

# Nutrition, Physical Activity and Obesity

## Netherlands



© Catharina de Kat-Reijnen

This is one of the 53 country profiles covering developments in nutrition, physical activity and obesity in the WHO European Region. The full set of individual profiles and an overview report including methodology and summary can be downloaded from the WHO Regional Office for Europe website: <http://www.euro.who.int/en/nutrition-country-profiles>.

© World Health Organization 2013  
All rights reserved.

DEMOGRAPHIC DATA	
Total population	16 613 000
Median age (years)	40.7
Life expectancy at birth (years) female   male	82.2   78.1
GDP per capita (US\$)	46 910.0
GDP spent on health (%)	11.9

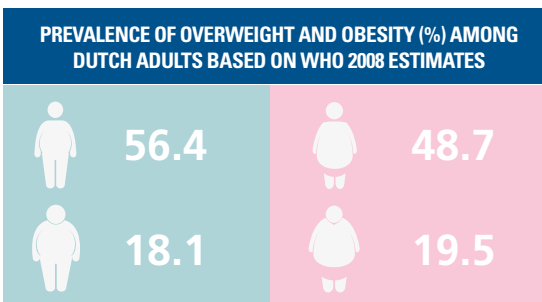
### Monitoring and surveillance

#### Overweight and obesity in three age groups

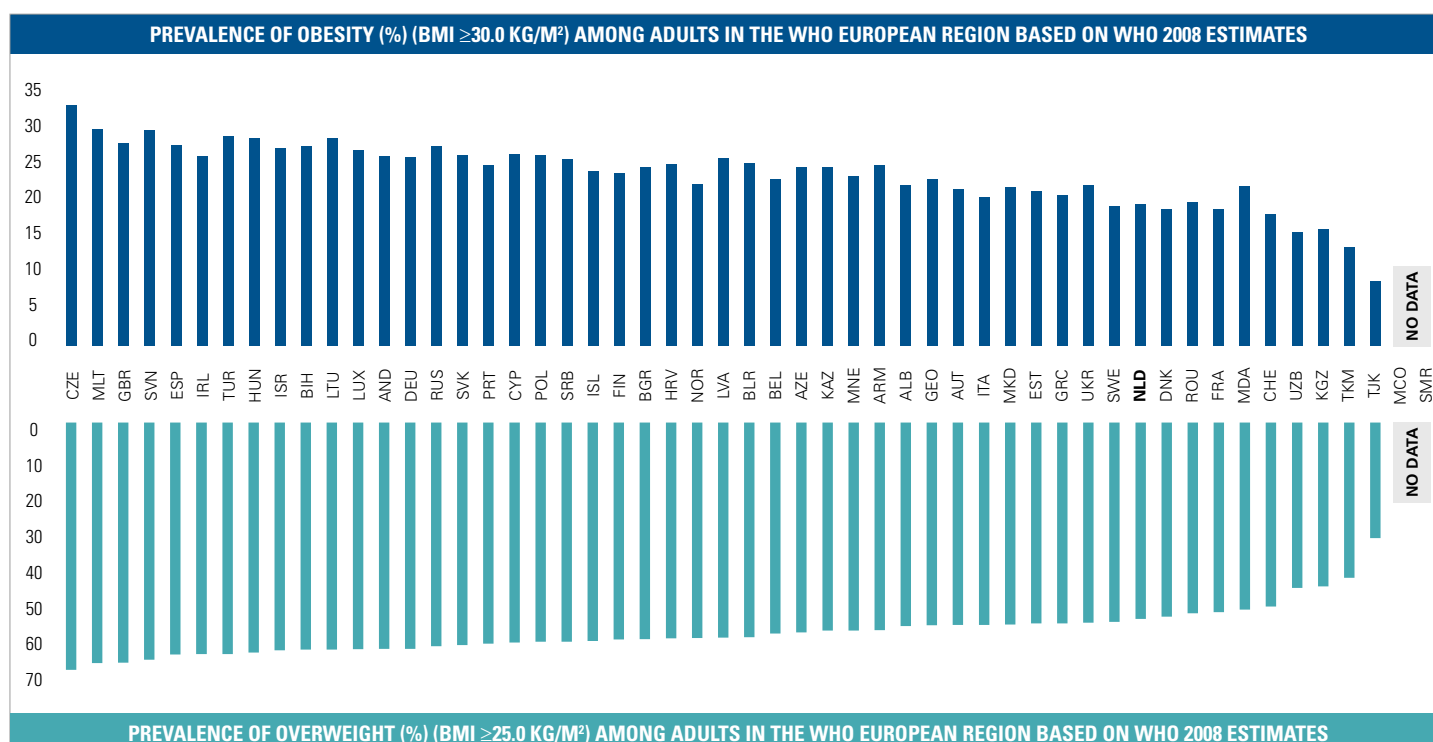
##### Adults (20 years and over)

