BIA Journal

Nutr 240: Nutritional Assessment
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Entry 1: Day's Activity

Day 1: 10/31/12

On the first day in the lab, I had three clients. The first two clients were male college students: 19 and 22 years old. For the first two clients, I took their height/stature using the standiometer. I had the client take his shoes off, straight with his back against the wall and his head in the Frankfort horizontal plane. Next, I measured their weight using the scale. I had the client step on the scale with their shoes off. Then, I took their body fat measurements using the bioelectrical impedance. I had the client lay down on the table with their socks off. After I put in the correct data using the height and weight just measured, I placed the stickers and clips on the client's hands and feet in the correct places then the measurement was taken.

Also, I used the Bod Pod with Dr. Busch and Charles Remillard. Charles is a 20 year old male cross country runner on SUCO's cross country team. We measured his body fat % using the Bod Pod. We measured his height using the standiometer and weight using the scale then had him put on spandex shorts and a swim cap to put his hair down. Then we followed the steps on the computer. But unfortunately, we took the measurement three times due to human error.

Day 2: 11/5/12

In the second day in the lab, I also had two clients. The first client was a female 20 years old. My second client was a male 21 years old. I took their height using the standiometer, weight using the scale, and body fat measurement using the bioelectrical impedance scale. Again, I had the client take his/her shoes off, stand straight with his/her back against the wall and his/her head in the Frankfort horizontal plane. Next, I measured their weight by having them step on the scale with their shoes off. Then, I measured their body fat using the Tanita scale instead of the other machine where you have the client lay down. For this one, I put in the

correct values using his/her height and weight measured and the other values. This one asks to put in if the client is athletic or not. Next, I had the client step on the scale with his or her shoes off then the measurement was taken. The machine printed the results.

Entry 2: Reflection

Day 1: 10/31/12

For my first day in the lab, it went pretty well except for some problems and errors I encountered. My clients were very compliant and patient which made me less nervous since this really was the first time I was taking measurements on someone besides during class. My first client was nervous, but very excited. He is a weight lifter and has a strict diet. He recently lost 20 lbs. and is still trying to lose fat and gain more muscle. Since he does manage his weight, he was very excited to learn how much body fat he actually has. But he also was nervous since this was his first time being measured with a bioelectrical impedance. His hydration status was good and his body fat % was lean and in the healthy range, so he was very happy. My second client was also male, but younger. He seemed to not care what his results were and he came and left quickly.

I encountered a couple of problems since this was really my first time taking these measurements on clients and using the Bod Pod. First, I was shorter than both my clients. Since I was shorter, it was difficult to measure their height. I realized that to get an accurate measurement, it would be better to stand on a stool.

Next, when using the Bod Pod, it took us three times to get a correct measurement. First, we skipped the results and could not go back. Also, the computer could not print the results. Second, I recorded his height inaccurately in the computer, so the data came out wrong. His body fat % was very low into the at risk category. The client was tall, thin, and a runner. But

this was lower than it should be since you could tell that he was well nourished. Although, Dr. Busch did explain that sometimes tall, thin athletes will have a low body fat % since they do burn more calories than they eat daily. We discovered that his height was inaccurate, so we had to run the test a third time. This time his body fat % was 6.8% which was definitely more accurate. He is lean, but not malnourished or at risk.

I noticed that he was very compliant and patient. The test lasts about 20 minutes, but it took us about an hour and he had to get in the Bod Pod three times. I wonder if every client would be as patient and understanding. I assume that some patients may not be as patient which might put more pressure on the person taking the measurements. Mistakes do happen, but accuracy is very important. Also, the person taking the measurements could look over the measurements taken to find if he/she made any mistakes, use critical thinking skills, or have someone else take or look over the measurements (if possible). But also variation will exist in who takes the measurements. These mistakes were mostly due to inexperience using the Bod Pod, but also inaccuracy of data.

Day 2: 11/5/12

My second day in the lab mostly went well. It definitely seemed to go more smoothly since I was more confident. Taking the height and weight measurements went smoothly, but I did encounter problems using the Tanita scale which is a little different from the other machine (which I was used to using). My client's were again compliant and patient. My first client, a female student seemed excited and interested. She was really disappointed when the machine did not print her results. She left, but did come back when it did start working again. I took her

body fat % measurement again and it did print her results. Even though we had to do it again, it does not take long and she was understanding.

