

# Nutrition Optimization Before Bariatric Surgery: Does Required Dietitian Follow-up Improve Patient Outcomes?

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## Introduction

- Insurance companies require patients to undergo clinical nutrition evaluation as part of the clearance for bariatric surgery
- Goal of nutrition evaluation: identify nutritional problems and determine patient's ability to make diet and lifestyle changes
- Nutrition optimization aims to reduce complications and improve the potential for weight loss
- All patients must undergo a series of nutrition

## Purpose

- appointments, classes, etc. to ensure they are ready for the lifestyle changes that come with bariatric surgery
- Some patients are put on nutrition hold for a variety of reasons- lack of nutrition education, lack of diet history, elevated A1C, etc.
- Weight loss (pre-operative and post-operative)
  - Post-operative complication rates
  - Post-operative follow-up rate
  - Preoperative phase duration

## Methods/Population

### Method

Retrospective Chart Review

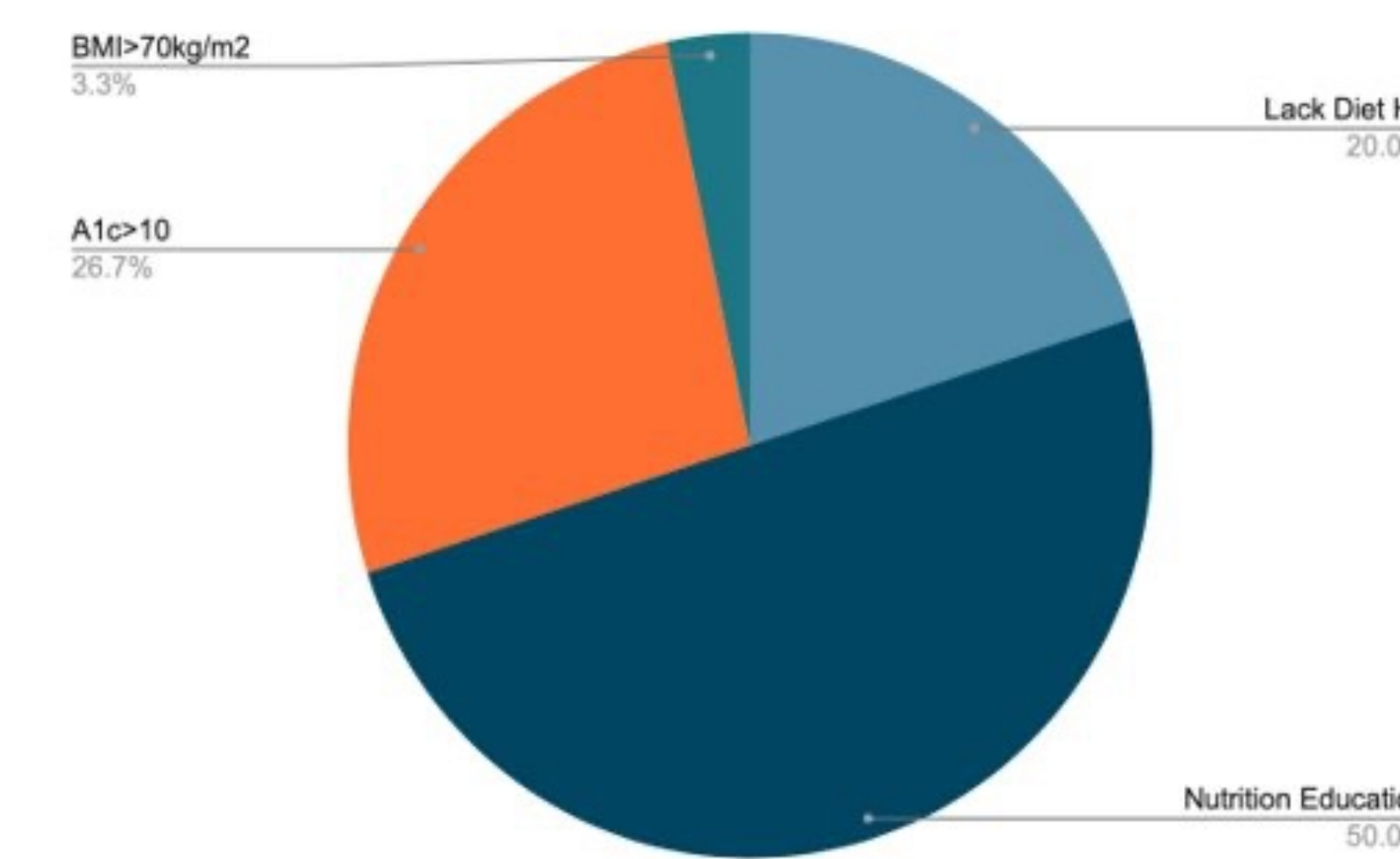
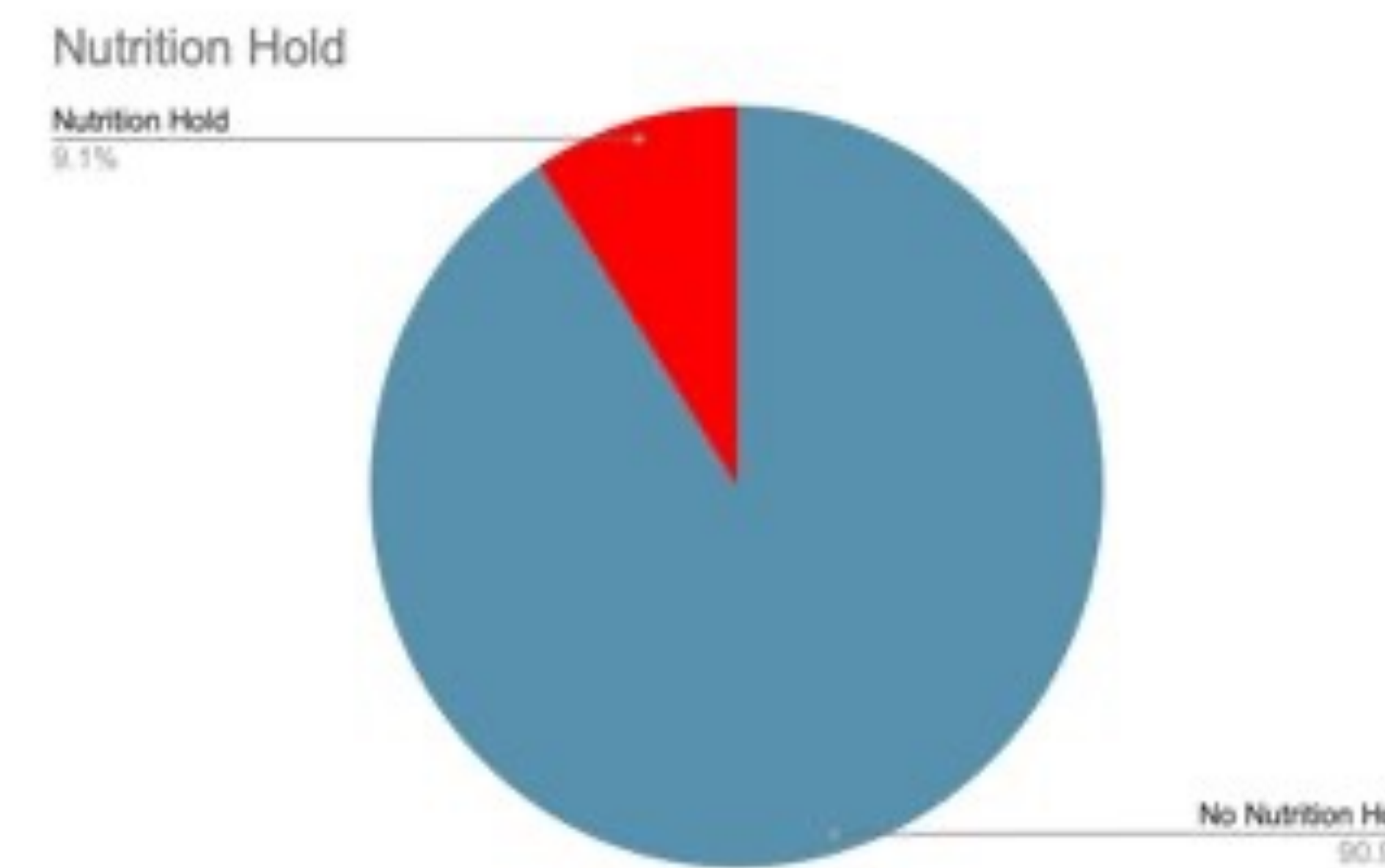
- August 1, 2017 through December 31, 2019- timeline of patients who completed nutrition evaluation and underwent surgery

