# **FORTISIP COMPACT PROTEIN IN A CURATIVE, SURGICAL HEAD AND NECK CANCER PATIENT**

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## **PATIENT BACKGROUND**

An independent 80 year old lady who lives alone, walks several miles most days and manages to do her own cooking and shopping. She has no family locally but has support from her friends from the Church. She has occasional alcohol and is a recent ex-smoker (60 pack year history).

Past medical history included osteoporosis, coeliac disease (CD) and previous depression. She presented with a lump in her cheek, ear pain, trismus and weight loss. She was

not sleeping due to pain and was constipated secondary to opioid usage. She was seen in the Head and Neck Multi Disciplinary Team (MDT) by the Maxillo-facial Surgeons, Geriatrician, Plastic Surgeons, Specialist Dietitian, Speech and Language Therapist (SaLT) and Cancer Nurse Specialist where she was diagnosed with T4bN0M0 Squamous Cell Carcinoma (SCC) of the right buccal mucosa (cheek) which had spread to the skin under her eye. Following the MDT discussion, this lady opted for a potentially curative major surgical resection and reconstruction with a radial forearm flap and split skin graft.

## **NUTRITIONAL ASSESSMENT**

At the MDT the patient was assessed by the Dietitian and SaLT. The aim of pre-operative nutritional support was to improve muscle mass and provide adequate energy and protein with an aim to increase her weight, while managing and minimising the nutritional impact of her symptoms. She was struggling to eat due to trismus, pain on chewing and fatigue. She explained that she was usually a poor eater, suffering with early satiety and had always struggled to maintain her weight. Twenty years ago, she was diagnosed with Coeliac disease and keeps to a strict gluten free diet (GFD). She reported 9kg weight loss over the last 3 months (17%), with a dramatic loss of 5 kg in the last 2 weeks. The patient could only manage a liquid diet – soups, ice cream, pureed fruit, smooth yogurt and full cream milk to drink. Her estimated daily intake was approximately 600Kcals and 25g protein.

## **NUTRITIONAL INTERVENTION AND RATIONALE**

To meet her nutritional requirements (ESPEN\* / PENG\*\* guidelines, table 1), she required a high energy, high protein, low volume Oral Nutritional Supplement (ONS). The small volume was easier to consume as she had little appetite and the slightly thicker consistency was easier to control orally due to the pain in her mouth. Various flavours of Fortisip Compact Protein (FCP) were provided with the aim of drinking 3/day (900 Kcals, 54g protein) to meet her requirements. Further advice on food fortification and gluten free, level 4 (puree) diet was also discussed.

	Normal	Diagnosis	Pre-surgery	Discharge	4 weeks post discharge
Weight (kg)	53	44.1	45.4	41.5	44.2
BMI (kg/m²)	20	16.8	17.3	15.8	16.9
Energy Requirements Kcals / day		1540	1590	2000	
Protein requirements g / day		53-66	54.5-68	63	

### Table 1

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#### This information is intended for healthcare professionals only.

\*ESPEN: European Society for Clinical Nutrition and Metabolism. \*\*PENG: Parenteral and Enteral Nutrition Specialist Group of the British Dietetics Association.

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## **NUTRITIONAL INTERVENTION AND RATIONALE (CONT.)**

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At pre-operative admission to hospital two weeks later, the patient had gained a little weight and it was felt her nutritional status had improved. She was managing small amounts of puree-fortified diet as well as 3 FCP/d. She reported that the small volume supplement was easy to take as she had little appetite and the slightly thicker consistency was better controlled orally due to the pain in her mouth. The patient had extensive 14 hour long resection of the buccal mucosa tumour including mandibular rim resection, bilateral radical neck dissections and reconstruction with a free forearm flap.

Post-surgery she was nil by mouth (NBM) and fed via a NG tube for 17 days where she was closely monitored. The SaLT then assessed her and allowed IDDSI level 4 (puree) diet and normal fluids. The patient found it very difficult to meet her high nutritional requirements orally due to fatigue, oral incompetence/spillage of liquids and poor tolerance of the gluten free level 4 diet in hospital. She continued to require additional overnight NG feeds, which she was unable to manage herself at home. The prolonged hospital stay had also resulted in a low mood. The dietitian (working closely with the patient, surgeon and the SaLT) decided to allow her a five day home leave trial without any NG feeding. Advice on high calorie, high protein gluten free level 4 diet was provided with the aim of a minimum of 3 FCP/d and 2 x Calogen Extra shots to be added to her food (1220 Kcals, 58g protein). She enjoyed all flavours of the FCP but especially liked the banana, peach/mango, and mocha. She was advised to take her FCP after her small meals, so not to affect the amount of food she could eat. Her appetite was still small at this time and managing any larger quantities of pureed food was very difficult. The dietitian suggested taking the 3rd bottle at supper time – possibly trying the mocha flavour warmed slightly as a bedtime drink.

## RESULTS

The patient managed extremely well at home, and at her subsequent review, she had gained weight, her wounds had healed, her mood had improved and she felt well. She had successfully taken her ONS every day as advisedknowing she was getting over 50% of her requirements from supplements alone was very reassuring to her. She reported that she enjoyed the FCP – she liked the mouth feel, the ease of controlling it in her oral cavity as well as the taste. The wide range of flavours were good giving her a variety to

choose from each day. Her energy levels had improved and she was able to start going for short walks, which further improved her mood and overall quality of life. Pathology results showed her cancer had been successfully removed with clear margins but would require regular follow up for the next 5 years. It was decided that no adjuvant radiotherapy was needed so her nutritional care was transferred to a community dietitian to continue monitoring her intake in the longer term.

## CONCLUSION

This case demonstrates that intensive nutritional counselling, alongside ONS, aided post-surgical healing, minimised ongoing deterioration in nutritional status and enabled this patient to recover. We succeeded with the primary aim of improving her overall survival and enhancing her quality of life.

Fortisip Compact Protein is a Food for Special Medical Purposes for the dietary management of disease related malnutrition and must be used under medical supervision. Calogen Extra Shots is a Food for Special Medical Purposes for the dietary management of conditions requiring a high energy intake and must be used under medical supervision.

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