Revision After Gastric Band / Sleeve BMI >50? RYGB Is The Only Choice

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IFSO Melbourne 2024

What Would Jason Bourne Do?

YOU KNOW HIS NAME

JASONBOURNE

07.29.16

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What It All Comes Down To

Why RYGB?.......

It works

It solves the problem

It abolishes uncertainty

It prevents the problems the alternative (OAGB) create

Here Is The Issue

- Our patient “Doesn’t Have GERD”
- Whatever that means…
- The reality though is this..

You Need A Happy Oesophagus

Criteria for Assessing Esophageal Motility in Laparoscopic Adjustable Gastric Band Patients: The Importance of the Lower Esophageal Contractile Segment

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Cheryl Laurie · Geoff Hebbard · Paul E. O'Brien

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Successful vs Symptomatic Patients

- 93% vs 43% normal swallows (<0.05)

➔ *Failure of LECS / LOS*

- Loss Satiety
- Side effects

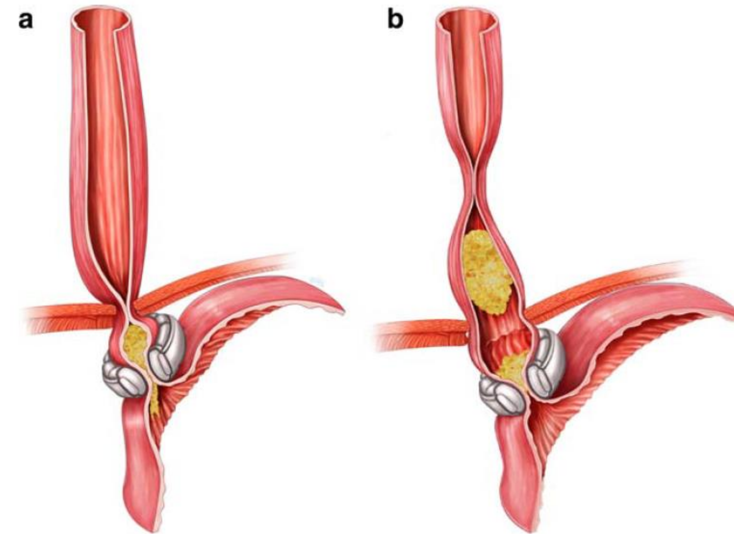
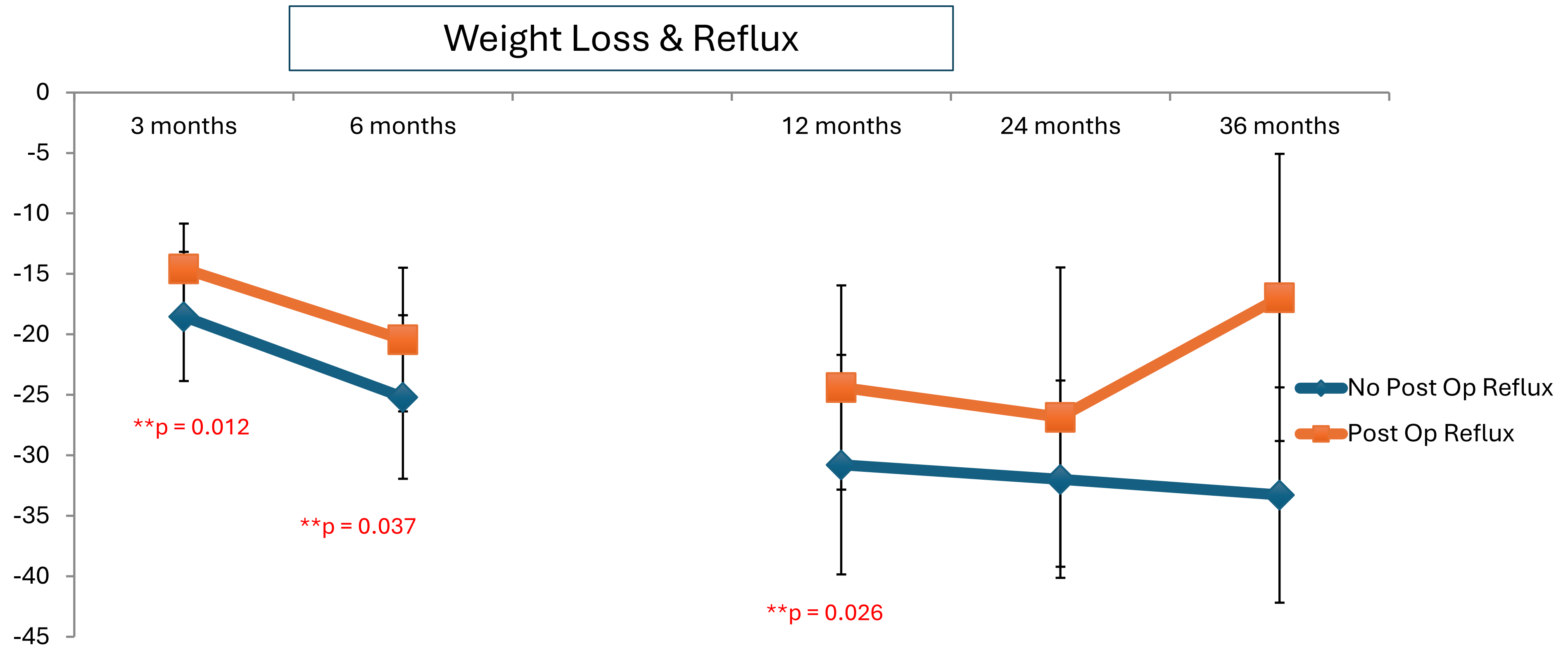


