

SESSION IV

THE NEW YOU: HOW TO DETERMINE YOUR PERCENT OF BODY FAT & IDEAL WEIGHT

OBJECTIVES

- *Compute your approximate percentage of body fat.*
- *Determine your goal weight.*
- *Calculate how long it will take you to reach your goal weight.*

BACKGROUND

Now it's time to figure out your amount of body fat so that you can begin to get a realistic picture of how much weight you need to lose. You'll probably experience a heightened level of commitment for your desired body image when you have completed this session.

Women have a higher percent body fat because of the presence of hormones that direct fat to the hips and breasts. Guidelines for ideal body fat percentages for both men and women are included in the tables in this study guide session.

Traditional measures of assessing body fat have included body water measurements, isotope studies, skin-fold tests, hydrostatic weighing and DEXA (Dual-Energy X-Ray Absorptiometry). The most accurate of all methods is DEXA weighing. The method you will use in this session is accurate within 3% of DEXA.

A convenient and accurate way to determine your proper body weight is to calculate your body's percent of fat and your lean body mass using simple circumference measurements. There are tables in this session of your Study Guide to assist you. You will learn how to use these tables and some simple measurements to calculate your present percent body fat, your lean body mass and the ideal weight for you. Also, you can use the % Body Fat Calculation Forms for men and women that's in the download section of this session. These forms do the calculations for you.

Then, we even show you how to figure out an estimate of how long it will take you to reach your goal weight following the guidelines of the program.

PRACTICE

1. Predicting Body Fat for Women

If you're a woman, look at the forms "Body Fat Computation for Women" below and "Conversion Chart for Predicting Body Fat for Women" on the page 19. You will use these later to calculate your percentage of body fat.

Body Fat Computation for Women

Measurements

Hips Average
Measurement _____

Abdomen Average
(measure at navel) _____

Height in Inches _____

Calculations

Enter Constant A = _____

(from Table page 19)

Enter Constant B = _____

Add Constants A & B = _____

Subtract Constant C = _____

Equals % of Body Fat = _____

Measure each body area three times and put the average of your measurements in the blank space on the computation form. Now look at the "hips" column on the next page. Note there is a number to the right side of each hip measurement. This number is a "constant" and is used in the computation of the percent body fat from the measurements you have taken. Write down the constant for each measurement you have made on the computation form to the right side of the measurement. Now add constant A to constant B and subtract constant C. The number you have left is percent body fat.

An example may be helpful. If a lady had an average hip circumference of 42 inches and an average abdominal circumference of 28 and was 64 inches tall, we would get the following calculations:

Hips Average
Measurement 42

Abdomen Average
(measure at navel) 28

Height in Inches 64

Enter Constant A = 50.24

(from Table page 19)

Enter Constant B = 19.91

Add Constants A & B = 70.15

Subtract Constant C = 39.01

Equals % of Body Fat = 31.14

According to these measurements, she is about 31% body fat.

Conversion Chart for Predicting Body Fat for Women

Hips		Abdomen		Height	
<i>In.</i>	<i>Constant A</i>	<i>In.</i>	<i>Constant B</i>	<i>In.</i>	<i>Constant C</i>
30	33.48	20	14.22	55	33.52
31	34.87	21	14.93	56	34.13
32	36.26	22	15.64	57	34.74
33	37.67	23	16.35	58	35.35
34	39.06	24	17.06	59	35.96
35	40.46	25	17.78	60	36.57
36	41.86	26	18.49	61	37.18
37	43.25	27	19.20	62	37.79
38	44.65	28	19.91	63	38.40
39	46.05	29	20.62	64	39.01
40	47.44	30	21.33	65	39.62
41	48.84	31	22.04	66	40.23
42	50.24	32	22.75	67	40.84
43	51.64	33	23.46	68	41.45
44	53.03	34	24.18	69	42.06
45	54.43	35	24.89	70	42.67
46	55.83	36	25.60	71	43.28
47	57.22	37	26.31	72	43.89
48	58.62	38	27.02	73	44.50
49	60.02	39	27.73	74	45.11
50	61.42	40	28.44	75	45.72
51	62.81	41	29.15	76	46.32
52	64.21	42	29.87	77	46.93
53	65.61	43	30.58	78	47.54
54	67.00	44	31.29	79	48.15
55	68.40	45	32.00	80	48.76
56	69.80	46	32.71	81	49.37
57	71.19	47	33.42	82	49.98
58	72.59	48	34.13	83	50.59
59	73.99	49	34.84	84	51.20
60	75.39	50	35.56	85	51.81