Intercountry comparable overweight and obesity estimates from 2008 (1) show that 52.5% of the adult population ( $\geq 20$  years old) in the Netherlands were overweight and 18.8% were obese. The prevalence of overweight was higher among men (56.4%) than women (48.7%). The proportion of men and women that were obese was 18.1% and 19.5%, respectively.

Nationally representative data collected in 2011 show that 53.5% of men and 43.0% of women aged 20 years and older were overweight (based on self-reported height and weight). The proportion of men and women that were obese was 10.2% and 12.6%, respectively (2). It should be taken into account that



Source: WHO Global Health Observatory Data Repository (1).



Notes. The country codes refer to the ISO 3166-1 Alpha-3 country codes. Data ranking for obesity is intentionally the same as for the overweight data. BMI: body mass index.  
Source: WHO Global Health Observatory Data Repository (1).

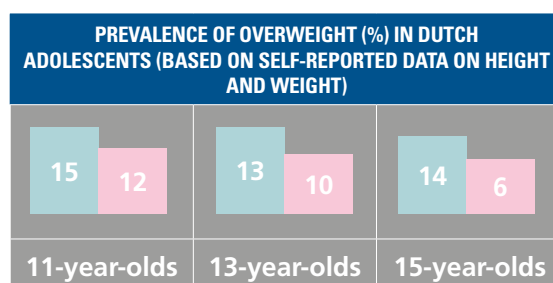
The Regional Office is grateful to the European Commission (EC) for its financial support for the preparation of this country profile and the development of the nutrition, obesity and physical activity database that provided data for it.

these data do not allow for comparability across countries due to sampling and methodological differences.

Adulthood obesity prevalence forecasts (2010–2030) predict that in 2020, 8% of both men and women will be obese. By 2030, the model predicts that 8% of men and 9% of women will be obese.<sup>1</sup>

### Adolescents (10–19 years)

In terms of prevalence of overweight and obesity in adolescents, up to 15% of boys and 12% of girls among 11-year-olds were overweight, according to data from the Health Behaviour in School-aged Children (HBSC) survey (2009/2010).<sup>2</sup> Among 13-year-olds, the corresponding figures were 13% for boys and 10% for girls, and among 15-year-olds, 14% and 6%, respectively (3).



Source: Currie et al. (3).

According to self-reported data from a 2011 national survey among schoolchildren in the Netherlands (2), the proportion of schoolchildren aged 12–16 years that were overweight was 11.0% for boys and 10.3% for girls; the obesity figures for the same age group were 1.8% and 1.1%, respectively. The proportion of overweight boys and girls aged 16–20 years was 14.0% and 15.9%, respectively; and 2.9% and 3.9% for obesity (2).<sup>3</sup> It should be taken into account that these figures do not allow for comparability across countries.