Fig. 4 Schematic representation of the role of the lower esophageal contractile segment in bolus transit in LAGB patients. **a** Normal intact lower esophageal contractile segment: Coordinated esophageal peristalsis pushes a bolus into the small gastric pouch above the band. The intrabolus driving pressure is contributed to by contraction of the lower esophageal sphincter, generating flow across the band. Several peristaltic contractions may be required to achieve complete bolus clearance as the rate of flow is limited by the stoma size of the LAGB. **b** Impaired contractility of lower esophageal segment: The LAGB is positioned appropriately, just beneath the esophago-gastric junction. The esophageal body functions normally and delivers the bolus to the region of the LES. However, the lower esophageal sphincter does not contract effectively. Therefore bolus transit is impaired, reliant on the drive from the more proximal esophagus

The Oesophagus After Sleeve



For Band and Sleeve

- We know the LOS complex fails over time due to the pressure from below
- These operations “fail” because the pressure induced satiety is gone
- This patient is coming for revision because the LOS has failed
- They all have a “refluxogenic oesophagus”

Don’t get sucked in….

- People will tell you the oesophagus recovers

- NO IT WONT!!

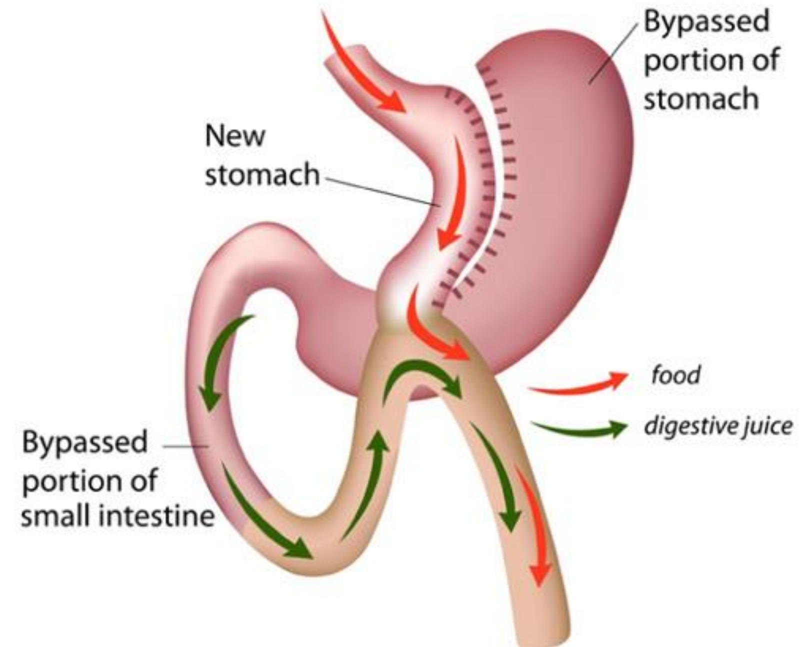
    - Failure (reflux) is very likely

OAGB here

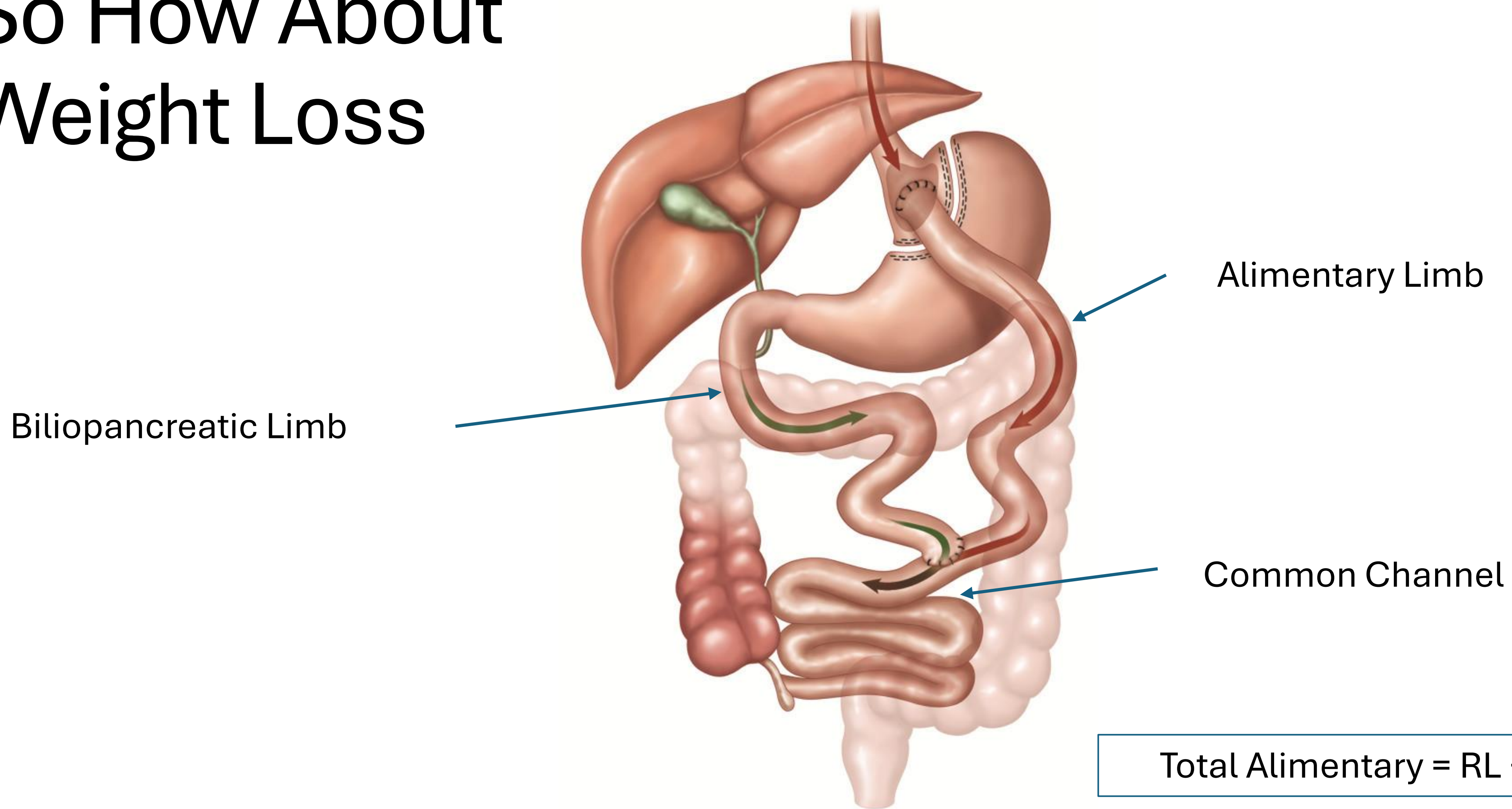
- They ALL have bile in the stomach
- Lots of it
- Yes you may get weight loss
- But your chance of reflux and coming back to do what you should have done in the first place is very high
- Youre gonna end up doing a RYGB

