

비만의 정의와 역학

Definition and Epidemiology of Obesity

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Dol Mi Kim, M.D. · Chul Woo Ahn, M.D.

Department of Internal Medicine

Yonsei University College of Medicine, Yongdong Severance Hospital

E - mail : lcdm@yumc.yonsei.ac.kr · acw@yumc.yonsei.ac.kr

Abstract

Obesity can be defined as the excessive accumulation of fat in adipose tissues, to the extent that health may be impaired. The most widely used measures of total and abdominal adiposity are the body mass index (BMI) and waist circumference, respectively. During the past several decades, the prevalence of obesity has increased substantially, making it a true epidemic and a public health crisis, with about 315 million people world - wide estimated to fall into the WHO - defined obesity categories with BMI of 30 or above. Indeed, the obesity epidemic has been already leading to dramatic increases in type 2 diabetes and metabolic syndromes. On the other hand, there are substantial risks for morbidity in obese children even before they reach adulthood, and if obesity in childhood persists into the adult years, the morbidity and mortality are greater than if the obesity developed in adulthood. The major causes of the rapid global rise in obesity rates lie in the profound environmental and societal changes now affecting large parts of the world and creating societies in which physical activities are low and the availability of high - fat, energy - dense foods has increased. Strategies aimed at preventing weight gain and obesity are likely to be more cost effective and to have a greater positive impact on the long - term control of body weight than treating obesity once it has developed.

Keywords : **Obesity prevalence; Body mass index; Waist circumference**

가

(Body Mass Index)

(Waist Circumference)

3

가

(WHO)가

30 kg/m²

가

가

1. 가

WHO recommended definition of obesity(2000)*. The risk co - morbidities column refers to the likelihood of the occurrence of obesity - associated disease.		
Classification	BMI(kg/m ²)	Risk of co - morbidities
Underweight	< 18.5	Low(but risk of other clinical problems increased)
Normal range	18.5~24.9	Average
Overweight	> 25.0	
Pre - obese	25~29.9	Mildly increased
Obese	> 30.0	
Class	30.0~34.9	Moderate
Class	30.0~34.9	Severe
Class	> 40.0	Very severe

*Adapted from Obesity : preventing and managing the global epidemic. Technical Report 894. Geneva : WHO, 2000

가 .

Metro-politan Life Insurance Tables

가

,

,

가 가

가

가 .

가

(3). 2000

가

25 kg/m²

, 30 kg/m²

1

(1).

가

1.

가

가

가

,

1

(4).

,

가

25 kg/m²

가

가 (5).

(International Obesity Taskforce)

International Association for the Study

of Obesity and the Western Pacific Region of WHO

(1, 2).

23 kg/m²

, 25 kg/m²

2.

Waist circumference(measure of visceral adiposity) associated with increased risk of metabolic complications of obesity.		
Population	Risk	
	Increased	Substantially increased
Caucasian (WHO)		
Men	> 94 cm	> 102 cm
Women	> 80 cm	> 88 cm
Asia (IASO/IOTF/WHO)		
Men		> 90 cm
Women		> 80 cm
WGOC (China)		
Men		> 85 cm
Women		> 80 cm

4

5

CT

가

(2).

1

(6).

24

(2)(6).

13

7

4

85 cm,

80 cm

가 가
(7).

(Working Group on Obesity in China,

WGOC)

24 kg/m²

28 kg/m²

1

(7).

cm

85

가

3.

가 가

가

US National Center for

2.

Health Statistics

가

2

International reference population

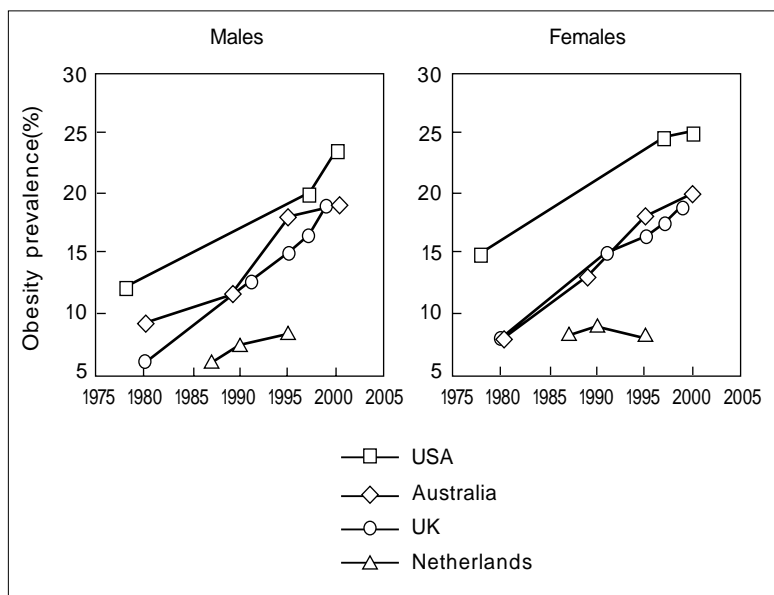
MRI CT, 2 X

(dual X - ray

(8). 가

absorptiometry)

가



1.

가

(9, 10). Cole 7

18

30 kg/m²

25 kg/m²

가 (1).

(11).

가

가

35.5%가

19.1%,

21.8%가

20.5%

67.4%,

52%가

25 kg/m²

(14).