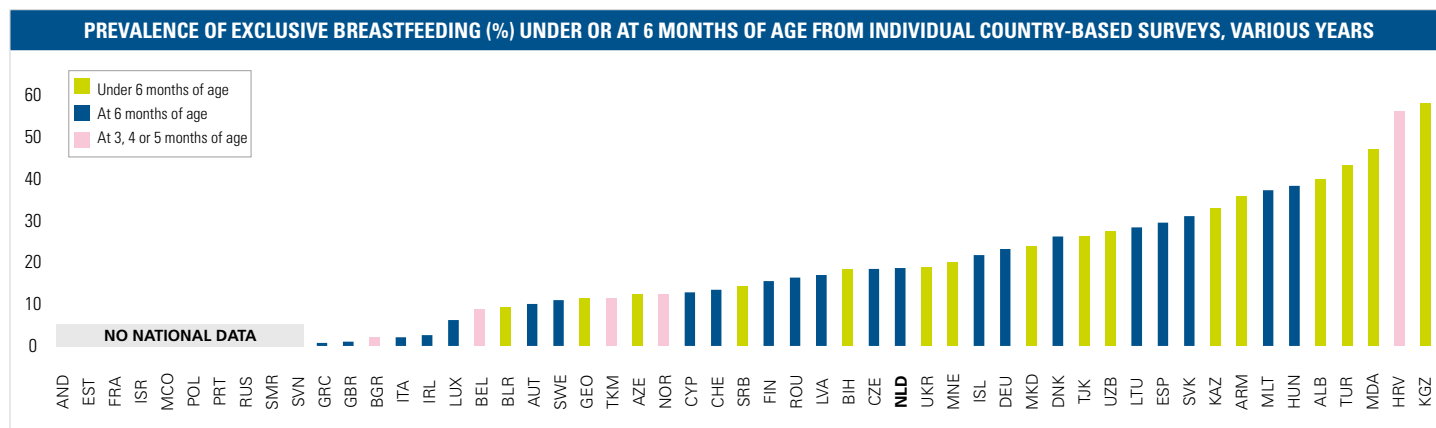
### Children (0–9 years)

No prevalence figures are available for overweight and obesity in schoolchildren based on measured intercountry comparable data. The Netherlands is not yet participating in the WHO European Childhood Obesity Surveillance Initiative (COSI).

However, nationally representative data (based on self-reported height and weight) from 2011 show that 12.7% of children aged 4–12 years (boys 13.2%; girls 12.2%) were overweight. The obesity figure for the same age group was 2.9% (3.1% boys; 2.8% girls) (2).<sup>3</sup> It should be taken into account that these figures do not allow for comparability across countries.

### Exclusive breastfeeding until 6 months of age

Nationally representative data from 2010 show that the prevalence of exclusive breastfeeding at 6 months of age was 18.0% in the Netherlands.<sup>4</sup>



Notes. The country codes refer to the ISO 3166-1 Alpha-3 country codes. Data were derived from country-specific publications on surveys carried out in this field, not as part of a European-wide survey. Due to different data collection methods of the country-specific surveys, any comparisons between countries must be made with caution.  
Source: WHO Regional Office for Europe grey literature from 2012 on breastfeeding.

### Saturated fat intake

According to the 2007 estimates of the Food and Agriculture Organization of the United Nations (FAO), the adult population in the Netherlands consumed 12.4% of their total calorie intake from saturated fatty acids (5). According to national data from 2007–2010, the adult population aged 19–69 years in the Netherlands consumed about 13% of their total calorie intake from saturated fatty acids (6). It should be taken into account that these latter, national data do not allow for comparability across countries due to sampling and other methodological differences.