And OAGB

- Shape**
- Leak
- ***BILE***
- Bile reflux
- Oesophageal function impact?
- Limited long term data / “Investigational”



So How About Weight Loss

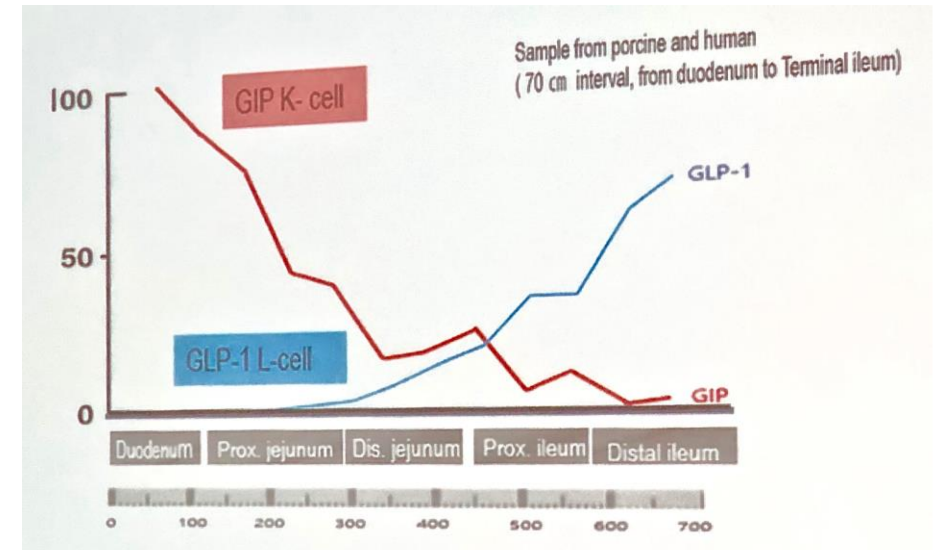


Do we need to lengthen the BP Limb?

- After Band – No
- After Sleeve - Maybe

BPL Mech Action

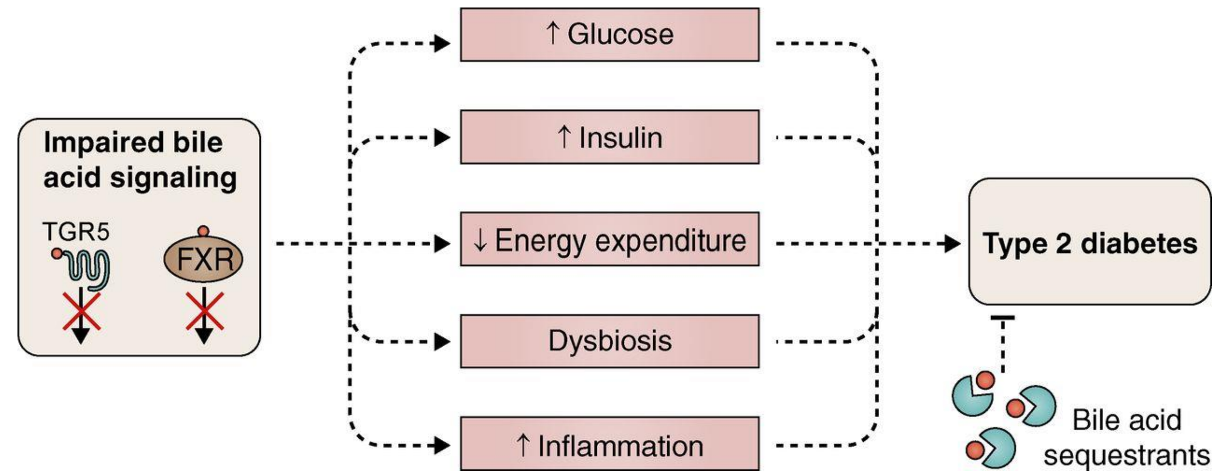
- Delivery of Bile / Nutrients More Distally
    - GLP 1 secretion enhanced
    - Longer limb → Greater GLP 1 density[1]
- Greater bypass GIP cells proximally
    - Reduced GIP secretion
    - Antidiabetic effect



