

به نام خدا

ارزیابی تغذیه ای جلسه چهارم

دکتر نعمتی

متخصص تغذیه

دکتر طباطبائی

دستیار تخصصی تغذیه

گروه تغذیه

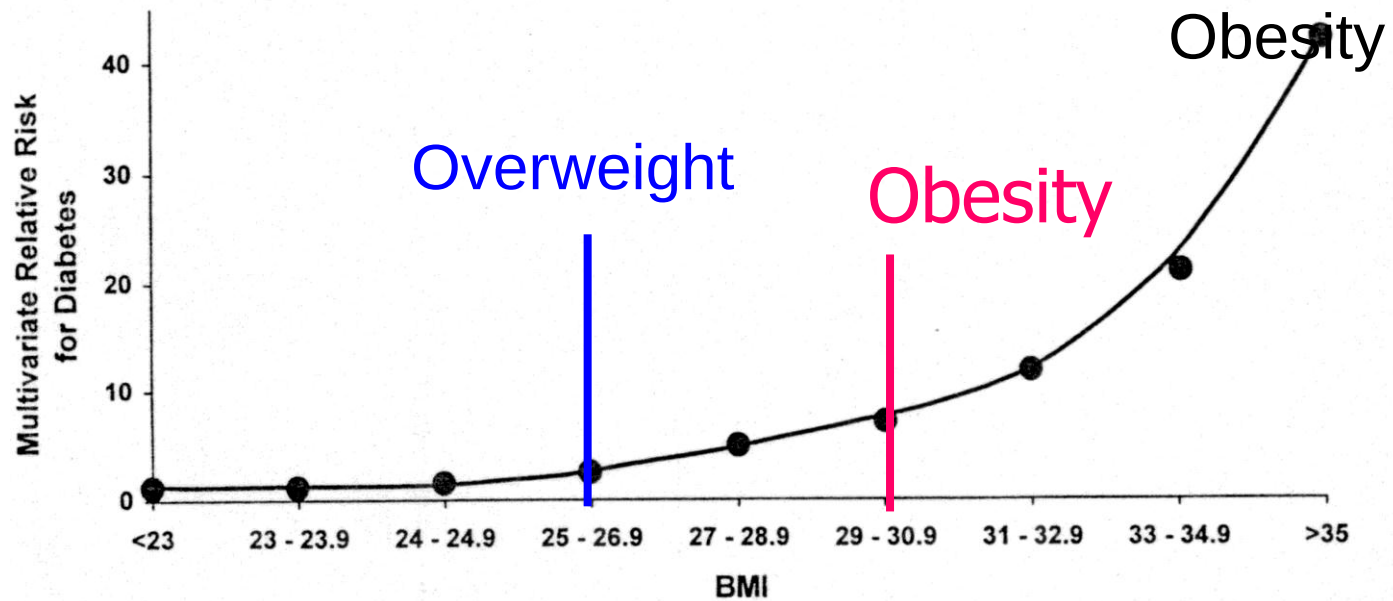
دانشکده پزشکی مشهد

$$\text{BMI} \geq 25$$

the risk increases for
development of certain •
diseases
morbidity from existing •
disorders

