

# THE IMPORTANCE OF BODY FAT

- **Fat insulates the body and helps it to adapt to heat and cold.**
- **Fat acts as a shock absorber.**
- **Fat helps the body use vitamins effectively.**
- **Fat serves as a critical energy store.**
- **Fat, in reasonable amounts, helps you to look your best.**

Overhead  
Transparency  
Master

# 13-B

## TARGET BODY WEIGHTS

### Females (age 14-18)

Actual body weight	Sum of triceps and calf skinfolds									
	27-28	29-30	31-32	33-35	36-38	39-42	43-45	46-49	50-52	53+
200	197	193	189	185	181	177	173	169	165	161
195	192	188	184	180	176	172	168	164	160	157
190	187	183	179	175	172	168	164	160	156	153
185	182	178	174	171	167	163	160	156	152	149
180	177	173	170	166	163	159	155	152	148	145
175	172	169	165	162	158	155	151	148	144	141
170	167	164	160	157	154	150	147	143	140	137
165	162	159	156	151	149	146	142	139	136	133
160	157	154	151	148	145	141	138	135	132	129
155	152	149	146	143	140	137	134	131	128	125
150	148	145	142	139	136	133	130	127	124	121
145	143	140	137	134	131	128	125	122	119	117
140	138	135	132	129	127	124	121	118	115	114
135	133	130	127	125	122	119	117	114	111	109
130	128	125	123	120	118	115	112	110	107	105
125	123	121	118	116	113	111	108	106	103	101
120	118	116	113	111	109	106	104	101	99	97
115	113	111	109	106	104	102	99	97	95	93
110	108	106	104	102	100	97	95	93	91	89
105	103	101	99	97	95	93	91	89	87	85
100	99	97	95	93	91	89	87	85	83	81
95	94	92	90	88	86	84	82	80	78	77
90	89	87	85	83	82	80	78	76	74	73
85	84	82	80	78	77	75	72	70	68	67

From *Fitness for Life: Teacher Resources and Materials, Fifth Edition* by Karen McConnell, Charles B. Corbin, and Darren Dale, 2005. Champaign, IL: Human Kinetics.

# TARGET BODY WEIGHTS

*(continued)*

## Males (age 14-18)

Actual body weight	Sum of triceps and calf skinfolds									
	22-23	24-25	26-28	29-31	32-34	35-37	38-40	41-42	43-45	46+
240	234	230	225	220	215	210	206	201	196	191
235	229	225	220	215	210	206	201	196	192	187
230	224	220	215	210	206	201	197	192	187	183
225	220	216	211	207	202	198	193	189	184	180
220	215	211	206	202	197	193	189	184	180	175
215	210	206	201	197	193	188	184	180	175	171
210	205	201	196	192	188	184	180	175	171	167
205	200	197	191	187	183	179	175	171	167	163
200	196	192	188	184	180	176	172	168	164	160
195	190	187	183	179	175	171	167	163	159	155
190	185	182	178	174	170	166	163	159	155	151
185	180	177	173	169	165	162	158	154	151	147
180	175	172	168	164	161	157	154	150	146	143
175	171	168	164	161	157	154	150	147	143	140
170	166	163	159	156	152	149	146	142	139	135
165	161	158	154	151	148	144	141	138	134	131
160	157	153	149	146	143	140	137	133	130	127
155	151	148	144	141	138	135	132	129	126	123
150	147	144	141	138	135	132	129	126	123	120
145	141	139	136	133	130	127	124	121	118	115
140	136	134	131	128	125	122	120	117	114	111
135	131	129	126	123	120	118	115	112	110	107
130	126	124	121	118	116	113	111	108	105	103
125	122	120	117	115	112	110	107	105	102	100
120	117	115	112	110	107	105	103	100	98	95

# FITNESS TARGET ZONES FOR FAT CONTROL

## Diet

## Physical activity

### **F**

### Frequency

Eat three regular meals daily or four or five small meals. Regular, controlled eating is best for losing fat. Skipping meals and snacking is usually not effective.

Participate in physical activity daily. Regular physical activity is best for losing fat. Short or irregular exercise does little for controlling body fat.

### **I**

### Intensity

To lose a pound of fat, you must eat 3,500 fewer calories than normal.

To gain a pound of fat, you must eat 3,500 calories more than normal.

To maintain your weight, you must keep the number of calories you eat the same.

To lose a pound of fat, you must use 3,500 calories more than normal.

To gain a pound of fat, you must use 3,500 calories less than normal.

To maintain your weight, you must keep your level of physical activity the same.

