

**IFSO Melbourne 2024**

**Edo Aarts**





Fact or Fiction?

# **Fact or Fiction?**

**Correcting nutritional deficiencies  
prior to MBS results in better  
postop patient outcomes**



# **Edo Aarts, MD, PhD**



**WEIGHTWORKS**  
specialist in maagverkleiningen

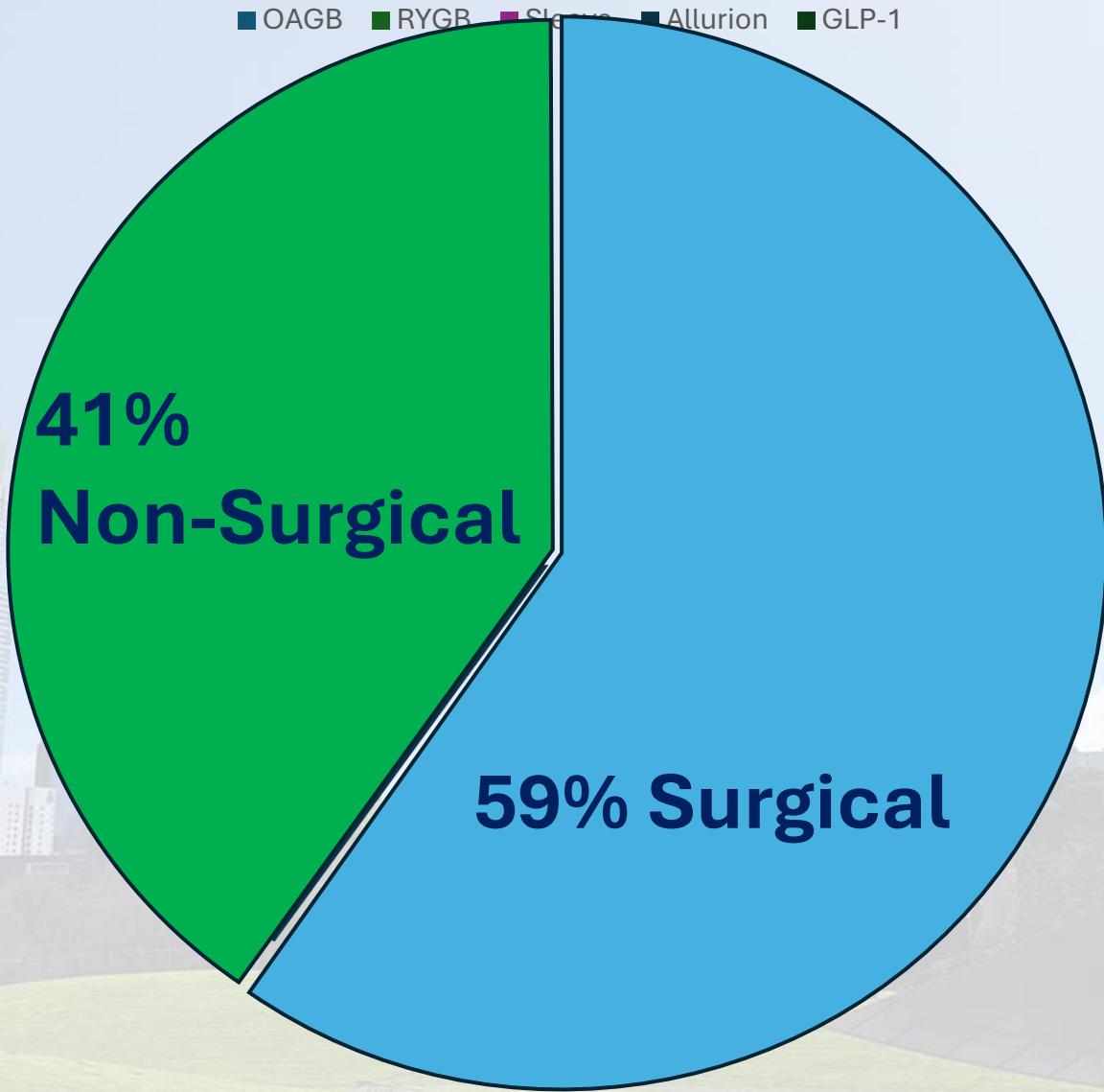
**ETHICON**

**fitforme**

**Medtronic**

**dockx**

**Allurion**  
KLINIEK



2023

N = 1986

MBS = 1180

Balloon/GLP-1 = 806



**Pre-operative status**  
**A Sleeve is serious surgery**  
**Absorption alterations**  
**Multivitamin compliance**  
**Number 1 complication!**