*From *The Complete Book of Physical Fitness*, A. G. Fisher and R. K. Conlee, used by permission.

2. Predicting Body Fat for Men

It is quite easy to get percent fat for men since only the wrist and waist are measured.

First, measure your waist at the umbilical (belly button) and then have someone measure your wrist circumference just in front of the wrist bones where the wrist bends. Now subtract the wrist measurement from the waist measurement and reference the following tables with this number and your weight. The resulting number is your approximate percent of body fat.

Body Fat Computation For Men

Abdominal Circumference Minus Wrist (in inches)

WT		22	22.5	23	23.5	24	24.5	25	25.5	26	26.5	27	27.5	28	28.5
LBS															
125		4	6	7	9	11	13	15	17	19	20	22	24	26	28
130		4	6	7	9	11	12	14	16	18	20	21	23	25	27
135		3	5	7	8	10	12	13	15	17	20	20	22	24	26
140		3	5	6	8	10	11	13	15	16	19	19	21	23	24
145		3	5	6	7	9	11	12	14	15	18	19	20	22	23
150		3	4	6	7	9	10	12	13	15	17	18	19	21	23
155		2	4	5	7	8	10	11	13	14	16	17	19	20	22
160		2	4	5	6	8	9	11	12	14	16	17	18	19	21
165		2	4	5	6	8	9	10	12	13	15	16	17	19	20
170		2	3	4	6	7	9	10	11	13	15	15	17	18	19
175		2	3	4	6	7	8	10	11	12	14	15	16	17	19
180		2	3	4	6	7	8	9	10	12	14	14	16	17	18
185	1	3	4	5	6	8	9	10	11	13	14	15	16	18	
190	1	3	4	5	6	7	8	10	11	13	13	15	16	17	
195	1	2	3	5	6	7	8	9	11	12	13	14	15	16	
200	1	2	3	5	6	7	8	9	10	12	12	14	15	16	
205	1	2	3	4	5	6	8	9	10	12	12	13	14	15	
210	1	2	3	4	5	6	7	8	9	11	12	13	14	15	
215	1	2	3	4	5	6	7	8	9	11	11	12	13	15	
220	1	2	3	4	5	6	7	8	9	11	11	12	13	14	
225	0	2	2	4	4	6	7	8	9	10	11	12	13	14	
230	0	1	2	3	4	5	6	7	8	10	10	11	12	13	
235	0	1	2	3	4	5	6	7	8	10	10	11	12	13	
240	0	1	2	3	4	5	6	7	8	10	10	11	12	13	
245	0	1	2	3	4	5	6	7	8	9	9	10	11	12	
250	0	1	2	3	4	5	6	6	7	9	9	10	11	12	
255	0	1	2	3	3	4	5	6	7	9	9	10	11	12	
260	0	1	2	3	3	4	5	6	7	9	9	10	10	11	
265	0	1	1	3	3	4	5	6	7	8	8	9	10	11	
270	0	1	1	2	3	4	5	6	7	8	8	9	10	11	
275	0	0	1	2	3	4	5	5	6	8	8	9	10	11	
280	0	0	1	2	3	4	4	5	6	8	8	9	9	10	
285	0	0	1	2	3	4	4	5	6	8	8	8	9	10	
290	0	0	1	2	3	3	4	5	6	7	7	8	9	10	
295	0	0	1	2	2	3	4	5	6	7	7	8	9	10	
300	0	0	1	2	2	3	4	5	5	7	7	8	9	9	

Body Fat Computation For Men (cont.)

