Take Your Own Bodyfat: The Henriques 6 Bodyfat Chart

There are 2 very annoying issues that arise when taking bodyfat using the skinfold calipers. Those issues are:

- · You need a trainer (or someone that knows what they are doing) because you can't reach the sites yourself
- There is huge inter-tester variability when it comes to the results

I believe I have solved both of those issues, and created a more accurate formula as a replacement. But first, a little background.

There are 3 popular bodyfat formulas that trainers currently use. There is the Durnin & Womersley method, which involves taking bodyfat at 4 sites: Bicep, Tricep, Subscapula, and Suprailiac. You add the total of the four sites together, use a fancy formula, and it spits out your bodyfat percentage. In my experience this is the most popular method used. In my experience this formula tends to overestimate one's bodyfat especially for fit people.

Another popular method is the Jackson/Pollock Method. There are actually 3 versions of this but they all derive from the main one, the Jackson/Pollock 7. That involves taking bodyfat at 7 sites: chest, abdomen, thigh, tricep, subscapular, suprailiac, midaxillary; use another formula and it will give you a bodyfat percentage. In my experience this formula tends to underestimate one's bodyfat.

The third formula is the Parrillo formula. This was created by the bodybuilding coach John Parrillo and he wanted a formula that was specific to bodybuilders and fitness oriented people. This involves taking bodyfat at 9 sites: chest, abdominal, thigh, bicep, tricep, subscapular, suprailiac, lower back, and calf. Again, you do the same deal – add up your total and look on a chart to find your bodyfat. This formula tends to predict a bodyfat percentage in between the Durnin & Womersley and the Jackson/Pollock formulas. There are 10 standardized bodyfat pinch sites. No formula uses them all, Parrillo uses all of them except for the midaxillary site.

There is nothing inherently wrong with these formulas, it is just that they are very inconvenient to use. Checking body fat should be like checking the scale, you can check in daily or at least weekly to see your progress if you want. But to use these formulas you need a trainer to take the measurements on you, and if you don't get the same person there is likely to be reasonable variation in the result. I should know. I have trained and tested over a 1000 trainers on these bodyfat methods and when they graduate from NPTI they are pretty good at it, but even with that training there is more variability than one would like. It is what it is, but I think we can solve both of these problems.

Let me introduce the Henriques 6 body fat calculation. It will follow the model set up by the other formulas but the huge benefit of this method is that there is no measurement on your posterior - this means you can do the test yourself. In addition because you will be the one doing it, once you practice it a few times I think you will find the results to be quite consistent. And finally while this is just my opinion, I believe this formula does a better job of describing the level of bodyfat we are seeing visually. By that I mean it doesn't seem to overestimate the body fat like the Durnin & Womersley method, but it doesn't underestimate it like the Jackson/Pollock seems to.

This method involves using a skinfold caliper (the same implement you would use for the other formulas) and it involves measuring yourself at 6 locations. Those locations are:

- Bicep vertical fold halfway down the front of the bicep (make sure your palm is forward). See Figure 1.1 and
 1.2 for more detail.
- o Chest diagonal fold right at the pec/delt tie in. See figure 2.1 and 2.2 for more detail.
- o Midaxillary horizontal fold under the armpit, in line with the bottom of the sternum (arm must be raised out to the side to about 90 degrees to do this). See figure 3.1 and 3.2 for more detail.
- Suprailiac diagonal fold 3-4" inches anterior to the height of the iliac crest (top of the hip bone). This site is generally found where the abs meet the obliques; another good landmark is at the height of the navel but lined up under the nipple. See figure 4.1 and 4.2 for more detail.
- Abdomen vertical fold 2" inches to the right of your navel (staying in your right side). See figure 5.1 and 5.2 for more detail.
 - Note the abdominal site is just a few inches medial (toward your belly button) of the suprailiac site
- o Thigh vertical fold halfway down the anterior portion of the thigh. See figure 6.1 and 6.2 for more detail.

Use the pictures as a reference and see the video tutorial for more detailed directions. If you are used to taking bodyfat then just measuring each of these areas once will suffice. If you are not familiar with regularly taking bodyfat then run through these areas two or three times at least. Go through them top to bottom and then repeat, this will help prevent you from just making the same mistake each time. Compare your numbers, you should be able to get your repeated measurements within 1 mm of each other – preferably they will be the same each time.

Once you have your measurements in millimeters for each of the six sites, simply add them up. That number is the sum of the measurements. Now look on the chart provided and find your sum on the left hand column. Use the appropriate gender and that is your estimated percentage of bodyfat from this formula. It is as easy as that.

As an example, a male has the following results from this assessment:

Bicep - 5 Chest - 8 Midallixary - 10 Suprailiac - 11 Abdomen - 19 Thigh - 13

Sum of Measurements = 66

Using the chart, we can see this person is estimated to have 14.2% body fat. If this person was a female with the same numbers, she would have 22.64% body fat.

