to give up control of the situation, as illustrated in Figure 10-1. Both responses are mediated by the sympathetic nervous system. Once the pressure or threat has passed, hormone levels usually return to normal, mediated by the parasympathetic nervous system. Although the body typically recovers rapidly from acute stress, it can precipitate or trigger health problems, such as a cardiac arrhythmia or a myocardial infarction (heart attack). Long-term stress is caused by persistent, unresolved situations, which, if left unmanaged, could lead to chronic pathology.

**CHRONIC PATHOLOGY AND STRESS**

Individuals experiencing chronic pathology and their caretakers are challenged by additional stresses associated with managing physical impairments and dealing with compromised functioning in activities of daily living. Generally, individuals with chronic health conditions have pain and lose strength, musculoskeletal flexibility, and cardiovascular endurance from decreased activity during acute illness. Hypokinesia (abnormally decreased motor function or activity)\(^3\) is a major contributor to the chronic health problems leading to disability resulting from inactivity and deconditioning. Other health concerns associated with chronic illness include altered psychological status, changes in social interactions, altered sleep habits, unhealthy nutritional habits, changes with digestion and elimination, reduced balance and coordination, altered cognitive status (often secondary to medications), financial strain, and concurrent use of several drugs that may pose additional health risks.

Any chronic condition can trigger depression, but the risk increases with the severity of illness and the degree of life disruption it causes. Although depression alone can limit functional abilities, it can also aggravate signs and symptoms of pathology, including fatigue, lethargy, and pain, and lead to social withdrawal. Although the risk of becoming depressed is approximately 10% to 25% for women and 5% to 12% for men in the general population, the risk increases for individuals with chronic illness.\(^4\) Examples of chronic illnesses leading to depression include heart disease, Parkinson’s disease, multiple sclerosis, stroke, cancer, diabetes, and chronic pain syndrome. Behaviors associated with depression include poor health habits (drinking alcohol, smoking, lack of exercise, and poor eating habits) and poor adherence to interventions. The National Alliance for Mental Illness provides a helpful depression and chronic illness fact sheet for patients and health care professionals that outlines coping strategies recommended for individuals with chronic illness (http://www.nami.org).