

CALCULATE YOUR IDEAL BODY WEIGHT

Reaching your ideal body weight is a critical part of successful rehabilitation following a knee injury or knee surgery.

When it comes to patellofemoral pain or a sore knee cap, I go so far as to say that no treatment, surgical or non-surgical, will succeed, unless your weight is in a normal zone. The knee joint has a very small surface area by comparison to your body weight, so the load reaches very high levels, even at your ideal weight.

Another way to understand this is if you go hiking with a full 20kg backpack, almost everyone will get sore knees eventually. Take the backpack off and your knee pain recovers. If you have knee pain and you are carrying around the equivalent of a backpack, you need to take it off.

So what is your ideal body weight?

Body mass index or BMI has long been used to give people an indication as to whether they are within a normal weight zone. BMI is calculated on a formula of your weight in kilograms divided by your height in metres squared. Put simply, that means that the taller you are, the greater your weight is allowed to be. This formula is based on a person of normal proportions. We call that a mesomorphic body shape.

However, if you are tall and skinny (ectomorphic) the BMI figure is very forgiving and you may actually be overweight without having an abnormal BMI reading.

Conversely, if you are of a short stocky build (endomorph) the BMI is unfair on you. You may have a result indicating that you are overweight when you are not.

For these reasons I do not advocate using BMI as a guide to your ideal weight or your weight loss program.

The most scientific way to track your weight is with percentage body fat. Previously this was only possible with expensive equipment, but a set of electronic digital scales with percentage body fat is now available over the counter at most pharmacies. The great thing about percentage body fat is that it does not matter what your body shape is, it still provides an accurate reading. It also takes into account the old conundrum that as you get fitter, you may well put on more muscle bulk and you may not see dramatic reductions in your weight. However your percentage body fat will fall. Many

people kid themselves that this is the reason they are not losing weight, and these scales are a measure of truth in that regard.

What is a reasonable target for percentage body fat?

None of us are going to reach the 6% body fat of a professional male cyclist. Reasonable targets are set out below:

- 30 year old woman – 20%
- 60 year old woman – 30%

- 30 year old man – 16%
- 60 year old man – 22%

Using this data you can calculate your ideal body weight but it is a little bit of a mathematical contortion. Firstly you need to calculate your current **lean body mass**. So for example if you weigh 100kg and the scales tell you that your percentage body fat is 20%, then 80% is not fat, so your lean body mass is 80% of 100kg or 80kg.

The next step is to calculate your **ideal lean body mass as a percentage**. So if your targeting 15% body fat, then you want a lean body mass percentage of 85%. That is to say that your current 80kg of lean body mass has to make up 85% of your total body weight. The other 15% is fat. Therefore, your ideal weight is your current **lean body mass (80kg) divided** by your **ideal lean body mass as a percentage (85) times 100** (=94kg in this example).

Or you could take the easy path and just watch your percentage body fat come down over time.

The take home message – if you are serious about weight loss, you need to know your percentage body fat.

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