60%가

25 kg/m²

27%가

(15).

27 kg/m²

1994

35.2%,

25.6% (12).

AUSDIAB

3 22~23 kg/m²

가 가 가

10%,

12% (16, 17).

가 1.5 가 (18).

6% 40%

25%

가 가

2~3 (5~7).

1998

10 , 9,771

40~44

30% 가 가 가

(19). 25 50~54 가

kg/m²

48.9% , 40~49 25

67.4% 66.7% 55.2%

50~59 56.9% (21) (

(20). 2).

가 29.7 kg/m²

30%가 52.9%,

24 kg/m² 8~12%가 28 kg/m² 28.2 kg/m²

(7). 1992 22.4%가 36.2% 20

25 kg/m² 3% 50%

. 1998

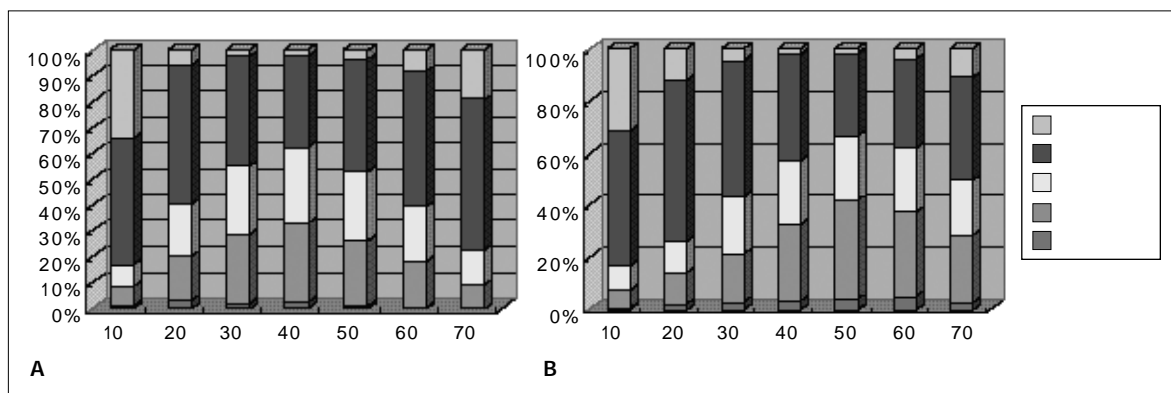
23.0~24.9 kg/m² 27%(), 22.5%(),

, 31.5%(), 25.0~29.9 kg/m² 50%(),

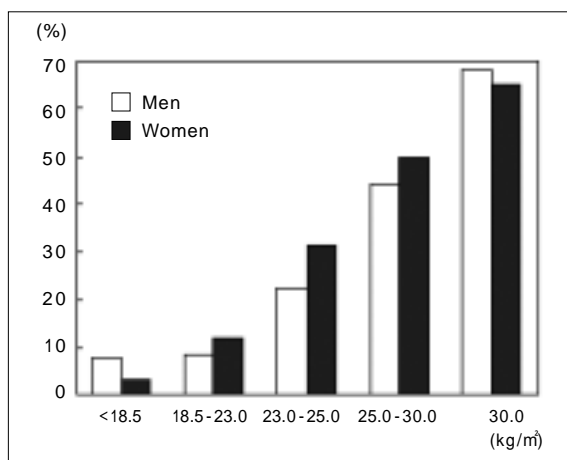
44.3%(), 50.0%(), 30.0 kg/m² 68.3%(),

64.8 kg/m² 가

24.9 kg/m² (18.5~22.9 kg/m²) 10%(), 8.5%(),



2. (A : , B :)



3. 20 (, 1998)

11.9%() , (<18.5 kg/m²) 7.7%
() , 3.2%()
(22)(3).

가 2
1995
5~6%,
2 가
5%가
16~18%, 14~16%가
6~19 13~
14%가 1960 3 가
가 , ,
14~30%
(23).
51% 26%
가
가
(24~26).
2000

3.

N(%)	N(%)	N(%)	N(%)
63(15.8)	198(49.6)	60(15.0)	78(19.6)
138(23.6)	293(50.1)	60(10.3)	93(15.9)
151(36.6)	194(47.0)	34(8.2)	34(8.2)
47(13.5)	207(59.7)	51(14.7)	42(12.1)
142(29.2)	249(51.2)	62(12.8)	33(6.8)
50(13.9)	213(59.0)	47(13.0)	51(14.1)

가

4. 2000 , 2001

1999	2000	2001	1999	2000	2001
140,746	144,521	147,245	65,464	63,190	63,649
700	892	892	324	4949	450
122,219	124,598	126,336	60,605	58,753	57,159
275	409	371	181	216	206
262,965	269,119	273,581	126,069	122,943	120,808
975	1,301	1,263	505	710	656

가

가

가

(27)

2,590 12.8%(), 14.7%(), 10.6%

가

() 110 ~ 120%

14.9%(), 11.4%(), 10.5%()

120% 16.1%(), 11.8%

(), (11.0%) (3).

786,451

(%)

50%

0.5%가

가 2

가

(4).

☞

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26. , , , , , 1998


가

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Tel. 02-794-2480, 6587, 2474(ARS 8) Fax. 02-792-1361
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