# Physical inactivity as a major risk factor

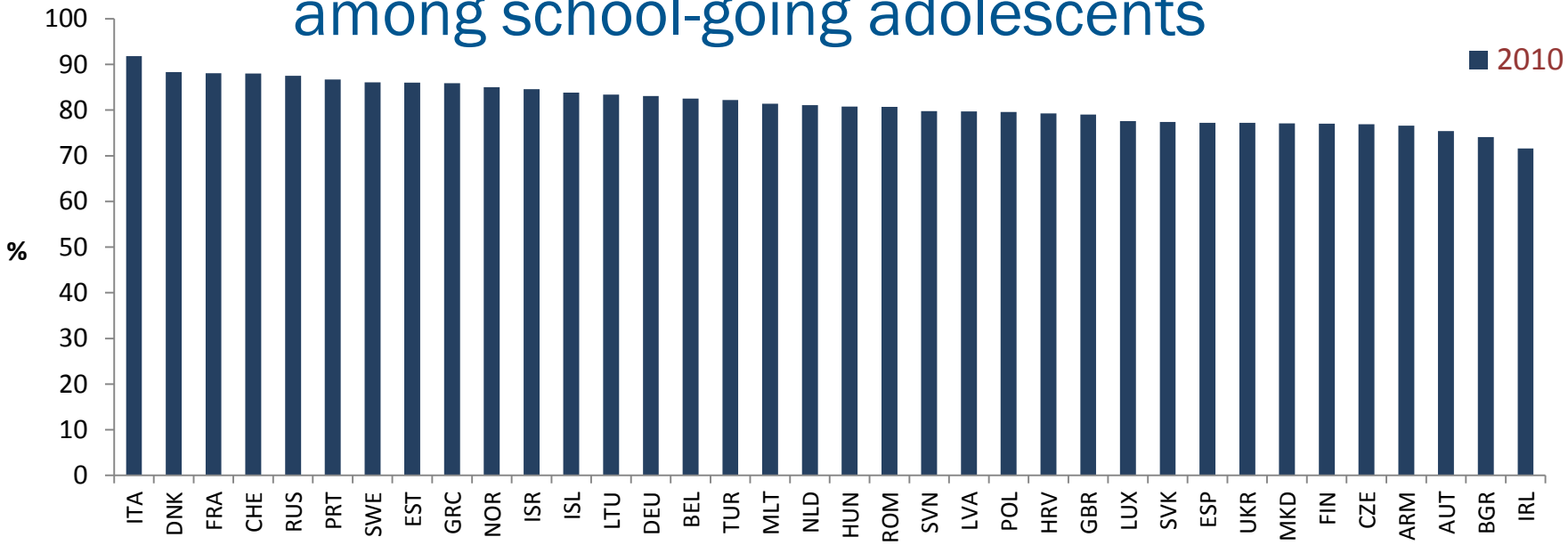
- Worldwide, physical inactivity causes at least 6–10% NCDs (CHD, diabetes, breast and colon cancer)*
- Physical inactivity causes 9% premature mortality*
- In Europe, estimates indicate that more than one third of adults are insufficiently active**

*Lee IM & al. 2012; **Hallal PC & al. 2012

# Physical inactivity & the obesity epidemic

- In addition to being an independent risk factor for NCDs, physical inactivity is also related to overweight and obesity *(energy imbalance)*
- With over 50% population overweight in almost all 53 European countries, all people can benefit from being more active
- But above all, it is also important for mental health and well-being

