BR). Práticas Integrativas e Complementares em Saúde crescem 70% e ampliam o acesso ao cuidado integral no SUS [Internet]. Brasília: Ministério da Saúde; 2025 [citado 2025 maio 12]. Disponível em: <https://www.gov.br/saude/pt-br/assuntos/noticias/2025/marco/praticas-integrativas-e-complementares-em-saude-crescem-70-e-ampliam-o-acesso-ao-cuidado-integral-no-sus>

