# NEUROPROTECTION: HOW ALKALINE WATER SUPPORTS BRAIN HEALTH

The brain, as the control center of the body, requires optimal hydration and nutrition to function efficiently. Neuroprotection refers to strategies that protect the nervous system from injury or degeneration, and recent studies suggest that regular consumption of alkaline water can play a supportive role in this process. Here's how alkaline water contributes to brain health and neuroprotection:

### 1. Combats Oxidative Stress:

Oxidative stress, caused by an imbalance between free radicals and antioxidants, is a significant factor in neurological disorders such as Alzheimer's and Parkinson's disease. Alkaline water contains molecular hydrogen, a potent antioxidant that neutralizes free radicals, reducing oxidative damage to brain cells and promoting overall neurological health.

#### 2. Reduces Inflammation:

Chronic inflammation in the brain can lead to neurodegenerative diseases and cognitive decline. Alkaline water's anti-inflammatory properties help lower inflammation in brain tissues, protecting neurons from damage and preserving cognitive function.

# 3. Enhances Blood Flow and Oxygenation:

Proper circulation is vital for brain health, as it ensures the delivery of oxygen and nutrients to neurons. Alkaline water promotes better blood flow and oxygenation, supporting brain cell regeneration and preventing damage caused by insufficient blood supply.

# 4. Supports Cellular Hydration:

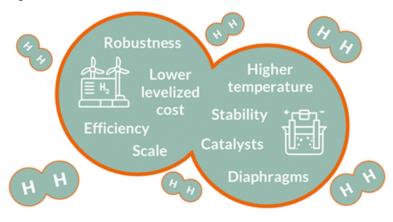
Dehydration can impair brain function, leading to fatigue, poor concentration, and memory issues. Alkaline water, with its smaller molecular clusters, is absorbed more efficiently by cells, providing superior hydration and supporting optimal brain performance.

# 5. Balances pH Levels:

The modern diet often leads to an acidic internal environment, which can negatively affect brain health. Alkaline water helps neutralize excess acidity, creating a balanced pH environment that supports the nervous system and reduces stress on the brain.

#### 6. Protects Against Toxins:

The brain is vulnerable to toxins, such as heavy metals and pollutants, which can contribute to neurological damage. Alkaline water aids in flushing out toxins from the body, helping to protect the brain and support long-term cognitive health.



# Pretreatment Activated carbon filter Quartz sand filter Ultrafiltration filter Filtration Primary RO Concentrate Secondary RO membrane Water production Tertiary RO Water production Concentrated water Circulating solar collector tube Hot concentrated olar salt making through brin Shell-and-tube circulating condenser Selection of participants based on inclusion and exclusion criteria. Randomized (n=24) Purified Water Drinking Alkaline Reduced Water Drinking Group (n=12) Group (n=12) 1Wk Wash-out period, Cross-ove **Purified Water Drinking** Alkaline Reduced Water Group (n=12) Drinking Group (n=12) Collection of Blood sample Before treadmill exercise and after 15 min of intense treadmill exercise 🔼 Drinking PW or ARW water according to body weight (10ml/kg) per grouping Blood collection 15 min post drinking experimental water Preparation of serum and analysis for oxidative stress and fatigue markers

#### Conclusion

Incorporating alkaline water into your daily routine offers a simple yet effective way to support neuroprotection. By reducing oxidative stress, combating inflammation, and improving hydration and circulation, alkaline water can contribute to better brain health, sharper cognitive function, and a reduced risk of neurodegenerative diseases. While it is not a cureall, alkaline water can be a valuable addition to a holistic approach to brain health and wellness.