# General

**Dr. Johannes Sander**



WLS Start enthält pro Tagesdosis			
Vitamine	Verbindung	Menge	RI**
A	Retinylpalmitat	1000 mcg RE/ER	125%
-	Beta-Carotin	0,2 mg	-
B1*	Thiaminhydrochlorid	5,5 mg	500%
B2*	Riboflavin	0,7 mg	50%
B3*	Nicotinamid	8 mg NE	50%
B5*	Calcium-D-pantothenat	6 mg	100%
B6*	Pyridoxal-5'-phosphat	0,7 mg	50%
B8*	D-Biotin	50 mcg	100%
B9/B11	Pteroylmonoglutaminsäure	600 mcg	300%
B12*	Methylcobalamin	100 mcg	4000%
C*	L-Ascorbinsäure	250 mg	313%
D	Cholecalciferol	75 mcg	1500%
E	D-a-Tocopherolsäuresuccinat	12 mg a-ET/TE	100%
Mineralstoffe			
Eisen*	Eisenfumarat	24 mg	172%
Zink	Zinkcitrat	22,5 mg	225%
Kupfer*	Kupfergluconat	2,25 mg	225%
Chrom	Chrom(III)-Chlorid	80 mcg	200%
Jod*	Kaliumiodid	150 mcg	100%
Selen	Natriumselenat	100 mcg	182%
Mangan*	Mangancitrat	2 mg	100%
Molybdän	Natriummolybdat	50 mcg	100%

**Inhaltsstoffe:**  
Vitamine, Mineralien, Magnesiumcitrat, Kapsel (Hypromellose), Füllstoff (mikrokristalline Cellulose), Stabilisator (Siliciumdioxid), Trennmittel (Magnesiumstearat).

\*\* RI (reference intake) = Referenzmenge nach der Verordnung (EU) 1169/2011.

Chargennummer: siehe Packungsseite und/oder Blister  
Mindestens haltbar bis Ende: siehe Packungsseite und/oder Blister  
Nettogewicht: 41 gram



