Table 1. Estimated Energy Requirements for Various Activities*

<table>
<thead>
<tr>
<th>Activity</th>
<th>1 METS</th>
<th>4 METS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Care for self</td>
<td>• Eat, drink, dress, use toilet</td>
<td>• Climb 1 flight; walk up hill</td>
</tr>
<tr>
<td>Walk indoors around house</td>
<td>• Walk a block or two, level ground, 2-3 mph (3-5 km/h)</td>
<td>• Walk on level ground, 4 mph (6 km/h)</td>
</tr>
<tr>
<td>Do light housework (e.g., dusting)</td>
<td>• Do light housework (e.g., dusting)</td>
<td>• Run short distance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Do heavy housework (e.g., scrub floors, move furniture)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Moderate recreational activities (e.g., golf, bowl, tennis doubles)</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>&gt;10 METS</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Strenuous sports (swimming, tennis singles, football, skiing)</td>
</tr>
</tbody>
</table>

Table 2. Clinical Predictors of Increased Cardiovascular Risk (Myocardial Infarction, Congestive Heart Failure, Death)

**Major**
- Unstable coronary syndromes
- Recent MI with evidence of important ischemic risk by clinical symptoms or noninvasive study
- Unstable or severe angina (Canadian Class III or IV)
- Decompensated congestive heart failure
- Significant arrhythmias
- High-grade atrioventricular block
- Symptomatic ventricular arrhythmias in the presence of underlying heart disease
- Supraventricular arrhythmias with uncontrolled ventricular rate
- Severe valvular disease

**Intermediate**
- Mild angina pectoris (Canadian Class I or II)
- Prior myocardial infarction by history or pathological Q-waves
- Compensated or prior CHF
- Diabetes mellitus
- Creatinine >2.0 mg/dl

**Low**
- Advanced age
- Abnormal ECG (left ventricular hypertrophy, left bundle branch block, ST-T abnormalities)
- Rhythm other than sinus (e.g., atrial fibrillation)
- Low function capacity (e.g., inability to climb one flight of stairs with a bag of groceries)
- History of stroke
- Uncontrolled systemic hypertension

Table 3. Cardiac Risk Stratification for Noncardiac Surgical Procedures

**Major**
- (Reported cardiac risk often >5%)
  - Emergent major operations, particularly in the elderly
  - Aortic and other major vascular
  - Peripheral vascular
  - Anticipated prolonged surgical procedures associated with large fluid shifts and/or blood loss

**Intermediate**
- (Reported cardiac risk 1-5%)
  - Intraprostatical and intrathoracic
  - Head and neck
  - Carotid endarterectomy
  - Orthopedic
  - Prostate

**Low**
- (Reported Cardiac Risk generally <1%)
  - Endoscopic procedures
  - Superficial procedure
  - Cataract
  - Breast

*Combined incidence of cardiac death and nonfatal myocardial infarction.
†Do not generally require further preoperative cardiac testing.

Reference:
- Fleisher L, Eagle KA. Lowering Cardiac Risk in Non-Cardiac Surgery. NEJM 2001;345:1677-1682

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