# Prevalence of insufficient physical activity among school-going adolescents

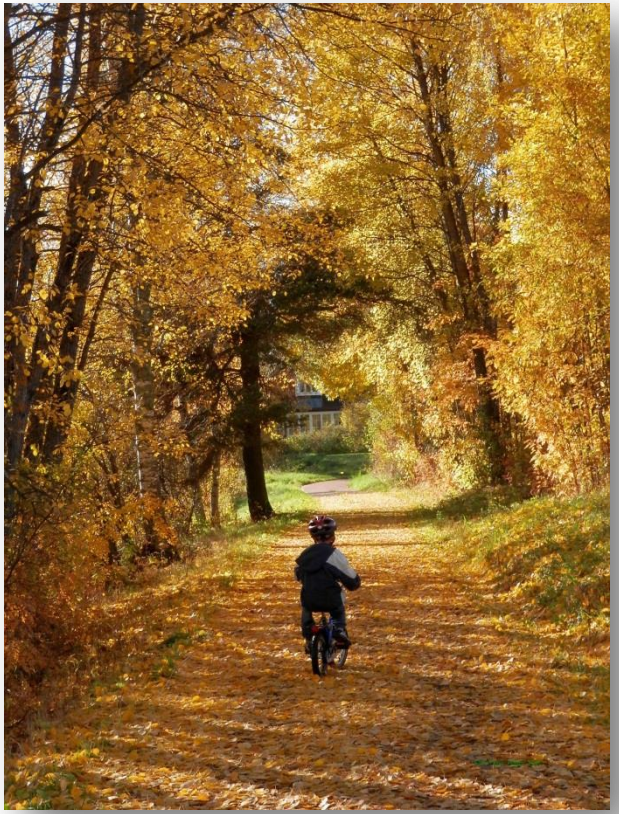



Global Health Observatory Data Repository. Geneva: World Health Organization (http://apps.who.int/gho/data/view.main.2463ADO?lang=en, accessed 1 May 2015). No data for ALB, AND, AZE, BLR, BIH, CYP, GEO, KAZ, KGZ, MNE, MDA, SMR, SRB, TJK, TKM, UZB

# Mission of our work

**To inspire governments and stakeholders to work towards increasing physical activity for all by:**

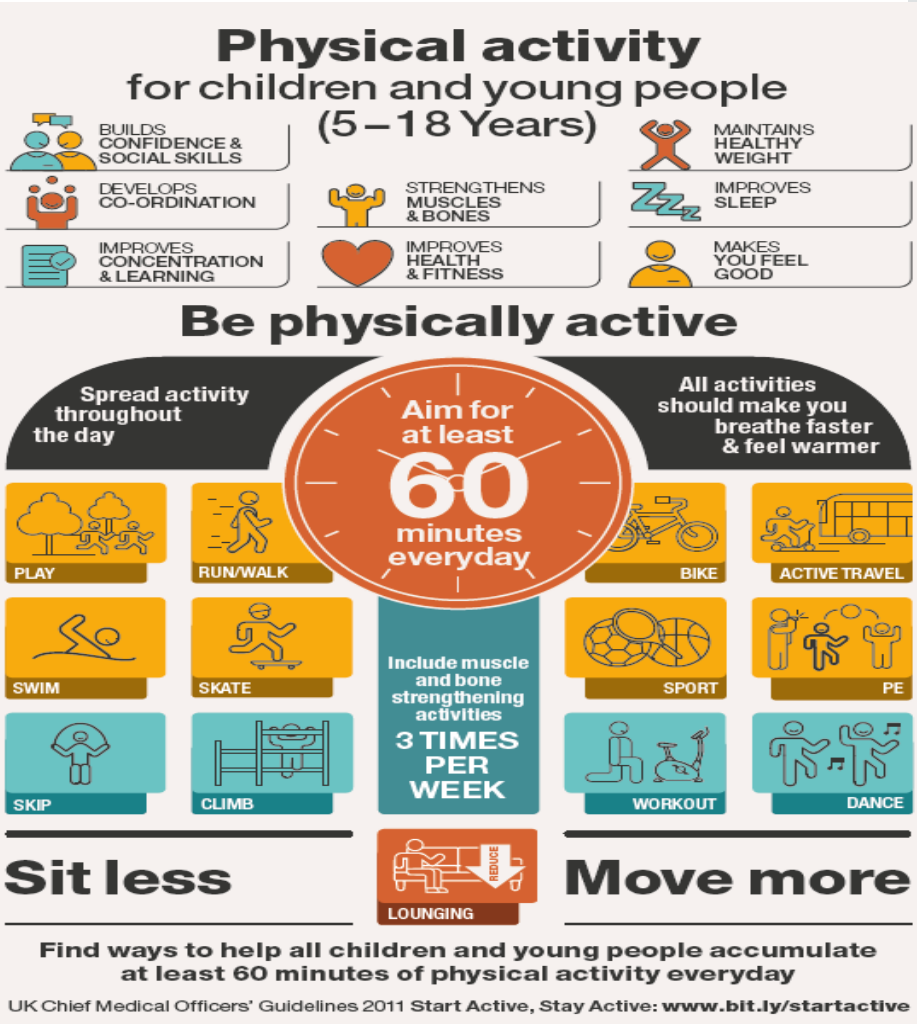
- promoting physical activity
- creating enabling environments
- ensuring equal opportunities
- removing barriers