# Setup

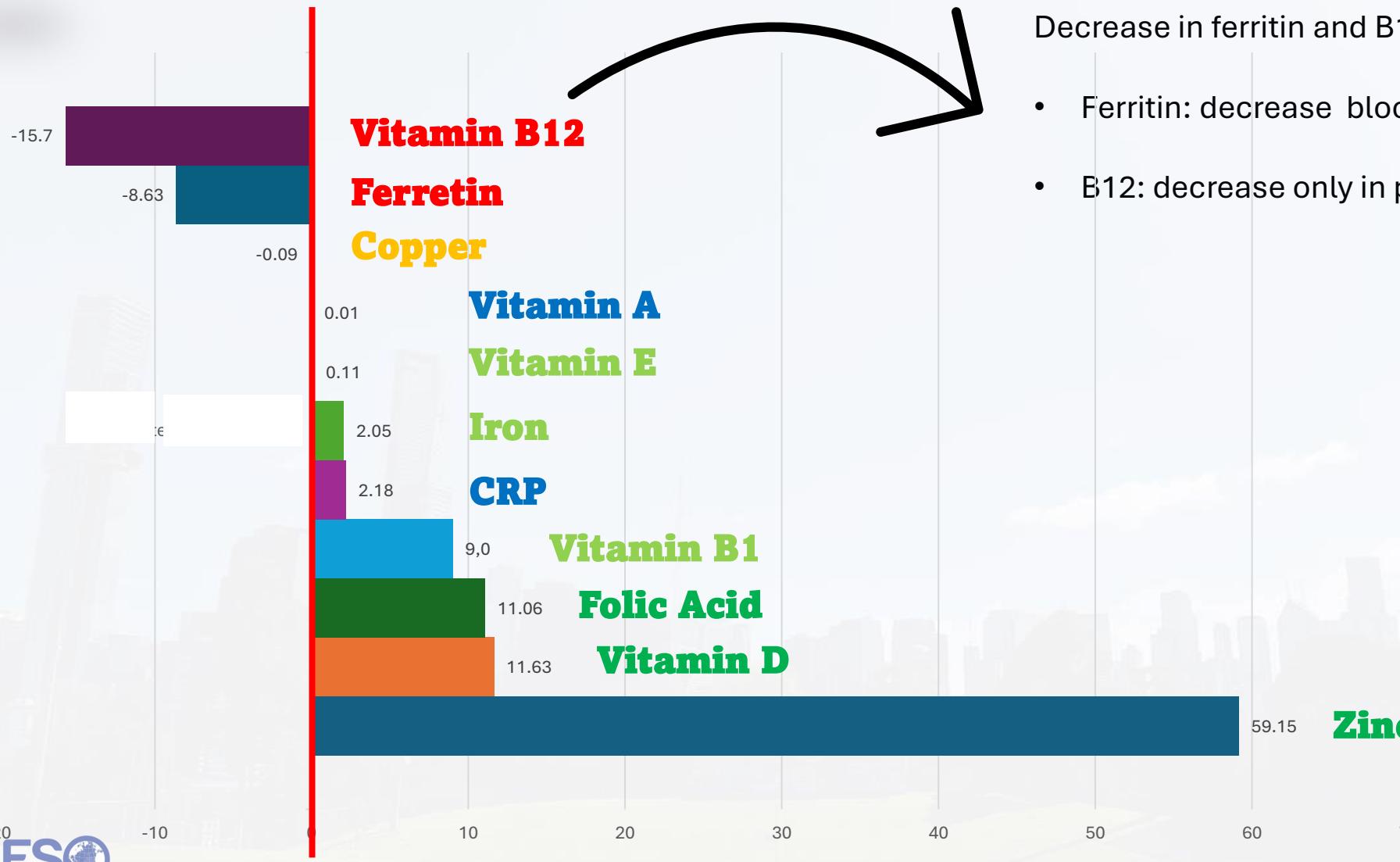


## IMProving blood levels before bAriatriC surgery in Three months: Effects of a specialized multivitamine





# Results

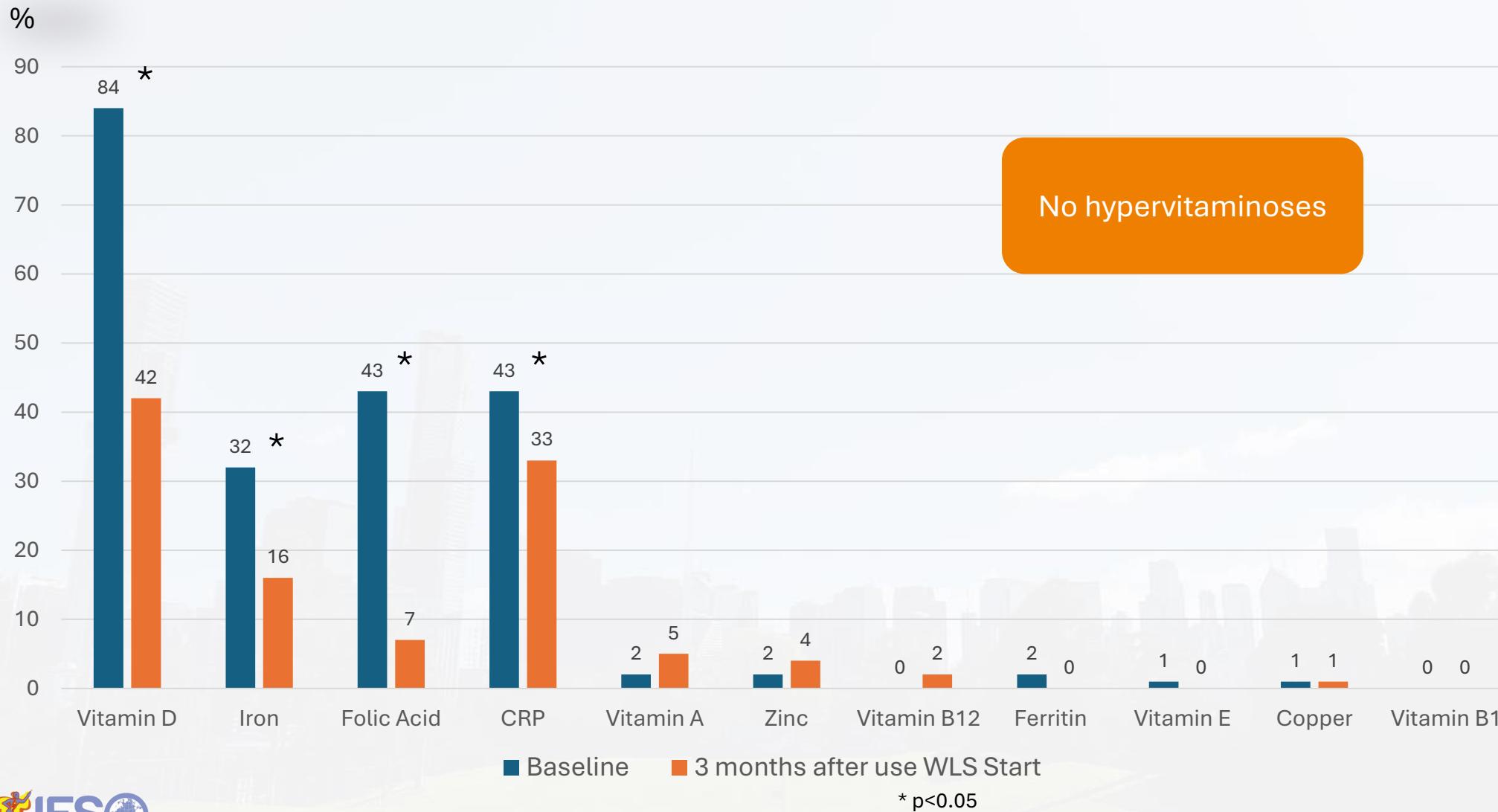


Decrease in ferritin and B12 **not clinically relevant:**

- Ferritin: decrease blood loss during menstruation
- B12: decrease only in people with high initial value



