

NATURAL PHOTOPROTECTION ALTERNATIVES TO SYNTHETIC AND MINERAL UV FILTERS: LITERATURE REVIEW

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Sun is useful and necessary for human health, however high levels of UV rays are harmful to the human body. This manifests itself into sunburn, premature aging, pigmentation disorders and allergic skin diseases. Also, long-term exposure to sunlight is one of the most significant factors in the development of skin cancer. The main ways to protect skin against UV rays are to avoid the sun at its maximum intensity, to cover the skin with clothes and to use the sunscreens. UV filters are usually synthetic and mineral. However, the side effects studied by these filters make us look for alternatives. For this reason, there has been a recent interest in natural materials that have ultraviolet protective activity and can act as natural filters for UV rays. In this review we have evaluated articles that has appeared in the last 5 years, and we have critically collected the most significant data. Several databases, namely «Pubmed», «EBSCO», «Science Direct», «Springer Link», «Google Scholar» were used as literature sources. Only articles in the English language have been selected. In this review we focused on natural materials with sun protection factor (SPF) such as natural herbal extracts, compounds and oils.

In general, the currently available synthetic and mineral filters in sunscreen can cause side effects. Even though natural materials cannot completely replace the synthetic and mineral filters, this study provides a strong foundation on the status and potential use of natural antioxidants for UV filtration.