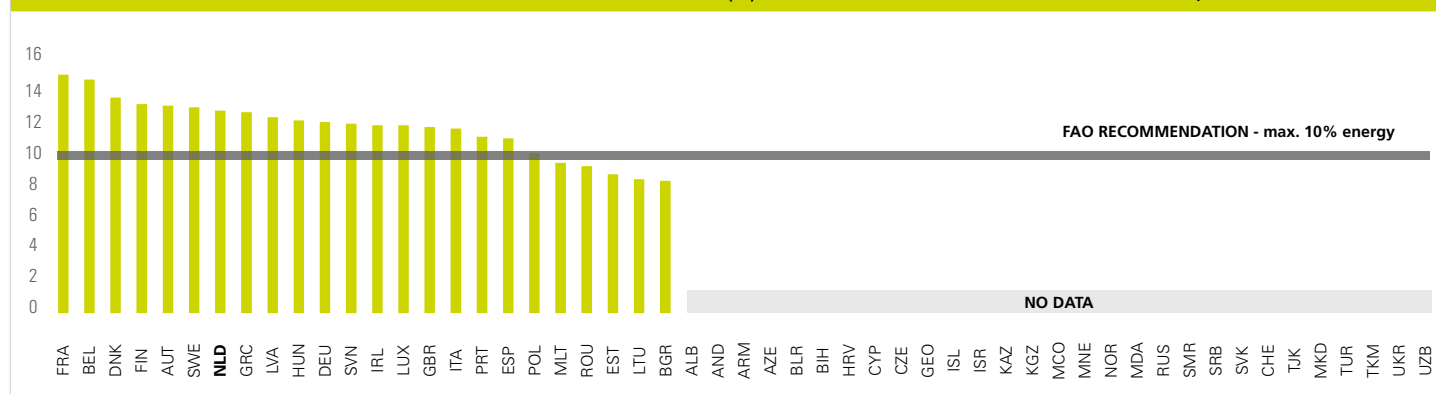
<sup>1</sup> Report on modelling adulthood obesity across the WHO European Region, prepared by consultants (led by T. Marsh and colleagues) for the WHO Regional Office for Europe in 2013.

<sup>2</sup> Based on 2007 WHO growth reference.

<sup>3</sup> Based on the growth reference recommended by the International Obesity Task Force (4).

<sup>4</sup> WHO Regional Office for Europe grey literature from 2012 on breastfeeding.

## PROPORTION OF ENERGY FROM SATURATED FATTY ACIDS (%) AMONG ADULTS IN THE WHO EUROPEAN REGION, 2007



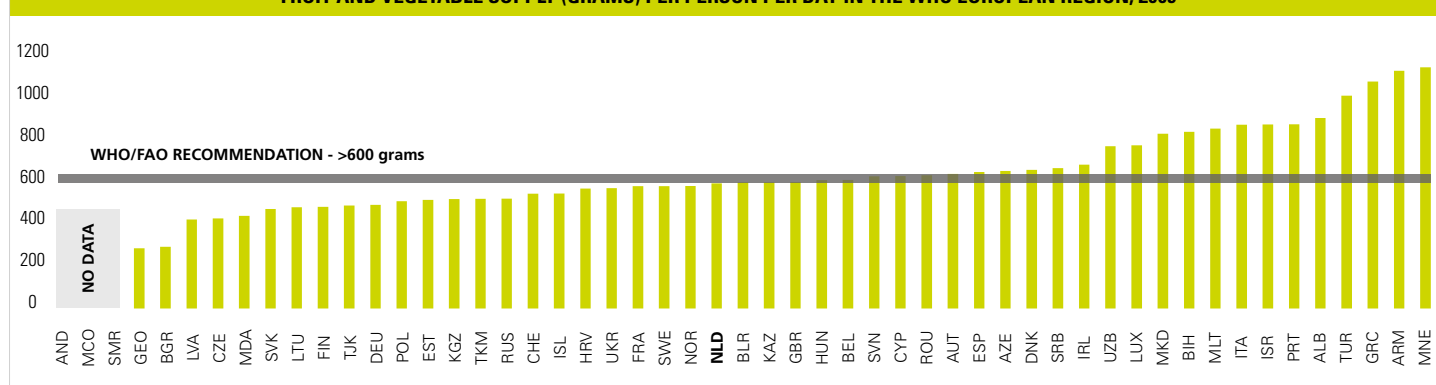
Notes. The country codes refer to the ISO 3166-1 Alpha-3 country codes. Ranking of data was carried out so that country data at the right-hand side of the graph – with values below the FAO recommendation – fall within the positive frame of the indicator.

Source: FAOSTAT (5).

## Fruit and vegetable supply

The Netherlands had a fruit and vegetable supply of 582 grams per capita per day, according to 2009 estimates (5).