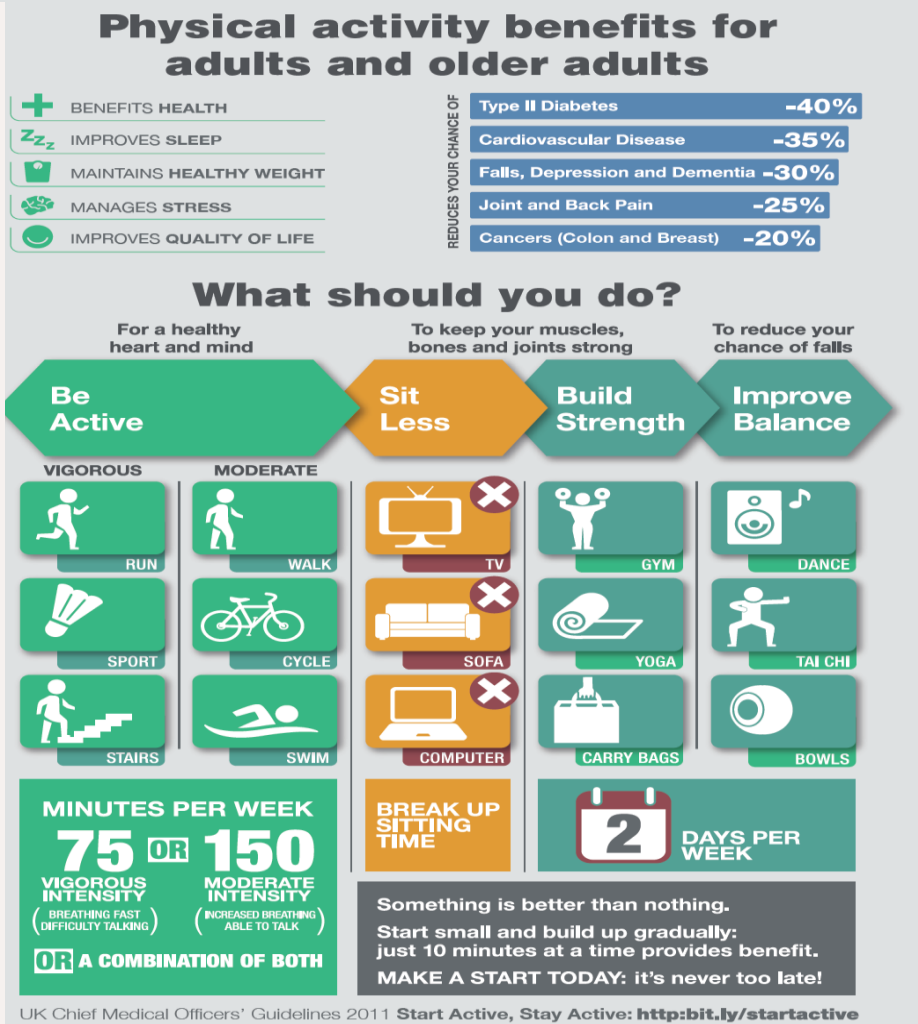


# Guiding principles

- Reduce **inequities**
- Promote a **life-course approach**
- Empower people and **communities**
- Promote **integrated**, **multisectoral**, sustainable and partnership-based approaches
- Ensure **adaptability** of physical activity programmes
- Use **evidence-based strategies**

# WHAT ARE GOVERNMENTS DOING?



# Supporting professionals

FACTSHEET 1

## Physical activity guidelines for

### EARLY YEARS (UNDER 5s) – FOR INFANTS WHO ARE NOT YET WALKING

1. Physical activity should be encouraged from birth, particularly through floor-based play and water-based activities in safe environments.
2. All under 5s should minimise the amount of time spent being sedentary (being restrained or sitting) for extended periods (except time spent sleeping).