# Results





# Conclusion



**WLS Start is effective in improving blood serum values**

**WLS Start is effective in decreasing deficiencies**

**3 Months of use before surgery appears safe**

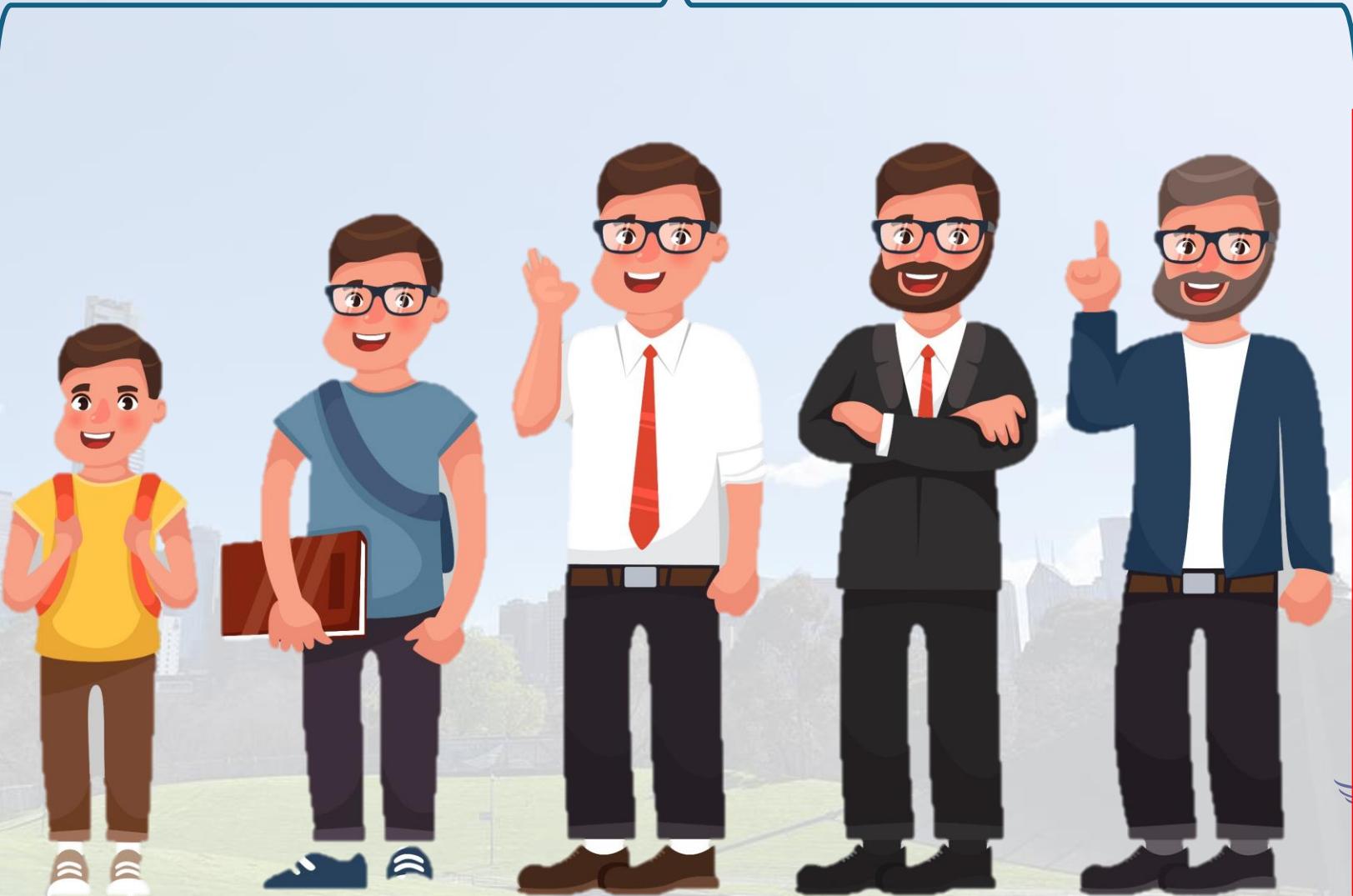


# Age





# Age





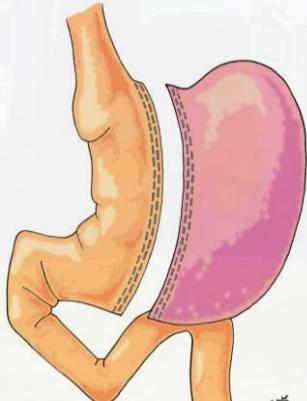
# Age





# Age

**“There is no upper patient-age limit to MBS. Older individuals who could benefit from MBS should be considered for surgery after careful assessment of co-morbidities and frailty.”**





# Hair Loss

Obesity Surgery (2021) 31:2649–2659  
<https://doi.org/10.1007/s11695-021-05311-2>



ORIGINAL CONTRIBUTIONS



## Hair Loss After Metabolic and Bariatric Surgery: a Systematic Review and Meta-analysis

Jen Zhang<sup>1</sup> · Meiling Fan<sup>2</sup> · Cunchuan Wang<sup>3,4</sup> · Kamal Mahawar<sup>5</sup> · Chetan Parmar<sup>6,7</sup> · Weiju Chen<sup>1</sup> ·  
Jin Yang<sup>3,4,8,9</sup> · on behalf of Global Bariatric Research Collaborative