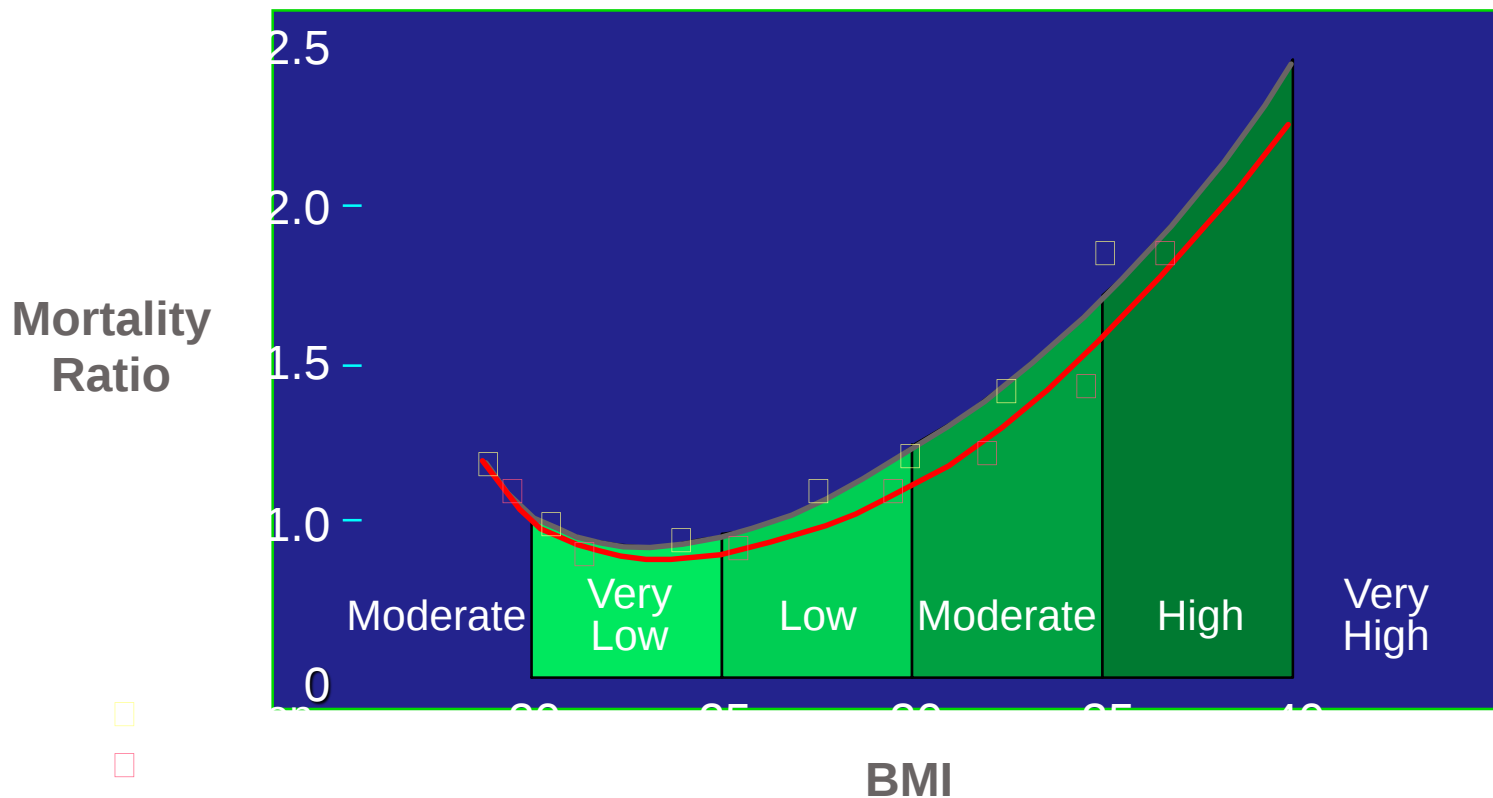


Risk of Diabetes



Obesity and Mortality Risk

American Cancer Society Study of 750,000
All Cause Mortality in Men and Women

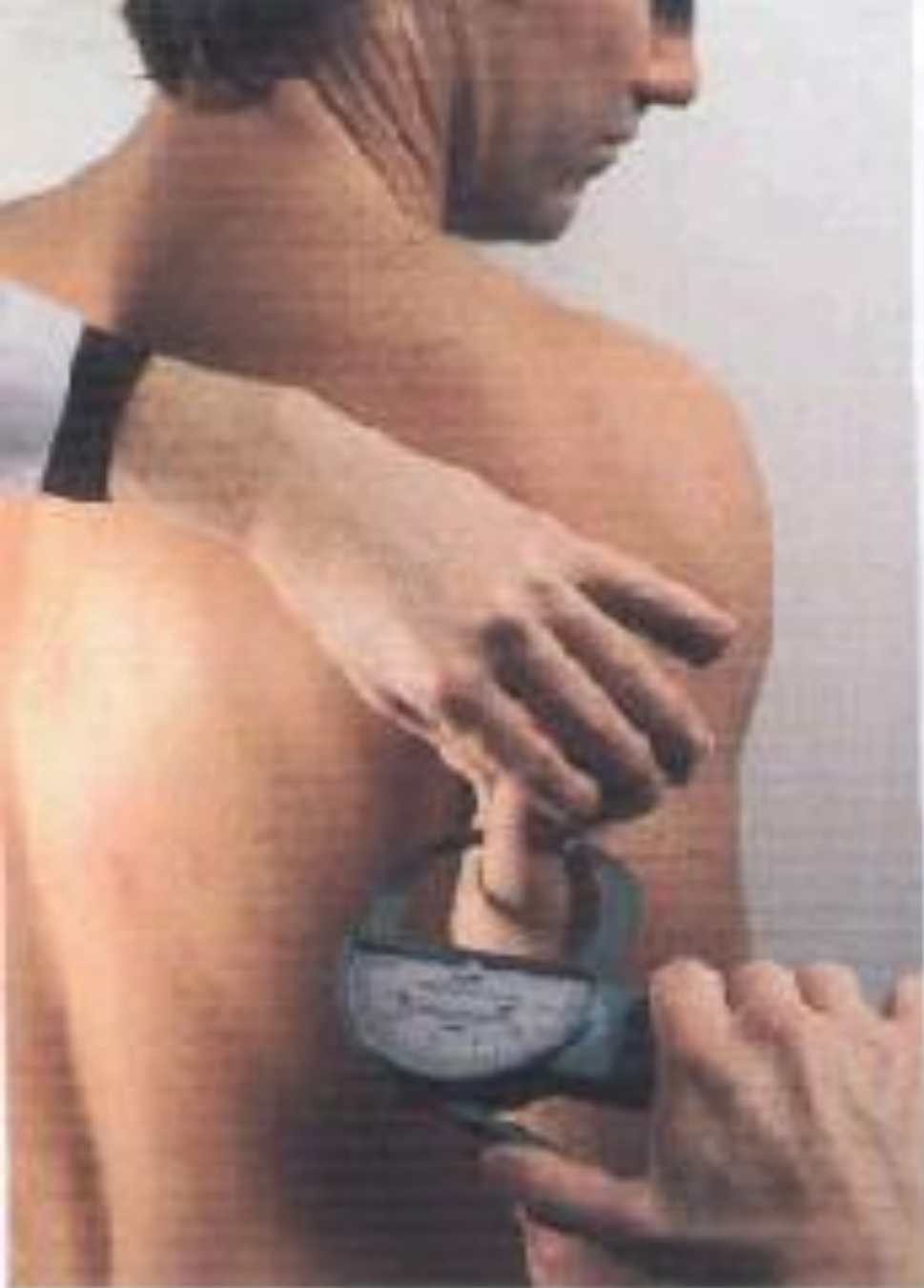


Estimating height from ulna length



Measure between the point of the elbow and the midpoint of the prominent bone of the wrist (left side if possible). Height in meters is determined from the following chart, based on the ulna length as measured in cm.

