Daycares in Finland grew forests, and it changed kids' immune systems [1]

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Excerpts

Playing through the greenery and litter of a mini forest's undergrowth for just one month may be enough to change a child's immune system, according to an experiment in Finland.

When daycare workers rolled out a lawn, planted forest undergrowth (such as dwarf heather and blueberries), and allowed children to care for crops in planter boxes, the diversity of microbes in the guts and on the skin of the young kids appeared healthier in a very short space of time.

Compared to other city kids who play in standard urban daycares with yards of pavement, tile, and gravel, 3-, 4-, and 5-year-olds at these greened-up daycare centers in Finland showed increased T-cells and other important immune markers in their blood within 28 days.

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The notion that an environment rich in living things impacts on our immunity is known as the 'biodiversity hypothesis'. Based on that hypothesis, a loss of biodiversity in urban areas could be at least partially responsible for the recent rise in immune-related illnesses.

"The results of this study support the biodiversity hypothesis and the concept that low biodiversity in the modern living environment may lead to an un-educated immune system and consequently increase the prevalence of immune-mediated diseases," the authors explained in the 2020 study.

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Research shows getting outside is also good for a child's eyesight, and being in nature as a kid is linked to better mental health. Some recent studies have even shown green spaces are linked to structural changes in the brains of children.

What's driving these incredible results is not yet clear. It could be linked to changes to the immune system, or something about breathing healthy air, soaking in the sun, exercising more, or having greater peace of mind.

Given the complexities of the real world, it's really hard to control for all the environmental factors that impact our health in studies.

While rural children tend to have fewer cases of asthma and allergies, the available literature on the link between green spaces and these immune disorders is inconsistent.

The research here had a small sample size, only found a correlation, and can't account for what children were doing outside daycare hours, but the positive changes seen were enough for scientists in Finland to offer some advice.

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