### FRUIT AND VEGETABLE SUPPLY (GRAMS) PER PERSON PER DAY IN THE WHO EUROPEAN REGION, 2009



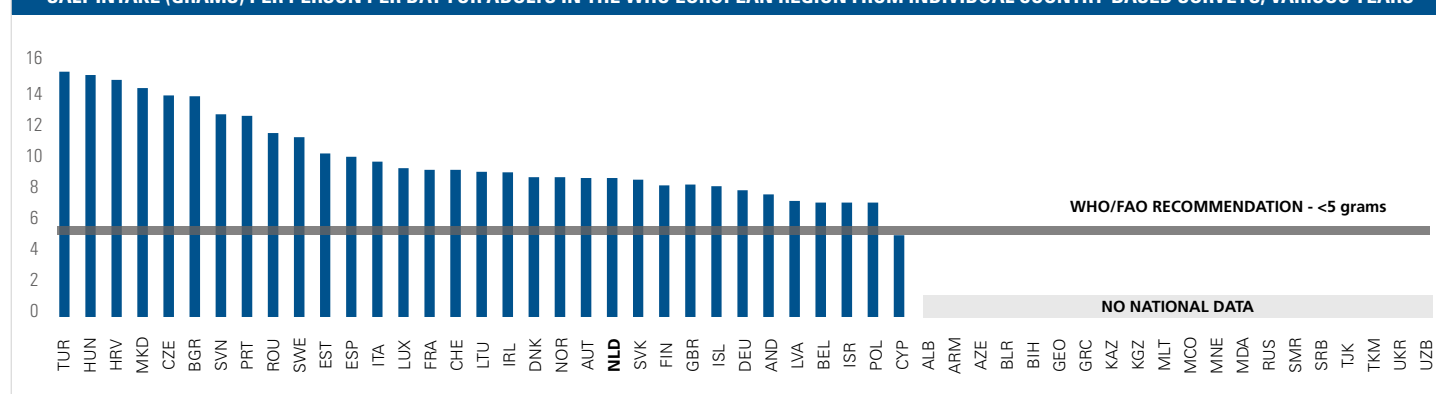
Notes. The country codes refer to the ISO 3166-1 Alpha-3 country codes. Ranking of data was carried out so that country data at the right-hand side of the graph – with values above the WHO/FAO recommendation – fall within the positive frame of the indicator.

Source: FAOSTAT (5).

## Salt intake

Data from 2007–2010 show that the median salt intake in the Netherlands was 10.1 grams per day for men and 7.5 grams per day for women (7).

### SALT INTAKE (GRAMS) PER PERSON PER DAY FOR ADULTS IN THE WHO EUROPEAN REGION FROM INDIVIDUAL COUNTRY-BASED SURVEYS, VARIOUS YEARS



Notes. The country codes refer to the ISO 3166-1 Alpha-3 country codes. Data were derived from country-specific publications on surveys carried out in this field, not as part of a European-wide survey. Due to different data collection methods of the country-specific surveys, any comparisons between countries must be made with caution. Ranking of data was carried out so that country data at the right-hand side of the graph – with values below the WHO/FAO recommendation – fall within the positive frame of the indicator.

Source: WHO Regional Office for Europe (7).

## Iodine status

According to the most recent estimates on iodine status, published in 2012, the proportion of the population with an iodine level lower than 100 µg/L was 30.9% (8, 9). National estimates from 2007–2010 (based on a 24-hour single urine excretion study) suggest that about 7% of the population in the Netherlands had an inadequate iodine intake, defined by intakes below the estimated average of 95 µg/day (10).

## Physical inactivity

In the Netherlands, 20.0% of the population aged 15 years and over were insufficiently active (men 23.7% and women 16.4%), according to estimates generated for 2008 by WHO (1).

## Policies and actions

The table below displays (a) monitoring and evaluation methods of salt intake in the Netherlands; (b) the stakeholder approach toward salt reduction; and (c) the population approach in terms of labelling and consumer awareness initiatives (7).

### Salt reduction initiatives

Monitoring & evaluation		Stakeholder approach			Population approach						
					Labelling	Consumer awareness initiatives					
Industry self-reporting	xxx	Industry involvement	Food reformulation	Specific food category		Brochure Print	TV Radio	Website Software	Education Schools	Conference	Reporting
Salt content in food	xxx										
Salt intake	xxx										
Consumer awareness		xxx	xxx	25% salt reduction in bread by 2015	xxx			xx	xx		
Behavioural change	xx										
Urinary salt excretion (24 hrs)	xxx										

Notes. xx partially implemented; xxx fully implemented.

