

What about fibre? An audit of current practices in prescribing enteral nutrition in people living with motor neurone disease

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INTRODUCTION

Enteral nutrition (EN) is often prescribed for people living with motor neurone disease (plwMND) who have a gastrostomy tube. EN may be used as a supplement to oral intake or as the primary source of nutrition when oral intake is inadequate.¹ It is the role of a dietitian to prescribe EN formulas to maintain adequate nutrition and hydration. Commercial EN formulas may be broadly categorised as fibre or fibre-free. While it is encouraged that plwMND maintain adequate dietary fibre to prevent and manage commonly experienced gastrointestinal issues, including constipation,² there are currently no clinical practice guidelines describing which EN formula should be prescribed.

OBJECTIVE

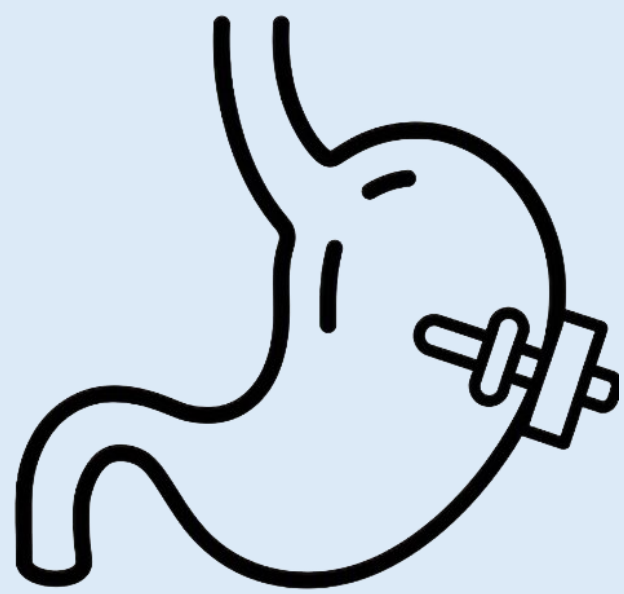
To describe the use of fibre and fibre-free EN formulas in plwMND with gastrostomy tubes.

METHODOLOGY

Retrospective audit using routinely collected data from a statewide multidisciplinary motor neurone disease (MND) service over a 9-year period (2017-2026). Enteral feed categories were defined as fibre (>0.1g/100ml) or fibre-free (0g/100ml).

ELIGIBILITY CRITERIA:

- ☒ MND diagnosis
- ☒ Gastrostomy tube
- ☒ EN prescribed by MND service Dietitian
- ☒ EN accounts for >70% of estimated energy requirements or is ≥3 bolus feeds of ≥125ml and ≥1.5kcal



RESULTS

Sixty-six of 134 patients met eligibility criteria. Participant characteristics included: median age 65 years (range 42-84), 51.5% (n=34) aged >65 years, 56% (n=37) female and **66.7% (n=44) with bulbar-onset MND**.

