

THERAPEUTIC ADVANCES in *Drug Safety*

Contents

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epidermidis. **Conclusions:** Apples that are rejected by the commercial circuit can be valued through fermentation, showing promising antimicrobial activity for some bacterial species.

Keywords: apple, fermentation, antimicrobial activity.

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Abstract-Post-22 Other

Mental health and anxiolytics in times of covid-19

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Background: The COVID-19 pandemic has triggered not only a global health emergency but also a significant psychological impact [1]. Anxiety has emerged as one of the most prevalent psychiatric outcomes, often intensifying other mental health disorders and reducing overall quality of life [1,2]. This rise in anxiety has led to increased use of pharmacological treatments, particularly anxiolytics [1,2,3]. **Objectives:** To examine the relationship between the COVID-19 pandemic and the use of anxiolytic medications, focusing on anxiety levels within the adult Portuguese population. **Methods:** A descriptive, cross-sectional study was conducted using an online questionnaire distributed to Portuguese adults between January and February 2022. The Beck Anxiety Inventory was used to assess anxiety levels. The survey also gathered data on the use of pharmacological and non-pharmacological strategies for managing anxiety. **Results:** The findings indicated that 13.1% of participants exhibited severe

anxiety, while 20.4% presented moderate anxiety. A notable increase in the consumption of anxiolytic medications was observed, with 81% of medicated participants reporting the use of anxiolytics. Furthermore, 70.8% had been using these medications for a duration exceeding three months. Additionally, 28.5% of respondents reported engaging in non-pharmacological methods to cope with anxiety symptoms. **Conclusions:** The COVID-19 pandemic was associated with increased anxiety levels and a greater reliance on anxiolytic medications among Portuguese adults. These findings highlight the urgent need for public health strategies aimed at preventing and managing anxiety through both pharmacological and alternative approaches.

Keywords: COVID-19; Mental Health; Anxiolytics.

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Abstract-Post-25 Other

Beer raw materials: evaluation of antioxidant activity and potential skin benefits

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Background: Malt and hop extracts have shown promising skin benefits, but scientific evidence is scarce [1]. **Objectives:** To evaluate, *in vitro*, the potential of aqueous extracts of malt and hops for antioxidant, photoprotective and metabolic activity in human keratinocytes (HaCaT cells). **Methods:** Experimental study, with the

preparation of aqueous extracts of three malts (Chocolate, Munich and Vienna) and hops (Saaz, Citra and Mosaic), according to Silva et al. (2022) [2]. Total of phenolic compounds (TPC), antioxidant (hydrogen peroxide neutralization assay), photoprotective (sun protection factor-SPF), and metabolic activity of HaCaT cells (3-(4,5-Dimethyl-2-thiazolyl)-2,5-diphenyl-2H-tetrazolium bromide -MTT assay) were evaluated. Data were analysed using the one-way ANOVA test and significant differences were considered for $p < 0.05$. **Results:** The aqueous extracts of hops showed higher TPC ($54.20 \pm 1.56 - 90.02 \pm 0.48$ mg GAE/g), antioxidant ($1.88 \pm 0.11 < IC_{50} < 3.81 \pm 0.15$ μ g/mL) and photoprotective activity ($173.77 \pm 2.75 < SPF < 213.97 \pm 4.77$), compared to malt extracts ($10.97 \pm 0.48 < TPC < 21.18 \pm 0.40$ mg GAE/g, $11.67 \pm 0.63 < IC_{50} < 17.63 \pm 0.46$ μ g/mL and $21.22 \pm 0.12 < SPF < 79.53 \pm 0.93$) ($p < 0.05$). Generally, cell viability was higher than 80% at the concentrations tested (1 - 500 μ g/mL). The hop extracts had higher cell viabilities than the control (culture medium), showing greater potential for skin regeneration. Saaz hops have the highest TPC and SPF ($p < 0.05$). **Conclusions:** The extracts show promising activities, mainly hops extracts, at the cutaneous level, but further studies are needed to corroborate the activities studied and the possibility of integrating them into cosmetic formulation.

Keywords: Malt, Hop, Skin

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Abstract-Post-36 Other

Efficacy versus effectiveness. what is the impact of these parameters on the process of evaluating a medication?

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Background: This narrative review explores the distinction between efficacy and effectiveness in medication evaluation. While efficacy reflects a medicine's performance under controlled, ideal conditions, effectiveness relates to its impact in real-world clinical settings. Understanding this difference is crucial for accurate drug assessment and informed clinical, regulatory, and policy decisions. **Objective:** The purpose of this article is to present a narrative review on the impact of the parameter's efficacy and effectiveness in the process of evaluating a medicine. **Methods:** The review was carried out in three databases: PubMed, Scopus and Web of Science. The search strategy involved the construction of a Boolean combination for each of the databases used. The definition of inclusion criteria is based on the Preferred Reporting Items for Systematic Reviews and Meta-analysis (PRISMA) model. The inclusion criteria were articles written in English, containing terms such as efficacy and effectiveness, as well as comparison of results, and published between 2004 and 2024. This review took place in November of 2024. **Results:** 83 records were initially obtained. From these 83 records, 11 articles were selected to prepare this article, taking into account the eligibility criteria. The studies showed different results depending on whether they analyzed effectiveness and/or efficacy. **Conclusion:** The parameters of efficacy and effectiveness have a significant impact on the evaluation of a medicine, as a drug may have high efficacy, but if it is not effective in the real world, its impact on public health remains limited.

Keywords: Efficacy, Effectiveness, Evaluation of a medicine.

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