Rethink Obesity®

Empathic diagnosis and assessment

Managing obesity can be a sensitive subject for many patients. Even though you may have successfully broached the topic of weight management with your patient, it is important to continue all discussions and assessments in a way that makes this experience as comfortable as possible for your patient.

Body mass index and waist circumference are important measures for evaluating obesity-related health risks.[1]

Body mass index (BMI) and waist circumference allow you to assess your patient's risk for weight-related comorbidities and to form treatment goals.

- Patients with a high waist circumference may be at an increased risk for type 2 diabetes (T2D), dyslipidemia, hypertension and cardiovascular disease.[1]

- In addition to a surplus in total body fat, excess abdominal fat (indicated by a high waist circumference) serves as an independent marker of greater cardiometabolic disease risk.[1,2]

novo nordisk®

Rethink Obesity®

Assessing BMI

BMI is an internationally recognised standard for classifying overweight and obesity in adults.[3] BMI does not necessarily reflect body fat levels in different individuals. At a population level, however, BMI is a practical and useful measure for identifying overweight and obesity.[3]

Before assessing BMI, you need to weigh your patient.

Making a weigh-in more comfortable for your patient:

Ensure weighing scales are in an area that offers privacy

Ensure weighing scales can measure >200 kg

Do not announce your patient's weight

BMI is calculated by dividing your patient's weight in kg by the square of their height in metres.[3]

$$\text{BMI}\ (kg/m^2) = \frac{\text{Weight}\ (kg)}{\text{Height}^2\ (m)}$$

BMI categories[3]

Classification	BMI
Underweight	<18.5 kg/m²
Normal	18.5–24.9 kg/m²
Overweight	25.0–29.9 kg/m²
Class I obesity	30.0–34.9 kg/m²
Class II obesity	35.0–39.9 kg/m²
Class III obesity	≥40 kg/m²

You should weigh and document your patient's weight at every visit.

novo nordisk®

Rethink Obesity®

Measuring waist circumference

Waist circumference is an important measure for evaluating health risks. A higher waist measurement is associated with an increased risk of chronic disease.[3]

Making waist measurement a more comfortable experience for your patient

1 Ask the person to stand facing you.

2 Hand them one end of the measuring tape and ask them to hold it at their belly button.

3 Request they make one turn so that the tape wraps around their waist.

4 Grasp both ends of the tape and adjust it to ensure the tape is at the level of the upper hip bones and record their waist circumference.

Waist circumference can identify increased relative risk for the development of obesity-related complications.[3]

Risk levels for Caucasian men, and both Caucasian and Asian women[3]

Sex	Risk level	
	Increased	**Substantially increased**
Male	94–101 cm	≥102 cm
Female	80–87 cm	≥88 cm

Waist circumference is less accurate in some situations, including pregnancy, medical conditions where there is distension of the abdomen and for certain groups, such as Aboriginal and Torres Strait Islander peoples, and South Asian, Chinese and Japanese adults.[3,4]

novo nordisk®

Rethink Obesity®

BMI

Use this table as a guide to calculate your patient's BMI

	55kg	60kg	65kg	70kg	75kg	80kg	85kg	90kg	95kg	100kg	105kg	110kg	115kg	120kg	125kg	130kg	135kg	140kg
1.47m	25	28	30	32	35	37	39	42	44	46	49	51	53	56	58	60	62	65
1.50m	24	27	29	31	33	36	38	40	42	44	47	49	51	53	56	58	60	62
1.52m	24	26	28	30	32	35	37	39	41	43	45	48	50	52	54	56	58	61
1.55m	23	25	27	29	31	33	35	37	40	42	44	46	48	50	52	54	56	58
1.57m	22	24	26	28	30	32	34	37	39	41	43	45	47	49	51	53	55	57
1.60m	21	23	25	27	29	31	33	35	37	39	41	43	45	47	49	51	53	55
1.62m	21	23	25	27	29	30	32	34	36	38	40	42	44	46	48	50	51	53
1.65m	20	22	24	26	28	29	31	33	35	37	39	40	42	44	46	48	50	51
1.67m	20	22	23	25	27	29	30	32	34	36	38	39	41	43	45	47	48	50
1.70m	19	21	22	24	26	28	29	31	33	35	36	38	40	42	43	45	47	48
1.72m	19	20	22	24	25	27	29	30	32	34	35	37	39	41	42	44	46	47
1.75m	18	20	21	23	24	26	28	29	31	33	34	36	38	39	41	42	44	46
1.77m	18	19	21	22	24	26	27	29	30	32	34	35	37	38	40	41	43	45
1.80m	17	19	20	22	23	25	26	28	29	31	32	34	35	37	39	40	42	43
1.82m	17	18	20	21	23	24	26	27	29	30	32	33	35	36	38	39	41	42
1.85m	16	18	19	20	22	23	25	26	28	29	31	32	34	35	37	38	39	41
1.87m	16	17	19	20	21	23	24	26	27	29	30	31	33	34	36	37	39	40
1.90m	15	17	18	19	21	22	24	25	26	28	29	30	32	33	35	36	37	39
1.92m	15	16	18	19	20	22	23	24	26	27	28	30	31	33	34	35	37	38
1.95m	14	16	17	18	20	21	22	24	25	26	28	29	30	32	33	34	36	37
1.97m	14	15	17	18	19	21	22	23	24	26	27	28	30	31	32	33	35	36
2.00m	14	15	16	18	19	20	21	23	24	25	26	28	29	30	31	33	34	35
2.02m	13	15	16	17	18	20	21	22	23	25	26	27	28	29	31	32	33	34
2.05m	13	14	15	17	18	19	20	21	23	24	25	26	27	29	30	31	32	33

- ☐ Underweight (BMI <18.5)
- ☐ Normal (BMI 18.5–24.9)
- ☐ Overweight (BMI 25.0–29.9)
- ☐ Obesity class 1 (BMI 30.0–34.9)
- ☐ Obesity class 2 (BMI 35.0–39.9)
- ☐ Obesity class 3 (BMI ≥40)

References: 1. National Institutes of Health. National Heart, Lung, and Blood Institute. NHLBI Obesity Education Initiative. *The Practical Guide: Identification, Evaluation, and Treatment of Overweight and Obesity in Adults.* Available at: www.ncbi.nlm.nih.gov/books/NBK2003/. Accessed February 2024. **2.** Garvey WT, *et al. Endocr Pract* 2016;22(suppl 3):1–203. **3.** AIHW. Overweight and Obesity, 2023. Available at: www.aihw.gov.au/reports/overweight-obesity/overweight-and-obesity/contents/measuring-overweight-and-obesity. Accessed February 2024. **4.** Heart Foundation of Australia. *What is a healthy body weight?.* Available at: www.heartfoundation.org.au/Heart-health-education/Healthy-Body-Weight. Accessed February 2024.

novo nordisk®