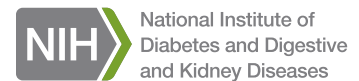


Understanding Adult Overweight and Obesity

U.S. Department of Health
and Human Services



WIN *Weight-control Information Network*

When we eat more calories than we burn, our bodies store this extra energy as fat. While a few extra pounds may not seem like a big deal, they can increase your chances of having high blood pressure and high blood sugar. These conditions may lead to serious health problems, including heart disease, stroke, type 2 diabetes, and certain cancers.

Today, more than two-thirds of adults in the United States are considered to be overweight or obese. More than one-third of adults have obesity. This fact sheet will help you find out if you may be at risk of developing weight-related health problems. It will also explain how overweight and obesity are treated and give you ideas for improving your health at any weight.

How can I tell if I am at a normal weight?

Body mass index (BMI) is one way to tell whether you are at a normal weight, overweight, or obese. The BMI measures your weight in relation to your height.

The BMI table on the next page will help you to find your BMI score. Find your height in inches in the left column labeled "Height." Move across the row to your weight. The number at the top of the column is the BMI for that height and weight. Pounds are rounded off. You may also go to the Resources section at the end of this booklet for a link to an online tool for measuring BMI.

A BMI of 18.5 to 24.9 is in the normal range. A person with a BMI of 25 to 29.9 is considered overweight, and someone with a BMI of 30 or greater is considered obese.

However, because BMI doesn't measure actual body fat, a person who is very muscular, like a

bodybuilder, may have a high BMI without having a lot of body fat. Please review your findings with your health care provider if your BMI is outside of the normal range.

Why do people gain weight?

Our bodies need calories (energy) to keep us alive and active. But to maintain weight we need to balance the energy we take in with the energy we use. When a person eats and drinks more calories than he or she burns, the energy balance tips toward weight gain, overweight, and obesity. The tipping

(continued on page 3)

Does my body shape matter?

Health care providers are concerned not only with how much body fat a person has, but where the fat is located on the body.

- Women tend to collect fat in their hips and buttocks, giving them a "pear" shape.
- Men usually build up fat around their bellies, giving them more of an "apple" shape.
- Of course, some men are pear-shaped and some women are apple-shaped, especially after menopause.

Extra fat around your midsection may put you at greater risk for type 2 diabetes, heart disease, and other health problems—even if you have a normal weight. Your provider can help you assess your risk.

Table 1. Body Mass Index Table

To use the table, find the appropriate height in the left-hand column labeled Height. Move across to a given weight (in pounds). The number at the top of the column is the BMI at that height and weight. Pounds have been rounded off.