Abdominal Circumference Minus Wrist (in inches)

WT		29	29.5	30	30.5	31	31.5	32	32.5	33	33.5	34	34.5	35	35.5
LBS															
120		31	33	35	37	39	41	43	45	47	49	50	52	54	56
125		30	32	33	35	37	39	41	43	45	46	48	50	52	54
130		28	30	32	34	36	37	39	41	43	44	46	48	50	51
135		27	29	31	32	34	36	38	39	41	43	44	46	24	52
140		26	28	29	31	33	34	36	38	39	41	43	44	46	48
145		25	27	28	30	31	33	35	36	38	39	41	43	44	46
150		24	26	27	29	30	32	33	35	36	38	40	41	43	44
155		23	25	26	28	29	31	32	34	35	37	38	40	41	43
160		22	24	25	27	28	30	31	33	34	35	37	38	40	41
165		22	23	24	26	27	29	30	31	33	34	36	37	38	40
170		21	22	24	25	26	28	29	30	32	33	34	36	37	39
175		20	21	23	24	25	27	28	29	31	32	33	35	36	37
180		19	21	22	23	25	26	27	28	30	31	32	34	35	36
185		19	20	21	23	24	25	26	28	29	30	31	33	34	35
190		18	19	21	22	23	24	26	27	28	29	30	32	33	34
195		18	19	20	21	22	24	25	26	27	28	30	31	32	33
200		17	18	19	21	22	23	24	25	26	28	29	30	31	32
205		17	18	19	20	21	22	23	25	26	27	28	29	30	31
210		16	17	18	19	21	22	23	24	25	26	27	28	29	30
215		16	17	18	19	20	21	22	23	24	25	26	28	29	30
220		15	16	17	18	19	20	22	23	24	25	26	27	28	29
225		15	16	17	18	19	20	21	22	23	24	25	26	27	28
230		14	15	16	17	18	19	20	21	22	23	24	25	26	27
235		14	15	16	17	18	19	20	21	22	23	24	25	26	27
240		14	15	16	17	17	18	19	20	21	22	23	24	25	26
245		13	14	15	16	17	18	19	20	21	22	23	24	25	26
250		13	14	15	16	17	18	18	19	20	21	22	23	24	25
255		13	14	14	15	16	17	18	19	20	21	22	23	24	24
260		12	13	14	15	16	17	18	19	19	20	21	22	23	24
265		12	13	14	15	15	16	17	18	19	20	21	22	24	24
270		12	13	13	14	15	16	17	18	19	19	20	21	22	23
275		11	12	13	14	15	16	16	17	18	19	20	21	22	22
280		11	12	13	14	14	15	16	17	18	19	19	20	21	22
285		11	12	12	13	14	15	16	17	17	18	19	20	21	21
290		11	11	12	13	14	15	15	16	17	18	19	19	20	21
295		10	11	12	13	14	14	15	16	17	17	18	19	20	21
300		10	11	12	12	13	14	15	16	16	17	18	19	20	21

Body Fat Computation For Men (cont.)