Men(<65 years)	1.94	1.93	1.91	1.89	1.87	1.85	1.84	1.82	1.80	1.78	1.76	1.75	1.73	1.71
Men(>65 years)	1.87	1.86	1.84	1.82	1.81	1.79	1.78	1.76	1.75	1.73	1.71	1.70	1.68	1.67
Ulna length(cm)	32.0	31.5	31.0	30.5	30.0	29.5	29.0	28.5	28.0	27.5	27.0	26.5	26.0	25.5
Women(<65 years)	1.84	1.83	1.81	1.80	1.79	1.77	1.76	1.75	1.73	1.72	1.70	1.69	1.68	1.66
Women(>65 years)	1.84	1.83	1.81	1.79	1.78	1.76	1.75	1.73	1.71	1.70	1.68	1.66	1.65	1.63
Men(<65 years)	1.69	1.67	1.66	1.64	1.62	1.60	1.58	1.57	1.55	1.53	1.51	1.49	1.48	1.46
Men(>65 years)	1.65	1.63	1.62	1.60	1.59	1.57	1.56	1.54	1.52	1.51	1.49	1.48	1.46	1.45
Ulna length(cm)	25.0	24.5	24.0	23.5	23.0	22.5	22.0	21.5	21.0	20.5	20.0	19.5	19.0	18.5
Women(<65 years)	1.65	1.63	1.62	1.61	1.59	1.58	1.56	1.55	1.54	1.52	1.51	1.50	1.48	1.47
Women(>65 years)	1.61	1.60	1.58	1.56	1.55	1.53	1.52	1.50	1.48	1.47	1.45	1.44	1.42	1.40



ضخامت چین پوستی

ضخامت چین پوستی

● معرف میزان چربی زیر پوستی و در نتیجه تخمین میزان چربی کل بدن خواهد بود.

● فرض بر این اساس است که 50% چربی بدن زیر پوستی است.

● 3-4 هفته طول می کشد تغییری در ضخامت چین پوستی ایجاد شود.

● محل‌های مهم اندازه‌گیری: تریسپس، بایسپس، زیر کتف و بالای تیغه ایلیاک .

● بمنظور حداقل رساندن خطاء اندازه‌گیری بهتر است اندازه‌گیری‌ها بر بیمار توسط یک فرد انجام شود و هر اندازه‌گیری 3 بار بطور مجزا انجام شود و میانگین آنها در نظر گرفته شود.

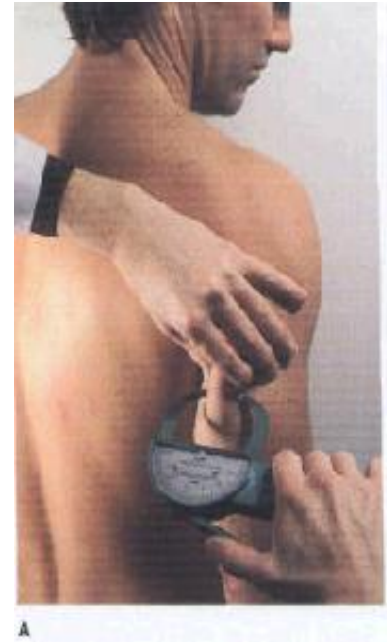




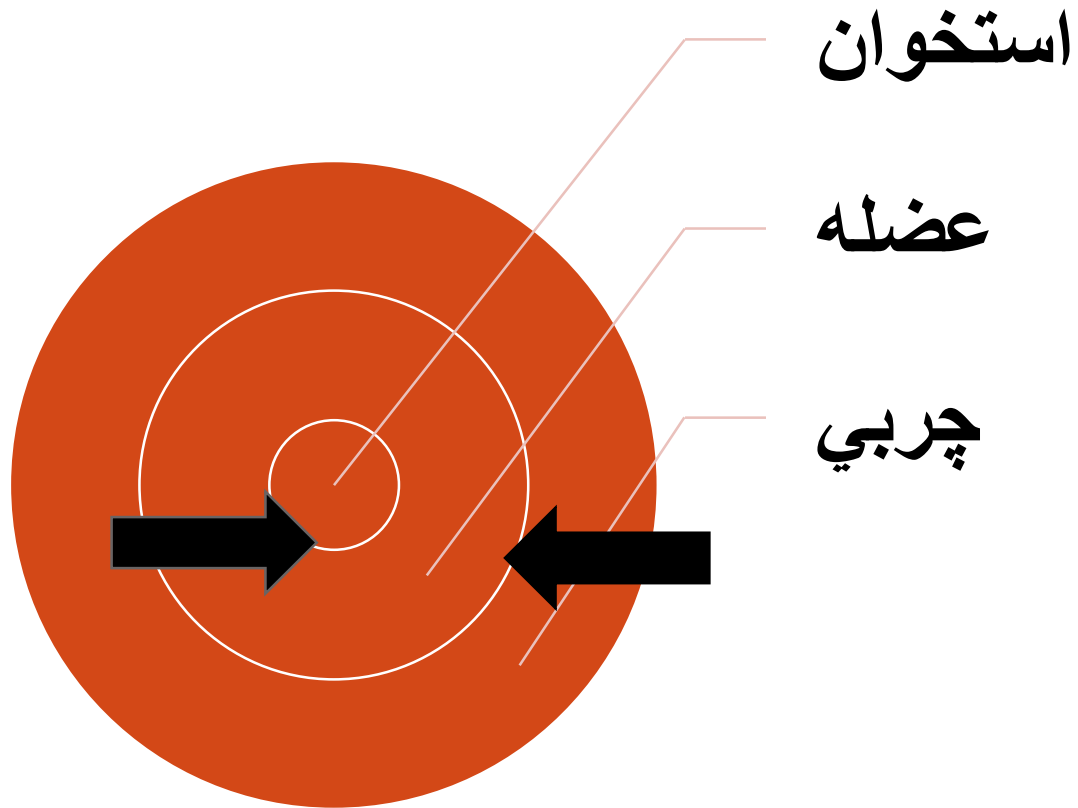
FIGURE 15-2 Assessment tools include skinfold calipers, shown here, which measure the relative amount of subcutaneous fat tissues at various body sites. (From *Jarvis C: Physical examination and health assessment, ed 3, Philadelphia, 2000, WB Saunders.*)





