I chose resistance exercises to enhance flexibility and balance, improving muscle strength and weight management. I engaged in squats and pushups, which I do every morning for thirty minutes before starting my day. I repeated the exact timetable for eating and exercises for the two weeks. The following is documentation of the workout process for two weeks.

**Monday**

Opening pulse=67 beats per minute

Opening weight=114.76 lbs.

Breakfast

 I boiled egg

I banana

I slice of toast

I completed 36 squats which included 12 reps of all movements for each of the three sets. I did the first set of squats and rested for thirty seconds, did the second set, rested for 30 seconds, and did the third set. I rested for 2 minutes then proceeded to do 20 girl pushups which included five reps for each of the four sets.

Closing pulse=110 beats per minute

**Tuesday**

Opening pulse=72 beats per minute

Breakfast

I cup Coffee

One banana

I completed a total of 60 wall squats which included ten reps of all movements for each of the six sets. I took two rests of 20 seconds each. I also did 20 reps of all movements for each of the five sets of wall pushups.

Closing pulse=122 beats per minute

**Wednesday**

Opening pulse=65 beats per minute

½ cup bran flakes

One banana

1 cup milk

I started warm-up with ten jumps and then completed ten reps of all movements for each of the ten sets of ballistic pushups. I took 30 seconds rest intervals after completing each of the set of pushups. This was followed by 12 reps for all movements for each of the side squats, completing 100 squats. However, I rested for thirty seconds between each set of side squats.

Closing pulse=124 beats per minute

**Thursday**

Breakfast

1 cup banana and strawberry smoothie

One boiled egg

Opening pulse rate=67 beats per minute

I completed 15 reps of all movements for the ten sets of diamond pushups. I also completed a total of 150 pistol squats that consisted of 10 of all movements for each of the 15 sets. However, I alternated between one set of pushups with squats and rested for thirty seconds after completing each set.

Closing pulse=122 beats per minute

**Friday**

Breakfast

½ cup cooking oats

Unsweetened soy milk

I teaspoon honey

Opening pulse=72 beats per minute

I completed two sets of spider man pushups with ten movements for each of the sets. I then took a thirty seconds break and continued with five sets of plié squats with 20 movements for each. This was then followed by the remaining five sets of spider man pushups with ten movements for each.

Closing pulse=128 beats per minute

Weight at the end of the first week=111lbs

I completed the same set of exercise activities but with different results.

**Monday**

Opening pulse=72beats per minute

Closing pulse=124 beats per minute

**Tuesday**

Opening pulse=68 beats per minute

Closing pulse=122 beats per minute

**Wednesday**

Opening pulse=70 beats per minute

Closing pulse=125 beats per minute

**Thursday**

Opening pulse=72 beats per minute

Closing pulse=126 beats per minute

**Friday**

Opening pulse=71 beats per minute

Closing pulse =120 beats per minute

Weight at the end of the second week =108lbs

The results reveal a significant increase in the heart rate, with the lowest being 67 beats per minute on the first week to 128 beats per minute at the end of the second week. Endurance exercises are, however, beneficial for creating strong muscles and enhancing weight loss. This is evident in the weight at the beginning of the exercise in the first week, at 114.76 lbs. At the end of the first week, I was able to bring the weight down to 111lbs and eventually to 108lbs at the end of the second week.

I chose nutrition and bioavailability since it contributes to healthy living in various ways. Bioavailability refers to the fraction of nutrient in food which is absorbed and utilized by the body. Professor Segal explains that the Science of nutrition and bioavailability reveals that the best diet for humans depends not only on food but also on the person eating it. Individuals need to adopt a healthy lifestyle that involves exercise that helps to increase the body’s ability to absorb nutrients while losing excess body fat.