

Leveraging health benefits of nature for public health in Finland

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Structure of the presentation

- Background and prerequisites for mainstreaming
- How is the Health from Nature theme acknowledged in strategies?
- Assessing scientific background for practical implementation
- Health from Nature program for Finland



Nature's role in supporting well-being

- Increased level of evidence beneficial effects of nature exposure on health and well-being (FAO 2020, WHO 2023 UIFRO 2023).
- The burden of non-communicable diseases is increasing: NBIs could offer cost-effective solutions (Nejade et al 2022)
- In Finland social and health care costs reaching cover 1/3 of government's annual budget.
- What is needed for mainstreaming of health benefits for public health



Key prerequisites for mainstreaming

- Adequate scientific evidence-base of health effects of nature
- Policy support and resourcing
- Good skills and willingness of key actors to introduce new practises
- Functional and effective cross-sectoral collaboration.
- Formulation of key actions how to implement the knowldge in practice.



How science can help practical solutions?

SOCIETAL DEVELOPMENT IN FINLAND



LVVI 2000

Forest Preschools

Animal assisted Therapies

Well-being from forests research Program Metla 2008-2014

Green Care Finland ry. 2010

Green Care quality standards

Visit Finland 2015 : Nature Well-being in Tourism

Metsähallitus Nature Move- project

2010

Nature & Stress - studies (Fin-Jap 2011)

1. Green Care -research

Health forest Trail in Ikaalinen Spa

Lahti Hospital Health Forest Plan (UAAalto 2018)

Allergy Association Health step to Nature 2017-2019

Argumenta: Nature for health and well-being 2014 (Luke & SYKE)

Green Health – research 2015, Luke, THL, TaY

Public Health from Forests, Finnish Medical Association -2018

Sustainable outdoor recreation & tourism (Prime min. office 2017-2018)

NatureMove research (OKM, 2018)

2020

Virtual nature - research (2019)

