RESUMO SIMPLES - CAGR - CIÊNCIAS AGRÁRIAS

PROFILE OF COLORANTS USAGE IN THE PERUVIAN FOOD INDUSTRY

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Color influences the perception and acceptance of food and beverages. Therefore, the food industry uses colorants to achieve a more appealing appearance for consumers. The use of synthetic colorants was common due to their low cost, stability, high intensity, and color uniformity. However, scientific evidence suggested adverse health effects, such as behavioral changes in children and allergic reactions. This has led developed countries to prohibit or severely restrict their use, while in countries like Peru, their use is still permitted within certain limits, generating concern among informed consumers. The aim of this study was to identify patterns that characterize the use of colorants in the Peruvian food industry. For this purpose, in May 2026, the colorants mentioned

in the labels of 320 food products were recorded in a database. The products embraced the categories of confectionery, gelatins, dairy beverages, yogurt, soft drinks, energy drinks, hydrating drinks, meat products, sauces, ice creams, juices and nectars marketed in two supermarket chains with the greatest presence in the districts of metropolitan Lima. The use of 24 colorants was identified in the Peruvian food industry, 14 of which were synthetic and 10 natural. The most frequently used colorants were Allura Red AC (INS 129), Tartrazine (INS 102), Sunset Yellow FCF (INS 110), and Brilliant Blue FCF (INS 133), with a presence in 34.48%, 28.44%, 25.94%, and 21.88% of the food products, respectively. On the other hand, 16.25% of the food products did not contain any declared colorant, primarily dairy and meat products. This suggests that in certain food categories, colorants are not necessary because the color is provided by the raw materials and is sufficient to meet consumer expectations. It was also observed that products aimed at children, primarily in the confectionery and beverage categories, use a mixture of several colorants simultaneously to create more appealing colors. This strategy was used in combination with visual marketing on the labels, including images associated with concepts such as "happiness", "fun" and "cartoons". The results reflect a marked dependence on synthetic colorants in the Peruvian food industry. Therefore, it is hoped that, through stricter regulations, the promotion of safe alternatives, and an informed citizenry, a balance between innovation and safety can be achieved, ensuring that color is not only attractive but also safe for everyone.

Palavras-chave: synthetic dye; peruvian market; food standards.