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Título	Brazilian berries prevent colitis induced in obese mice by reducing the clinical signs and intestinal damage
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Resumo	<p>This study hypothesized that polyphenol- and fiber-rich Brazilian fruits could elicit preventive effects in inflammatory bowel diseases (IBDs), even when applied to obese subjects. Therefore, the purpose was to investigate the implications of the consumption of açaí pulp and jaboticaba peel on obese mice with dextran sodium sulfate (DSS)-induced colitis. First, obesity was induced by a high-fat diet for 13 weeks, followed by the inclusion of DSS in the water for five days. Animals received during the whole experiment a standard or high-fat diet, with the last one containing or not 5% (w/w) freeze-dried açaí or jaboticaba. The diets added with the fruits had a higher content in total phenolic compounds (1.1 mg GAE/g) and an increased antioxidant capacity (up to 25.32 $\mu\text{mol TE/g}$). The high-fat diet promoted weight gain starting from the eighth week of the experiment. While jaboticaba delayed and reduced body weight gain, açaí highly exacerbated it, also increasing the accumulation of fats. Colitis was successfully induced as seen by the clinical signs and damaged colonic mucosa. The high-fat diets did not increase the severity of colitis in comparison with the standard regimen, despite promoting additional weight gain. Animals that received açaí or jaboticaba did not have many symptoms of colitis and showed a grand recovery in colonic histological parameters. Additionally, açaí increased the expression of tight-junction-related molecules. Despite being included in a high-fat diet, the fruits still managed to promote healing effects in colitis, therefore indicating their potential for trials with IBD patients.</p>
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