FORESTS EUROPE – report 2019

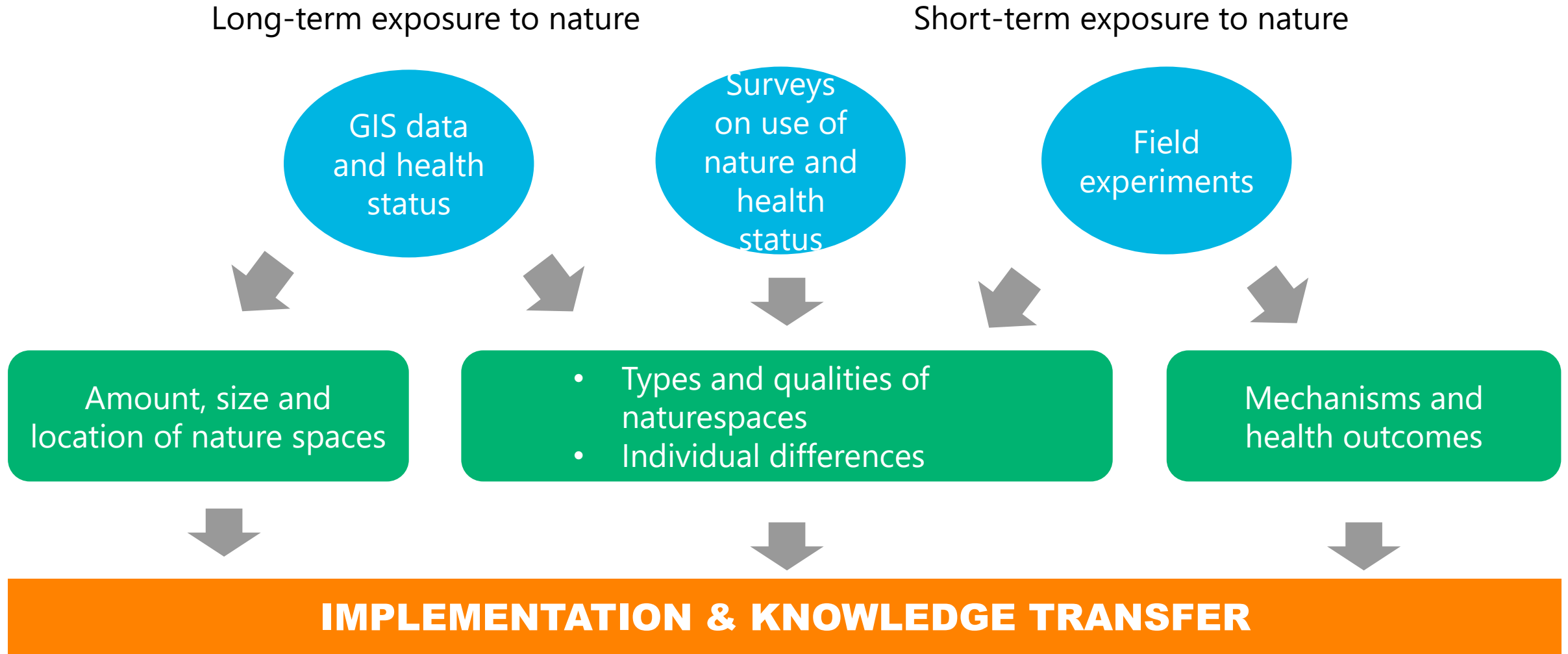
Nordic review 2024

Health from nature program 2026-

LUKE'S RESEARCH WORK

Key research approaches and themes in Finland

(Tyrväinen et al. 2019)



**How is the Health from Nature theme
acknowledged in strategies?**

Nature-based health and wellbeing in Finland's national policy framework.

- **National Forest Strategy 2035**
 - Forests contribute to wellbeing, recreation, support nature-assisted health services.
- **National Mental Health Strategy 2020–2030**
 - Supports preventive mental health promotion, including the role of natural environments.
- **Finnish Biodiversity Strategy**
 - Connects biodiversity conservation with human health, wellbeing, and ecosystem services.
- **National Outdoor Recreation Strategy 2030**
 - Recognizes outdoor recreation as a means to promote physical activity, mental wellbeing, social inclusion, and public health.
- **Health from Nature Programme 2026–2035**
 - Integrates nature-based health benefits into health promotion.



National Outdoor Recreation Strategy 2030 & Action plan 2023-2025

First National Outdoor Recreation Strategy in Finland

Prepared in collaboration with government bodies (7 ministries), authorities, research institutes, NGOs



Strategic objectives

- **Ensure access to local nature**
- **Promote health and wellbeing**
- Ensure sustainability of outdoor recreation
- Identify resources and ways of cooperation
- Diversify outdoor recreation



Action Programme 2023-2025 extracts:

Accessibility to local nature :

- Improving accessibility of nature sites
- Access for children to green spaces
- National Outdoor Information Service

Promoting health and well-being:

- Social services direct clients to nature
- Expanding use of nature-assisted methods in health care services
- Supporting children's and youth's nature skills and nature connectedness



Assessing scientific background for implementation



Health effects of nature and their economic implications

- Nordic review on the impacts of the natural environment on human health for high level decision-making
 - Focus on mental health, physical health and immunological diseases.
 - Example calculations on the economic potential of health impacts in Finland
- Interdisciplinary work with 15 experts
- **Implementation:** Luke, Finnish Institute for Health and Welfare (THL) and Nordic Health care group Finland.
- **Funding:** Finnish Innovation Fund (SITRA).



Luonnonvara- ja biotalouden tutkimus 76/2024

Luontoympäristön terveysvaikutukset ja niiden taloudellinen merkitys

Liisa Tyrväinen, Jaana I. Halonen, Tytti Pasanen, Ann Ojala, Martin Täubel, Santtu Kivelä, Riikka-Leena Leskelä, Paula Pennanen, Juulia Manninen, Aki Sinkkonen, Tari Haahtela, Hanna Haveri, Mikaela Grotenfelt-Engren, Tuija Lankia ja Marjo Neuvonen

Easy access to nature can protect against depression

- More green spaces in the living environment reduced the risk of depression. (Gonzales- Inca 2023, Klein et al. 2022)
- In the Helsinki MPA regular nature walks reduced the likelihood of using antidepressants (Turunen ym. 2023).
- A cohort study: Moving to a greener area reduced the risk of developing depression (Kivimäki et al. 2021).



