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Endoscopic Sleeve Gastroplasty (ESG)

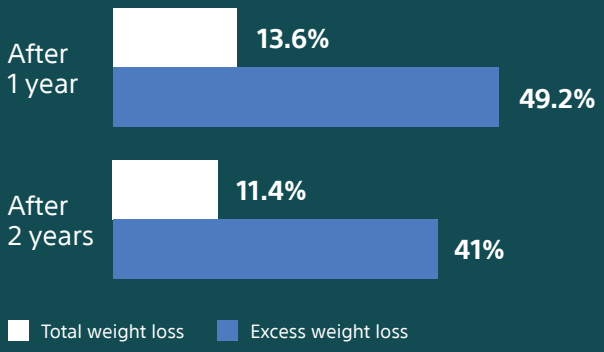
ESG: a non-surgical, non-pharmacological option

ESG supports portion control, but long-term dietary behaviour determines outcomes.

Key information for bariatric dieticians

- ESG induces weight loss through restriction and enhanced satiety, not malabsorption.[1,2,3,4]
- Nutritional deficiencies are uncommon when diet progression and protocols are followed.[2]
- An RCT showed **13.6% total body weight loss (TBWL) at 12 months.**[5]
- An RCT showed a **2% rate of severe adverse events.**[5]
- Post-procedure dietary staging:[4]
  - Clear liquid diet (Day 1-3)
  - Full liquid diet (Day 3-14)
  - Pureed diet (Week 3-6)
  - Low fat & carbohydrate diet (Week 7+)
- Adherence to this staging is essential to **optimise outcomes.**[6,7]
- Long-term success depends on **sustained dietary behaviour change.**[2,7]
- **ESG differs from surgery (gastrectomy/ bypass),** no tissue or portion of the stomach is surgically removed during endoscopic suturing or plication, minimising the risk of malabsorption or need for vitamin/mineral supplementation.[13]

ESG is effective[5]



ESG is safe[5]

2%
Severe adverse events*

*These were defined as grade 3 or higher on the Clavien Dindo classification

Long-term dietary changes[2]

50%
Calcium and iron rich protein

20%
Carbohydrates

30%
Fibre Vitamins Minerals

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Weight Loss Solutions

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The Role of Endoscopic Sleeve Gastroplasty (ESG)

Addressing common patient questions

Why is it important to change how you eat after ESG?

ESG facilitates portion control, but long-term weight loss depends on nutrition and behaviour.[2,7]

Why is it important to start on a liquid diet and slowly reintroduce foods?

It allows suture healing and prevents loosening.[6,7]

How does ESG differ from surgery?

Gastric bypass denies the body the chance to absorb nutrients from food, by routing food around the stomach.[9] Because ESG does not bypass the stomach, nutrient absorption is not affected.[7,10]

Unlike gastrectomy no tissue or portion of the stomach is surgically removed during ESG minimising the risk of malabsorption or need for vitamin/mineral supplementation.[7,8,12]

How ESG is performed

- No incisions, no scars.[7,8]
- Under general anaesthesia.[7,8]
- Permanent sutures are placed endoscopically through the mouth to reduce stomach volume by 70-80%.[3,7]
- No gastric resection.[7,8]
- Preserves future treatment options.[7,11]

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