[1]Nergard Bc. Surg Obes Relat Dis 2015;11(6):1237–6

BPL Action – Bile Salts

- Bariatric surgery upregulates FXR (sleeve/bypass)
- Bile salts are absorbed best when there is no food in the enteric stream
- Long BP Limb promotes early reabsorption
  - Brown fat activation
  - Increased thermogenesis
  - Increased metabolic effect
  - Correlates with improved insulin resistance



Mika A, Obes Surg 2018;28(11):3405–14

The BPL is the Batman of RYGB

- Dependable
- Gets it done
- Always answers the call
- When you need more it can give you more

The BPL is where its at…

Several Systematic Reviews…

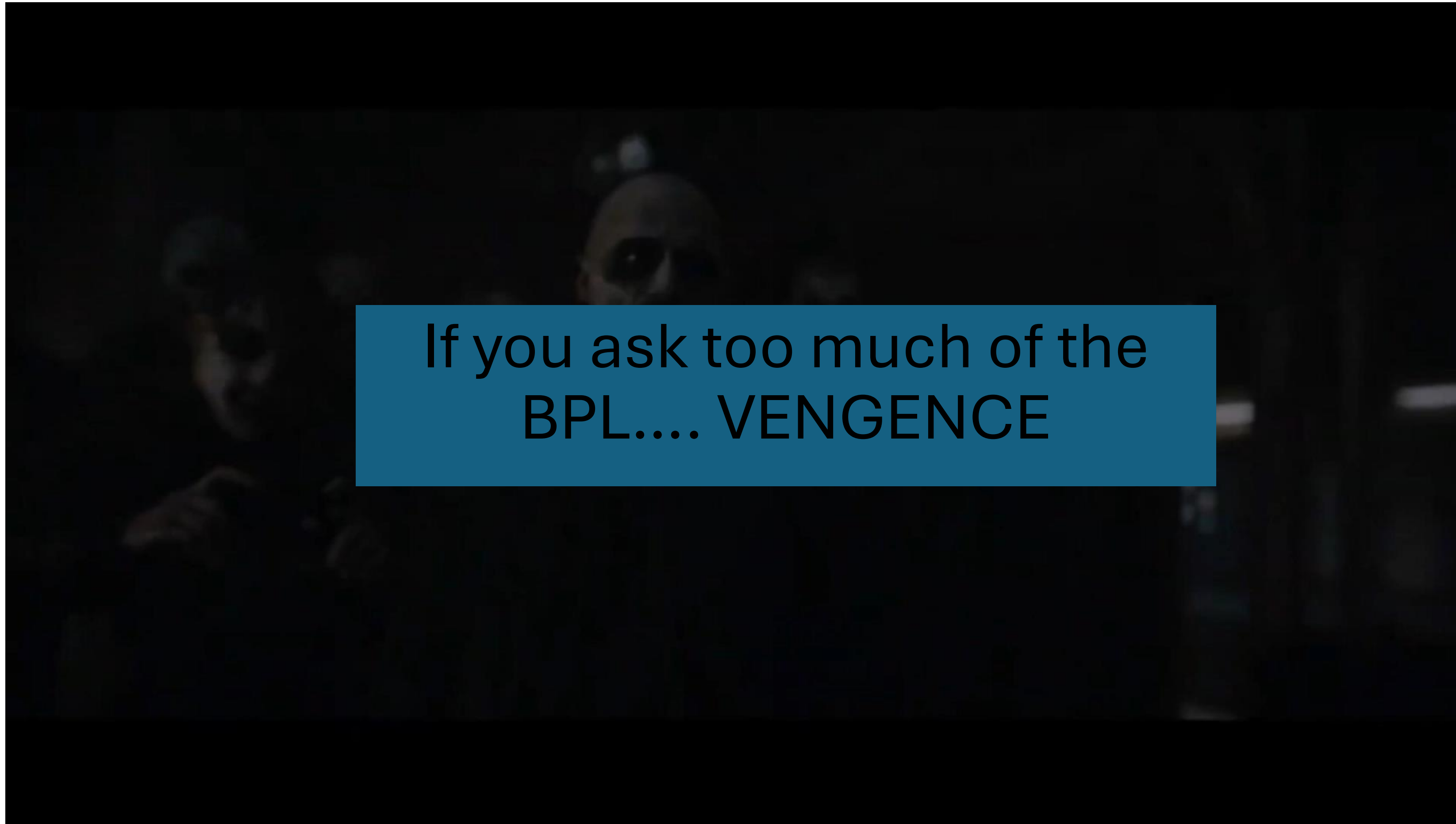
- Weight loss improves with longer BPL
- Glucose control improves with longer BPL

