



Heart and Mind: Understanding the Link Between Cardiovascular and Brain Wellness Among Veterans

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Why Is This Important?

- **Veterans Face Higher Risks:** Veterans report higher rates of cardiovascular disease (CVD) and at younger ages compared to non-veterans.
- **Alarming Trends:** Nearly half a million American veterans live with Alzheimer's, a number expected to grow with an aging population.
- **The Connection:** The heart and brain are deeply interconnected. Cardiovascular impairments can lead to cognitive decline and dementia due to the brain's reliance on oxygen-rich blood.

Key Risk Factors for Veterans

Traumatic Brain Injury (TBI):



- **Cardiovascular Impact:** Increased hypertension and irregular circulation.
- **Brain Impact:** Higher risk of dementia and chronic traumatic encephalopathy (CTE).
- **Note:** Veterans exposed to combat are at elevated risk of repeated TBIs.

Post-Traumatic Stress Disorder (PTSD):



- **Cardiovascular Impact:** Hypertension and increased inflammation.
- **Brain Impact:** Cognitive impairment and neurochemical imbalances.
- **Note:** Chronic stress from PTSD exacerbates risks for both heart and brain diseases.

Military Exposures:



- **Burn Pits:** Linked to respiratory, cardiovascular diseases, neuroinflammation, and cognitive impairment.
- **Agent Orange:** Increased risk of ischemic heart disease, Alzheimer's, and Parkinson's disease.
- **Gulf War Syndrome:** Associated with hypertension, neuroinflammation, and memory problems.
- **Particulate Matter:** Elevated cardiovascular and stroke risks, accelerated brain aging.
- **Chemical/Radiation Exposure:** Neurotoxicity and cognitive decline linked to military operations.

Chronic Stress:



- **Cardiovascular Impact:** Elevated heart rate and metabolic syndrome.
- **Brain Impact:** Memory impairments and reduced brain plasticity.

Lifestyle Factors:



- Veterans face higher rates of smoking, alcohol misuse, physical inactivity, and poor sleep, which compound risks for both CVD and dementia.

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Key Takeaways for Veterans

- **Heart and Brain Connection:** Improving cardiovascular health through early prevention and management significantly lowers risks for cognitive decline and dementia.
- **Actionable Steps:** Address risk factors such as high blood pressure, diabetes, and obesity through:
 - Regular health screenings.
 - Balanced diet and physical activity.
 - Reducing tobacco and alcohol use.
 - Managing stress and improving sleep quality.
- **Veteran-Specific Needs:** Combat injuries, PTSD, and environmental exposures necessitate tailored health strategies.

Health Promotion in the Veteran Population:



Early and Regular
Health Screenings



Healthy Lifestyle
Modifications



Addressing
Mental Health



Substance Use
Treatment and
Prevention



Treatment for
Traumatic Brain Injury



Vaccinations and
Immunotherapy



Peer Support and
Social Engagement



Reducing
Environmental
Exposure Risks



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