

Compliant or Defiant: Who's Taking their vitamins?

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Background.

Nutritional deficiencies experienced in post-operative bariatric patients is widely published. However there is little documented evidence on the compliance of gastric bypass patients with vitamin supplementation.

Published data claims a broad range of adherence rates between 30 and 80%.

Guidelines set out by the AACE/TOS/ASMBS recommend initiating micronutrient supplementation at 3 days post-op with multivitamins and minerals, calcium citrate and vitamin D, Iron supplementation and hydroxocobalamin (B12) injections.

Methodology.

In a cohort study 54 patients were asked about adherence to their nutritional supplements.

Data was collected from patients attending their 3 month post-op out-patient review who underwent a gastric bypass operation between October 2008 and September 2009.

This data was collected verbally during consultations with the dieticians at the 3 months post-op review.

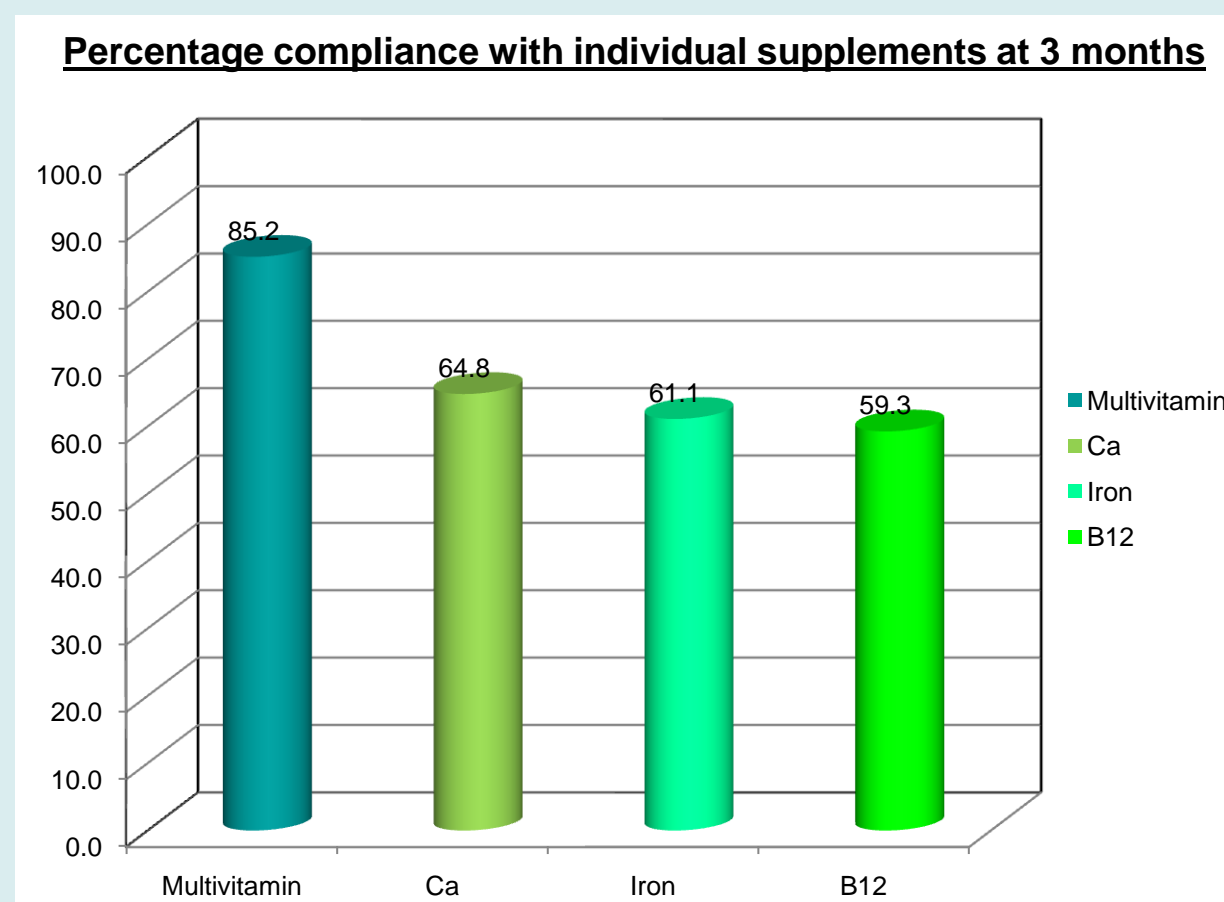
A separate cohort of 13 patients was questioned at 24 months post bypass.

Results.