*Individual physical and mental capabilities should be considered when interpreting the guidelines.*

**Examples of physical activity that meet the guidelines**

For infants who are not yet walking, physical activity refers to movement of any intensity and may include:

- 'Tummy time' – this includes any time spent on the stomach including rolling and playing on the floor
- Reaching for and grasping objects, pulling, pushing and playing with other people
- 'Parent and baby' swim sessions

Floor-based and water-based play encourages infants to use their muscles and develop motor skills. It also provides valuable opportunities to build social and emotional bonds.

Minimising sedentary behaviour is also important for health and development and may include:

- Reducing time spent in infant carriers or seats
- Reducing time spent in walking aids or baby bouncers (these limit free movement)
- Reducing time spent in front of TV or other screens

**What are the benefits of movement?**

- Develops motor skills
- Improves cognitive development
- Contributes to a healthy weight
- Enhances bone and muscular development
- Supports learning of social skills

For further information: *Start Active, Stay Active: A report on physical activity for health from the four home countries' Chief Medical Officers* (2011)

FACTSHEET 2

## Physical activity guidelines for

### EARLY YEARS (UNDER 5s) – FOR CHILDREN WHO ARE CAPABLE OF WALKING

1. Children of pre-school age who are capable of walking unaided should be physically active daily for at least 180 minutes (3 hours), spread throughout the day.*
2. All under 5s should minimise the amount of time spent being sedentary (being restrained or sitting) for extended periods (except time spent sleeping).

* Most UK pre-school children currently spend 120–150 minutes a day in physical activity, so achieving this guideline would mean adding another 30–60 minutes per day.

*Individual physical and mental capabilities should be considered when interpreting the guidelines.*

**Examples of physical activity that meet the guidelines**

Physical activity is likely to occur mainly through unstructured active play but may also include more structured activities. Activities can be of any intensity (light or more energetic) and may include:

- Activities which involve movements of all the major muscle groups, i.e. the legs, buttocks, shoulders and arms, and movement of the trunk from one place to another
- Energetic play, e.g. climbing frame or riding a bike
- More energetic bouts of activity, e.g. running and chasing games
- Walking/skipping to shops, a friend's home, a park or to and from a school

Minimising sedentary behaviour may include:

- Reducing time spent watching TV, using the computer or playing video games
- Reducing time spent in a pushchair or car seat – this can also help to break up long periods of sedentary behaviour

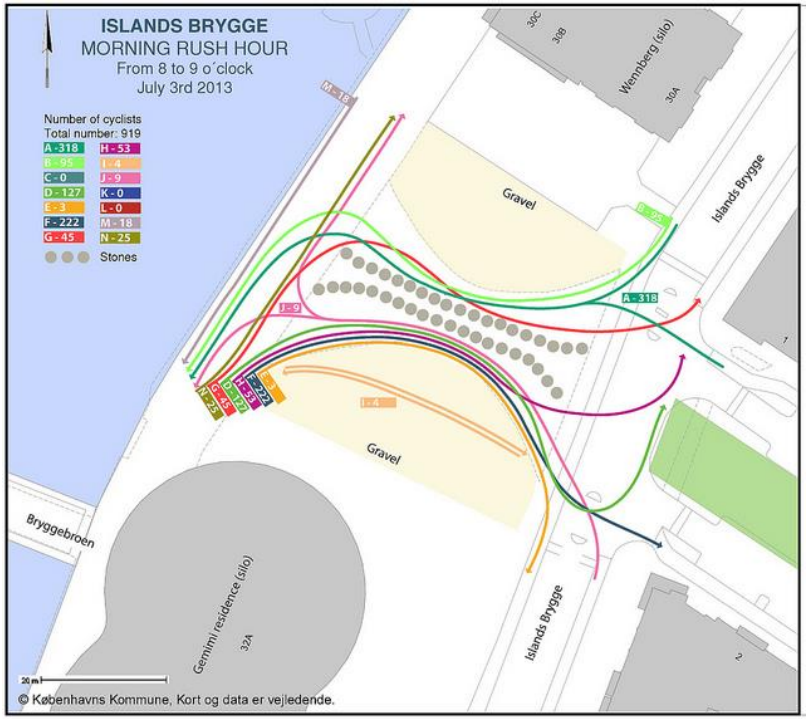
**What are the benefits of being active for at least 180 minutes each day?**