### **T**

### Time

Neither diet nor physical activity results in quick fat loss. Experts recommend that a person lose no more than 1 or 2 pounds of weight per week without medical supervision. Both diet and physical activity can be used to safely lose 1 or 2 pounds per week.

**Application****13****FRIEND TO FRIEND**

Read the following situations. Write your answers on the lines that follow.

1. You are discussing body fatness with two friends, Alice and Tricia. They both feel that they are overfat. Alice tells you that she would like to reduce her body fat to less than 11 percent. What would you tell her?

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2. Tricia says that she can do nothing about her body type because it is an inherited condition. Her mother is overfat, as are her two brothers. Do you agree with your friend's statement? Explain.

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3. After more discussion, your friends decide to try to reduce their body fat. Alice says she intends to do so by reducing her caloric intake, but she does not intend to increase her level of activity. Tricia says that, although she is not willing to eat less, she will try to lose the excess fat through increased exercise. How would you respond to your friends' statements?

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4. Before beginning their fat-loss programs, Alice and Tricia look at a table of normal weight. Alice sees from the table that she is 7 pounds heavier than the normal weight given in the chart. You convince her to have a skinfold test. The test shows that Alice's body fat is 22 percent. What would you advise her? Why?

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# 13

## Reinforcement

### WORD CONNECTION

Place the correct word(s) from the chapter under each definition. In the box below each word, draw a line connecting the letters that spell the word or phrase. Do not cross your own lines.

1. folds of skin used for fat measurement
- \_\_\_\_\_

S	E	T	L
N	K	O	D
I	D	F	S
M	N	R	K

5. tool used to measure skinfold thickness
- \_\_\_\_\_

R	A	N	O
C	O	L	I
S	W	P	H
R	E	A	C

9. very overfat
- \_\_\_\_\_

C	B	O	H
E	S	L	B
B	O	I	S
C	E	Y	T

2. amount of energy your body uses to keep you alive
- \_\_\_\_\_

L	A	S	A
M	E	G	B
A	T	I	S
B	O	L	M

6. anorexia \_\_\_\_\_, a disorder that is more common in athletes who desire low weight
- \_\_\_\_\_

A	C	H	M
T	R	B	A
H	M	E	C
L	E	T	I

10. minimum amount of body fatness needed for health
- \_\_\_\_\_

N	T	I	A
E	E	B	L
S	S	O	D
T	A	F	Y

3. having too little body fat
- \_\_\_\_\_

L	E	R	D
A	D	F	I
N	F	H	A
U	B	M	T

7. having too much body fat
- \_\_\_\_\_

O	F	C	A
A	K	R	I
T	L	E	V
F	H	T	O

11. disorder that involves bingeing and purging
- \_\_\_\_\_

L	I	R	W
A	B	M	N
U	T	U	I
M	I	R	L

4. disorder in which food intake is severely restricted
- \_\_\_\_\_

O	E	N	A
S	V	R	I
A	O	R	X
T	N	A	E

8. all of the tissues that make up your body
- \_\_\_\_\_

D	B	Y	C
N	O	D	O
O	T	M	P
I	I	S	O

12. most accurate method to measure body fat levels
- \_\_\_\_\_

A	T	E	R
W	H	T	W
R	G	I	E
E	D	N	U



# 13

**Personal  
Project**

## LOGGING AND PLANNING CALORIC INTAKE AND OUTPUT

### Part 1—Logging Caloric Intake and Output

Use the table below to record your caloric intake and caloric output for one week. At the end of each day determine the difference in intake and output. If you took in more calories than you expended, record the difference using a “+” sign. If you expended more calories than you took in, record the difference using a “-” sign. At the end of the week answer the reflection questions at the bottom of the page.

<b>Caloric intake—write the total number of calories you consumed for each meal or snack and then add them up for each day</b>	<b>Day 1</b>	<b>Day 2</b>	<b>Day 3</b>	<b>Day 4</b>	<b>Day 5</b>	<b>Day 6</b>	<b>Day 7</b>
Breakfast							
Snack							
Lunch							
Snack							
Dinner							
Snack							
<b>Total caloric intake</b>							
<b>Caloric output—write the total number of calories you expended in physical activity for each day</b>	<b>Day 1</b>	<b>Day 2</b>	<b>Day 3</b>	<b>Day 4</b>	<b>Day 5</b>	<b>Day 6</b>	<b>Day 7</b>
Activity 1:							
Activity 2:							
Activity 3:							
<b>Total calories expended</b>							
<b>Caloric balance—determine the difference in your caloric intake and caloric output for each day</b>							

Over the course of the week did your caloric intake and caloric output seem to balance out? \_\_\_\_\_

Did you have any days in which your caloric intake was significantly greater than your caloric output? What contributed most to the difference?

