**Introduction:** Physical exercise is important and can boost immunological functioning. Despite physical wellness, mental illness can cause immunological malfunction and decline. This portrays how the body and mind are intricately tied.

Physical and mental well-being are equally important in overall health.

**Methods:** A literature search was conducted in order to compile information from multiple research studies. Research studies regarding physical exercise, immune health, and mental illness were used to conduct this project.

**Results:** Benefits of Physical Fitness on the Immune System:

- Increased WBC count
- Increased antibody flow
- Increased antibody amount
- Decreased inflammation
- Decreased risk of diseases, such as cardiovascular disease and autoimmune diseases

## Table 1: Increased WBC cell count after exercise training

<table>
<thead>
<tr>
<th>Pair</th>
<th>Pre-training WBC (mg/dl)</th>
<th>Post-training WBC (mg/dl)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5.75 ± 1.51</td>
<td>7.25 ± 2.23</td>
</tr>
<tr>
<td>2</td>
<td>4.80 ± 0.41</td>
<td>5.50 ± 1.09</td>
</tr>
<tr>
<td>3</td>
<td>14.42 ± 1.72</td>
<td>16.14 ± 3.16</td>
</tr>
<tr>
<td>4</td>
<td>43.97 ± 6.44</td>
<td>48.17 ± 7.92</td>
</tr>
<tr>
<td>5</td>
<td>315.95 ± 99.30</td>
<td>357.63 ± 66.22</td>
</tr>
<tr>
<td>6</td>
<td>0.80 ± 0.30</td>
<td>1.22 ± 0.19</td>
</tr>
<tr>
<td>7</td>
<td>47.86 ± 7.20</td>
<td>50.10 ± 5.94</td>
</tr>
<tr>
<td>8</td>
<td>46.43 ± 6.80</td>
<td>51.30 ± 7.92</td>
</tr>
<tr>
<td>9</td>
<td>5.61 ± 1.60</td>
<td>5.71 ± 1.14</td>
</tr>
</tbody>
</table>

How Mental Illness Hinders Immunity:

- WBC abnormalities
- Higher risk for autoimmune diseases
- Higher risk for cardiovascular disease
- Improper immune responses
- WBC death (apoptosis)
- Immunosuppression

There is even evidence of an immune environment in the brain → microglia are the brain’s own immune cells

Physical wellness and mental wellness are both important on the immune system, portraying the body and the mind are intricately connected.