	Normal										Overweight										Obese										Extreme Obesity											
BMI	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54						
Height (inches)																					Body Weight (pounds)																					
58	91	96	100	105	110	115	119	124	129	134	138	143	148	153	158	162	167	172	177	181	186	191	196	201	205	210	215	220	224	229	234	239	244	248	253	258						
59	94	99	104	109	114	119	124	128	133	138	143	148	153	158	163	168	173	178	183	188	193	198	203	208	212	217	222	227	232	237	242	247	252	257	262	267						
60	97	102	107	112	118	123	128	133	138	143	148	153	158	163	168	174	179	184	189	194	199	204	209	215	220	225	230	235	240	245	250	255	261	266	271	276						
61	100	106	111	116	122	127	132	137	143	148	153	158	164	169	174	180	185	190	195	201	206	211	217	222	227	232	238	243	248	254	259	264	269	275	280	285						
62	104	109	115	120	126	131	136	142	147	153	158	164	169	175	180	186	191	196	202	207	213	218	224	229	235	240	246	251	256	262	267	273	278	284	289	295						
63	107	113	118	124	130	135	141	146	152	158	163	169	175	180	186	191	197	203	208	214	220	225	231	237	242	248	254	259	265	270	278	282	287	293	299	304						
64	110	116	122	128	134	140	145	151	157	163	169	174	180	186	192	197	204	209	215	221	227	232	238	244	250	256	262	267	273	279	285	291	296	302	308	314						
65	114	120	126	132	138	144	150	156	162	168	174	180	186	192	198	204	210	216	222	228	234	240	246	252	258	264	270	276	282	288	294	300	306	312	318	324						
66	118	124	130	136	142	148	155	161	167	173	179	186	192	198	204	210	216	223	229	235	241	247	253	260	266	272	278	284	291	297	303	309	315	322	328	334						
67	121	127	134	140	146	153	159	166	172	178	185	191	198	204	211	217	223	230	236	242	249	255	261	268	274	280	287	293	299	306	312	319	325	331	338	344						
68	125	131	138	144	151	158	164	171	177	184	190	197	203	210	216	223	230	236	243	249	256	262	269	276	282	289	295	302	308	315	322	328	335	341	348	354						
69	128	135	142	149	155	162	169	176	182	189	196	203	209	216	223	230	236	243	250	257	263	270	277	284	291	297	304	311	318	324	331	338	345	351	358	365						
70	132	139	146	153	160	167	174	181	188	195	202	209	216	222	229	236	243	250	257	264	271	278	285	292	299	306	313	320	327	334	341	348	355	362	369	376						
71	136	143	150	157	165	172	179	186	193	200	208	215	222	229	236	243	250	257	265	272	279	286	293	301	308	315	322	329	338	343	351	358	365	372	379	386						
72	140	147	154	162	169	177	184	191	199	206	213	221	228	235	242	250	258	265	272	279	287	294	302	309	316	324	331	338	346	353	361	368	375	383	390	397						
73	144	151	159	166	174	182	189	197	204	212	219	227	235	242	250	257	265	272	280	288	295	302	310	318	325	333	340	348	355	363	371	378	386	393	401	408						
74	148	155	163	171	179	186	194	202	210	218	225	233	241	249	256	264	272	280	287	295	303	311	319	326	334	342	350	358	365	373	381	389	396	404	412	420						
75	152	160	168	176	184	192	200	208	216	224	232	240	248	256	264	272	279	287	295	303	311	319	327	335	343	351	359	367	375	383	391	399	407	415	423	431						
76	156	164	172	180	189	197	205	213	221	230	238	246	254	263	271	279	287	295	304	312	320	328	336	344	353	361	369	377	385	394	402	410	418	426	435	443						

Source: Adapted from *Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults. The Evidence Report.* NIH Publication No. 98-4083: National Heart, Lung, and Blood Institute; 1998.

(continued from page 1)

point at which the calories coming in and the calories going out become out of balance and lead to weight gain may differ from one person to another.

What other factors are involved?

Your genes, the world around you, and other factors may all affect weight gain. Learn how to address these factors in the section “How can I improve my health?”

Family

Research shows that obesity tends to run in families, suggesting that genes may contribute to obesity. Families also share diet and lifestyle habits that may affect weight. However, it is possible to manage your weight even if obesity is common in your family.



The World around You

Where people live, play, and work may also strongly affect their weight. Consider the fact that obesity rates were lower 30 years ago. Since that time, our genetic make-up hasn't changed, but our world has.

The world around us affects access to healthy foods and places to walk and be active in many ways:

- Many people drive rather than walk.
- Living in areas without sidewalks or safe places to exercise may make it tough to be more active.
- Many people eat out or get takeout instead of cooking, which may lead to eating more calories.
- Most vending machines do not offer low-calorie, low-fat snacks.

Overweight and obesity affect people in all income ranges. But people who live in low-income areas may face even greater barriers to eating healthy foods and being active than other people. High-calorie processed foods often cost less than healthier options, such as fruits and vegetables. There also may be few safe, free, or low-cost places nearby to be active on a regular basis. These factors may contribute to weight gain.

Culture

A person's culture may also affect weight:

- Some cultures have foods with a lot of fat or sugar, making it hard to manage weight.
- Family events at which people eat large amounts of food may make it tough to control portions.

Sleep

Research suggests that lack of sleep is linked to overweight and obesity. Recent studies have found that sleeping less may make it harder to lose weight. In these studies, adults who were trying to lose weight and who slept less ate more calories and snacked more.

