

Research Summary: Obesity and Nutritional Deficiencies

Enhancing GLP-1 / GIP RA Medication Outcomes

The problem

The chronic disease obesity increases the risk of micronutrient deficiencies. Beyond the hope and hype of GLP-1 medication, these deficiencies are further amplified in people living with obesity using these medications. The nutritional gaps driven by GLP-1 usage are increasingly recognized by researchers and healthcare professionals. Left unaddressed, such gaps undermine treatment success and pose long-term health risks. ‘Standard’ supplements cannot provide the tailored nutritional support needed by patients living with obesity on GLP-1 therapies.

The solution

FitForMe’s Support-1 builds on 20 years of expertise in weight loss surgery to support people living with obesity on GLP-1 medication—delivering best-in-class, science-backed nutritional supplementation combined with continuous patient care.

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Built by experts. Guided by science.

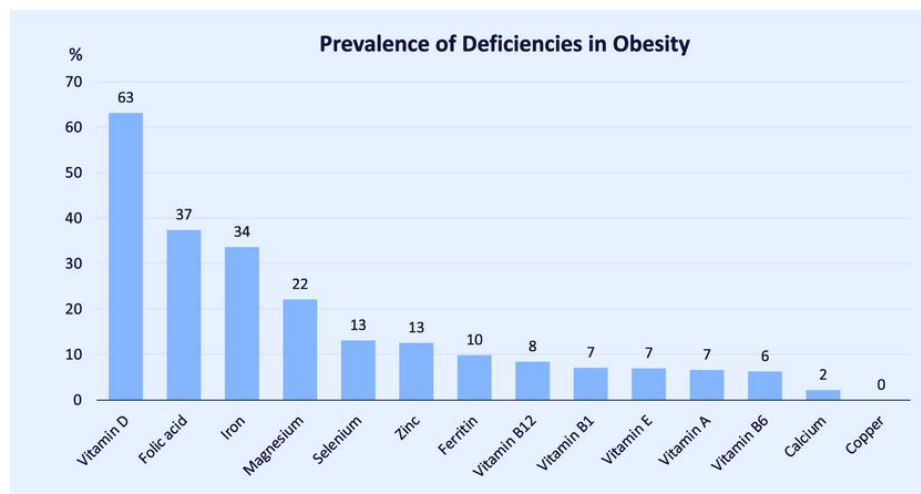
Improving the quality of life for people living with obesity.

Introduction

New anti-obesity medications (AOMs) offer innovative ways to support people living with obesity, better aligning with their personal needs and desired outcomes. Yet, the ‘canary in the GLP-1 coal mine’ is nutritional deficiency. Common side effects of these medications are closely linked to inadequate intake of macro- and micronutrients—challenges that cannot be resolved through diet alone.

With 20 years of experience supporting healthcare professionals in bariatric care, FitForMe is a trusted, research-backed expert in supplementation and nutritional needs. This report summarizes our findings on the effects of GLP-1/GIP RAs in people with obesity and outlines our recommendation for specialized supplementation as part of a holistic care plan

1. Obesity Increases the risk of micronutrient deficiencies



Graph represents the mean prevalence of preoperative deficiencies reported in 7 papers (2011-2015). See Appendix.

Decades of research concludes that people living with obesity are at risk of developing material nutritional deficiencies (15+ references in the appendix).

In clinical research with pre-surgery cohort on a FitForMe product (Sander et al., 2025), deficiencies were found in 18 out of the 21 measured parameters.

2. Beyond the Hope and the Hype of GLP-1 Medication, Nutritional Deficiencies of People Living With Obesity are Amplified

1. Existing deficiencies in people with obesity

18 out of 21 nutritional parameters show deficiencies that are common in people with obesity

Sander et al., 2025



2. Reduced food intake

A 16%–39% calorie reduction is observed in people using GLP-1.

With a calorie intake of:
 <1,200 kcal/day (women)
 <1,800 kcal/day (men)
 a deficiency in vitamins and minerals may occur.

Christensen et al., 2021; Poli et al., 2017



3. Common side-effects

Of all reported side-effects:

