

# Factors Distinguishing Weight Loss Success & Failure at 5 or More Years Post-Bariatric Surgery



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# **Background**

- ◆ Recommendations for dietary intake, eating behaviors, and physical exercise are typically made to post-bariatric patients.
- ◆ Recommendations <sup>1-2</sup> address the following:
  - Nutrition
  - ◆ Total calories/day
  - ♦ % calories from protein, carbs
  - ♦% calories from fat
  - Avoid high sugar foods
  - ◆Eating at fast food vs. sit-down restaurants
  - ◆ Eating in front of TV
  - ◆ Drinking liquids with calories (e.g., high protein drinks)

#### ◆ Fluid Intake

- Avoiding carbonated beverages
- Avoiding excess caffeine

#### Portion Control

- ◆Limit portion sizes, grazing, mindless eating
- Vitamin Supplements
- ◆ Multivitamins
- ◆Calcium, iron

## Personal Accountability

- Weighing regularly
- Attending support groups & surgical follow-up appointments
- Regular Exercise
- Aerobic exercise
- Strength training
- Little is known about which are most associated with weight-loss success or failure over the intermediate to longer term (e.g., 5 or more years post surgery).

Research Question: At five or more years post surgery, do "Highly Successful" versus "Not Highly Successful" patients differ regarding their adherence to recommended guidelines?

#### Methods

- ♦ Of 535 survey respondents, 255 were at least 5 years post weight loss surgery.
- ◆ Within those 255, two groups, a "Highly Successful" and "Not Highly Successful" were identified based on Excess Weight Loss (%EWL):
  - ◆ "Highly Successful" (HS) defined as >80% EWL (n=115)
  - ◆ "Not Highly Successful" (NHS) defined as <40% EWL = (n=41)</p>

## Participants

- Highly Successful = 45% of sample (115/ 255)
- ◆ Not Highly Successful = 16% of sample (41/255)
- ◆ Characteristics of final sample (n= 156) were:
- •51.7 (SD=8.9) years old
- •8.8 (SD=4.2) years post surgery
- 96% female
- 59% married
- 89% White
- 89.1% post gastric bypass
- •No significant group differences on demographic variables.

#### **Data Analyses**

• Independent t-tests and chisquares used to compare HS and NHS on reported behaviors.

## Results

Table 1

Behaviors Reported by Highly

Successful vs. Not Highly Successful

Patients at ≥ 5 Years Post Weight Loss

Surgery

Reported Behavior	Highly Successful >80% EWL n=115	NOT Highly Successful ≤40% EWL n=41	Sig (p)
Cals/day	1152 kCals	2190 kCals	<.001*
% Calories from protein	49%	36%	<.001*
% Calories from carbs	31%	40%	<.001*
% Calories from fat	20%	22%	ns
Eat protein first at least daily	67%	37%	<.002*
Eat high sugar foods at least daily	9.3%	40%	<.001*
Eat Fast Food at least weekly	19.4%	60.5%	<.001*
Eat at sit-down restaurant at least weekly	54%	65%	ns
Eat in front of TV at least weekly	43.5%	67.5%	<.01*
Drink meal replacements/ at least weekly	39.3	45.9	ns
Drink ≥ 1 carbonated drink/day	7.5%	27%	<.003*
Drink caffeine ≥1/day	27.1%	48.6%	.<02*
Meal Portions too large ≥1x/day	9.3%	52.6%	<.001*

## Table 1 (continued)

Reported Behavior		NOT Highly Successful	Sig (p)
Snack Portions too large ≥1x/day	14.8%	47.4%	<.001*
Grazing ≥ 1/day	5.2%	45%	<.001*
Eat Mindlessly ≥ daily	7.8%	52.5	<.001*
Multivitamin daily	82.2%	56.8%	<.003*
Calcium	75.2%	43.2%	<.991*
Iron daily	55.4%	27.0%	<.004*
B12 daily	78.2%	40.5%	<.001*
Weigh daily	35.7%	7.3%	<.002*
Attend Support Groups	40.2%	13.3%	<.008*
Attend Surgical Follow-up	75.7%	67.5%	ns
Vigorous exercise ≥3x/wk	44.1%	13.5%	<.009*
Strength training ≥3x/wk	40.2%	26/6%	<.002*

#### Limitations

- ♦ Findings based on on-line convenience sample
- Data do not include qualitative analyses of patient-generated responses.

# Conclusions

◆Adherence to the majority of recommendations distinguished patients with and without a high degree of success at >5 years post surgery.

# References

<sup>1</sup>Cook CM & Edwards C (1999). Success habits of long-term gastric bypass patients. Obesity Surgery: 9, 80-81.

<sup>2</sup> Cook CM. (2012).The Success Habits of Weight Loss Surgery Patients. Utah: Bariatric Support Centers International.