

Alfresco dining?

Made easier with
Nutrison Bolus Energy HP

A CASE STUDY BOOKLET

SUPPORTING NUTRISON
BOLUS ENERGY HP

This information is intended for Healthcare Professionals only.
Nutrison Bolus Energy HP is a Food for Special Medical Purposes
for the dietary management of disease related malnutrition
and must be used under medical supervision.



REAL WORLD EVIDENCE FOR NUTRISON BOLUS ENERGY HP

Nutrison Bolus Energy HP is a high energy, high protein, nutritionally complete,* ready to use, tube feed available in a 250 ml pouch.

Evidence for the efficacy of Nutrison Bolus Energy HP in everyday clinical practice has come from a multi-centre study in adult, home enteral nutrition patients recruited from the community by their managing dietitians across 16 NHS centres in the UK. The study followed 25 community-based patients for 28 days (+7-day baseline period) and assessed their quality of life, ease of feed administration, gastrointestinal tolerance, time, compliance and nutrient intake with Nutrison Bolus Energy HP.

This booklet includes two case studies and a patient testimonial. The first case study presents results from a clinical trial patient, while the second provides real-world insights from a patient currently using the bolus pouch in their day-to-day life.

Together, these case studies are designed to support healthcare professionals by illustrating the role of Nutrison Bolus Energy HP and offering practical guidance on its use.

CONTENTS

3 Clinical Study Outcomes

5 **Case study 1:** A 55-year-old male; head and neck cancer

7 **Case study 2:** A 55-year-old male; staying physically and socially active whilst bolus feeding

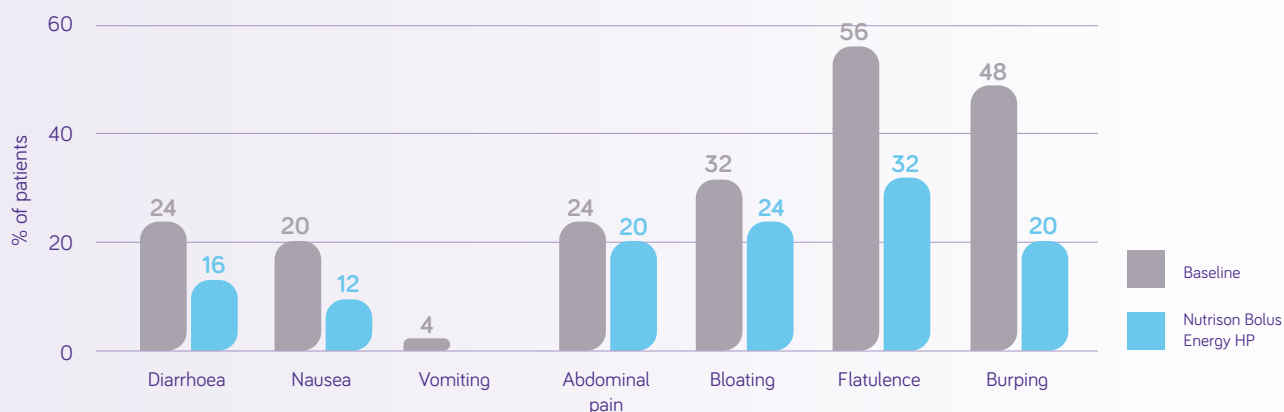
9 **Patient testimonial:** A 73-year-old male; head and neck cancer

10 Key Features of Nutrison Bolus Energy HP Nutritional Value per 100 ml

IN A UK, MULTI-CENTRE, NUTRISON BOLUS ENERGY HP DEMONSTRATED;¹

Excellent tolerance and compliance¹

Incidence of gastrointestinal symptoms



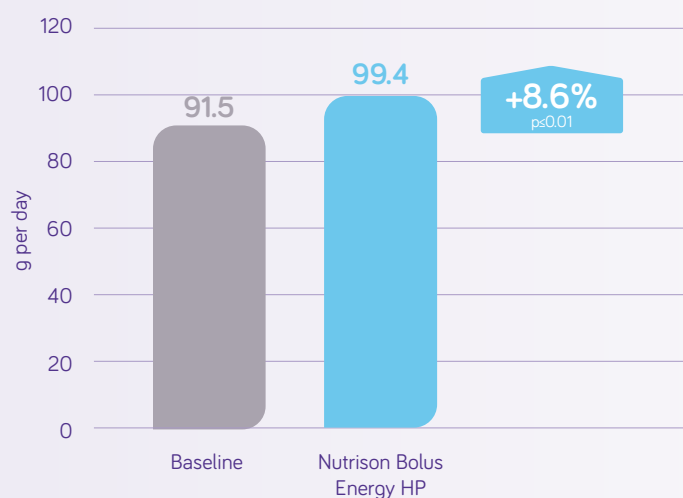
100%
of patients agreed they
tolerated the feed well¹