Good supply of nature support children's mental health



- Danish population-level studies on the effects of childhood exposure to nature on children's mental health.
- High green space provision reduced the risk for 12 out of 18 measured children's psychiatric disorders (Engeman et al. 2020).
- Similar results for schizophrenia and ADHD.
- Proximity to nature is emphasized; near environment of schools, daycare centers, and homes (Engeman et al. 2018, Thygesen et al. 2020)

Associations to cardiovascular diseases and type 2 diabetes

- Limited number of studies on the connection between the natural environment and cardiovascular disease and type 2 diabetes.
- In adults, easy access to green spaces appears to protect against obesity or overweight (Toftager et al. 2011, Halonen et al. 2014).
- There is moderate evidence that more abundant local nature in residential areas protects against type 2 diabetes (Kivimäki et al. 2021, Sorensen et al. 2022).



Connection between the natural environment and respiratory health

- Research evidence on the benefits of natural environments in prevention of asthma and allergies is somewhat mixed.
- Studies suggest that direct contact with beneficial microbes in soil or vegetation may strengthen the body's defense system (e.g., Roslund et al. 2022, Saarenpää et al. 2020).
- Longitudinal studies are needed to verify the health effects of these changes.



Assessing economic importance of health benefits



Assessing economic value of health benefits with example calculations

Disorder	Nature Exposure	Effect
Depression*	supply of green areas	Incidence of depression
Diabetes II**	Supply of green areas	Incidence of diabetes II
Asthma***	Visits to nature	Medical expenses



Assessment based on 10 % change in exposure *Gonzales- Inca 2023, **Maas et al 2009 & Kivimäki et al. 2021 ,and ***Turunen ym. 2023).



Assessing economic value of health benefits

10% increase of the supply of green areas would

- decrease 6 % the annual treatments costs of depression
71–150 M€ annually
- decrease 1,7 % the annual treatment costs of type 2 diabetes,
67-139 M€ annually

10 % increase of weekly nature visits would

- decrease the annual cost of asthma medication
1.7 M€ (1.8% of costs)
- The decline in nature exposure increases significant costs;
conversely, increasing nature exposure would result in savings



Considerable potential in gaining economic savings

- Estimates are based on
- Direct (health care expenditure) and indirect (sick leave and disability) costs.
- The monetary value of lost years of life or quality of life, are assessed through the willingness of society or the individual to pay.

up to €2.5 billion

Estimate of the economic benefits in Finland based on Belgian results 464 €/person (de Nocker et al. 2023)

€140–290 million

Conservative estimate based on example calculations

Nature environment have



- clear health benefits, with the strongest evidence relating to mental health
- high potential for health economic benefits
- Health benefits need to be integrated into health education and care practices & land-use planning (urban)
- Suggestion for national nature health program bringing nature's health benefits into daily lives and healthcare of Finns.



Piipahdus luonnossa voi tehdä terveydelle ihmeitä: Suomalaisselvitys löysi lukuisia hyötyjä

Sadan tutkimuksen yhteenvedossa selvitettiin, miten luonto vaikuttaa mielenterveyteen, fyysiseen terveyteen ja kehon puolustusjärjestelmien toimintaan.



Jos luontoa on lähellä, ihmisten fyysinen aktiivisuus lisääntyy, kertovat tutkimukset. Kuva on Hurttion lenkiltä Sastamalan Karkusta. Reitti on jäämässä aurinkovoimalan alle. Kyläyhdistyksen mukaan Hurttio on ainoa Karkun keskustasta kävelen saavutettava, täysin merkitty reitti. Kuva: Esa Viippola

Piia Elonen HS
29.10. 2:00

11.24



Lähimetsät ja viheralueet auttavat ehkäisemään muun muassa sydän- ja verisuonitauteja sekä mahdollisesti hengityselinsairauksia. Kuva: Timo Filpus

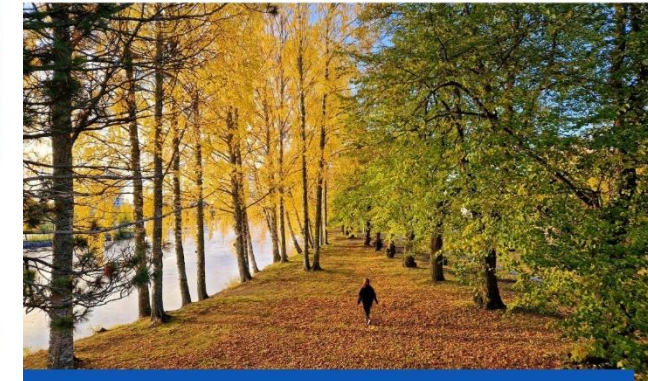
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Pääkirjoitus
MT toimitus

