

### THE PROFOUND EFFECTS OF NATURE ON HEALTH



There are so many reasons why we love spending time outside, but did you know nature also has a profound effect on our health and well-being? The list of health benefits from nature is vast and includes improved mental health, decreased stress, increased ability to concentrate, more rapid healing, and many others. The best part is that the benefits come quickly. Only 2 hours a week in green spaces have shown a measurable health improvement. Nearby natural areas, like the Katy Prairie Preserve, make getting this time outside a lot easier. **The health benefits of nature can be looked at through three pathways: reducing harm, restoring capacities, building capabilities.”**

**NATURE  
PROMOTES  
IMPROVED  
HEALTH**

#### Building Capabilities

Not only can nature restore us, but it can also promote health by encouraging physical activity and improving relationships in our communities. Certain types of green space including parks, walking and hiking trails, and green schoolyards have been found to improve physical activity and potentially increase its benefits. Access to green spaces can increase social cohesion, a measure of neighbors knowing and trusting each other. This is particularly important for health in older adults and spaces designed to bring people together can facilitate this. Longer stays in natural areas (e.g., long weekends) have shown increases in immune function which can help us fight off diseases including cancer.

**GET OUTSIDE!**



**REDUCING HARM** | Increasing green spaces in our urban areas has a direct effect on improving the environment and reducing harm. Green spaces typically have lower air pollution levels than other urban areas and may help remove harmful particles from the air. Urban green space can also reduce the heat island effect making cities cooler and increasing airspeed. Green spaces can reduce noise levels by 5-10 decibels and supply psychologically beneficial natural sounds. Green infrastructure can help reduce flooding during hurricanes and other storm events.

#### Restoring Capacities

Nature reduces stress and improves attention. Research has shown that taking a walk in nature or even a view through a window is related to improved mood and a decrease in blood pressure, resting heart rate, and cortisol. Nature may reset our attention abilities – studies have examined office workers and students who have spent time in a natural environment and this exposure showed increased time on task and attention to detail, as well as improved cognitive functioning. Improvements in creative tasks have also been demonstrated.



## GREEN HEALTH (continued)

### Improved Health Outcomes

All of these pathways contribute to long-term improvement in our health and well-being. The most critical is a reduction in the number of people who die each year from things like cardiovascular mortality, preterm birth, and type II diabetes. When patients can view nature from their rooms, their hospital stays are shorter and fewer painkillers are used. Several mental health benefits have also been demonstrated, including reductions in anxiety and depressive symptoms.



### Reducing Health Inequities

Studies have shown that low-income communities with more access to green spaces have lower overall death rates. In Houston, communities with access to the Bayou Greenways trail system had lower rates of hospital admissions for a variety of causes. Lower-income people receive a more significant benefit from nearby green spaces than higher-income people, which indicates that increased access to nature may help reduce health disparities.

## CHILDREN'S HEALTH



As critical as nature is to adults, it may be even more critical to children. Several studies have linked children's exposure to nature and proximity to parks and other green spaces to increased physical activity and reduced obesity. One study found that kids who get 27 additional minutes of physical activity for every hour spent outside are less likely to be obese. Nature access also improves children's mental health. Children who lived in greener neighborhoods reported less stress and psychological distress than students in urban settings. Children with ADHD who spent time walking in nature had lower reported inattentive symptoms and better cognitive functioning than those who walked inside. Emerging research shows that children who live in greener areas have lower levels of asthma and myopia (nearsightedness).

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