My second client, a male student seemed nervous. This time the printer was working, but I encountered another problem. Since I was not very familiar with this machine and it is different than the other machine, I did not put the accurate data in the machine. This scale asks if the person is athletic and you must have male or female athletic punched in or the data will be wrong. I had to take his measurement again, but he was also understanding and patient. Again, a machine error and human accuracy error prevented accurate results, but I did redo the tests over again to get accurate results. Again, accuracy is very important.

Entry 3: Reflection as a Client

As a client, I felt nervous and excited. Having electrical wires hooked up to you was nerve racking to me, but it really wasn't that bad. It did not take long at all. But if other people are uncomfortable laying down and putting electrical currents through your body by attaching wires, the other bioelectrical impedance scale may an alternative to them. Also, I felt excited. I am a runner and watch what I eat to maintain my weight. I also strive to be healthy as well as physically fit. I was really interested in knowing my body fat % since I really did not know. My body fat % was 23% which is moderately lean. This is what I expected, but I also was hoping it was lower since I do exercise regularly and eat a healthy diet. It was fun too.

First, she took my height. I took my shoes off and stood straight with my back to the wall at the standiometer and she measured my height. The measurement was slightly lower than what I have been measured for height at the doctor's office in the past couple of years. But the measurement was still close to my usual height. Next, I stepped on the scale then she read the

digital scale. My weight was 1 lb. more than my usual weight, but, I may have gained a pound since I last was weighed. Next, my data for height and weight was entered in the machine then I laid down and was hooked up to the wires. Also, in the other machine (the Tanita), my data was entered then I stepped on the scale. The process was very quick and did not take long for either bioelectrical impedance machine. The Tanita is more simple and quick since it does not involve any electrical wires. Also, again it's not as intimidating since it doesn't have any of the wires. I would prefer the Tanita. The Tanita also is more accurate than the other machine. My results did vary slightly, but not by much.

Even though in my career, I will be the one taking the measurements, experiencing being measured was a valuable experience. I understand why and how people can sometimes be nervous. It can be intimidating and some people may even feel ashamed if they are not confident about their self image. Also, I had to be patient too. It can be difficult to be patient, but I did want accurate results.

Entry 4: Overall Reflection

Overall, my experience as the assessment taker and the client was a valuable learning experience. As the assessment taker, I realized how accuracy is very important. You cannot rush, but you cannot take your time either because the client may get impatient. But if measurements are taken wrong or entered in the computer or machine wrong than results will not be accurate. It's important to carefully enter measurements, check measurements entered, and/or use critical thinking skills to realize if result does not seem correct. This is important for accurate results, but also if errors are caught early before the measurement is taken, this will eliminate repeating which means you will save time, burden on the client, and perhaps money.

Also, I observed that clients may be nervous and/or excited. Making clients feel comfortable is important, so they will keep coming back to you (the dietitian). Also, if they don't feel comfortable with the assessment then will they go through with the intervention? Clients may be less likely to keep coming back and to get the help they need to make the lifestyle changes needed to improve their health if they do not like being assessed or told what to do. The person taking the assessment should learn and realize how to make a client feel more comfortable.

As the client, I understand why and how people may be nervous. I used to hate going to the doctors, just sitting in the doctor's waiting room would elevate my blood pressure and make my heart beat out of my chest. I would get so nervous that when they measured my blood pressure it would always be high. Yet I am at a healthy weight, eat healthy, and fit. Of course this did not make sense, so nurses knew I must just be nervous. But why was I nervous? The blood pressure cuff/machine, needles, the smell of the office, sitting in a small room all myself, and worrying that they would find something wrong with me made me nervous. Many people are nervous when they have physicals and are assessed. Since I have experienced how a BIA can be nerve wrecking, I can sympathize or understand my client's feelings. Also, it would be important to try to make them feel more comfortable which is something I definitely should learn.

I have learned that soon I will have gained more knowledge and information about nutrition assessments and nutrition than the general public. I must be confident and positive about my decisions and practice. Right now, I am still learning, but soon I will be required to understand how to perform nutritional assessments. This is an important step of the ADIME process. I know that I am capable, but striving to learn more and practicing with equipment and

actually hands on learning is helpful. Practicing to get familiar with equipment and interacting with clients helps to also build my confidence. This experience was a valuable learning experience.