- Diarrhea – 21.93%
- Vomiting – 21.90%

Adding to the risk of developing deficiencies

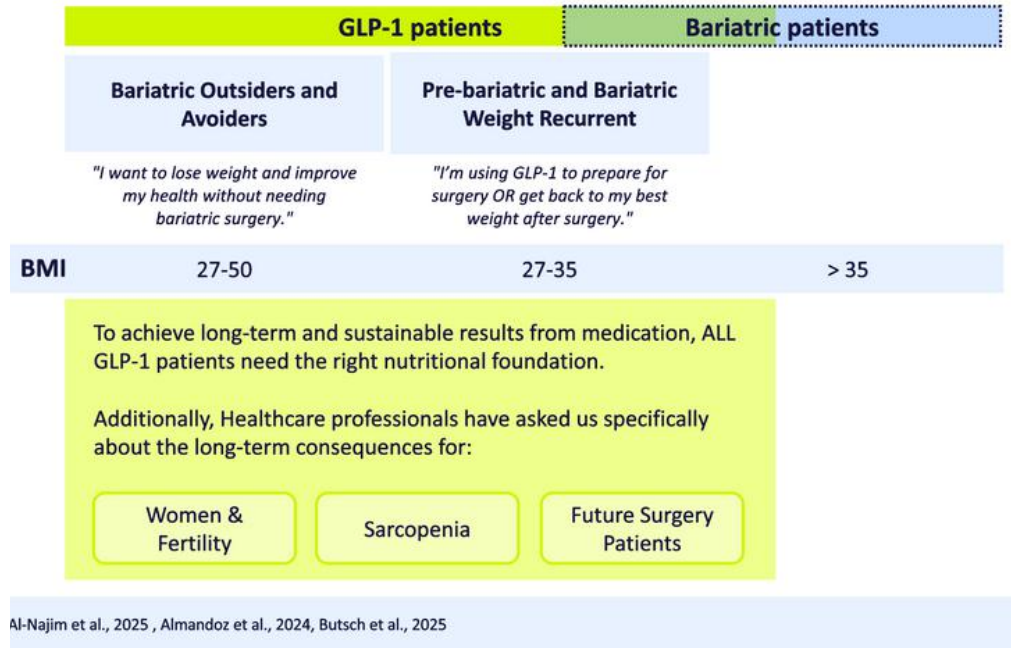
Liu et al., 2022



4. Nutritional Gaps Undermine Treatment Success & Have Long-term Consequences for Patients with Obesity

For all of your GLP-1 patients, they aren't just eating less - they risk missing vital nutrients when their bodies need them most.

Key focus areas are sufficient levels of B-vitamins, vitamin D, Iron and other important micronutrients, combined with adequate protein intake.



5. Patients Living With Obesity have Greater Needs than 'Standard' Supplements

Prevailing research shows that people living with obesity have greater needs.

This is due to volume dilution (more fat tissue, larger liver, greater blood volume), inflammation, other comorbidities, and medication use. Generic multivitamins are often too weak. Their poor bioavailability make them unsuitable for those with impaired absorption.

Damms-Machado et al. *Nutrition Journal* 2012, 11:34
<http://www.nutritionj.com/content/11/1/34>



RESEARCH
Open Access

Micronutrient deficiency in obese subjects undergoing low calorie diet

Antje Damms-Machado¹, Gesine Weser¹ and Stephan C Bischoff^{2*}

Micronutrient deficiencies persisted or worsened even when intake met 100% of the "Recommended Daily Intake".

Damms-Machado et al. (2012)



6. Dietary advice and high-quality supplements improve GLP-1 treatment outcomes

A new article in the journal Obesity Pillars (Volume 16, December 2025), outlines the criticality of nutritional supplementation - combined with dietary advice - to ensure optimal treatment outcomes for patients on GLP-1 medications.

Key takeaways

1. Unintended consequences of GLP1-RA may result in poor nutrient status, muscle loss, and metabolic dysfunction.
2. Meta-analyses support dietary supplements as potential adjunct tools to help manage unintended side effects.
3. High-dosed multivitamins address common nutrient gaps and high quality protein supplements help meet increased protein needs.



Nutritional Wellness Signals with Glucagon-like-1 Peptide Receptor Agonists Treatment Journey

