



WEEKLY EPIDEMIOLOGICAL REPORT

A publication of the Epidemiology Unit
Ministry of Health

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Obesity and overweight-Fifth leading killer

What is overweight and obesity?

Overweight and obesity is defined as abnormal or excessive fat accumulation that may impair health.

Body Mass Index (BMI) is a simple index of weight for height that is commonly used to classify overweight and obesity in adults. It is defined as a person's weight in kilograms divided by the square of his height in meters (kg/m²).

Key facts of obesity and over weight

- Worldwide obesity has more than doubled since 1980.
- In 2008, 1.5 billion adults(20 and older) were overweight. Of these over 200 million men and nearly 300 million women were obese.
- 65% of the world's population live in countries where overweight and obesity kills more people than underweight.
- Nearly 43 million children under the age of five were overweight in 2010.
- Obesity is preventable Overall, more than one in ten of the world's adult population is obese.

WHO definitions

Overweight - BMI ≥25

Obesity -BMI ≥30

BMI provides the most useful population level measure of overweight and obesity as it is the same for both sexes and for all ages of adults. However, it should be considered a rough guide be-

cause it may not correspond to the same degree of fatness in different individuals. For clinical applications, population specific cut off points will need to be determined by countries as most appropriate and should be used with an individual's clinical history and other clinical measurements (e.g. waist circumference and presence of other related factors)

Facts about overweight and obesity

Overweight and obesity is the fifth leading risk for global deaths. At least 2.8 million adults die each year as a result of being overweight or obese. In addition, 44% of the diabetes burden, 23% of the ischaemic heart disease burden and between 7% and 41% of certain cancer burdens are attributable to overweight and obesity.

Once considered a problem limited to high income countries, overweight and obesity in children is now on the rise in low and middle income countries, particularly in urban settings. Close to 35 million overweight children are living in developing countries and 8 million in developed countries.

Overweight and obesity is linked to more deaths worldwide than underweight. For example, 65% of the world's population live in countries where overweight and obesity kill more people than underweight (this includes all high income and most middle income countries).

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Causes of obesity and overweight

The fundamental cause of obesity and overweight is an energy imbalance between calories consumed and calories expended.

This is due to

- Increased intake of energy dense foods that are high in fat, salt and sugars but low in vitamins, minerals and other micronutrients
- Decrease in physical activity due to the increasingly sedentary nature of many forms of work, changing modes of transportation and increasing urbanization.

Changes in dietary and physical activity patterns are often the result of environmental and societal changes associated with development and lack of supportive policies in sectors such as health, agriculture, transport, urban planning, environment, food processing, distribution, marketing and education.

Common health consequences of overweight and obesity

Raised BMI is a major risk factor for non communicable diseases such as

- Cardiovascular diseases (mainly heart disease and stroke- which were the leading cause of death in 2008)
- Diabetes
- Musculoskeletal disorders (especially osteoarthritis - a highly disabling degenerative disease of the joints)
- Cancers such as endometrial, breast, and colonic cancers.

The risk for these non communicable diseases increases with the increase in BMI.

Childhood obesity is associated with a higher chance of obesity, premature death and disability in adulthood. But in addition to increased future risks, obese children experience breathing difficulties, increased risk of fractures, hypertension, early markers of cardiovascular disease, insulin resistance and psychological effects.

“Double burden” in developing countries

Many low and middle income countries are now facing a "double burden" of disease. While they continue to deal with the problems of infectious disease and under nutrition, they are experiencing a rapid upsurge in non communicable disease risk factors such as obesity and overweight, particularly in urban settings. It is not uncommon to find under nutrition and obesity existing side by side

within the same country, the same community and the same household.

Children in low and middle income countries are more vulnerable to inadequate prenatal, infant and young child nutrition. At the same time they are exposed to high fat, high sugar, high salt, energy dense, micronutrient poor foods which tend to be lower in cost. These dietary patterns in conjunction with low levels of physical activity result in sharp increases in childhood obesity while under nutrition issues remain unsolved.

