

# FORTINI COMPACT MULTI FIBRE



This information is intended for Healthcare Professionals only.

Fortini Compact Multi Fibre is a Food for Special Medical Purposes for the dietary management of disease related malnutrition and growth failure in children from one year onwards, and must be used under medical supervision.

Accurate at time of publication, February 2020





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# INTRODUCTION

### CASE STUDIES FROM THE FORTINI COMPACT MULTI FIBRE TRIAL

A randomised controlled trial (RCT) of paediatric patients >1 year of age investigating the efficacy, tolerance, acceptability and safety of **Fortini Compact Multi Fibre** versus standard paediatric ONS\* for 4 weeks (n=38) in 2016.

Case Study	Author	Child's age and gender	Diagnosis	Weight and Feeding History
1	Hannah Duggan, Specialist Paediatric Dietitian, Evelina London Children's Hospital	3 years old female	Chromosomal disorder, history of recurrent chest infections, fussy eater, faltering growth	Fussy eater, faltering growth and unable to take prescribed volume of Fortini Multi Fibre b.d.
2	Jennifer Robison, Specialist, Cystic Fibrosis Dietitian, Lewisham and Greenwich NHS Trust	7 years old male	Cystic Fibrosis	Poor appetite, faltering growth and unable to take prescribed volume of Fortini Multi Fibre b.d.
3	Jane Phillips, Paediatric Dietitian, Airedale NHS Foundation Trust	18 months old male	22q deletion, truncus repair, aortic stenosis, delayed motor milestones, faltering growth from birth, constipation	Faddy eater, outgrowing his high energy infant formula at 18 months.
4	Lydia Collins, Paediatric Dietitian, Cumbria Partnership NHS Foundation Trust	8 years old male	Chromosomal disorder, developmental delay, poor growth	Faddy eater, faltering growth and struggling to take daily prescribed volume ofsupplements.
5	Catherine Casewell, Specialist Paediatric Dietitian, Ashford and St Peters NHS Foundation Trust	7 years old male	ADHD	Exacerbation of faddy eating after starting drugs for ADHD, and downward progression for weight. Struggling to take in volume of over the counter food supplements and small oral intake.
6	Sarah O'Toole, Paediatric Dietitian Lewisham and Greenwich NHS Trust	11 years old female	Anaemia, poor growth	Small appetite/oral intake. Poor compliance to a range of ONS, struggled to take required volume. Minimal catch up growth in 7 years.



#### Outcome after 28 days trial of Fortini Compact Multi Fibre

Child M appeared bright and alert. She was taking the Fortini Compact Multi Fibre very well, tending to have one bottle in her breakfast cereal or in the morning and the other before bed. A week after starting the Fortini Compact Multi Fibre, M's appetite for food was improving. Weight and height had increased. The smaller volume was less intimidating for her to manage and she enjoyed the flavour. This helped to achieve the aims of preventing further faltering of M's weight and to ensure she was meeting her micronutrient needs.

Child L tolerated the Fortini Compact Multi Fibre well. His portion sizes increased and he was able to finish the supplement easier. At the end of the 28 days L's weight and height increased. The smaller volume was beneficial as it appeared to improve his intake and compliance. The neutral flavoured version was ideal for mixing in recipes and for those who need to transition away from standard milk.

He tolerated Fortini Compact Multi Fibre b.d. well. His weight, length, and head circumference all increased. Parents felt that this was the best rate of weight gain that they had seen since birth. They reported an improvement in his constipation since starting the product. Mum commented that him starting the Fortini Compact Multi Fibre was a turning point and felt it improved his nutrition and development. His parents felt that the drink was palatable and the dosage was achievable as the volume was small.

He was taking Fortini Compact Multi Fibre bd and took to the new product well, as he was very selective around food and drink. Mum found the neutral variant most useful as she was adding it into his porridge, day and night. His weight and height had increased. This was good progression for this child as his growth had become static in the last year. The smaller volume and different flavours makes it much more versatile and easier to consume, which can aid with compliance.

Following a change to Fortini Compact Multi Fibre he was able to consume nearer to his nutritional requirements as it is a much more nutrient dense supplement in a small volume. The availability of neutral Fortini Compact Multi Fibre was useful as he could use it on breakfast cereals and alter the flavours accordingly using a variety of powdered milkshakes. The use of Fortini Compact Multi Fibre in this patient achieved the desired goal of maintaining his weight and improving his nutritional status whilst Atomoxetine could be provided to help control his ADHD behaviours.