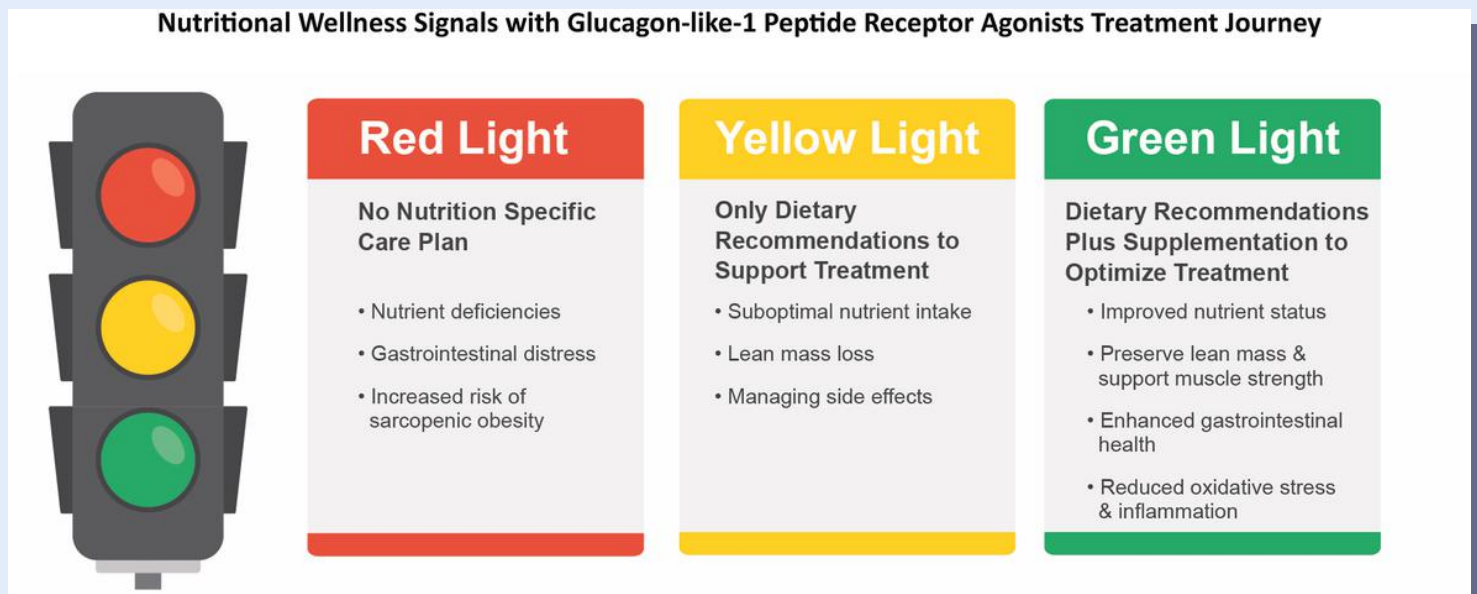


Fig. 1. Potential outcomes of obesity treatment care plans with and without nutritional and dietary supplementation interventions during glucagon-like-1 peptide receptor agonists treatment.

Support-1 Multivitamin

Support-1 is a specially formulated, highest quality, once-daily multivitamin:

- Based on extensive science and 19 clinical research publications with FitForMe products in patients living with obesity.
- High-dosed to address specific micronutrient deficiency risks from obesity, and from low caloric intake and rapid weight-loss due to the GLP-1 treatment.
- Contains only high-quality ingredients with high bioavailability (i.e., organic compounds).



Support-1 Nutritional Information		
A daily dose (1 capsule) contains		
Vitamins	Amount	RI*
Vitamin A	800 µg RE	100%
Vitamin B1	2,75 mg	250%
Vitamin B2	1,7 mg	121%
Niacin (B3)	25 mg NE	156%
Pantothenic acid (B5)	9 mg	150%
Vitamin B6	1,5 mg	107%
Biotin (B8)	150 µg	300%
Folic acid (B9)	500 µg	250%
Vitamin B12	100 µg	4000%
Vitamin C	100 mg	125%
Vitamin D3	75 µg	1500%
Vitamin E	15 mg α-TE	125%
Minerals		
Chromium	40 µg	100%
Copper	1,9 mg	190%
Iron	28 mg	200%
Iodine	150 µg	100%
Manganese	3 mg	150%
Molybdenum	50 µg	100%
Selenium	55 µg	100%
Zinc	28 mg	280%

* RI = Reference intake

Dosage:

- One capsule per day (90 capsules)

Key benefits:

- Reduce fatigue and tiredness, with iron and vitamin B12
- Maintain strong muscles, with vitamin D
- Support hair, skin, and nails, with zinc

Pure Whey Protein

Flavors: Vanilla, Strawberry, Natural

Pure Whey Protein is the highest quality, purest concentrated protein – for rapid weight loss:

- Supports muscle maintenance and recovery, especially during periods of weight loss or reduced protein intake.
- Made of the highest quality source of protein – pure whey – with high bioavailability (rapidly digested, efficiently absorbed) – in the purest concentration (92%).
- Contains a complete spectrum of essential amino acids (e.g., 2.91 g leucine, 1.79 g isoleucine and 1.62 g valine).
- Is ultra-low in calories (110 kcal), fat, sugar, and salt – it is a source of dairy with (non-added) calcium and folic acid.



Dosage:

- One jar contains 1 kg with 33 portions (30 grams/ day)

Key benefits:

- Maintains and builds muscles
- Supports strong bones



Research Summary:

Nutritional Deficiencies and Obesity

GLP-1 / GIP RA Medications & Enhancing Patient Outcomes

About FitForMe

We are dedicated to improving the quality of life for people affected by obesity - with our science-based supplements and lifelong support.

Recognising obesity as a complex, chronic disease, we envision a world where people affected by obesity are supported with the respect, science, and care they've always deserved, and we're here to support them on their health journey.

