Supplement 2. Indexes/indicators related to the Healthy Municipalities and Communities

Name of index/indicator mentioned by author	Author (year), country	Type of instrument, no. of items	Subjects	Setting	Purpose of index/indicator	Examples of indicators or domains categorized to define index
Movability index	Buck et al.[6] (2011) Germany	Kernel density method* $Ml_t = \frac{1}{3}(SC_t + DD_t + LU_t), \quad L = 1, \ldots, l.$	School children	School catchment areas in the city in German intervention region of the IDEFICS (Identification and Prevention of Dietary and Lifestyle-induced Health Effects in Children and Infants) study	To quantify possibilities for physical activity in the built environment of children	- Public playgrounds - Land use types
Age-Friendly City Indicators	Kano et al.[7] (2018), Japan	32 Indicators; mainly relies on administrative data sources and another on surveys of older residents in the community	Older adults	15 Communities from 12 countries; 13 sites municipalities	To measure age-friendly cities characteristics in diverse contexts worldwide	The proportion of older people who report that local sources of information about their health concerns and service needs are available
Cumulative Environmental Hazard Index	Huang et al.[8] (2012), USA	Formula* $CEHI_i = \frac{\sum_{j=1}^{3} v_{ij}}{3}$ $CEHI_{inorm} = 10 \times \frac{CEHI_i}{CEHI_{max}}$	NM	Southern half of California's 450-mile-long Central Valley	To measure of environmental hazards in and around each block group with possible scores between 0 and 1.	- Toxic release inventory sites - Refineries
Social Vulnerability Index		Formula* $SVI_i = \frac{\sum_{j=1}^{6} v_{ij}}{6}$ $SVI_{inorm} = 10 \times \frac{SVI_i}{SVI_{max}}$	NM		To measure of social vulnerability in and around each block group with possible scores between 0 and 1.	- Locations of health care facilities - Poverty rate
Relative Food Environment Index	Paquet et al.[9] (2014), Australia	Representing the ratio of fast-food restaurants and unhealthful food stores to healthful food stores.	Adults aged 18 years and over	Northern and western metropolitan regions of Adelaide	To measure the relative un healthfulness' of the food environment	-
Racial isolation index	Bravo et al.[10] (2019), UK	Using 2010 census data, block-level racial isolation scores were calculated by accounting for the population composition in the index block along with adjacent blocks	Patients of a Duke Medicine provider	City of Durham	To measure racial isolation in either non-Hispanic black or non-Hispanic white patients	-
Built environment index	Burns et al.[11] (2012), USA	Self-report presence or absence and/or type of various material assets in the household.	NM	Chaharbagh Street, which is a major and ancient street in the Isfahan metropolitan area, Iran.	To assess the individual-level access to municipal services and residential characteristics and conditions beyond socio-demographic factors.	- Housing quality - Access to water
Child social exclusion index	Mohanty et al.[12] (2016), Australia	Australia's only national small area index of the risk of child social exclusion including 5 dimensions and 13 indicators.	0–15-year-old children	Small areas across Australia	To capture the risk of social exclusion experienced by Australian children at the small-area level (mostly statistical local areas)	- Proportion of dependent children aged 0–15 in a single parent family - Proportion of dependent children aged 0–15 in a family where no parent is working
Neighborhood Deprivation Index (NDI)	Andrews et al.[13] (2020), USA	4 Domains and 13 indicators: the sum of these variables was used to create the final NDI measure at the county level.	NM	Counties within the USA	To assess neighborhood deprivation across the USA	- % Households without plumbing - % Unemployment