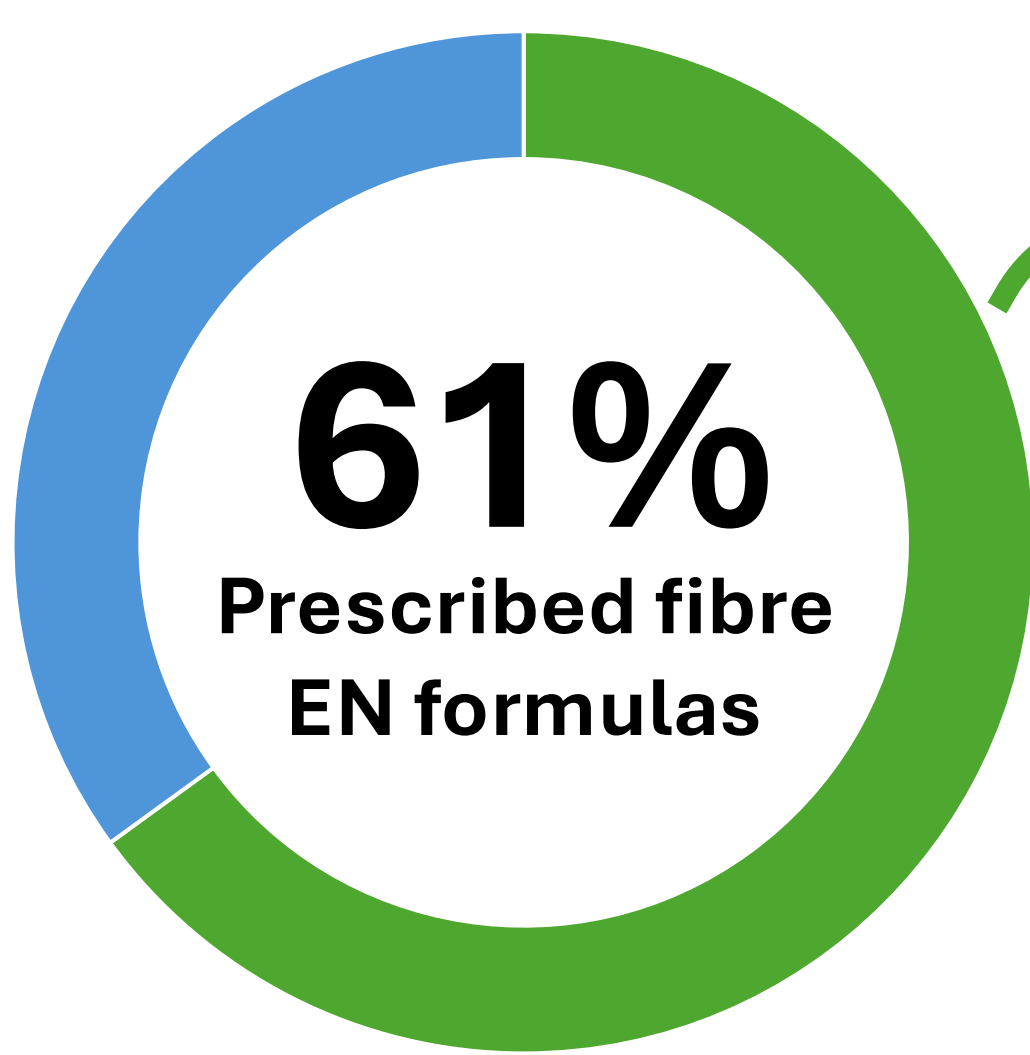


Figure 1. Distribution of fibre and fibre-free EN formula prescriptions (n=66).