How to reduce overweight and obesity

Overweight and obesity as well as their related non communicable diseases are largely preventable. Prevention can be done at individual and community levels. Individual responsibility can only have its full effect where people have access to a healthy lifestyle. Therefore effective community level activities are also necessary.

At the individual level

- Limit energy intake from total fats
- Increase consumption of fruit and vegetables as well as legumes, whole grains and nuts
- Limit the intake of sugars
- Engage in regular physical activity
- Achieve energy balance and a healthy weight.

At the community level

- Support individuals in following the recommendations above, through sustained political commitment and the collaboration of many public and private stakeholders (e.g. food industry can play a significant role in promoting healthy diets by reducing the fat, sugar and salt content of processed foods and by practicing responsible marketing strategies)
- Make regular physical activity and healthier dietary patterns affordable and easily accessible to all - especially the poorest individuals.
- Ensuring the availability of healthy food choices and supporting regular physical activity in the workplace.

Source

WHO Obesity and overweight fact sheet, available from

<http://www.who.int/mediacentre/factsheets/fs311/en/index.html>

Compiled by

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Table 1: Vaccine-preventable Diseases & AFP

07th - 13th May 2011(19th Week)

Disease	No. of Cases by Province									Number of cases during current week in 2011	Number of cases during same week in 2010	Total number of cases to date in 2011	Total number of cases to date in 2010	Difference between the number of cases to date in 2011 & 2010
	W	C	S	N	E	NW	NC	U	Sab					
Acute Flaccid Paralysis	01	00	00	00	00	01	00	00	00	02	03	30	33	- 09.1 %
Diphtheria	00	00	00	00	00	00	00	00	00	-	-	-	-	-
Measles	01	00	00	01	00	00	00	00	01	03	00	51	36	+ 41.6 %
Tetanus	00	00	00	00	00	00	00	00	00	00	00	08	09	-11.1 %
Whooping Cough	00	00	00	00	00	00	00	00	00	00	00	15	07	+114.3 %
Tuberculosis	55	184	12	08	05	17	03	00	12	296	235	3081	3362	- 08.4 %

Table 2: Newly Introduced Notifiable Disease

07th - 13th May 2011(19th Week)

Disease	No. of Cases by Province									Number of cases during current week in 2011	Number of cases during same week in 2010	Total number of cases to date in 2011	Total number of cases to date in 2010	Difference between the number of cases to date in 2011 & 2010
	W	C	S	N	E	NW	NC	U	Sab					
Chickenpox	07	02	19	06	06	08	13	02	11	74	60	1921	1513	+ 26.9 %
Meningitis	02 CB=1 KL=1	02 KD=2	01 GL=1	00	00	05 KN=4 PU=1	00	01 MO=1	02 RP=1 KG=1	13	31	346	592	- 41.5 %
Mumps	04	02	03	03	03	09	05	01	12	42	19	872	342	+ 154.9 %
Leishmaniasis	00	00	01 HB=1	00	00	00	04 AP=4	00	00	05	06	260	139	+ 79.8 %

Key to Table 1 & 2

Provinces: W: Western, C: Central, S: Southern, N: North, E: East, NC: North Central, NW: North Western, U: Uva, Sab: Sabaragamuwa.
DPDHS Divisions: CB: Colombo, GM: Gampaha, KL: Kalutara, KD: Kandy, ML: Matale, NE: Nuwara Eliya, GL: Galle, HB: Hambantota, MT: Matara, JF: Jaffna, KN: Killinochchi, MN: Mannar, VA: Vavuniya, MU: Mullaitivu, BT: Batticaloa, AM: Ampara, TR: Trincomalee, KM: Kalmunai, KR: Kurunegala, PU: Puttalam, AP: Anuradhapura, PO: Polonnaruwa, BD: Badulla, MO: Moneragala, RP: Ratnapura, KG: Kegalle.

Data Sources:

Weekly Return of Communicable Diseases: Diphtheria, Measles, Tetanus, Whooping Cough, Chickenpox, Meningitis, Mumps.

Special Surveillance: Acute Flaccid Paralysis.

Leishmaniasis is notifiable only after the General Circular No: 02/102/2008 issued on 23 September 2008. .