Source: WHO Regional Office for Europe (7).

### Trans fatty acids (TFA) policies

Legislation	Type of legislation	Measure
	Voluntary	Voluntary industry action

Source: WHO Regional Office for Europe grey literature from 2012 on TFA and health, TFA policy and food industry approaches.

### Price policies (food taxation and subsidies)

Taxes	School fruit schemes
	✓

Sources: WHO Regional Office for Europe grey literature from 2012 on diet and the use of fiscal policy in the control and prevention of noncommunicable diseases; EC School Fruit Scheme website (11).

### Marketing of food and non-alcoholic beverages to children (12)

In recent years, the Ministry of Health, Welfare and Sport has had several meetings with the Food Industry Federation to discuss what to expect in terms of self-regulation by the industry.

In June 2010, the Ministry of Health initiated a year-long research programme (13) (undertaken by the Dutch Consumers Organization) to monitor the action taken by the food industry regarding marketing to children aged 7–12 years. As part of the self-regulation process during the period 2010–2012, the code of conduct on advertising of foods (14) was refined. The Food Industry Federation called on its members to be reserved in their marketing aimed at children aged 7–12 years, and has taken the initiative to monitor its members' marketing activities aimed at children (15).

### Physical activity (PA), national policy documents and action plans

Sport	Target groups	Health	Education		Transportation	
Existence of national "sport for all" policy and/or national "sport for all" implementation programme	Existence of specific scheme or programme for community interventions to promote PA in the elderly	Counselling on PA as part of primary health care activities	Mandatory physical education in primary and secondary schools	Inclusion of PA in general teaching training	National or subnational schemes promoting active travel to school	Existence of an incentive scheme for companies or employees to promote active travel to work
✓	✓	✓ <sup>a</sup>	✓ <sup>b</sup>	✓ <sup>b</sup>	✓ <sup>b</sup>	

<sup>a</sup> Clearly stated in a policy document, partially implemented or enforced. <sup>b</sup> Clearly stated in a policy document, entirely implemented and enforced.

Source: country reporting template on the Netherlands from 2009 developed in the context of a WHO/EC project on monitoring progress on improving nutrition and PA and preventing obesity in the European Union (EU).

### Leadership, partnerships and professional networks on health-enhancing physical activity (HEPA)

Existence of national coordination mechanism on HEPA promotion	Leading institution	Participating bodies
✓ National programme on sport and exercise as part of the Active Neighbourhoods project (since 2011)	Netherlands Institute for Sports and Physical Activity; Netherlands Olympic Committee; Netherlands Sports Federation; Association of local public sports departments	Government departments on health, food, sport, transport, education and research, labour, academia; communities

Source: country reporting template on the Netherlands from 2009 developed in the context of a WHO/EC project on monitoring progress on improving nutrition and PA and preventing obesity in the EU.

## PA recommendations, goals and surveillance

Existence of national recommendation on HEPA	Target groups addressed by national HEPA policy	PA included in the national health monitoring system
✓	General population, vulnerable and low socioeconomic groups	✓

Source: country reporting template on the Netherlands from 2009 developed in the context of a WHO/EC project on monitoring progress on improving nutrition and PA and preventing obesity in the EU.