94%
compliance versus the
dietitian's prescription¹

Significantly increased protein intake¹

Protein intake



Total mean energy intake was maintained¹

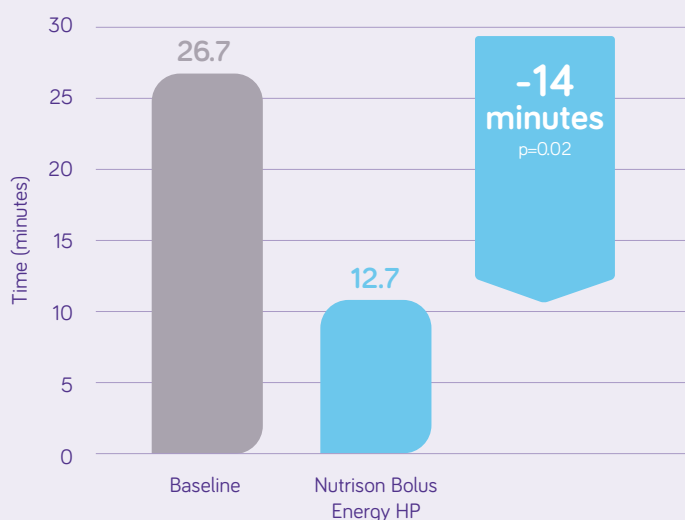
Baseline: 2110 kcal/day

End of the study: 2066 kcal/day

**Electrolyte (Na, K, Cl) intakes improved
with Nutrison Bolus Energy HP¹**

Reduced time spent tube feeding¹

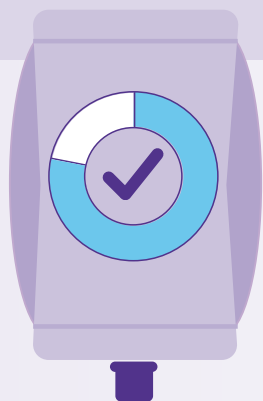
Total time per feed: set-up, administration, clean-up



Time saved/week¹
based on 4 pouches/day

**6 hours
32 minutes**

Significant improvement in patients' quality of life¹



80%

of patients preferred Nutrison Bolus Energy HP
to their baseline feed and method¹

- ✓ Quality of life for patients significantly improved¹
- ✓ Significantly fewer restrictions on attending social activities¹
- ✓ Reduced limitations on mobility, activity, and feeding away from home¹

CASE STUDY 1

A 55-year-old male; head and neck cancer

Provided by: Jo Bates Community Rehabilitation Dietitian

Northeast London Foundation Trust

BACKGROUND

A retired 55-year-old male was recruited in the community. He required enteral feeding to supply his sole source of nutrition whilst undergoing surgery and chemotherapy treatment for head and neck cancer, diagnosed in February 2021. Prior to the diagnosis, he was very active, enjoying hiking, cycling, and fishing with a stable weight of ~75 kg in December 2020 and a body mass index (BMI) of 24.4 kg/m². His weight declined down to ~63 kg and he had a BMI 20.6 kg/m² by March 2021 due to the diagnosis and the initial intensive medical treatment, resulting in him being unable to eat and drink orally. A Radiologically Inserted Gastrostomy (RIG) was placed in mid-March 2021. Radiotherapy treatment was carried out from April to June 2021.

The patient followed a bolus feeding regimen of 6x 200 ml of Fortisip 2kcal per day, which helped him to increase his weight by 12.5% to 72 kg by February 2022 whereby constipation became an issue. The regimen was changed to 2x 500 ml of Nutrison Energy Multi Fibre with 2x 200 ml of Fortisip 2kcal, all via bolus feeding, which introduced fibre as well as satisfying energy and protein requirements. However, despite resolving the constipation, his weight declined to 64.5 kg and his BMI was 21.5 kg/m² by July 2022. This was attributed to resuming his higher intensity outdoor activities such as running and cycling which resulted in higher energy needs. The regimen was therefore changed and he finally settled on 2x 500 ml of Nutrison Concentrated and 1x 500 ml of Nutrison Energy Multi Fibre, which provided 2801 kcal, 105 g protein & 7.5 g fibre with a brief trial of Pro-source Hyfibre that was not tolerated.