WT		36	36.5	37	37.5	38	38.5	39	39.5	40	40.5	41	41.5	42	42.5
LBS															
120		58	60	62	64	66	68	70	72	74	76	77	79	81	83
125		56	58	59	61	63	65	67	69	71	72	74	76	78	80
130		55	55	57	59	61	62	64	66	68	69	71	73	75	77
135		51	53	55	56	58	60	62	63	65	67	68	70	72	74
140		49	51	53	54	56	34	36	38	39	41	43	44	46	71
145		47	49	51	52	52	33	35	36	38	39	41	43	44	68
150		46	47	49	50	50	32	33	35	36	38	40	41	43	66
155		44	46	47	49	48	31	32	34	35	37	38	40	41	64
160		43	44	46	47	47	30	31	33	34	35	37	38	40	61
165		41	43	44	45	45	29	30	31	33	34	36	37	38	60
170		40	41	43	44	44	28	29	30	32	33	34	36	37	58
175		39	40	41	43	43	27	28	29	31	32	33	35	36	56
180		37	39	40	41	41	26	27	28	30	31	32	34	35	54
185		36	38	39	40	40	25	26	28	29	30	31	33	34	53
190		35	37	38	39	40	41	43	44	45	46	48	49	50	51
195		34	35	37	38	39	40	41	43	44	45	46	47	49	50
200		33	35	36	37	38	39	40	41	43	44	45	46	47	48
205		32	34	35	36	37	38	39	40	41	43	44	45	46	47
210		32	33	34	35	36	37	38	39	40	42	43	44	45	46
215		31	32	33	34	35	36	37	38	39	40	42	43	44	45
220		30	31	32	33	34	35	36	37	38	39	41	42	43	44
225		29	30	31	32	33	34	35	36	37	38	40	41	43	43
230		28	30	31	32	33	34	35	36	37	38	39	40	41	42
235		28	29	30	31	32	33	34	35	36	37	38	39	40	41
240		27	28	29	30	31	32	33	34	35	36	37	38	39	40
245		27	27	28	29	30	31	32	33	34	35	36	37	38	39
250		26	27	28	29	30	31	31	32	33	34	34	35	36	38
255		25	26	27	28	29	30	31	32	33	34	34	35	36	37
260		25	26	27	27	28	29	30	31	32	33	34	35	35	36
265		24	25	26	27	28	29	29	30	31	32	33	34	35	36
270		24	25	25	26	27	28	29	30	31	31	32	33	34	35
275		23	24	25	26	27	28	29	30	31	31	32	33	23	34
280		23	24	24	25	26	27	28	29	39	30	31	32	33	33
285		22	23	24	25	26	26	27	28	29	30	30	31	32	33
290		22	23	23	24	25	26	27	27	28	29	30	31	31	32
295		21	22	23	24	25	26	27	28	28	29	30	31	32	32
300		21	22	22	23	24	25	26	27	28	29	29	30	20	31

Body Fat Computation For Men (cont.)

WT		43	43.5	44	44.5	45	45.5	46	46.5	47	47.5	48	48.5	49	49.5
LBS															
120		85	87	89	91	93	95	97	99	99	99	99	99	99	99
125		82	84	85	87	89	91	93	95	96	98	99	99	99	99
130		78	80	82	84	86	87	89	91	93	94	96	98	99	99
135		75	77	79	80	82	84	86	87	89	91	92	94	96	98
140		72	74	76	77	79	81	82	84	86	87	89	91	92	94
145		70	71	73	75	76	78	79	81	83	84	86	87	89	91
150		67	69	70	72	74	75	77	78	80	81	83	84	86	87
155		65	67	68	70	71	73	74	76	77	79	80	83	83	85
160		63	64	66	67	69	70	72	73	75	76	77	79	80	82
165		61	62	64	65	67	68	69	71	72	74	75	76	78	79
170		59	60	62	63	64	66	67	69	70	71	73	74	75	77
175		57	59	60	61	63	64	65	66	68	69	70	72	73	74
180		56	57	58	59	61	62	63	65	66	67	68	70	71	72
185		54	55	56	58	59	60	61	63	64	65	66	68	69	70
190		52	54	55	56	57	58	60	61	62	63	65	66	67	68
195		51	53	53	55	56	57	58	59	60	62	63	64	65	66
200		50	51	52	53	54	55	57	58	59	60	61	62	63	65
205		48	49	51	52	53	54	55	56	57	58	60	61	62	63
210		47	48	49	50	51	53	55	56	57	58	59	60	61	62
215		46	47	48	49	50	51	52	53	54	56	57	58	59	60
220		45	46	47	48	49	50	51	52	53	54	55	56	57	58
225		44	45	46	47	48	49	50	51	52	53	54	55	56	57
230		43	44	45	46	47	48	49	50	51	52	53	54	55	56
235		42	43	44	45	46	47	48	49	50	51	51	52	53	54
240		41	42	43	44	45	46	46	47	48	49	50	51	52	53
245		40	41	42	43	44	44	45	46	47	48	49	50	51	52
250		39	40	41	42	43	44	44	45	46	47	48	49	50	51
255		38	39	40	41	42	43	44	44	45	46	47	48	49	50
260		37	38	39	40	41	42	43	43	44	45	46	47	48	49
265		36	37	38	39	40	41	42	43	43	44	45	46	47	48
270		36	37	37	38	39	40	41	42	43	43	44	45	46	47
275		35	36	37	38	38	39	40	41	42	43	43	44	45	46
280		34	35	36	37	38	38	39	40	41	42	43	43	44	45
285		34	34	35	36	37	38	39	39	40	41	42	43	43	44
290		33	34	35	36	37	38	39	39	40	41	42	43	43	44
295		32	33	34	35	36	36	37	38	39	39	40	41	42	43
300		32	33	33	34	35	36	37	38	39	39	40	41	42	43