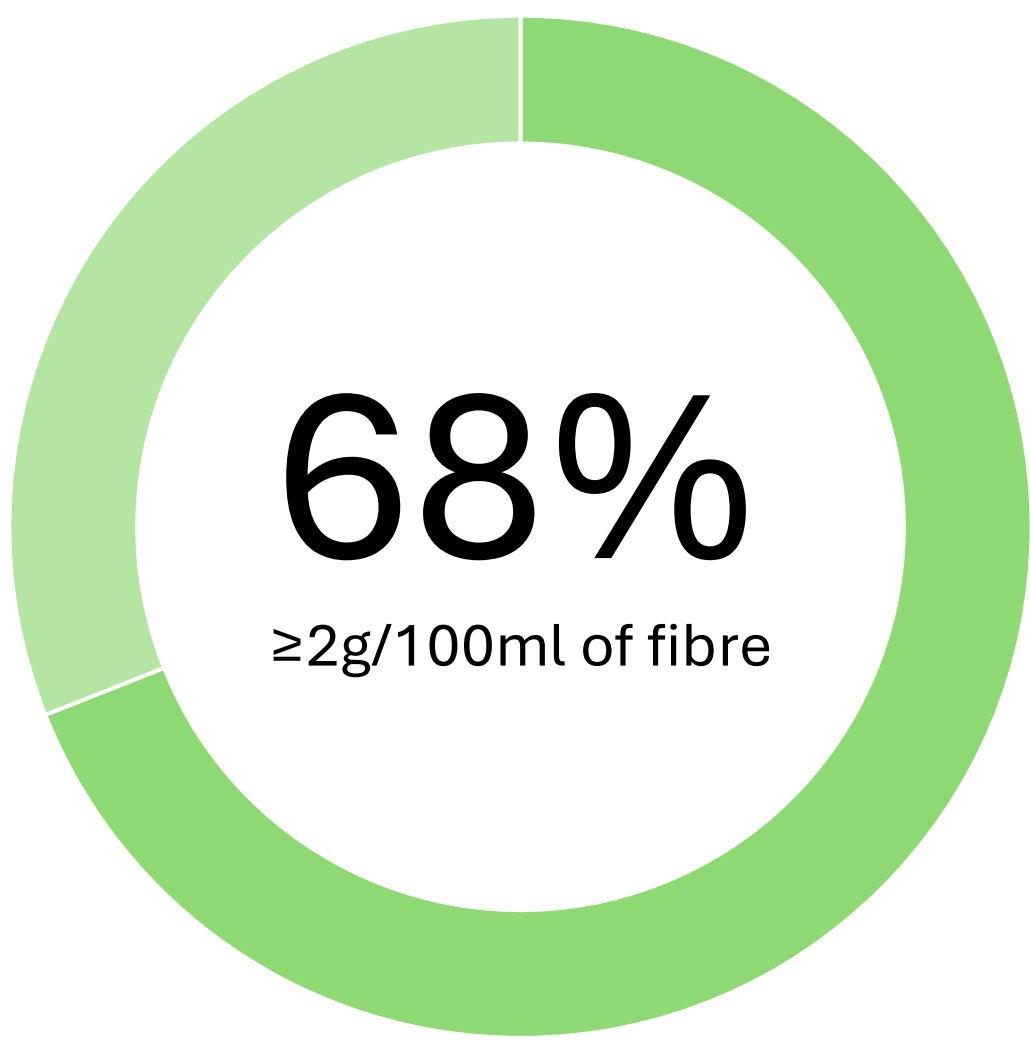


Figure 2. Distribution of fibre content among prescribed fibre EN formulas (n=40).

Overall, 61% (n=40) were prescribed fibre and 39% (n=26) fibre-free EN formulas (Figure 1). Among fibre formulas (n=40), 68% (n=27) were prescribed at least one EN formula containing >2g fibre/100ml (Figure 2).

Most participants (94%, n=62) received EN via bolus syringe feeding.

No significant differences in EN formula type between demographic (age, gender, location) or clinical factors (phenotype).

DISCUSSION

- While fibre EN formulas were prescribed more frequently than fibre-free EN formulas, both were commonly used in clinical practice. Among prescribed fibre EN formulas, those with higher fibre concentrations were more commonly used.
- Findings largely reflect prescribing practices for EN formulas administered via bolus syringe feeding.
- Bulbar-onset MND was the most common phenotype, likely reflecting the increased need for gastrostomy feeding and greater dependence on EN in the presence of dysphagia.
- The absence of demographic or clinical predictors of EN formula selection suggests that prescribing practices are largely individualised in plwMND, and are likely influenced by factors not captured in this audit.
- A lack of MND-specific guidance regarding EN formula selection may also contribute to variation in prescribing practices.

CONCLUSION

This research is a first step in understanding current EN prescription practices in plwMND and may pave the way for future research that creates an evidence-base to inform clinical practice guidelines. Further research exploring patient and dietitian perspectives, as well as associations between formula type and gastrointestinal outcomes, is needed to better understand factors influencing prescription of fibre and fibre-free EN.

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