How Exact Are the Numbers?

To be honest skinfold calipers give an individual an estimate of their bodyfat but it is not a perfect science. None of the skinfold formulas are perfectly accurate, they are all estimates. The key point of the formula is not to declare with certainty what one's bodyfat is, but it is to record where a person is and then most importantly it will show change over time. Gain fat and it will be reflected in the numbers; lose fat and that will also show up. In that respect the formulas do a very good job of showing change.

What about Age?

Two of the three formulas (Durnin & Womersley and Jackson/Pollock) include age as part of the end result; the Parrillo formula does not. It is not included in this formula either but you can add it in if you wish, I see it as optional. The Durnin & Womersley and Jackson/Pollock formulas don't agree how much age affects bodyfat. It is quite impactful in the Durnin & Womersley formula (just going from 25 to 35 years old will net you a gain of about 3% bodyfat even if you look the exact same according them); whereas with the Jackson/Pollock age only brings your number up a percent or two even over several decades.

Since this formula was designed to be a visual assessment of your body fat, I don't think we need to arbitrarily add fat in to take into account age – that will show up in your body and on the six sites. However if you want to factor in age, a simple but reasonably accurate way to do that is to add .1% fat to your score for every year you are older than 30. As example, if the person in the above scenario was 55 years old, we would add 2.5% (25 yrs over 30 x .1) to their body fat to factor in their age. Again, this is optional.

Technique

The location and general technique used in this method will mirror the other methods, with one exception. Using the traditional formulas, a personal trainer will pinch and pull the fat with one hand (their left hand) and then they will measure the pinch with the caliper which is held in their right hand. With this method there is no pinching hand. Simply open the caliper up reasonably wide, place it snug against the skin in the area you are going to pinch, and then allow the caliper to close. As it closes it will catch the fat and it will recreate the "pinch and pull" method the trainer was using. In addition because the spring will have a reasonably constant tension, once you get the technique down (which should only take a few practices) the spring will apply the same pressure and your readings should be quite consistent. It is worth noting that it is industry standard to always take body fat measurements on the right side of the body unless that is not a feasible option.

My goal in creating this method was simply to establish a quick and easy way for one person to measure their own body fat. You can do this as frequently as you wish to monitor change, and you can measure yourself in the privacy of your own home (not everyone loves going to the gym and getting poked and prodded by a personal trainer). With six sites the numbers are in tune enough so that minor changes - seen over a week or even a few days - will result in a slightly different score. A realistic bodyfat loss goal is ½ to 1% a week - the heavier you are the easier it is too lose the fat. When you are pushing yourself through a strict diet and a challenging workout program, it is nice to know that visible results will only be a few days away.

Please see the following videos for further reference:

Henriques 6 Body Fat Method - How To - Long Version

Henriques 6 Body Fat Method - How To- Short Version

The calipers used for this tutorial are easily available <u>here</u>.

FIG 1.1 BICEP



FIG 2.1 CHEST





FIG 4.1 SUPRAILIAC

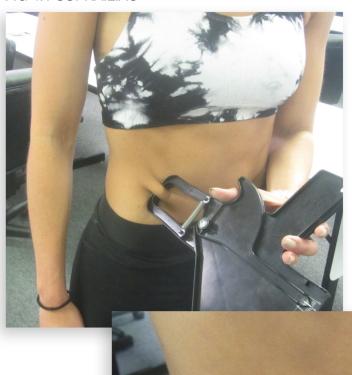


FIG 4.2 SUPRAILIAC



FIG 5.1 ABDOMEN

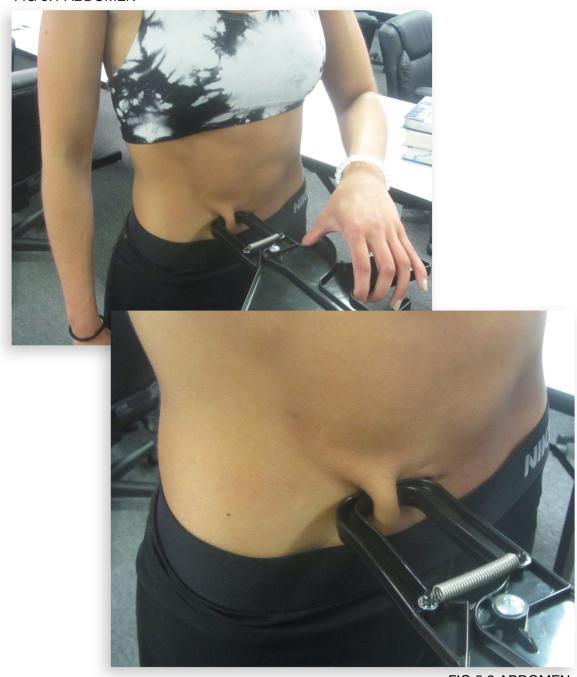


FIG 5.2 ABDOMEN

FIG 6.1 THIGH