His weight was stable in the 12 months prior to joining the trial at around 67 kg, and his BMI was 22.6 kg/m². His nutritional requirements at baseline were 2704 kcal/day and 83 g/protein/day. He had a very active lifestyle, with a busy family life and grandchildren whom he visited regularly. In 2023, he began eating IDDSI Level 4 texture modified foods and unmodified fluids and his tube feeding provision was therefore reduced. Bolus feeding continued to mimic mealtimes and limit restrictions around his activity. However, he found the procedure of feed decanting, connecting, and syringing his bolus feeds impacted his quality of life particularly when out of the home.

Baseline anthropometry: 67 kg and BMI 22.6 kg/m²

Baseline requirements: 2704 kcal/day, 83 g/protein/day

BASELINE REGIMEN

At baseline, the equipment required to administer the bolus feeds included a multi-use 60 ml syringe, multi-use adaptor/connector, water container and feed container (2x cups twice daily). Overall, the time taken to administer each bolus was 15 minutes and often resulted in a spillage, which outside of the home caused some frustration. The baseline regimen of 1x 500 ml bolus of Nutrison Concentrated and 1x 500 ml bolus of Nutrison Energy Multi Fibre which provided 1750 kcal/day, 68 g of protein/day, and 65% of his requirements. His overall intake including food was ~2384 kcal/day and 98 g of protein/day (1.45 g/kg). The patient was highly motivated and compliant with his baseline regimen, partly due to good gastrointestinal tolerance and ability to administer feeds around his busy lifestyle. However, the decanting and syringing process was a major limiting factor in his ability to feed away from the home, particularly when out fishing for example.

Baseline feed intake: 1750 kcal/day, 68 g/protein/day

Total baseline intake: 2384 kcal/day, 98 g/protein/day

RATIONALE AND USE OF NUTRISON BOLUS ENERGY HP

The high protein content of Nutrison Bolus Energy HP ensured that the patient was meeting his protein requirements within his bolus administrations. He had been sensitive to the fibre content of feeds in the past but was tolerating a mixed regimen of fibre-containing and fibre-free feeds well, so he agreed to trial Nutrison Bolus Energy HP as it was assumed that the absence of fibre would not affect the current gastrointestinal tolerance.

Trial feeding regimen: 2x 250 ml pouches of Nutrison Bolus Energy HP (500 ml total), providing 800 kcal and 40 g protein, alongside 500 ml/day of Nutrison Energy Multi Fibre.

DIETETIC GOAL WHILE ON TRIAL

The dietetic goal during the trial was to provide the patient's bolus feeds in a more convenient, efficient, and hygienic method for a patient with higher energy needs, living a very active lifestyle.

4-WEEK RESULTS

End point anthropometry: 67.8 kg and 22.7 kg/m²

	REQUIREMENTS	BASELINE FEED INTAKE	ENDPOINT FEED INTAKE
		Nutrison Concentrated & Nutrison Energy Multi Fibre	Nutrison Bolus Energy HP and Nutrison Energy Multi Fibre
ENERGY (kcal/day)	2704	1750	1565
PROTEIN (g/day)	83	68	70

During the 4-week trial, the patient maintained excellent tolerance and compliance to his regimen, with no effect on intake or weight, which measured 67.8 kg with a BMI of 22.7 kg/m² at the endpoint of the study. The daily overall energy and protein intake did not significantly differ from baseline, with the assessed overall intake at endpoint of 2182 kcal and 101 g of protein (1.5 g/kg body weight). The patient was able to maintain his highly active and strenuous lifestyle.

He was very happy that the average overall time taken to administer the feed decreased from 15 minutes to 6.8 minutes. In particular, the time taken to prepare the bolus feed decreased by 4 minutes and the time taken to clean up feed decreased by 1.6 minutes. The patient was very satisfied with the minimal equipment required to administer his feeds and he reported that he hadn't experienced a single spillage since beginning on the trial. As the number of spillages significantly decreased, kitchen wipes were also no longer necessary, and less storage was required, resulting in a major improvement in quality of life.

Overall, the patient was extremely happy with the trial of Nutrison Bolus Energy HP as he found using the pouch and accompanying Flocare Bolus Pouch Connector significantly simpler and less time consuming to administer his bolus feeds in comparison to decanting and administering the feed via syringe. He fully tolerated the feed each day and therefore achieved 100% compliance during the study. The dietetic goal was achieved, and the patient really enjoyed the discreet and hygienic nature of bolus feeding away from the home that the trial feed allowed. He was keen to stay on the product and remains on Nutrison Bolus Energy HP as part of his current regimen which has immensely improved his mental well-being.