Eagleston J, Nimeri A. Current Obesity Reports (2023) 12:345–354
Kwan Y, et al. Diabetes Care 2022;45:3091–3100

Randomised Trials

Study	RL /BPL	Weight Loss	Vitamin Deficiency
Homan 2018 (Elegance)	75/150 vs 150/75	Better (5%)	?
Eskadaros 2022	50/150 vs 150/150	Better	Same
Zerrweck 2021	150/50 vs 50/200	Better	N/A
Negaard 2014	60/200 vs 150/60	Better	Worse
Ruiz Tovar 2019	150/70 vs 150/120	No Diff	Worse
Miras 2021 (Long Limb Trial)	100/ 50 vs 100/150	No Diff	Same

There Is A Darkside to Batman



Pathophysiology

Reduced Pancreatic Enzyme Activity

- Bypassed bowel has lower Amylase, Lipase, Trypsin and Chymotrypsin levels
- Lipase is deactivated by proteases, so that only 1% of activity is present in the terminal ileum
- Long BP limb switches off pancreatic enzymes

→ Potential for fat malabsorption, CHO intolerance and greater vitamin deficiency

VENGENCE

- Beyond a certain point it will lead to fat malabsorption, which is likely to be bad for the patient and bad for your practice

- So what lengths are efficacious?

- What lengths are safe?

How Long Is Too Long?

- Little data to define this precisely

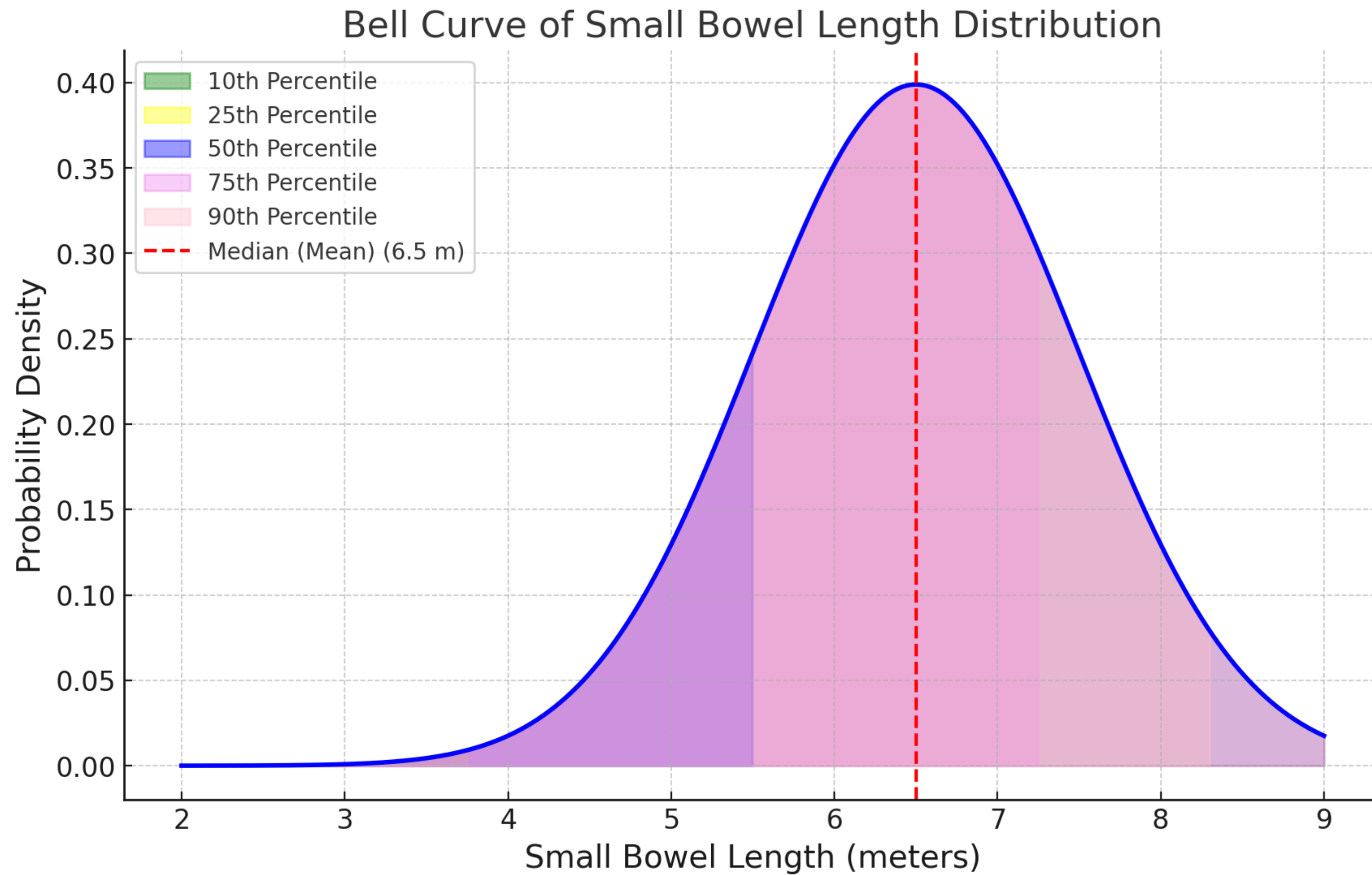
- The conflict is between the BPL and the CC length