For more on how obesity and sleep are related, see the Resources section at the end of this fact sheet for a link to the WIN fact sheet *Do You Know Some of the Health Risks of Being Overweight?*

Medicine

Certain drugs may cause weight gain. Steroids and some drugs to treat depression or other mental health

problems may make you burn calories more slowly or feel hungry. Be sure your health care provider knows all the medicines you are taking (including over-the-counter drugs and dietary supplements). He or she may suggest another medicine that has less effect on weight.

What problems are linked to excess weight?

Weighing too much may increase the risk for several health problems. It also may contribute to emotional and social problems.

Health Risks

Type 2 diabetes, heart disease, high blood pressure, stroke, kidney disease, and certain cancers are some of the diseases linked to excess weight. Obese men are more likely than other men to develop cancer of the colon, rectum, or prostate. Obese women are more likely than other women to develop cancer of the breast (after menopause), gallbladder, uterus, or cervix. Cancer of the esophagus (the tube that carries food and liquids to the stomach) may also be linked to obesity.

Other diseases and health problems linked to excess weight include

- breathing problems, including sleep apnea
- fatty liver disease (also called nonalcoholic steatohepatitis or NASH)¹
- gallbladder disease and gallstones
- pregnancy problems, such as gestational diabetes (high blood sugar during pregnancy), high blood pressure, and increased risk for cesarean section (C-section)

Emotional and Social Effects

Excess weight may also contribute to emotional suffering. Physical beauty and how a person looks are highly valued in society. People who may not fit society's view of beauty because of their weight may be seen as less attractive.

¹ For more information on NASH, see the listing in the Resources section for the National Digestive Diseases Information Clearinghouse.

Also, because some people in our culture may view a person with obesity as lacking willpower, people with obesity may face limited options in the job market, at school, and in social situations. They may feel rejected, ashamed, or depressed.

Who should lose weight?

Health care providers generally agree that people who are considered to be obese (have a BMI of 30 or greater) may improve their health by losing weight.

If you are overweight (BMI between 25 and 29.9), experts recommend that you avoid gaining any extra weight. If you are overweight and have other risk factors (see below), losing weight may reduce these risks. Experts recommend you try to lose weight if you have two or more of the following:

- **Family history of certain chronic diseases.** If you have close relatives who have had diseases such as heart disease or diabetes, you may be more likely to develop these problems.
- **Pre-existing medical problems.** High blood pressure, high LDL (bad) cholesterol levels, low HDL (good) cholesterol levels, high triglycerides, and high blood sugar (prediabetes or diabetes) are all warning signs of some diseases linked to obesity.
- **Large waist size.** Men who have waist sizes greater than 40 inches and women who have waist sizes greater than 35 inches are at higher risk of diabetes, unhealthy blood fats (high cholesterol and triglycerides), high blood pressure, and heart disease.

Fortunately, losing even a small amount of weight can help improve your health. This weight loss may lower your blood pressure and improve other risk factors.

For example, research shows that people at high risk for type 2 diabetes who lose a modest amount of weight and increase their physical activity may prevent or delay type 2 diabetes. For more information, see the listing in the Resources section for the National Diabetes Education Program.

How are overweight and obesity treated?

The best way to control your weight may depend on how much excess weight you have, your overall health, and how ready you are to change your eating and physical activity habits. In some cases, if lifestyle changes do not lead to enough weight loss to improve your health, doctors may recommend additional treatment, including weight-loss drugs.

In some cases of extreme obesity, doctors may recommend bariatric surgery. For more information on bariatric surgery, see the WIN fact sheet *Bariatric Surgery for Severe Obesity*, listed in the Resources section.

How can I improve my health?

Although you cannot change your genes, you can work on changing your eating habits, levels of physical activity, and other factors. Try the ideas below.