### Population

Age: 18-75 y/o

Demographic Data	Stats
Age, Mean $\pm$ SD (years)	$\bar{A}$ 44.29 $\pm$ 11.29
Sex, N (%)	
Male	57 (17.2)
Female	274 (82.8)
Race, N (%)	
White	245 (74.0)
Black	80 (24.2)
Biracial	2 (0.6)
Asian	1 (0.3)
Unknown	3 (0.9)
Ethnicity, N (%)	
Hispanic	323 (96.4)
Non-Hispanic	12 (3.6)
Weight at Nutrition Eval, Mean $\pm$ SD (lb)	283.88 $\pm$ 51.16
BMI at Nutrition Eval, Mean $\pm$ SD (lb)	44.82 $\pm$ 7.01
Total, N (%)	331 (100%)

## Methods/Population cont'd



## Results

- Average age of surgery for patients on hold was slightly higher than patients not on hold.
- Weight and BMI showed no real difference between no hold and hold patients.
- Time in surgery showed to be longer for patients that were on hold versus patients not on hold.
- Surgery length of stay also showed to be higher for patients on hold.

## Results cont'd

	Mean $\pm$ Standard Deviation No Hold Patients	Mean $\pm$ Standard Deviation Hold Patients	Two sided P-value
Age at Surgery	43.96 $\pm$ 11.37	47.63 $\pm$ 9.92	0.089
Nutr. Eval. Weight (lbs)	283.79 $\pm$ 50.54	284.71 $\pm$ 57.94	0.926
Nutr. Eval. BMI	46.41 $\pm$ 6.83	46.47 $\pm$ 8.78	0.964
Time Nutr. Eval. to Week 0 Preop days	119.55 $\bar{A}$ 61.64	160.13 $\pm$ 98.73	0.001
Sxtime	115.89 $\pm$ 36.29	139.73 $\pm$ 98.73	0.002
Sxlos	1.39 $\pm$ 0.68	1.93 $\pm$ 1.94	0.001

with greater duration of time for patients on nutrition hold

- Nutrition education and counseling pre-surgery is essential and necessary for long-term patient success; however, the additional nutritional education the patients on hold received did not show to have any significant benefits for overall outcome