3. When instructed by the narrator, pause the audio and perform the calculations of your own percentage of body fat. If you're a woman, use the charts on pages 18 and 19. If you're a man use the charts on pages 20 - 23.

4. Compute your goal weight by following the format below. This is an example of a 160 pound lady with 31 percent body fat (based on tables and calculations).

Computing Your Goal Weight

1. Write down % of body fat. In this case 31%.
2. Take current weight X percentage of body fat to find total pounds of fat. **160 lbs. times 31% body fat = 49.6 pounds of Total Body Fat.**
3. Subtract total pounds of body fat from current weight to determine Lean Body Mass. **160 lbs. Current weight, minus 49.6 lbs. body fat= 110.4 lbs. of Lean Body Mass.**
4. Subtract your “ideal fat percentage” goal from 100%. **100% - 22% ideal body fat = 78% (or .78).**
5. Divide lean body mass by final figure in #4. **110.4 lbs. of lean body mass divided by .78 = 141.5 lbs. goal weight.**

Estimating When You'll Reach Your Goal Weight

1. Current weight minus Goal Weight = Pounds needed to lose. **160 lbs. current weight minus 141.5 lbs. goal weight = 18.5 lbs. to lose.**
2. Divide pounds needed to lose by 1.5 lbs. (average weight loss per week) = weeks to reach goal weight. **18.5 lbs. to lose at 1.5 lbs. per week = 12.3 weeks to lose the weight.**

Determining Your Target Date

Determine your goal date by adding the number of weeks it will take you to achieve your goal to today's date. This is your target date. **January 1 + 12.3 weeks = March 28.**

5. For your record keeping list the following calculations:

A. Your Current Weight_____.

B. Your Current Percentage of Body Fat_____

C. Your Goal Weight_____ .

D. How Much Weight You Need To Lose_____

E. Your Target Date_____ .

POINTS TO REMEMBER

- Keep in mind that appearances can sometimes be misleading. Each person's body is unique in structure and composition. With these simple measurements and the vision of your ideal body image, you can establish what is right for you.
- Even though you are calculating your weight loss in pounds, what you really will be losing on this program is pounds of fat — and inches.
- Your body is very forgiving!! If it took you ten years, for example, to get overweight (520 weeks) and it takes only 26 weeks to lose it (1.5 lbs. per week), in each week you will lose the same amount of fat it took 20 weeks to accumulate.

PROGRESS CHECK

The calculation you did for the Practice satisfies for the Progress Check for this session. With your ideal body weight goal in mind, schedule yourself to complete Session V.

*The estimate of 1.5 pounds lost per week is based on studying people who have successfully used this program. However, this is only an average. If you are severely overweight or if you follow this program exactly you may lose weight at a rate greater than average.

After following this program for several weeks you may wish to re-compute your goal weight as your lean body mass and body fat numbers change.