  - If the CC length is short (<2m) then even a short BPL will have problems

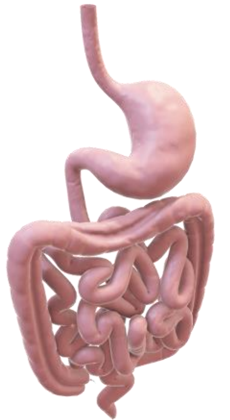
  - If the CC > 4m then significant malabsorption will be unlikely even with a long BP limb

- Similarly the TALL is important
  - <4m and malabsorption becomes problematic

So The Total Bowel Length Becomes Important



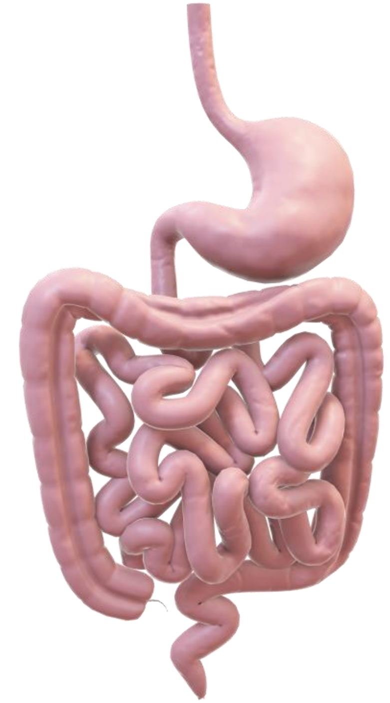
- **10th Percentile:** 4.5m
- **25th Percentile:** 5.4m
- **50th Percentile** 6.5m
- **75th Percentile:** 7.3m
- **90th Percentile:** 7.8m



15% of people have bowel length < 5.5m

So for 85% of patients (>5.5m)...

- Alimentary limb of 100cm
- Need to keep CC >300m (Pref 400cm)
- TALL of 400cm
- Leaves margin of 1.5- 2.0m safety margin for a BPL



How Long Is Too Long

- 150cm should be "safe" in majority
- Expect increasing vitamin deficiency / fat malabsorption at 200cm
- If planning >2.0m then determine total bowel length first
- Why make it so long anyway?
- Ultimately limb length ratios in future studies may provide more meaningful data

Do The RYGB

- Save yourself time and hassle
- Save the patient misery and repeat operations
- Do what makes sense
  - No reflux
  - Not highly dependent on pouch shape
  - Leak – will get better

- Remove the uncertainty

- Be definitive

- And sleep at night

Be Jason Bourne

Be Jason Bourne

- Don’t ask questions
- Don’t leave it to chance
- Get it done
  - Once
  - Efficiently
  - Definitively
  - Decisively

Do The RYGB