

nervous system exit the spinal cord between the first thoracic and the second lumbar segments (**Fig. 440-1**). The autonomic preganglionic fibers are thinly myelinated. The postganglionic neurons, located in ganglia outside the CNS, give rise to the postganglionic unmyelinated autonomic nerves that innervate organs and tissues throughout the body. Responses to sympathetic and parasympathetic stimulation are frequently antagonistic (**Table 440-1**), reflecting highly coordinated interactions within the CNS; the resultant changes in parasympathetic and sympathetic activity provide more precise control of autonomic responses than could be achieved by the modulation of a single system. In general, the “fight or flight” response is a consequence of increased sympathetic activity while the “rest and digest” reflects increased parasympathetic activity.

TABLE 440-1 Effects of Sympathetic and Parasympathetic Systems on Various Effector Organs