SUMMARY

Overall, the patient was extremely happy with the trial of Nutrison Bolus Energy HP as he found using the pouch and accompanying Flocare Bolus Pouch Connector significantly simpler and less time-consuming to administer his bolus feeds in comparison to decanting and administering the feed via syringe.

He fully tolerated the feed each day and therefore achieved 100% compliance during the study. The dietetic goal was achieved, and the patient really enjoyed the discreet and hygienic nature of bolus feeding away from the home that the trial feed allowed.

He was keen to stay on the product and remains on Nutrison Bolus Energy HP as part of his current regimen which has immensely improved his mental well-being.

CASE STUDY 2

A 55-year-old male; staying physically and socially active whilst bolus feeding

Provided by: Hannah Meanwell RD, Home Enteral Feeding Dietitian
Nottingham University Hospitals NHS Trust

PATIENT BACKGROUND

The patient is a 55-year-old male with a history of a squamous cell carcinoma of the hypopharynx which was successfully treated with chemoradiotherapy in 2018. Other medical history includes hypothyroidism, epilepsy, depression and ADHD. He lives with his partner and he enjoys taking his dogs on their daily walks. He is a sociable and outgoing individual.

ENTERAL FEEDING HISTORY

Gastrostomy feeding was commenced in 2018 prior to the chemoradiotherapy starting. Prior to the cancer, the patient weighed approximately 95 kg, BMI 33.7 kg/m². After treatment was completed, he slowly built his oral intake back up to the point where he no longer needed the gastrostomy tube, therefore this was removed approximately 11 months after placement. In 2022, he was unfortunately admitted to hospital unresponsive with shortness of breath and was found to have aspiration pneumonia. The patient described a history of a few months of coughing when eating and drinking. An endoscopy showed no recurrence of the cancer, but it showed oedematous vocal cords caused by late effects of the chemoradiation. A videofluoroscopy indicated a severe risk of aspiration on all consistencies, therefore he was advised to be Nil by Mouth and another gastrostomy was inserted. He was discharged home on a 15-hour pump feed of 1000 ml Nutrison Concentrated. He was quickly changed onto bolus feeding by the home enteral feeding dietitian as the patient felt it would be more convenient for him, and that it might alleviate the hunger he was experiencing.

In the years following his cancer treatment, he described the mental effects of a cancer diagnosis, followed by a gruelling course of treatment, and finally dealing with the late onset effects of chemoradiation and the impact that had on him. To help manage the psychological effects of this, he began attending men's cancer support groups and mindfulness groups, and he continued regularly walking his dogs. He was always keen for any changes that could be made to make his feeding regimen as practical as possible for him, so as not to impact on his daily life too much.

BASELINE FEEDING REGIMEN

The patient was on a bolus regimen consisting of 3 x 400 ml boluses of Nutrison Energy Multifibre and 2 x Nutrison Protein Shots. This provided a total of 1890 kcal and 94 g protein. His swallow had improved slightly and he was also managing a yoghurt and 4 x instant lattes per day by mouth. His weight was 79.2 kg, BMI 28.1 kg/m².

DIETETIC GOAL

The dietetic goal was to meet the patient's nutritional needs in the most convenient, flexible and efficient way possible to suit his busy, active lifestyle. He also had a longer-term goal of reducing his weight to approximately 75 kg which would give him a healthier BMI of 26.6 kg/m².

RATIONALE AND USE OF NUTRISON BOLUS ENERGY HP

He was very keen to commence Nutrison Bolus Energy HP as he had recently taken on more grandparent duties and wanted '*maximum flexibility*' with his enteral feeding. He had used the product before as he had been on the initial clinical trial and had got on very well with it. Whilst on the trial he had showed the pouches to other people with tube feeds in the cancer support group he attends which resulted in a few phone calls to our department from other people requesting the pouches! His new feeding regimen is 1.5 pouches of Nutrison Bolus Energy HP x 3 per day (total 4.5 pouches). This provides 1800 kcal and 90 g protein. Due to the higher protein content, the Nutrison Protein Shots were no longer required, therefore simplifying his feeding regimen and reducing burden.