C

ضخامت چین پوستي



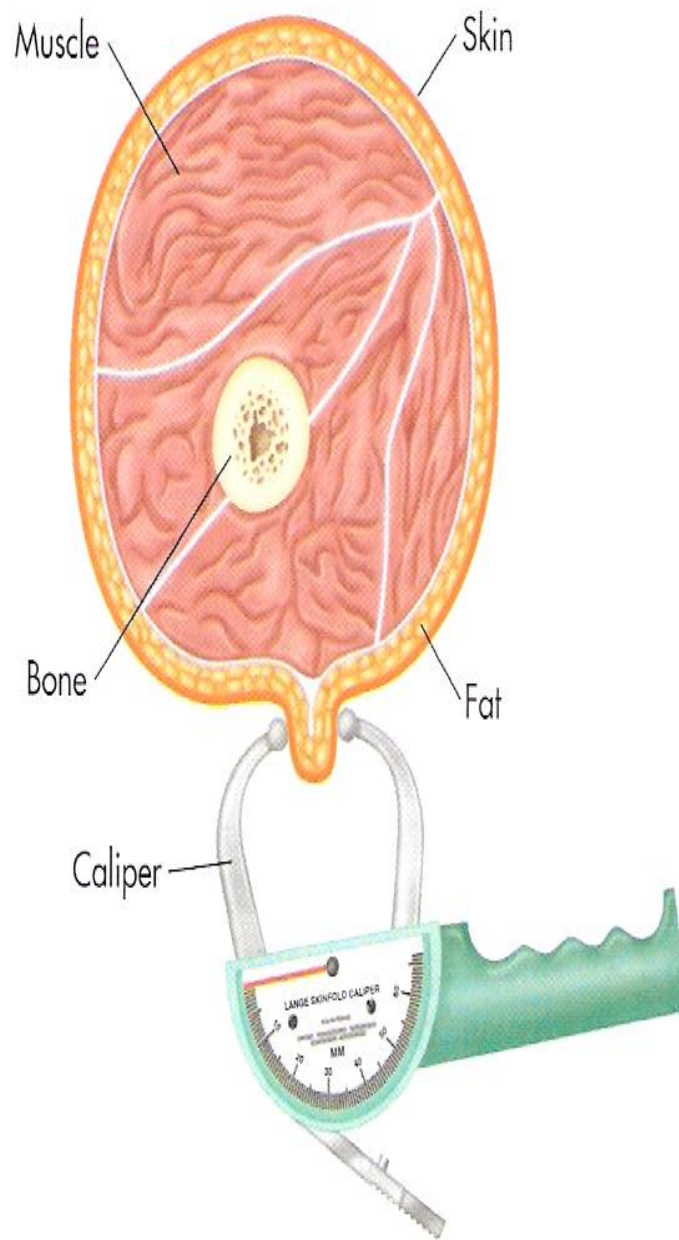
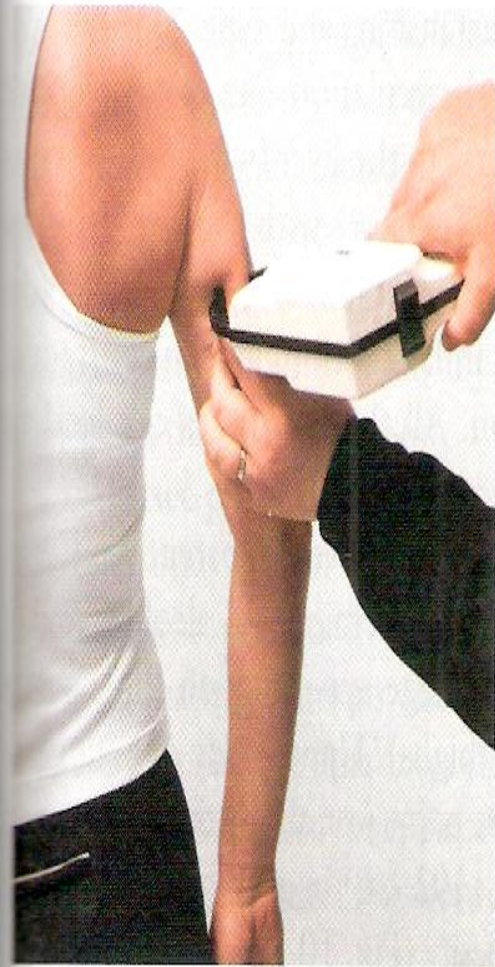


Figure 10-11 In about 10 minutes, a skilled technician can take skinfold measurements around the body, such as the arm, back, and abdomen, and use them to predict body fat content.

