Poorly-controlled acute pain can predispose patients to chronic pain syndromes. Box 5-5 provides a list of numerous complications of untreated pain in infants. A guiding principle in pain management is that prevention of pain is always better than treatment. Pain that is established and severe is often more difficult to control. When pain is unrelieved, sensory input from injured tissues reaches spinal cord neurons and may enhance subsequent responses. Long-lasting changes in cells within spinal cord pain pathways may occur after a brief painful stimulus and may lead to the development of chronic pain conditions.

## Box 5-5

## Consequences of Untreated Pain in Infants

## **Acute Consequences**

Periventricular-intraventricular hemorrhage

Increased chemical and hormone release

Breakdown of fat and carbohydrate stores

Prolonged hyperglycemia

Higher morbidity for neonatal intensive care unit patients

Memory of painful events

Hypersensitivity to pain

Prolonged response to pain

Inappropriate innervation of the spinal cord

Inappropriate response to nonnoxious stimuli

Lower pain threshold

## **Potential Long-Term Consequences**