

# WELLBEING

A Monthly Newsletter Covering Health and Wellness

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## BM WHY? Is Your Body Mass Index Telling You Enough?

### Body Mass Index

In recent years, BMI or Body Mass Index has become a common measurement to determine if you are a healthy weight, or obese and at risk for a heart attack or other chronic diseases.

#### How Do I Calculate BMI?

Basically, you divide weight by height squared. To calculate in pounds and inches (instead of kilograms and meters):

- 1) Change ounces (oz) and fractions to decimal values.
- 2) Calculate BMI by dividing weight (lbs) by height (inches) squared
- 3) Multiply by a conversion factor of 703.

$$\text{BMI} = (\text{Weight in Pounds} / (\text{Height in inches})^2) \times 703$$

Or, just plug your height and weight into one of many online calculators available.

Compare your number with the BMI Classifications:

Below 18.5	underweight
18.5 - 24.9	normal weight
25.0 - 29.9	overweight
30.0 - 39.9	obese
40+	extremely obese

Note that a number over 25 means overweight, but it may not mean fat. A number of 30 or above indicates too much body fat.

#### Where Did BMI Come From?

The measurement was developed in 1832 by a Belgian mathematician, but it wasn't designed to identify obesity or diseases related to extreme overweight. Adolphe Quetelet was attempting to define all aspects of the "normal man." More than 140 years later, physiology professor and obesity researcher Ancel Keys adopted the equation and named it body mass index.

#### Why Doesn't BMI Work For Me?

BMI alone may not give you a complete picture of your health risks or your overall fitness level.

A recent study of 33,000 American adults indicated that men and women who were heavier than the normal BMI range – 24 pounds heavier for men and 7 pounds for women – had the greatest life expectancies. BMI sees mass as mass...whether it's fat or muscle and bone. By BMI standards, Michael Jordan is obese. And so was the young bodybuilding champion Arnold Schwarzenegger.

If you are very muscular, big boned, or under five feet tall, for example, your BMI number may be telling you something that doesn't reflect your true health. You can also have a low BMI total, but be carrying more fat than you should. The current guides are 15 - 20 percent body fat for a healthy man, and 20 - 30 percent for a woman. BMI doesn't directly measure fat, and it doesn't tell you where the fat is in the body. Calculate your BMI and find out more about BMI measurement, waist measurement and weight control at: [www.nhlbisupport/bmi](http://www.nhlbisupport/bmi)

### Is There A Better Weigh?

Apparently location counts in health as well as in real estate. Medical professionals, researchers and scientists say waist circumference is a number you should pay attention to and measure year to year. It's visceral fat - deep in the abdomen around your organs - that's a key indicator of risk for heart disease.

- Recommended waist size: less than 37 inches for males, and 32 inches for females.
- In 2008, the average American man had a 40-inch waist; the average woman's waist was 37 inches.

In addition to measuring your waist, your doctor may calculate your hip-to-waist ratio. The larger your waist in comparison to your hips, the more lower abdomen fat. To find waist to hip ratio, your doctor will divide the circumference of the waist at its smallest point by the circumference of the hips at the widest point. Optimal ratio: less than 0.8 for women and 0.9 for men.

#### Body Fat Measuring Techniques

In the lab: dual-energy X-ray absorptiometry, underwater scales and the Bod Pod.

At the doctor's office: hip-to-waist ratio

At the gym: skin fold testing and commercial body fat scales

# Vitamin Update: Getting Your D Not Quite as Simple as A, B, C

Stay out of the sun.  
Get out in the sun.  
Lather on the sunscreen.  
Expose your skin to full spectrum sunlight.

As doctors and scientists are finding out more about the healing properties of vitamin D, the sunshine vitamin, some of the familiar health messages are being modified. We certainly don't want sun-damaged skin or the possibility of skin cancer.

But a number of Vitamin D researchers and medical professionals think we may have gone too far in avoiding sun exposure, and in doing so, exposed ourselves to a variety of health risks due to vitamin D deficiency.

## History of Healing

- In the early 1900s "the sunshine cure" was the only known tuberculosis therapy that worked. TB patients sent to rest in sunny areas often regained their health, even if doctors didn't know why.
- A century early in 1822, a Warsaw doctor noticed that children in rural Poland did not get rickets, while children in polluted cities in Europe were often afflicted with the deforming condition. He found that he could cure the city children by increasing their exposure to sunlight.

## Making D

When skin is exposed to UVB rays, a pre-vitamin D compound is manufactured and transformed by the body into active Vitamin D. Approximately 10,000 IU (international units) of D3 are produced after 15 to 20 minutes in midday (on fair skin in summer). You can get D from foods in smaller amounts, or you can take a supplement.

- A tablespoon of cod-liver oil provides 1,360 IU
- 3 to 3.5 oz. serving of tuna, sardines, mackerel or salmon will give you 200–360 IU
- Serving of fortified dairy products, orange juice or cereal has 60 to 100 IU

## What's too Little, What's too Much?

The recommended daily amounts have been:

- 5 micrograms or 200 International Units (IUs) to age 50
- 10 micrograms or 400 IUs from 51 to 70
- 15 micrograms or 600 IUs for 71 and older

But, recently:

- Researchers are saying 800 to 1,000 IU may be more beneficial for many people
- American Academy of Pediatrics is recommending 400 IU a day for children, starting a few days after birth.

The key is to keep blood serum levels of D within a healthy range. You can find out if you have enough D with a simple blood test. Note: Vitamin D is a fat soluble vitamin which means it isn't flushed out of the body so it is possible to overdose.

## Who's at Risk for D Deficiency?

- Babies that are breast-feeding only
- Older adults
- People with limited sun exposure
- Individuals with darker skin
- People who have difficulty absorbing fat

Sources: Care2.com; Fox.com; Mayo Clinic; National Institutes of Health Office of Dietary Supplements; Skin Cancer Foundation; www.torontosun.com/life/healthandfitness; Wellsphere.

## Skin Protection Strategies

### Chemical-free and natural sunscreens

Physical barrier sunscreens containing zinc oxide and titanium dioxide protect against both UVA and UVB rays. They also may be less irritating to sensitive skin.

### A whole foods, junk-free diet

Once again, you are what you eat. You cannot just eat a salad and go lay out, but making lasting dietary changes will give you healthier skin that is less susceptible to damage. The key is more whole foods and less processed items:

- Lose the fried foods and snack foods like chips.
- Make water your drink of choice.
- Load up on foods rich in beta carotene: apricots, cantaloupe, mango, peaches, broccoli, carrots, kale, pumpkin, spinach and sweet potatoes. Research is showing that over time these foods protect against sunburn.