Table E-5
Triceps Fatfold Percentiles (millimeters)

Age	Male					Female				
	5TH	25TH	50TH	75TH	95TH	5TH	25TH	50TH	75TH	95TH
1-1.9	6	8	10	12	16	6	8	10	12	16
2-2.9	6	8	10	12	15	6	9	10	12	16
3-3.9	6	8	10	11	15	7	9	11	12	15
4-4.9	6	8	9	11	14	7	8	10	12	16
5-5.9	6	8	9	11	15	6	8	10	12	18
6-6.9	5	7	8	10	16	6	8	10	12	16
7-7.9	5	7	9	12	17	6	9	11	13	18
8-8.9	5	7	8	10	16	6	9	12	15	24
9-9.9	6	7	10	13	18	8	10	13	16	22
10-10.9	6	8	10	14	21	7	10	12	17	27
11-11.9	6	8	11	16	24	7	10	13	18	28
12-12.9	6	8	11	14	28	8	11	14	18	27
13-13.9	5	7	10	14	26	8	12	15	21	30
14-14.9	4	7	9	14	24	9	13	16	21	28
15-15.9	4	6	8	11	24	8	12	17	21	32
16-16.9	4	6	8	12	22	10	15	18	22	31
17-17.9	5	6	8	12	19	10	13	19	24	37
18-18.9	4	6	9	13	24	10	15	18	22	30
19-24.9	4	7	10	15	22	10	14	18	24	34
25-34.9	5	8	12	16	24	10	16	21	27	37
35-44.9	5	8	12	16	23	12	18	23	29	38
45-54.9	6	8	12	15	25	12	20	25	30	40
55-64.9	5	8	11	14	22	12	20	25	31	38
65-74.9	4	8	11	15	22	12	18	24	29	36

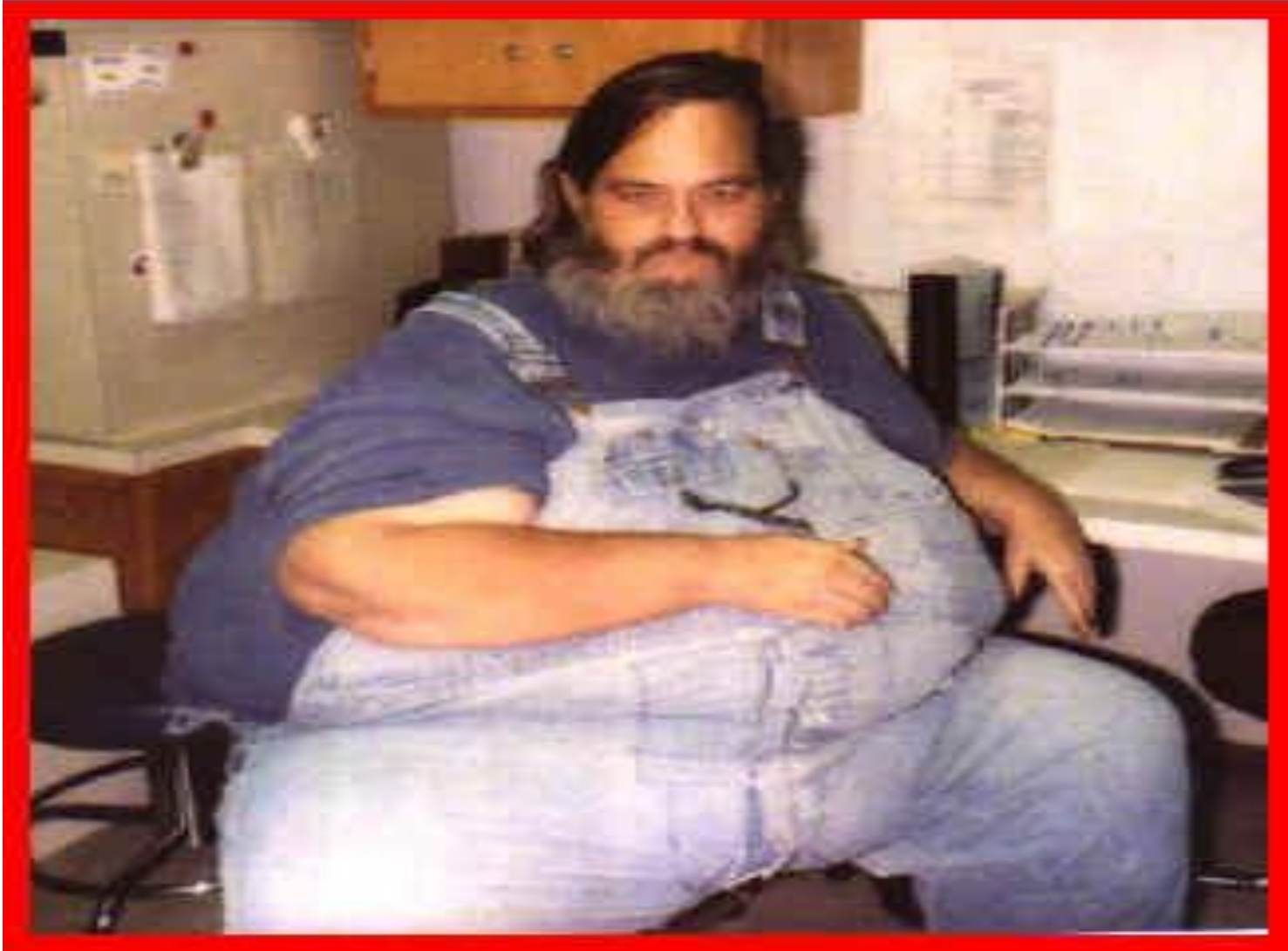
دور بازو MAC

Midpoint between the
acromion process at the
shoulder and the
olecranon process at the
elbow

محیط میانه بازو شاخص
ذخایر پروتئین و انرژی
است.