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**IFSO**



18



2538



57%

## Risk factors



Zinc  
Ferretin  
Folic acid





# Hair Loss

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Check for updates

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# Risk factors



**Zinc  
Ferretin  
Folic acid**

# Preventive measures



**Zinc 21mg  
2 Weeks**





# Vitamin D





# Vitamin D

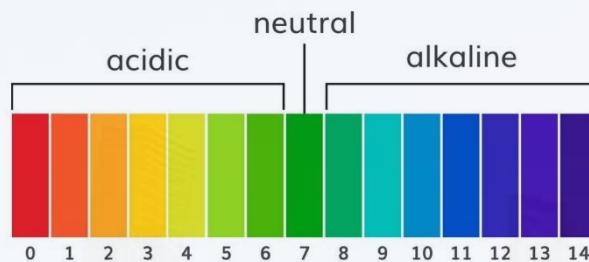
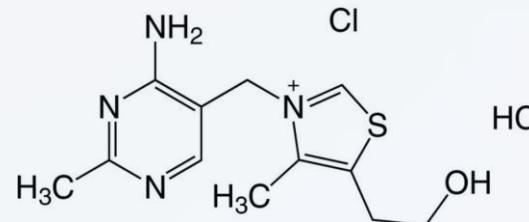
ViT D      ViT D  
Loading Dose =

**40 X (75- Serum 25-OHD) X body weight (kg)**



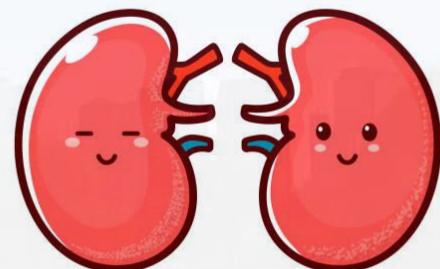
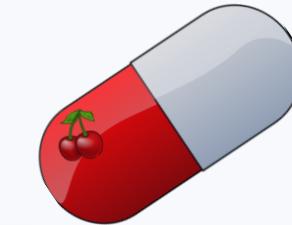