At 3 months (N=54) follow-up compliance with :

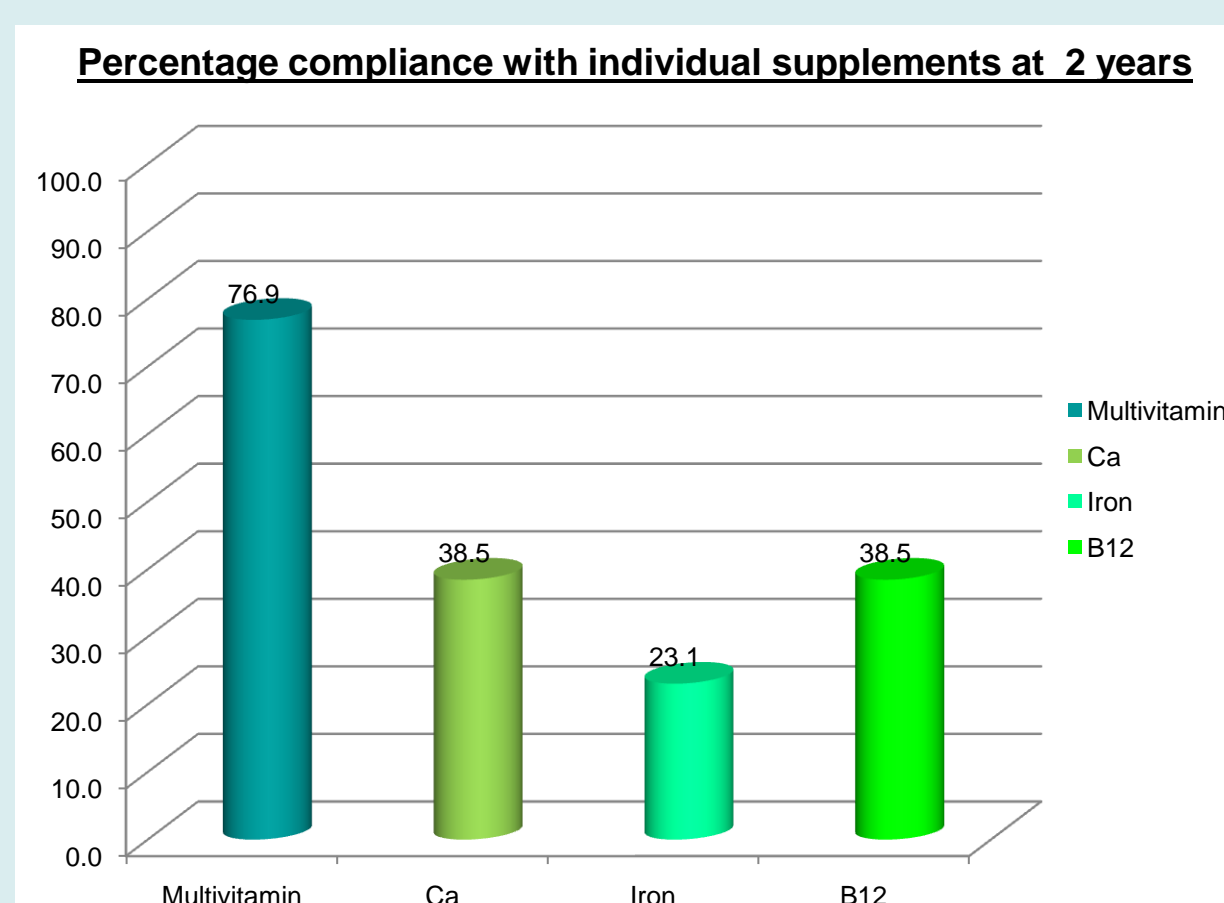
- **Standard multivitamins and minerals, 85.2%**
- **Calcium and vitamin D, 64.8%**
- **Iron, 61.1%**
- **Vitamin B12, 59.3%**
- Compliance with **all recommended supplements, 35.2%**.

3 patients were self-prescribing additional supplements such as 'skin, hair and nails' formulas.



A separate cohort at 24 months (N=13) post bypass demonstrated compliance with

- **Standard multivitamins and minerals - 76.9%**
- **Calcium and vitamin D - 38.5%**
- **Iron - 23.1%**
- **Vitamin B12, 38.5%**
- Compliance with **all recommended supplements, 15.4%**.



Discussion.

• These results compare favourably to the limited comparable evidence available.

• A degree of error must be accounted for due to the difficulty relying on patient reporting.

• Frequent reasons for non-compliance included a dislike of the liquid/effervescent form of the supplements and difficulty obtaining prescriptions.

• The greatest change at 2 years was a decrease in the prescribed supplements whilst patients continued their self-purchased multivitamins. This could represent difficulties in obtaining long-term prescriptions.

• These compliance rates and the efforts made to optimise them emphasise the importance of a multidisciplinary team approach in the field of bariatric surgery.

References.

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