\_\_\_\_\_

Did you have any days in which your caloric output was significantly greater than your caloric intake? What contributed most to the difference?

\_\_\_\_\_

What realistic changes can you make in your eating or activity patterns to help you improve your caloric balance?

\_\_\_\_\_



# 13

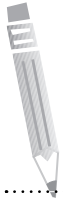
## Personal Project

### LOGGING AND PLANNING CALORIC INTAKE AND OUTPUT *(continued)*

#### Part 2—Planning Caloric Intake and Output

Use the chart below to plan your caloric intake and caloric output for one week. Try to create a realistic plan that takes into consideration your current activity level and daily schedule. Work to balance input and output each day.

<b>Caloric intake—write the total number of calories you plan to consume for each meal or snack and then add them up for each day</b>	<b>Day 1</b>	<b>Day 2</b>	<b>Day 3</b>	<b>Day 4</b>	<b>Day 5</b>	<b>Day 6</b>	<b>Day 7</b>
Breakfast							
Snack							
Lunch							
Snack							
Dinner							
Snack							
<b>Total caloric intake</b>							
<b>Caloric output—write the total number of calories you plan to expend in physical activity for each day</b>	<b>Day 1</b>	<b>Day 2</b>	<b>Day 3</b>	<b>Day 4</b>	<b>Day 5</b>	<b>Day 6</b>	<b>Day 7</b>
Activity 1:							
Activity 2:							
Activity 3:							
<b>Total calories expended</b>							
<b>Caloric balance—show the balance in your caloric intake and caloric output for each day</b>							



# 13

## Chapter Test

### BODY COMPOSITION

Choose the letter of the *best* answer for questions 1-14.

Use what you learned throughout the chapter to answer the final question.

1. Bingeing and purging occur in
  - a. anorexia nervosa.
  - b. bulimia.
  - c. anorexia athletica.
  - d. obesity.
2. What is essential body fat?
  - a. fat in the arms and legs
  - b. the maximum fat a person should have
  - c. the same as ideal weight
  - d. the minimum fat a person should have
3. Basal metabolism is energy used to
  - a. gain minimal fat.
  - b. undergo maturation.
  - c. stay alive.
  - d. achieve fitness.
4. Which cause of fat is LEAST controllable?
  - a. heredity
  - b. how much a person eats
  - c. how much a person exercises
  - d. the number of calories eaten
5. Which of the following statements is FALSE?
  - a. Teenage girls tend to have more body fat than teenage boys.
  - b. Being underfat can cause serious health problems.
  - c. Being overfat increases the risk of heart disease.
  - d. At rest, most adults burn more calories than teenagers.
6. Having too much fat for your body weight is called
  - a. underfat.
  - b. overweight.
  - c. overfat.
  - d. anorexia.
7. Body fat is important for all of the following EXCEPT
  - a. cleaning out arteries.
  - b. helping to absorb important vitamins.
  - c. acting as a shock absorber.
  - d. insulating the body from heat and cold.
8. How many fewer calories must be eaten in order to lose 1 pound?
  - a. 1,250
  - b. 2,500
  - c. 3,500
  - d. 5,000
9. Body fatness can be assessed by
  - a. skinfold measurements.
  - b. height.
  - c. caloric intake.
  - d. weight.
10. People who develop extra fat cells early in life
  - a. will always be overfat.
  - b. easily lose the fat later in life.
  - c. should consume more calories.
  - d. have difficulty losing fat later.
11. If you eat more food without exercising more,
  - a. your body will store fewer calories.
  - b. the weight you gain will be mostly fat.
  - c. your percentage of body fat will drop.
  - d. your muscle mass will increase greatly.
12. Which of the following does NOT help you maintain ideal body fatness?
  - a. active sports
  - b. aerobic activities
  - c. specific body part exercises
  - d. lifestyle exercise
13. The BEST way to lose body fat is to
  - a. eat a healthy diet and exercise.
  - b. control fat intake.
  - c. control caloric intake.
  - d. exercise to use extra calories.
14. Joel wants to lose 25 pounds. Which is a TRUE statement that would help Joel?
  - a. He probably has a glandular problem.
  - b. He should try to lose 7 pounds a week.
  - c. Exercise will cause him to eat more.
  - d. Dieting by itself might cause muscle loss.
15. Describe how to maintain your ideal level of body fat.
 

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