

# Syntheses and Evaluation of the Analgesic Activity of Some 4-Acetyl-4-phenylpiperidine and 4-Hydroxy-4-phenylpiperidine Derivatives

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Synthesis and analgesic activity of 4-phenylpiperidine derivatives is a topic of high actuality. As part of a programme towards obtaining new potential analgesics, ten derivatives of 4-acetyl-4-phenylpiperidine and ten derivatives of 4-hydroxy-4-phenylpiperidine were synthesised and characterized through spectroscopic techniques. All derivatives along with the parent compounds were evaluated for analgesic activity in the acetic acid-induced writhing assay and tail-flick test in mice. All derivatives of 4-acetyl-4-phenylpiperidine except one compound exhibited more or less protection against mice writhing, whereas all the compounds proved to be inactive in the tail-flick test at doses of 50 and 100 mg/kg body weight.