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Table S2. Continued

Name of index/indicator mentioned by author	Author (year), country	Type of instrument, no. of items	Subjects	Setting	Purpose of index/indicator	Examples of indicators or domains categorized to define index
Air pollution index (API)	Wang et al.[14] (2019), China	Daily API data of were also obtained from the Tianjin Environmental Monitoring Center during the study period. API value is calculated by using the linear interpolation method* $API_i = \frac{API_u - API_l}{C_m - C_l} \times (C_i - C_l) + API_l$	NM	11 Urban and suburban districts of Tianjin	To assess the air pollution in Tianjin, China	-
Food stress index (FSI)	Landrigan et al.[15] (2018), Australia	The FSI is a weighted combination of select variables that results in a score that can be used to rank areas according to the likelihood of food stress in each area	NM	Western Australia households	To identify likelihood households in the selected geographic area are suffering food stress.	- Food affordability - Proportion of income required to buy healthy food–couple family on welfare income
Global Food Security Index	Chen et al.[16] (2019), Taiwan	Three tiers and 28 indicators: hierarchical data envelopment analysis approach	NM	110 Countries	Is used to provide a benchmark for cross-country comparison by tracing how each country performs in ensuring access to affordable, sustainable, safe and nutritious food for all	- Food affordability - Food availability
Environmental quality index	Lobdell et al.[17] (2011), USA	Five domains were identified that contribute to environmental quality: air, water, land, built, and socio-demographic environments. An inventory of possible data sources was created. Data sources were evaluated for appropriate spatial and temporal coverage and data quality.	NM	All counties in the USA	For investigators researching health disparities to account for other concurrent environmental conditions.	- Air - Water and land
Synthetic air quality index	Choi et al.[18] (2016), South Korea	Normalizing and averaging indicators to calculate neighborhood index* $Y_{ij}\ norm = \begin{cases} \frac{Y_{ij}}{max\ Y_{ij}} & If\ \ Y_{ij}\ Satisfies\ \text{the larger the better} \\ \frac{min Y_{ij}}{Y_{ij}} & If\ \ Y_{ij}\ Satisfies\ \text{the smaller the better} \\ [min(Y_{ij}, Y_j^0)] & If\ \ Y_j^0 \text{is the ideal value with respect to } Y \\ [min(Y_{ij}, Y_j^0)] & \end{cases}$ $S_{AIRi} = \frac{1}{n} \sum_{j-1}^{n} Y_{ij}\ norm$	30–59 Adults	242 Municipalities in South Korea	Assessment of environmental injustice	- NO_2 (nitrogen dioxide) - CO (carbon monoxide)
Community Fluoridation Compliance Index	Kuthy et al.[19] (1987), USA	a (sample fluoride concentration for the period studied); b (optimal fluoride concentration for that period); c (number of samples submitted for the time studied), and d (number of samples that should have been submitted)* $CFCI\ \ 1 = \frac{\sum (a+b)_i}{C} \times \frac{c}{d} = \frac{\sum (a+b)_i}{d}$	50 Water systems	States of Illinois and Ohio	To assess performing fluoridation surveillance at the State and local levels. In addition, we sought to determine the degree to which monthly fluoride concentrations vary throughout the year.	-
Holistic Ecosystem Health Indicators	Wiegand et al.[20] (2010), UK	4 Category and 9 indicators: scores for each indicator were presented as the mean per 10-year period.	NM	Ythan catchment	To assess the temporal trends in ecosystem health	- Total oxidised nitrogen in mg N/L (250) - Proportion of estuary mudflats covered by macro-algae in summer (250)
Community Healthy Living Index	CDC[21] (2010), USA	Questionnaire-5 sub-indices; each sub-index in cluding assesses the venue's general characteristic.	Adults	States	It measures a community's environmental support for healthy living	- Physical activity opportunities - General healthy living
The Child Opportunity Index	Acevedo-Garcia et al.[22] (2014), USA	3 Categories and 19 indicators	NM	Census tracts—in the 100 largest US metropolitan areas	It is a measure of relative opportunity across all Neighborhoods in a metropolitan area	- Proximity to toxic waste release sites - Foreclosure rate

NM, not mentioned.
*See the text of the article for more details on the formula.