- Improves cardiovascular health
- Contributes to a healthy weight
- Improves bone health
- Supports learning of social skills
- Develops movement and co-ordination

For further information: *Start Active, Stay Active: A report on physical activity for health from the four home countries' Chief Medical Officers* (2011)

# Urban design and transport policy

- Macro-level urban design and planning should consider:
  - Connected street networks
  - Residential density and land use
  - Access to public transport
  - Open spaces
- Cities should also provide safe and adequate infrastructure to support walking and cycling



# Urban design and transport policy - evidence

- The way in which urban areas are planned – the lay out and rules about what can be built and where – is linked with physical activity levels
- Higher residential density, logical and walkable street networks, and zoning to encourage mixed use (e.g. retails, parks, schools, essential services) encourage active transport

# Urban design and transport policy

- Walking and cycling paths should be well maintained, unobstructed and connected with safe crossing points
- Implement complementary road traffic control measures to reduce pedestrian and cyclists' exposure to high traffic volume and speed
- Land can be re-purposed for public use (e.g. vacant lots, waterway paths)

# What about the balance of benefits vs. risks?

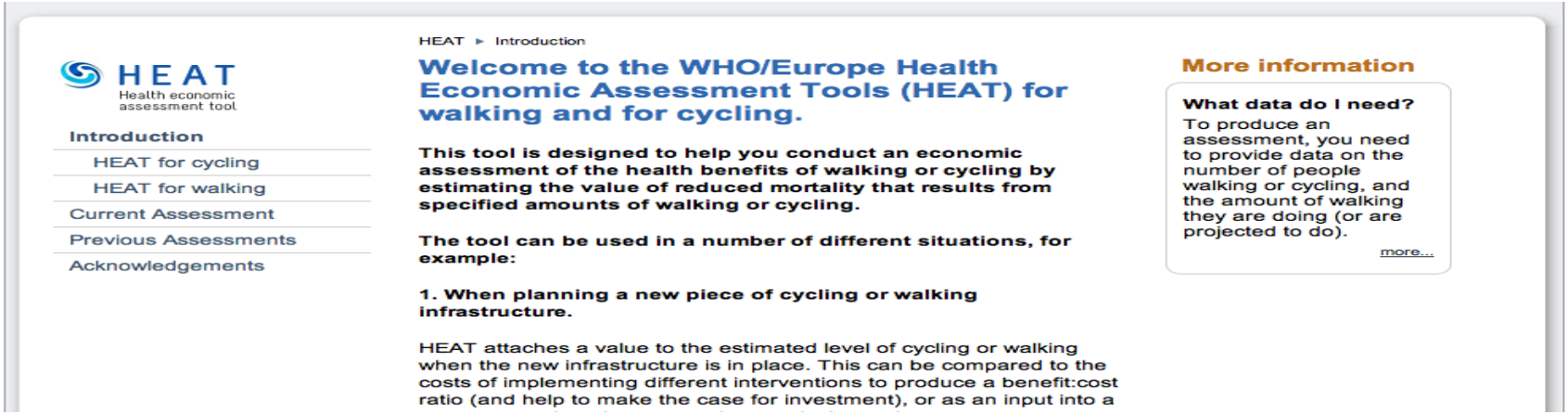
Modeled impact both on society and for individuals when 500,000 people would make a transition from car to bicycle for short trips on a daily basis in the Netherlands

- increased inhaled air pollution doses: 0.8-40 days lost
- traffic accidents: 5-9 days lost
- increased physical activity: 3-14 months of life gained
- societal benefits even larger

⟹ ***positive effects of active transport far greater than risks***

*Source: Johan de Hartog J, Boogaard H, Nijland H, Hoek G.: Do the health benefits of cycling outweigh the risks? Environ Health Perspect. 2010 Aug;118(8):1109-16. Epub 2010 Jun 11.*

# The WHO Health Economic Assessment Tool




How much is reduced mortality from regular walking and cycling worth?

