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This Is America

The Surprising Benefits of Social Connections

Social isolation is a major factor in physical as well as mental health.

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“There is one friend in the life of each of us who seems not a separate person, however dear and beloved,” the novelist Edith Wharton once wrote, “but an expansion, an interpretation, of one’s self, the very meaning of one’s soul.”

Friendship, and, indeed, a wide range of social connections, weak and strong, that require time, support, tolerance, loyalty, and reciprocity, it turns out, are conductive to physical as well as mental health. In *Friendship*, Lydia Denworth, a contributing editor to *Scientific American* and the author of *I Can Hear You Whisper: An Intimate Journey Through the Science of Sound and Language*, and *Toxic Truth: A Scientist, A Doctor and the Battle Over Lead*, draws on a raft of
research by social scientists, neurobiologists, geneticists, primatologists, and evolutionary biologists to examine how social bonds are developed and maintained, and their impact on well-being and longevity. Grounded in the still-contested premise that “stripped to its essence, everything psychological is biological,” *Friendship* is an engaging, and immensely informative, primer on the social brain, “the need to belong, tend and befriend.”

Denworth demonstrates that social isolation is a major risk factor in health. In 1988, she indicates, a paper published in *Science* by Jim House, a professor at the University of Michigan’s Institute for Social Research, pulled together all existing population studies and follow-up data on mortality over the subsequent six or more years, concluded that “social relationships, or the relative lack thereof,” rival cigarette smoking and obesity in their association with illness and death.

In 2007, social scientist John Cacioppo and neuroscientist Steve Cole found that leukocytes (genes in the white blood cells of the immune system) expressed themselves differently in socially isolated and relatively well-connected people; in the loneliest people, the genes that activate inflammatory responses were up-regulated, while those governing antiviral responses were down-regulated. These findings (based on a small sample) have been corroborated in subsequent studies of poor people, breast cancer, and individuals with posttraumatic stress disorder. As he bestowed a name (CTRA, conserved transcriptional response to adversity), Cole declared that at the molecular level loneliness “makes a body feel threatened and insecure.”

In contrast to social isolation, which increases susceptibility to inflammation and viral infection, feelings of fulfillment and a web of social connections may well strengthen the ability of the immune system to fend off illnesses. The conclusions in this area, Denworth reports, are preliminary. The samples in a study conducted by UCLA epidemiologist Teresa Seeman and Cole are small and participants have not yet been compared to a control group.

Denworth concludes by making a compelling case that a deeper understanding of social connections should be “front and center in public health circles.” After all, she points out, isolation among older Americans costs Medicare almost 7 billion dollars a year, much of it spent on nursing facilities, emergency room visits, and hospitalization for people who have no network to rely on. And by 2035 older adults are projected to outnumber children, with more of them than ever before unmarried, childless, living alone, retired and without daily contact with colleagues.
Identifying initiatives that will build connections, Denworth acknowledges, will not be easy. That said, she gives a shout out to neighborhood drop-in centers, recommends that the U.S. military consider the implications of moving servicemen and women and their families repeatedly, and suggests studies of “Blue Zones,” where a significant number of people reach the age of 100. Denworth is especially impressed with Generation Xchange, an intergenerational program, conceived by Teresa Seeman, in which UCLA’s Division of Geriatrics joined forces with Los Angeles’ Unified School District to bring older adults into under-resourced elementary schools, assigned them to a specific school for an entire year, where they spend at least ten hours a week helping the children with reading skills and behavioral skills. The program, Denworth writes, “has succeeded on every front,” including improved cholesterol, blood pressure, weight and mobility as well as social connections for the senior citizens.

Clearly, it will take a village to enhance the quantity – and quality – of social connections. But, as Friendship teaches us, “having someone handy to hug” is not only emotionally satisfying, it has the power to extend or shorten our lives.