RESULTS AND DISCUSSION

The patient continues on 4.5 pouches of Nutrison Bolus Energy HP per day, given as 1.5 pouches three times per day. He has been on this regimen for nearly four months. He now finds giving his feeds to be quicker and much more discreet. Previously, he preferred to be at home to give his feeds as giving a bolus meant decanting the feed into a jug, drawing it up and then administering it. None of this could be done discreetly and would require washing up facilities to wash the jug and syringe out afterwards. This meant that he missed some group sessions that he would have liked to attend, as they coincided with the time he needed to have his feeds. He says *'now I can be standing and chatting with someone at the group whilst giving my feed and they don't even really notice'*. His weight has reduced very slightly as planned to 78.1 kg, BMI 27.7 kg/m². He has some fibre sachets available at home should he need to add some fibre back into his diet, however, he is not needing these currently.

SUMMARY/CONCLUSION

Overall, Nutrison Bolus Energy HP has given this patient more freedom to spend his day how he would like to, as he now feels able to give his feeds more quickly and discreetly whilst out in a public setting. He is not limited to only going to places with washing up facilities available, and he needs to take less equipment out with him, reducing the overall burden compared with his usual feeding regimen. He now attends groups at his feed time with no problem. This additional flexibility with his feeding will likely have a positive impact on his daily life and mental wellbeing.

PATIENT TESTIMONIAL

73-year-old male; head and neck cancer

Using Nutrison Bolus Energy HP

I am a 73-year-old man who has been on exclusively tube feeding for nearly 2 years because of difficulty swallowing and chronic aspiration from radiation therapy for tongue cancer.

My tube feeding has limited my family's travel, especially air travel, because of the difficulty of transporting large quantities of liquid food.

I commenced feeding with Nutrison Bolus Energy HP. Because my usual formula has 4 grams of dietary fibre per pack, I elected to add a 4-gram fibre packet to each meal consisting of two 250 ml pouches of the Nutrison Bolus Energy HP formula (6 pouches in total per day, 2400 kcal). This regimen suited me perfectly, I was able to transition from the Nestlé Compleat formula to the Nutrison Bolus formula all at once with no adverse symptoms of any kind.

I found the pouch-based system to be very convenient and mess-free. They were equally easy to handle in the hotel and while touring by car. In fact, because the system is completely closed, there was no risk of spilling the formula while riding in a moving car. With the pouch system, the pouch can be above or below the level of the PEG tube since the formula is squeezed manually from the pouch into the stomach.

Administration of a 250 ml pouch was quick and this left more time free for sight-seeing and other activities. And post-feeding cleanup was minimal. Disposal of empty pouches and used connector tubing was never a problem. The system is essentially mess-free and quite discreet. I was even comfortable feeding myself while on the airplane, something I would have hesitated to do with the gravity system.

INTRODUCING NUTRISON BOLUS ENERGY HP



Unique squeezable pouch

**High energy
1.6 kcal/ml**

**High protein
8 g/100 ml**

Nutritionally complete*

Optimised electrolyte profile for tube feeding

Neutral flavour

85% of participants liked the flavour²

**Less time to prepare & deliver¹
Easier & cleaner to administer¹
Greater portability & convenience¹**

Nutritional value per 100 ml

Energy	160 kcal
Protein	8 g
Carbohydrate	18.1 g
Fat	6.2 g
EPA + DHA	52 mg
Iron	2.55 mg
Vitamin D	2.13 µg
Sodium	104 mg (4.51 mmol)
Potassium	224 mg (5.72 mmol)
Chloride	159 mg (4.48 mmol)
Magnesium	24 mg (0.99 mmol)
Osmolarity	610 mOsmol/l
Presentation	250 ml pouch
ACBS approved	Yes

- ✓ Suitable as a sole source of nutrition
- ✓ Nutritionally complete in 4 pouches*
- ✓ Electrolyte profile optimised for tube feeding
- ✓ Low viscosity to aid administration
- ✓ Halal certified
- ✓ Kosher approved



Learn more

For more information visit nutricia.co.uk or refer to the product label



We extend our sincere thanks to those who participated in the trial and made it possible to bring this product to market.

References: 1. Nutricia trial data, data on file 2022-2024. 2. Nutricia Independent Consumer Sensory Assessment on Nutrison Bolus Energy HP vs Abbott, data on file 2023.

*Nutritionally complete in 4 pouches, using a 19-49 year old male RNI for a comparator (excl. Na, K, Cl & Mg).

A typical intake would be 4-6 pouches (1600-2400 kcal per day) if used as a sole source of nutrition. The Flocare bolus pouch connector should only be used with Nutrison Bolus Energy HP. Refer to user guidance document for more information.

Accurate at time of publication: June 2026

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