



# Pain and Placebo

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## Abstract

Expectation of pain relief can reduce pain and prior positive experiences increase the analgesic responses to subsequent placebo. Placebo effect is the positive beneficial response after receiving a placebo. Nocebo effects are the negative responses after receiving a placebo, which are usually minor, but can be life threatening. Endogenous neuropeptides such as opioids, dopamine, serotonin and cannabinoids are released in placebo analgesia. Part of the placebo response is mediated by intrinsic cognitive factors, alone or in combination with extrinsic environmental factors.



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## References

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