Abstract
We have shown that a number of compounds which inhibit the degradation of met-enkephalin can produce naloxone-reversible analgesia in mice. These compounds also potentiate the analgesia produced by acupuncture, foot shock, and transcutaneous nerve stimulation in animals and humans. The potency of their effectiveness as analgesics or potentiatotors parallels their potency as inhibitors of mouse brain enkephalinase. D-Phenylalanine (DPA), one of these enkephalinase inhibitors, has been used successfully for the management of chronic intractable pain in humans and to potentiate the treatment of many painful conditions by acupuncture. Other aspects of pharmacology of DPA will be discussed, including its effects on the cardio-vascular system, behavior, and lack of development of tolerance and dependence when used chronically in animals and humans.