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Health and Well-being in the Life cycle (ICHWBI 2021)

1st international conference on human kinesiology (ICOHK)



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Kinesi Lab



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**INSTITUTO PIAGET UNIVERSITY
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**Coordination by:
Gustavo Desouza**



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O198

Sun Protection Potential Determination of Medicinal Plants

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Background: Solar radiation is associated with problems such as skin cancer and early photoaging (Xiao et al., 2018). As a preventive and skin protective, synthetic compounds are used in various cosmetic products. However, the toxicity of these compounds is a major concern since it can cause health problems (Cefali et al., 2019). Plants exposed to high levels of solar radiation produce compounds to defend themselves from ultraviolet radiation and oxidative stress. Therefore, plants offer a source of UV protecting compounds that can be used in cosmetic products (Nunes et al., 2018). **Objectives:** This study aims to determine the solar protection potential of *Pterospartum tridentatum* and *Melilotus indicus*. **Methods:** Aqueous and methanolic extracts (80:20, V/V) of each plant were prepared and subjected to phytochemical screening. Colorimetric methods were also used to determine antioxidant activity *in vitro* (DPPH assay, Iron Chelating Activity (ICA) and Total Phenolic Compounds (TPC) content), absorption coefficient and sun protection factor (SPF). **Results:** All extracts presented phenolic compounds, flavonoids, tannins and diterpenoids. All of them showed alkaloids, except the methanolic extract of *P. tridentatum*. The aqueous extract of *M. indicus* showed triterpenoids and the methanolic terpenoids. As for antioxidant activity, extracts showed values between 386.31±10.77 - 615.28±21.28 mgGAE/100mg for TPC; 169.89±9.00 to 316.27±29.90 µg/mL for DPPH and 77.01±3.58 - 378.75±24.59 µg/mL for ICA. The absorption capacity showed values between 0.04 - 11.11 and the SPF 15.03±1.80 - 30.80±2.18. **Conclusions:** Both plants demonstrate the presence of phenolic compounds, flavonoids, tannins, diterpenoids and alkaloids. The extracts demonstrated antioxidant capacity and a good UV absorption and sun protection capacity. This study may contribute to the increase of knowledge about two Portuguese plants aiming its possible introduction in cosmetic products, as, for example, solar protective agents.

Keywords: *Pterospartum tridentatum*, *Melilotus indicus*, antioxidant capacity, sun protection factor

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Relação entre Qualidade do Sono e Consumo Alimentar

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Introdução: O sono está associado a vários processos hormonais e metabólicos do organismo e é importante na manutenção da homeostasia metabólica (Sharma & Kavuru, 2010). As funções mais importantes do sono são a restauração das funções do corpo, síntese de proteínas e a prevenção da letargia. De acordo com estudos epidemiológicos, existe relação entre a duração do sono e a dieta (Zadeh & Begum, 2011). **Objetivos:** Verificar se existe relação entre a qualidade do sono e o consumo alimentar. **Métodos:** Foi realizado um estudo transversal, observacional e analítico numa amostra não probabilística constituída por 132 indivíduos. Como instrumentos de recolha de dados recorreu-se a um questionário de frequência alimentar (Lopes, 2006) e ao questionário *Pittsburgh Sleep Quality Index* (PSQI), versão portuguesa (João, Becker, Jesus & Martins, 2017). Resultados: A maioria dos inquiridos eram do sexo feminino (63,3%), com idades compreendidas entre os 18 e os 67 anos. Quanto à qualidade de sono, 71,2% dos indivíduos apresentavam má qualidade de sono e 28,8% apresentavam boa qualidade de sono. No que concerne à relação do consumo alimentar com a qualidade do sono, verificou-se uma relação inversa no consumo de leite magro (*p-value* 0,040; *Ró* -0,179), peixe gordo (*p-value* 0,017; *Ró* -0,208), óleo girassol/milho/soja (*p-value* 0,050, *Ró* -0,171), couve penca (*p-value* = 0,038; *Ró* = -0,181) e Laranjas/Tangerinas (*p-value* 0,022; -0,191). O consumo de café revelou uma associação direta, mas fraca com a qualidade do sono (*p-value* 0,030; 0,189).

Conclusões: Verificou-se uma correlação entre a qualidade do sono com o consumo alimentar, sendo fundamental intervir nesta dualidade de forma a fomentar uma boa qualidade de vida.

Palavras-chave: hábitos alimentares, consumo alimentar, comportamento alimentar, qualidade de sono, duração de sono

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O204

Early traumatic shame experiences, mental health, and gender: How are they related?

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