Get regular physical activity

Try these tips for starting or maintaining an exercise program:

- Get at least **150 minutes (2 ½ hours) of moderately intense aerobic activity each week** that raises your heart rate and makes you sweat. Brisk walking, biking (with a helmet), swimming, and playing tennis or basketball are fun choices that you can do with others for support.
- You can spread the 150 minutes out in short spurts over the week. Do house or yard chores briskly, walk the dog at a quick pace, or dance to your favorite music for at least 10 minutes at a time.
- Aim for **300 minutes (5 hours) of aerobic activity a week to prevent gradual weight gain in adulthood**. If you are at a healthy weight now but used to be overweight or obese, experts encourage 60 to 90 minutes of exercise a day to keep the weight off.

Most adults don't need to see their doctor before starting a physical activity program. However,



those who should see a doctor include men older than 40 and women older than 50 who plan a vigorous program or who have either a serious health condition or risk factors for a serious health condition.

Eat better

Eating healthy foods has vital health benefits, too, including weight loss. To start eating better, try these tips:

- Eat the rainbow. Make half of what's on your plate fruit and vegetables.
- Replace refined grains with whole grains, like oatmeal, whole wheat bread, and brown rice.
- Get your protein from healthy sources, like seafood, lean meats, poultry, eggs, beans, unsalted nuts, and seeds.
- Instead of sugary drinks, choose unsweetened tea, low-fat milk, or water.

Remember, weight control is a lifelong effort. Starting now with small steps may improve your health. A healthy eating plan and regular physical activity can be steps to a healthier you.

Research

The National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) conducts and supports a broad range of basic and clinical obesity research. More information about obesity research is available at <http://www.obesityresearch.nih.gov>.

Clinical trials are research studies involving people. Clinical trials look at safe and effective new ways to prevent, detect, or treat disease. Researchers also use clinical trials to look at other aspects of care, such as improving the quality of life for people with chronic illnesses. To learn more about clinical trials, why they matter, and how to participate, visit the NIH Clinical Research Trials and You website at <http://www.nih.gov/health/clinicaltrials>. For information about current studies, visit <http://www.ClinicalTrials.gov>.

Resources

Additional Reading from the Weight-control Information Network

For more information on topics related to healthy eating, barriers to physical activity, portion control, and eating and physical activity myths, refer to these WIN publications. All are available online at <http://win.niddk.nih.gov/publications>.

- **Active at Any Size** explains the benefits of regular physical activity and describes activities that people who are overweight or obese can enjoy safely.
- **Bariatric Surgery for Severe Obesity** explains how this operation on the stomach and/or intestines helps patients with extreme obesity to lose weight. Patients may use this fact sheet to talk about this option with their health care providers.
- **Do You Know Some of the Health Risks of Being Overweight?** explains the harmful effects of being overweight and the benefits of losing weight.

Additional Resources

- **2008 Physical Activity Guidelines for Americans**
<http://www.health.gov/paguidelines/guidelines/default.aspx>
- **Body Mass Index Online Calculator**
National Heart, Lung, and Blood Institute
http://www.nhlbi.nih.gov/health/educational/lose_wt/BMI/bmicalc.htm
- **Dietary Guidelines for Americans, 2010**
<http://health.gov/dietaryguidelines>
- **National Diabetes Education Program**
<http://www.yourdiabetesinfo.org>
- **National Digestive Diseases Information Clearinghouse**
Information on NASH
<http://www.digestive.niddk.nih.gov/ddiseases/pubs/nash/index.htm>
- **National Kidney Disease Education Program**
<http://nkdep.nih.gov>

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The Weight-control Information Network (WIN) is a national information service of the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), part of the National Institutes of Health (NIH). WIN provides the general public, health professionals, and the media with science-based, up-to-date, culturally relevant materials and tips. Topics include healthy eating, barriers to physical activity, portion control, and eating and physical activity myths.

Publications produced by WIN are carefully reviewed by both NIDDK scientists and outside experts. This fact sheet was also reviewed by Delia Smith West, Ph.D., Professor, University of Arkansas for Medical Sciences.

Inclusion of resources is for information only and does not imply endorsement by NIDDK or WIN.

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This publication is also available at <http://www.win.niddk.nih.gov>.

You may also find additional information about this topic by visiting MedlinePlus at <http://www.medlineplus.gov>.

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