Dengue Prevention and Control Health Messages

Check the roof gutters regularly for water collection where dengue mosquitoes could breed.

Table 4: Selected notifiable diseases reported by Medical Officers of Health
07th – 13th May 2011(19th Week)

DPDHS Division	Dengue Fever / DHF*		Dysentery		Encephalitis		Enteric Fever		Food Poisoning		Leptospirosis		Typhus Fever		Viral Hepatitis		Human Rabies		Returns Received Timely**
	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	%
Colombo	112	1839	4	85	0	4	0	62	0	8	4	156	0	5	0	20	0	2	85
Gampaha	62	661	4	54	1	9	0	21	0	12	8	272	0	13	0	35	0	2	73
Kalutara	19	330	5	64	0	3	0	27	1	14	2	107	0	0	0	4	0	0	50
Kandy	8	168	7	165	0	4	0	14	0	26	4	63	0	42	0	25	0	0	74
Matale	2	72	1	54	0	2	0	9	0	7	1	86	0	10	0	4	0	0	58
Nuwara	1	45	8	143	0	3	0	22	0	12	1	23	0	37	0	7	0	0	69
Galle	14	152	2	32	0	4	0	3	0	5	5	61	0	14	0	7	0	0	74
Hambantota	6	165	0	16	0	4	0	2	0	7	27	296	0	24	0	4	0	0	83
Matara	17	160	1	29	0	1	1	6	3	6	8	156	2	33	0	9	0	1	94
Jaffna	1	137	4	69	0	3	2	115	0	11	0	2	0	162	0	13	0	1	82
Kilinochchi	0	32	0	8	0	3	0	5	0	4	0	2	0	6	0	2	0	0	0
Mannar	1	19	0	7	0	0	0	10	2	66	0	11	0	27	0	1	0	0	60
Vavuniya	2	39	0	19	0	9	1	6	33	36	0	31	0	2	0	1	0	0	75
Mullaitivu	0	6	0	26	0	1	0	1	0	0	0	3	0	1	0	2	0	0	25
Batticaloa	38	438	30	319	0	3	1	4	0	9	0	16	1	1	0	2	1	4	64
Ampara	0	40	0	41	0	0	0	7	0	20	1	47	0	1	0	6	0	0	29
Trincomalee	3	76	13	372	0	0	0	1	0	7	0	61	0	3	0	4	0	0	55
Kurunegala	10	233	9	123	1	6	1	44	0	26	19	1149	0	42	1	14	0	0	70
Puttalam	4	220	2	79	0	0	0	12	0	2	1	74	0	10	0	5	0	1	44
Anuradhapu	4	85	4	54	0	1	0	2	0	22	4	196	0	13	0	4	0	0	63
Polonnaruw	11	108	3	25	0	1	0	6	0	8	2	63	0	1	0	5	0	0	100
Badulla	2	108	9	75	0	4	0	22	0	5	0	28	0	25	0	20	0	0	80
Monaragala	3	96	1	26	0	2	0	17	1	8	8	136	0	38	0	33	0	0	64
Ratnapura	16	271	8	216	0	3	0	19	1	12	7	232	0	19	0	20	0	0	44
Kegalle	11	142	2	40	0	10	0	30	0	18	7	143	1	11	3	38	0	0	73
Kalmunai	0	15	23	254	0	0	0	0	0	11	0	3	0	2	0	2	0	1	46
SRI LANKA	347	5657	140	2395	02	80	06	467	41	362	109	3417	04	542	04	287	01	12	66

Source: Weekly Returns of Communicable Diseases WRCD).

*Dengue Fever / DHF refers to Dengue Fever / Dengue Haemorrhagic Fever.

**Timely refers to returns received on or before 13th May, 2011 Total number of reporting units =320. Number of reporting units data provided for the current week: 214

A = Cases reported during the current week. B = Cumulative cases for the year.

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Comments and contributions for publication in the WER Sri Lanka are welcome. However, the editor reserves the right to accept or reject items for publication. All correspondence should be mailed to The Editor, WER Sri Lanka, Epidemiological Unit, P.O. Box 1567, Colombo or sent by E-mail to chepid@sltnet.lk.

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