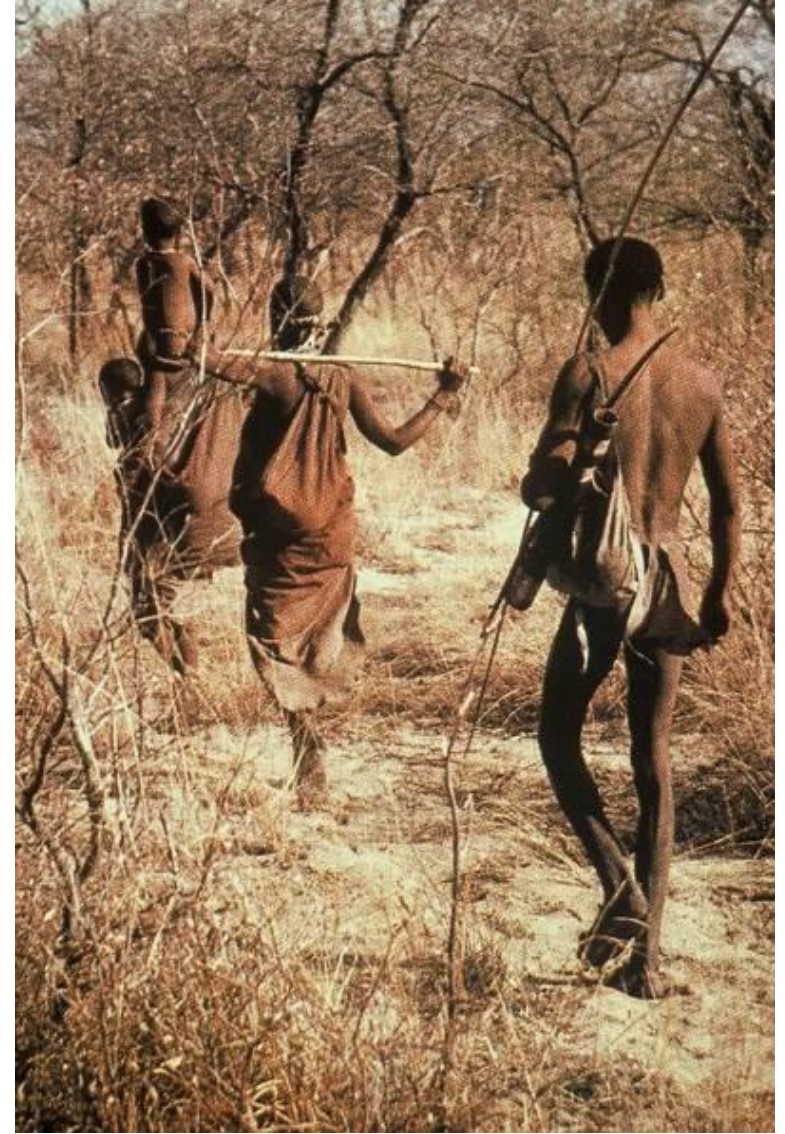
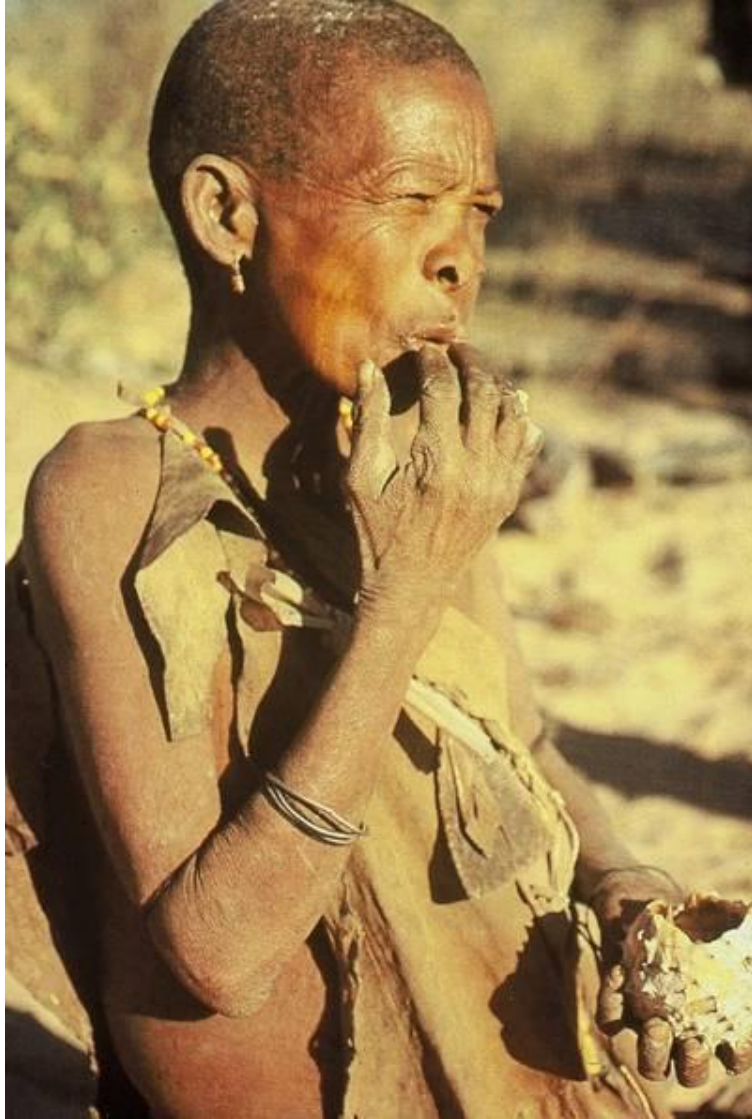
اندازه دور کمر

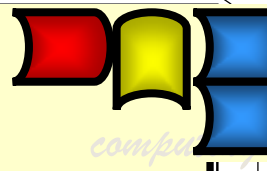


اندازه دور کمر



اندازه دور کمر





Body Mass Index (Quetelet's index) = weight (kg) / height² (m)