## References

1. WHO Global Health Observatory Data Repository [online database]. Geneva, World Health Organization, 2013 (<http://apps.who.int/gho/data/view.main>, accessed 21 May 2013).
2. Statline [website]. Heerlen, Statistics Netherlands, 2013 (<http://statline.cbs.nl/StatWeb/?LA=en>, accessed 22 June 2013).
3. Currie C et al., eds. *Social determinants of health and well-being among young people: Health Behaviour in School-aged Children (HBSC) study: international report from the 2009/2010 survey*. Copenhagen, WHO Regional Office for Europe, 2012 (Health Policy for Children and Adolescents, No. 6) ([http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0003/163857/Social-determinants-of-health-and-well-being-among-young-people.pdf](http://www.euro.who.int/__data/assets/pdf_file/0003/163857/Social-determinants-of-health-and-well-being-among-young-people.pdf), accessed 21 May 2013).
4. Cole TJ et al. Establishing a standard definition for child overweight and obesity worldwide: international survey. *British Medical Journal*, 2000, 320:1240–1243.
5. FAOSTAT [online database]. Rome, Statistics Division of the Food and Agriculture Organization of the United Nations, 2013 (<http://faostat.fao.org/>, accessed 21 May 2013).
6. Van Rossum CTM et al. *Dutch national food consumption survey 2007–2010: diet of children and adults aged 7 to 69 years*. Bilthoven, National Institute for Public Health and the Environment, 2011 ([http://www.rivm.nl/dsresource?objectid=rivmp:55436&type=org&disposition=inline&ns\\_nc=1](http://www.rivm.nl/dsresource?objectid=rivmp:55436&type=org&disposition=inline&ns_nc=1), accessed 22 June 2013).
7. *Mapping salt reduction initiatives in the WHO European Region*. Copenhagen, WHO Regional Office for Europe, 2013 ([http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0009/186462/Mapping-salt-reduction-initiatives-in-the-WHO-European-Region.pdf](http://www.euro.who.int/__data/assets/pdf_file/0009/186462/Mapping-salt-reduction-initiatives-in-the-WHO-European-Region.pdf)).
8. Andersson M, Karumbunathan V, Zimmermann MB. Global iodine status in 2011 and trends over the past decade. *Journal of Nutrition*, 2012, 142(4):744–750.
9. Zimmerman MB, Andersson M. Update on iodine status worldwide. *Current Opinion in Endocrinology, Diabetes and Obesity*, 2012, 19(5):382–387.
10. Verkaik-Kloosterman J, Buurma-Rethans EJM, Dekkers ALM. *Inzicht in de jodiumname van kinderen en volwassenen in Nederland: Resultaten uit de Voedselconsumptiepeiling 2007–2010 [The iodine intake of children and adults in the Netherlands: results of the Dutch national food consumption survey 2007–2010]*. Bilthoven, National Institute for Public Health and the Environment, 2012 ([http://www.rivm.nl/dsresource?objectid=rivmp:119995&type=org&disposition=inline&ns\\_nc=1](http://www.rivm.nl/dsresource?objectid=rivmp:119995&type=org&disposition=inline&ns_nc=1), accessed 22 June 2013).
11. School Fruit Scheme [website]. Brussels, European Commission Directorate-General for Agriculture and Rural Development, 2012 ([http://ec.europa.eu/agriculture/sfs/eu-countries/index\\_en.htm](http://ec.europa.eu/agriculture/sfs/eu-countries/index_en.htm), accessed 21 May 2013).
12. *Marketing of foods high in fat, salt and sugar to children: update 2012–2013*. Copenhagen, WHO Regional Office for Europe, 2013 ([http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0019/191125/e96859.pdf](http://www.euro.who.int/__data/assets/pdf_file/0019/191125/e96859.pdf), accessed 10 October 2013).
13. *Monitoring voedingsreclame kinderen [Monitoring food advertising to children]*. The Hague, Ministry of Health, Welfare and Sport, 2011 (<http://www.rijksoverheid.nl/documenten-en-publicaties/rapporten/2011/10/28/monitoring-voedingsreclame-kinderen.html>, accessed 6 August 2013).
14. Reclamecode voor voedingsmiddelen (RVV) [Food advertising code] [website]. Amsterdam, Stichting Reclame Code, 2005 (<https://www.reclamecode.nl/nrc/pagina.asp?paginaID=277%20&deel=2>, accessed 6 August 2013).
15. Reclamecode voor Voedingsmiddelen [Food advertising code] [website]. Rijswijk, Dutch Food Industry Federation, 2010 (<http://www.fnli.nl/werkgebieden/voeding-gezondheid-voedselveiligheid/voeding-en-gezondheid/reclamecode-voor-voedingsmiddelen.html>, accessed 6 August 2013).