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**Melanocortin and leptin signaling systems: central regulation of catabolic energy balance.**

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The recent cloning of the ob gene (leptin) has revolutionized our understanding of obesity and the underlying factors that govern weight homeostasis. There is growing evidence that long term food intake regulation is controlled by the central nervous system by a number of peptide hormones in response to changes in leptin levels. Studies of these hormones, using both genetic and pharmacological approaches, have provided a foundation for decoding the molecular logic of the neuronal circuits which regulate food intake control and energy balance. A review of the current progress in the melanocortin-4 receptor pathway, with particular emphasis on its relation to leptin, neuropeptide Y and other obesity hormones known to modulate weight homeostasis, is presented.

Publication Types:

- Review
- Review, Tutorial

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