<table>
<tr><th colspan="3">Stress Patterns and Associated Health Issues</th></tr>
<tr><th>Allostatic Load Patterns</th><th>Neurophysiological
Activation & Inhibition Patterns</th><th>Potential Associated Health Issues</th></tr>
<tr><td>1. Too frequent stress responses to real or perceived stressors (e.g., poverty, child abuse, caregiver for someone with a chronic illness)</td><td>Full activation (SNS) and inhibition (via the HPA) cycle that occurs too frequently</td><td rowspan="3">Overproduction of adrenaline:
• Increase in heart attack and stroke
[Too much adrenaline = surge in blood pressure = damage to vessels of the heart and brain, or lesions where plaque builds and restricts blood flow (“hardening of the arteries”)]
• Hypertension
Overproduction of cortisol:
• Melancholic depression
• Obsessive compulsive disorder
• Panic disorder
• Alcoholism
• Lowered immune systems
• Decrease in memory functions
• Increase in anxiety
• Diabetes
• Malnutrition
• Hyperthyroidism
• Functional gastrointestinal disease</td></tr>
<tr><td>2. Inability to adjust (habituate) to initial challenges that over time, should no longer be threatening (e.g., public speaking, daily commute)</td><td>Full activation (SNS) and inhibition (HPA) cycle when it is not necessary</td></tr>
<tr><td>3. Prolonged stress response after stressor is removed (e.g., remaining activated after an argument, elevated blood pressure hours following a test)</td><td>Both activation (SNS) and inhibition (HPA) return to baseline more slowly or do not shut off when stressor is no longer present</td></tr>
<tr><td colspan="3">All the above load conditions involve long-term overexposure to adrenaline and cortisol</td></tr>
<tr><td>4. Inadequate stress recovery back to baseline</td><td>Decreased inhibition (HPA) to restore balance and promote stress recovery; other systems then compensate and stay activated</td><td>Underproduction of cortisol:
Allergies
Asthma
Autoimmune diseases
Chronic fatigue syndrome
Rashes
Rheumatoid arthritis
PTSD</td></tr>
<tr><td colspan="3">In the above load condition there is long-term overexposure to inflammatory cytokines</td></tr>
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Note: This information is compiled from McEwen’s (2002) book and adapted with permission from *The End of Stress As We Know It,* Washington, D. C.: Joseph Henry Press.