# Integration of health effects in transport assessments: challenges

- Complex methodological questions for transport planners:
  - which health endpoints to include?
  - form of the relationship between exposure and effect?
  - activity substitution
  - which costs to include?
  - how to calculate costs?
  - which time lag periods to apply before benefits/costs occur?

# The question

If ***x*** people walk/cycle a distance of ***y*** kilometres on most days, what is the economic value of the health benefits that occur as a result of the reduction in mortality due to their physical activity?

# Key considerations – tailoring action

- Studies comparing built environment attributes across different countries demonstrate a wide variety of diversity in urban form and challenges ("Don't tell me to be like Copenhagen or Amsterdam")
- Different cities have different opportunities and different starting points
- Ensure benefits reach those with greatest need, in an appropriate way (older people; low SES groups; women; ethnic minorities)

# WHO Healthy Cities Network

- A healthy city is defined by a process, not an outcome
- A healthy city is not one that has achieved a particular health status
- It is conscious of health and striving to improve it
- A healthy city is one that continually creates and improves its physical and social environments and expands the community resources
- This entails:
  - explicit political commitment;
  - leadership;
  - institutional change; and
  - intersectoral partnerships


DENMARK
PHYSICAL ACTIVITY FACTSHEET
World Health Organization
Europe
DENMARK
PREVALENCE (%) OF ADOLESCENTS REACHING WHO RECOMMENDED PHYSICAL ACTIVITY LEVELS, 2013/2014
% | ADOLESCENTS | 11 YEARS | 13 YEARS | 15 YEARS
MALES | 20 | 16 | 15
FEMALES | 11 | 12 | 7
Total population: 5 627 235
Median age: 41.3 years
Life expectancy at birth: males 78.3 years
Life expectancy at birth: females 82.4 years
GDP per capita: €44 400
GDP spent on health: 10.0% (1)


PORTUGAL
PHYSICAL ACTIVITY FACTSHEET
World Health Organization
Europe
PORTUGAL
PREVALENCE (%) OF ADULTS THAT ENGAGED IN MODERATE- AND VIGOROUS-INTENSITY PHYSICAL ACTIVITY FROM EUROBAROMETER, 2014
% | ADULTS | MODERATE-INTENSITY* | VIGOROUS- INTENSITY*
BOTH SEXES | 14 | 9
*moderate- and vigorous-intensity physical activity on at least 4 days within the past 7 days
Total population: 10 427 301
Median age: 43.1 years
Life expectancy at birth males: 77.6 years
Life expectancy at birth females: 84.0 years
GDP per capita: €15 800
GDP spent on health: 10.2% (1)


NETHERLANDS
PHYSICAL ACTIVITY FACTSHEET
World Health Organization
Europe
NETHERLANDS
PREVALENCE (%) OF ADULTS MEETING THE RECOMMENDED PHYSICAL ACTIVITY LEVELS, 2014
% | ADULTS (18+ YEARS)
MALES | NNGB | 58.7
FITNORM | 28.5
COMBINED | 61.5
FEMALES | NNGB | 58.2
FITNORM | 22.6
COMBINED | 59.9
BOTH SEXES | NNGB | 58.5
FITNORM | 24.5
COMBINED | 60.7
Total population: 16 900 726
Median age: 42.0 years
Life expectancy at birth males: 79.5 years
Life expectancy at birth females: 83.2 years
GDP per capita: €35 900
GDP spent on health: 12.1% (2011) (1)

World Health Organization
REGIONAL OFFICE FOR Europe

cities

# *Food Environment Description in Cities from Central Asia and Caucasus*


- To characterize the street food environment in urban settings, including the vending places , their food offer, and customer characteristics
- To document food marketing in public places, using photography and 360 film
- To report the content of trans-fatty acids and sodium in foods sold in the streets, based on laboratory analyses of locally-obtained food samples

World Health Organization
REGIONAL OFFICE FOR Europe

cities

# *Food Environment Description in Cities from Central Asia and Caucasus*