# Thiamin



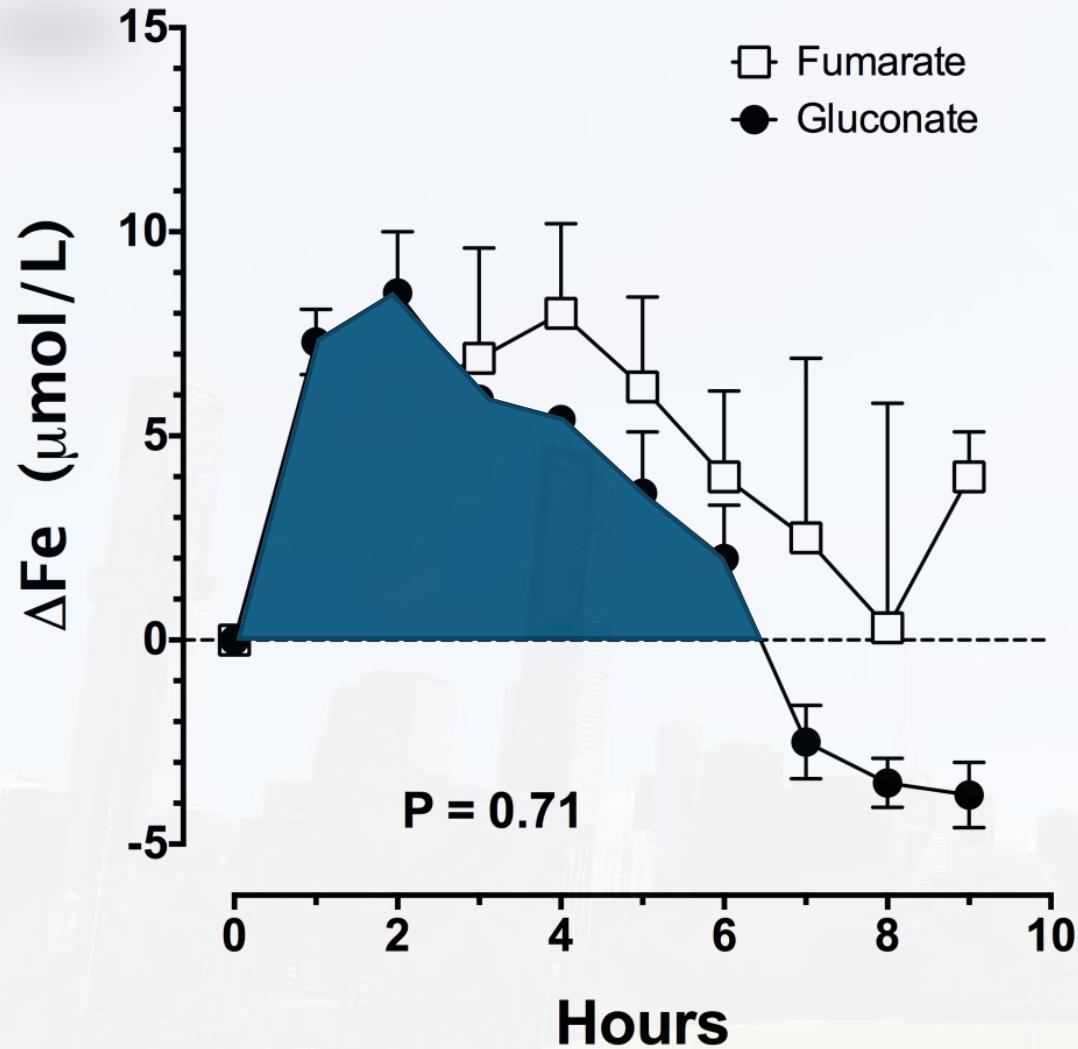


# Thiamin

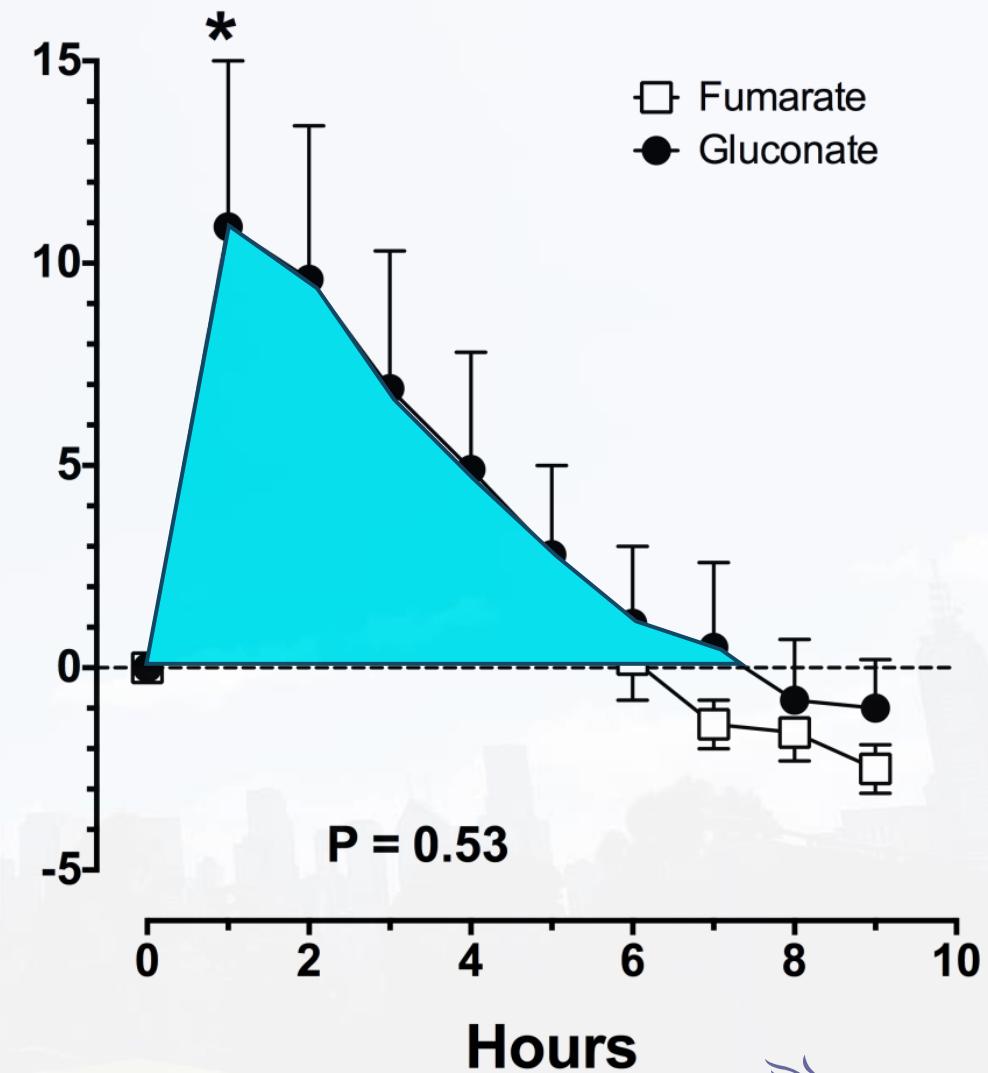




# Preoperative

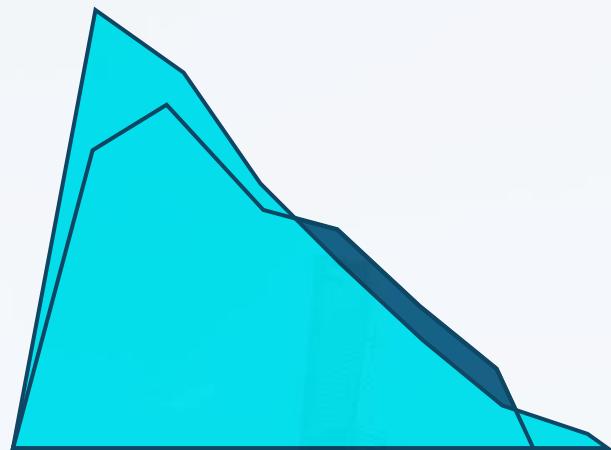


# Postoperative

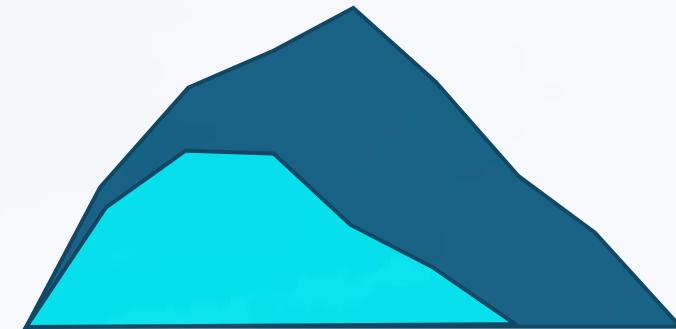




● Gluconate



□ Fumarate





# Little bit Fact

## Most Fiction (or unproven)



**Pre-operative status**

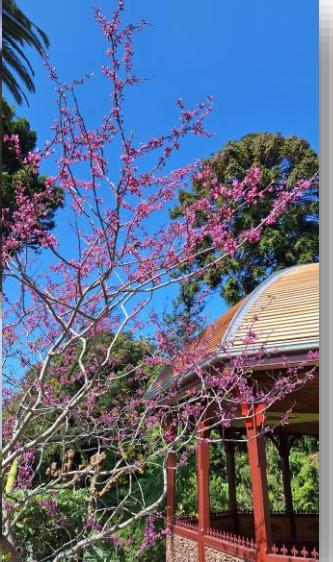
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**Absorption alterations**

**Multivitamin compliance**

**Number 1 complication!**





# Thanks for listening

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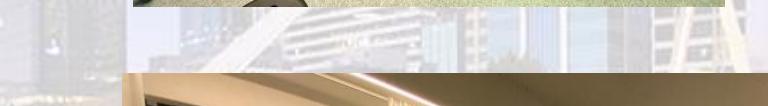














## 13<sup>th</sup> Congress of the International Federation for the Surgery of Obesity (IFSO) European Chapter

15-17 May 2025 | Venice, Italy



[IFSO-EC2025.COM](http://IFSO-EC2025.COM)

XXVII IFSO World Congress



Melbourne 2024