FitForMe today

FitForMe is partnering with health care professionals today to support their patients on different weight management journeys - from bariatric surgery, to medical (GLP-1), to lifestyle intervention programs. We're here to make support practical, personal, and part of everyday life, wherever their journey starts.

Head-quartered in Rotterdam, we now operate in 20 countries. We provide our customers the support they need - with local language support and our own dieticians available to advise customers. We remain deeply committed to quality and science - with more than 19 scientific publications, several own clinical trials, ongoing R&D and active sharing of the latest research with our health care professional partners.

Our numbers tell the story

- 1 We're Europe's number 1 bariatric supplement brand
- 19 FitForMe has 19 peer-reviewed research publications
- 20 We're active in 20 countries across 3 continents
- 2005 Founded in 2005, we've accumulated 20 years of experience
- 8,000+ FitForMe is trusted by 8000+ healthcare professionals
- 200,000+ Every day, 200K+ of our supplements are used
- 750,000+ We have supported over 750 thousand customers to date



Improving the quality of life for people living with obesity.

Built by experts. Backed by science.

Appendix: FitForMe Research Summary Sources (1/2)**1. Obesity Increases the Risk of Micronutrient Deficiencies**

1. Sander J, Torensma B, Sliepe J, et al. Assessment of Preoperative Multivitamin Use on the Impact on Micronutrient Deficiencies in Patients with Obesity Prior to Metabolic Bariatric Surgery. *Obesity Surgery*, 2025; 35:1818-1826
2. Kaidar-Person O, Person B, Szomstein S, Rosenthal RJ (2008) Nutritional deficiencies in morbidly obese patients: a new form of malnutrition? Part B: minerals. *Obes Surg*, 18:1028-1034.
3. Kimmons JE, Blanck HM, Tohill BC, Zhang J, Khan LK (2006) Associations between body mass index and the prevalence of low micronutrient levels among US adults. *MedGenMed*, 8:59. 7.
4. Van Rutte PWJ, Aarts EO, Smulders JF, et al. Nutrient deficiencies before and after sleeve gastrectomy. *Obes Surg*. 2014;24:1639-46.
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13. Pellegrini M, Rahimi F, Boschetti S, et al. Pre-operative micronutrient deficiencies in patients with severe obesity candidates for bariatric surgery. *J Endocrinol Invest*. 2021;44(7):1413-1423.
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Research Summary:

Nutritional Deficiencies and Obesity

GLP-1 / GIP RA Medications & Enhancing Patient Outcomes

Appendix: FitForMe Research Summary Sources (2/2)

2. Beyond the Hope and the Hype of GLP-1 Medication, Nutritional Deficiencies of People Living With Obesity can be Amplified

1. Sandra Christensen, Katie Robinson, Sara Thomas, Dominique R. Williams, Dietary intake by patients taking GLP-1 and dual GIP/GLP-1 receptor agonists: A narrative review and discussion of research needs, Obesity Pillars, Volume 11, 2024,
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3. Liu Hao-Yu , Liu Hui-Xin , Zheng Ju-Sheng , Cai Demin, Editorial: Metabolic consequences of malnutrition: How to balance nutrients and genes, Frontiers in Nutrition, Volume 9 - 2022

3. Nutritional Gaps Escalated by GLP-1 for people with Obesity are Increasingly Recognized

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2. W. Scott Butsch, Suela Sulo, Andrew T. Chang, Jeeyun A. Kim, Kirk W. Kerr, Dominique R. Williams, Refaat Hegazi, Thadchaigeni Panchalingam, Scott Goates, Steven B. Heymsfield,
3. Nutritional deficiencies and muscle loss in adults with type 2 diabetes using GLP-1 receptor agonists: A retrospective observational study, Obesity Pillars,, Volume 15, 2025

4. Nutritional Gaps Undermine Treatment Success & Have Long-term Consequences for Patients with Obesity

1. Muscle matters: the effects of medically induced weight loss on skeletal muscle, Prado, Carla M et al. The Lancet Diabetes & Endocrinology, Volume 12, Issue 11, 785 - 787
2. Memel, Z., Gold, S.L., Pearlman, M. et al. Impact of GLP- 1 Receptor Agonist Therapy in Patients High Risk for Sarcopenia. Curr Nutr Rep 14, 63 (2025).
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5. Patients Living With Obesity have Greater Needs than ‘Standard’ Supplements

1. Damms-Machado, A., Weser, G. & Bischoff, S.C. Micronutrient deficiency in obese subjects undergoing low calorie diet. Nutr J 11, 34 (2012).

6. Dietary advice and high-quality supplements improve treatment outcomes

- Johnson, B.V.B., Milstead, M., Kreider, R., & Jones, R. Dietary supplement considerations during glucagon-like Peptide-1 receptor agonist treatment: A narrative review. Obesity Pillars, 16, 100209 (2025).