[Etusivu](#) / [Uutissuomalainen](#)

Vain tilaajille

Selvitys: Luonto voi tarjota Suomelle jopa satojen miljoonien eurojen hyödyn kansantautien torjunnassa

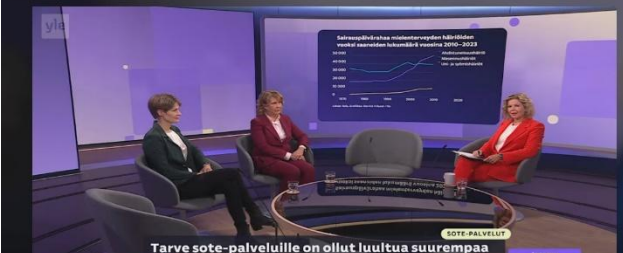


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Health from nature program 2026-2036



Recommendation

National Health from Nature Program

- The report recommended that a national Nature Health program should be established in Finland.
- The program would bring the health benefits of nature into our everyday lives and into the activities of the health and social services.

The program has been co-developed 2025 by different organizations.



What?

What is the Health from Nature Program?

Objective: To increase people's well-being, health, and work ability & reduce the burden of chronic diseases.

How? By making nature a part of people's everyday lives and the activities of the social and health care services.

What? Actions in municipalities, the social and health care sector, and workplaces, as well as communication.

Target groups: Children, young people, working-age people, and the elderly.



Objectives

Objectives of the Program



The burden of chronic diseases has been reduced by increasing our exposure to nature.
Indicator diseases: depression, obesity, type 2 diabetes, and asthma

Awareness and understanding of the health benefits of nature has grown in society.

The health benefits of nature have been included in health care and social welfare recommendations, training, and activities.

Time spent and physical activity in nature has increased.

People's opportunities to be exposed to nature in their everyday lives have improved.

The health benefits of nature are taken into account in the land use planning & planning and maintenance of green/nature areas

With whom?

Organizations involved in the preparation of the Health from Nature Program are e.g.

- **Finnish Institute for Health and Welfare (THL)**
- Finnish Innovation Fund Sitra
- Natural Resources Institute (LUKE)
- Finnish Environment Institute (SYKE)
- Finnish Institute of Occupational Health (TTL)
- The Finnish Allergy, Skin and Asthma Federation
- Finnish Lung Health Association (Filha ry)
- Mieli Mental Health Finland (Mieli ry)
- The Organisation for Respiratory Health in Finland (Hengitysliitto)
- Age Institute (Ikäinstituutti)
- Metsähallitus, Parks & Wildlife Finland (MH:n Luontopalvelut)
- The Association of Finnish Cities and Municipalities (Kuntaliitto)
- Duodecim
- Terveystalo
- Physicians Tari Haahtela and Hanna Haveri



What happens?

What is done in the program?

Nature health in the social and health care sector

-In the program, the health benefits of nature are included in treatment recommendations and pathways and rooted in the practices of the field.

-Training is organized for social welfare and health care professionals on the health benefits of nature and how to utilize them.



What happens?

What is done in the program?

Nature health work in municipalities

-Municipalities can secure the health benefits of nature in everyday life (greening daycare centres and schools, enhance access to nature and opportunities to green exercise).

-The program supports the nature health work of municipalities through training, guides, the collection and dissemination of good practices, and by funding concrete actions in municipalities.



Why Health from Nature Programme has broad support?

- Built on strong scientific evidence linking nature exposure to better physical and mental health.
- Supports national goals for health promotion and sustainability.
- Brings together health, environment, municipal, NGOs and business sectors

Translates research into practical solutions:

- Improves population health and wellbeing.
- Reduces healthcare costs .
- Supports environmental and biodiversity goals.
- Creates socio-economic benefits for communities and organizations.



- Thank you!
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