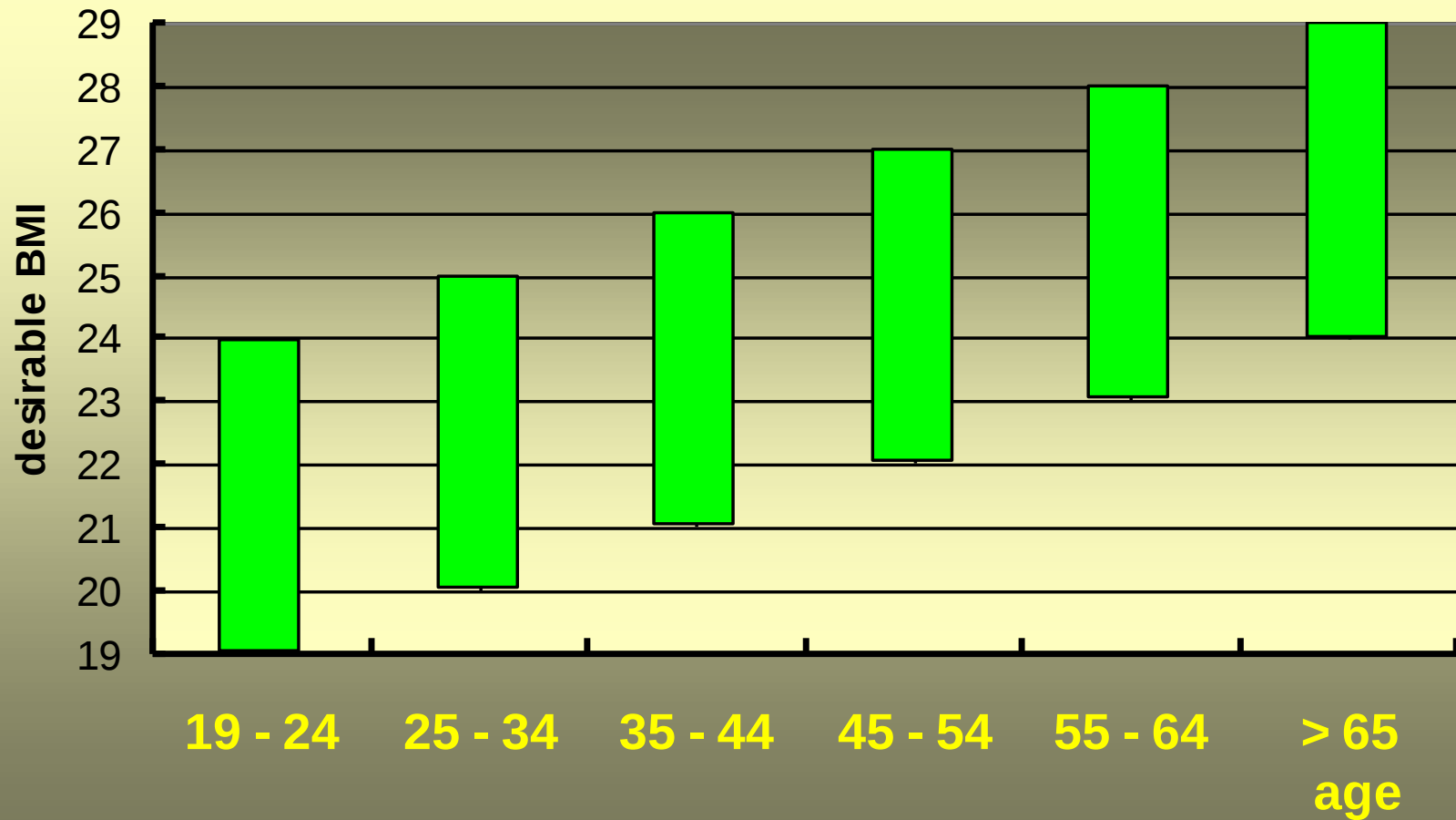
desirable range BMI 20 - 25

overweight BMI 25 - 30

obesity BMI 30 - 40

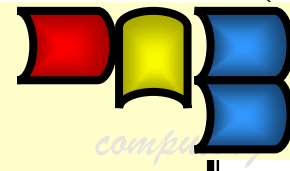
severe obesity BMI > 40

Increase in desirable range of BMI with age

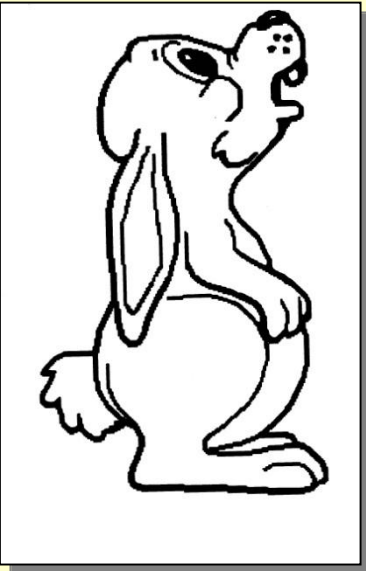
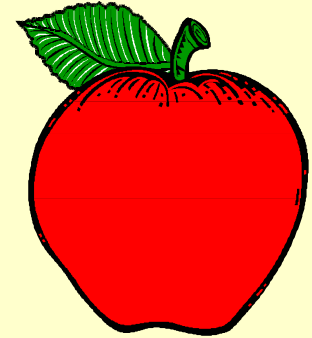


