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Título	Chrysin Modulates Genes Related to Inflammation, Tissue Remodeling, and Cell Proliferation in the Gastric Ulcer Healing
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Resumo	Chrysin exhibits anti-inflammatory and antioxidant activities. Here, the gastroprotective effect of chrysin was investigated in mouse models of gastric ulcer induced by absolute ethanol, acetic acid, and ischemia-reperfusion injury. The gastric-healing effect was evaluated at 7 and 14 days after treatment; the mechanism of action was verified using the expression of metalloproteinase 2 (*MMP-2*) and 9 (*MMP-9*), caspase-3, cyclooxygenase 1 (*COX-1*) and 2 (*COX-2*), epidermal growth factor (*EGF*), and interleukin-10. Chrysin (10 mg/kg) inhibited macroscopic lesions and increased catalase activity in the mouse model established using absolute ethanol. It ameliorated the gastric ulcer caused by acetic acid by improving the expression of inflammatory genes such as *COX-2*, inhibiting negative remodeling promoted by MMP-9, increasing cell proliferation effect via EGF, and reducing cellular apoptosis by modulating caspase-3. A faster healing effect was evident in the first 7 days of treatment compared to 14 days of treatment, indicating the pharmacological potential of chrysin. Overall, these results demonstrate the potent effect of chrysin in the gastrointestinal tract and elucidate the genes involved in the healing of gastric ulcers. Moreover, an increase in the levels of gastric mucosa defensive factors is involved in the activity of chrysin in the gastric mucosa.
Fomento	