The distribution of body fat is important

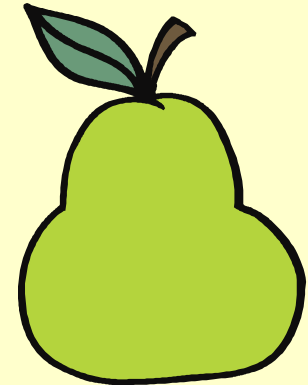
انواع چاقی

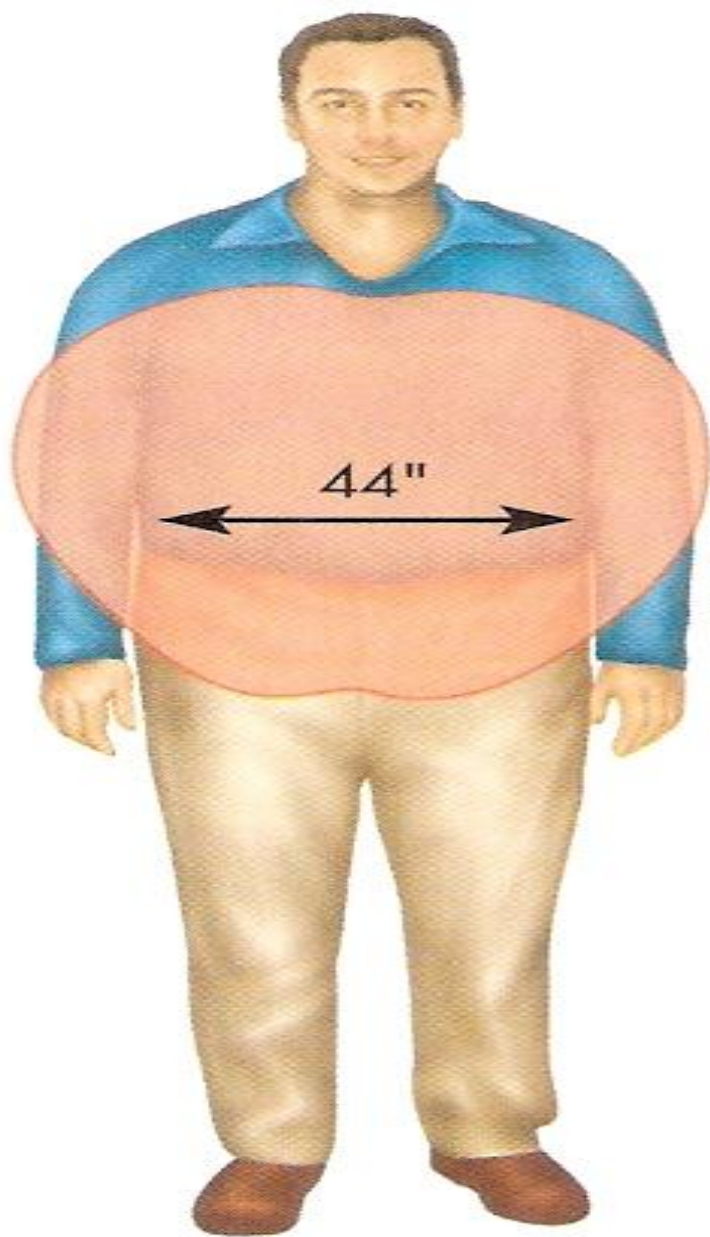


Abdominal obesity – the male pattern

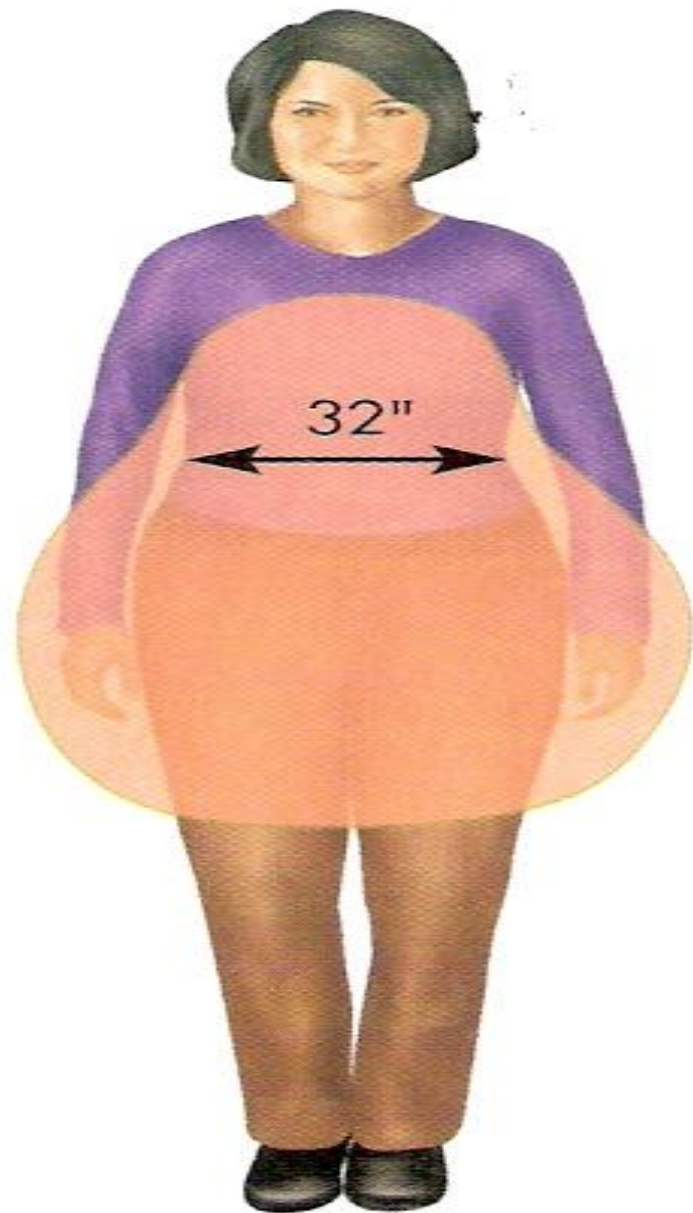


Hip-thigh obesity – the female pattern





Upper-body fat distribution
(android: apple shape)



Lower-body fat distribution
(gynoid: pear shape)

Body Fat Distribution