After one month on Fortini Compact Multi Fibre, Anna experienced a significant weight gain of 15kg (5% body weight). For the first time her weight increased to the 25th centile and her BMI tracked upwards to the 2nd centile. She found the smaller volume more manageable and the supplement more palatable despite the higher energy density. Additionally mum reported that her appetite slowly increased at mealtimes and overall her diet became healthier as she was less reliant on sugary snacks to meet her nutritional needs. Overall it was reported that she had developed a more positive body image since gaining weight. After seven years of trialling a range of supplements, Fortini Compact Multi Fibre has enabled Anna to achieve the desired weight gain.

### Hannah Duggan, Specialist Paediatric Dietitian, Evelina London Children's Hospital

#### **BACKGROUND**

Child M is a 3 year old girl with a chromosomal disorder and a history of recurrent chest infections. She was initially referred to the dietitian at just 7 weeks of age due to poor weight gain, with reflux and vomiting. Her birth weight was  $2.36 kg (0.4^{th} - 2^{nd} centile)$ , but this rapidly dropped to below the  $0.4^{th}$  centile.

She was changed onto an extensively hydrolysed formula due to potential cow's milk protein allergy, and the paediatrician optimised M's anti-reflux medications. Child M's vomiting improved but she continued to only take small amounts of feed.

Her milk was concentrated to optimise oral calories, with her weight gain fluctuating, but generally tracking the  $0.4^{\rm th}$  centile. She was also trialled on an amino acid based formula, with no change in symptoms or growth seen. At 10 months, M was advised to go back to a milk containing formula by the consultant.

She started on a high energy infant formula which was well tolerated and she continued to be seen by the dietetic team. Over the next 2 years, M's weight gradually increased to the 9th centile, though getting her to eat enough was a daily struggle for the family.

#### **ASSESSMENT**

By the time M first came to my outpatient clinic she was aged 3 and had been under the care of the dietetic service for several years. She came with her mum and older sister, and whilst full of beans, appeared very slight and delicate. She presented to me with ongoing poor appetite and disinterest in food.

M's weight was 12kg, which was on the 2<sup>nd</sup> to 9<sup>th</sup> centile. Her weight had been static at 12kg for several months and it was clear that this was very concerning for M's mum. Her height was 99.5cms; just below the 50<sup>th</sup> centile, which was approximately tracking.

M was able to eat all different textures of foods with no reported gagging or vomiting. Mum had previously had advice on methods of fortifying M's food, which she was utilising on a daily basis.

Her dietary intake was variable; sometimes she would manage 3 small meals a day with snacks, while other days only eating a banana and a few mouthfuls of dinner. Mum reported that meal times would last approximately 30 minutes and were not particularly stressful. No force-feeding was reported. M would often manage more when eating with her older sister.

M had been prescribed Fortini Multi Fibre aiming for 200mls twice a day. M had initially taken this very well, but was now only managing about 100mls per day.

I was concerned that M's calorie and protein intake was inadequate and her weight had begun to falter again. Whilst she was no longer taking the prescribed volume of Fortini Multi Fibre, she was also at risk of micronutrient deficiencies. I was particularly concerned about her iron intake as this had previously been low. My dietetic aims were to prevent M's weight dropping any further centiles and to ensure she was getting sufficient micronutrients.

We discussed strategies to optimise M's dietary intake. Mum reported that M would happily take chocolate cereal with milk most days. She was also good with foods such as yoghurt and lasagne. She did enjoy the Fortini Multi Fibre but was struggling to manage the advised volume.

I suggested that Fortini Compact Multi Fibre would be a good option for M as it would provide the same amount of nutrients in a much smaller volume. We also discussed using the neutral flavoured Fortini Compact Multi Fibre as the milk on her cereal. At this point Fortini Compact Multi Fibre was only available through the trial, which Mum was happy to participate in. I brought some of the Fortini Compact Multi Fibre down to the clinic room for M to try.

She tried the neutral flavour and finished a full bottle in the clinic room. It was lovely to see that M was excited about her new milkshake style oral nutritional supplement (ONS) and of course, the obligatory princess sticker. She left the clinic appointment promising to tell the 'doctor' how she had got on.

#### **REVIEW**

When M returned to see me in clinic a month later she appeared bright and alert. She was very pleased to tell me that she liked her ONS and was having 2 bottles every day.

Mum confirmed that M was taking the Fortini Compact Multi Fibre very well, tending to have one bottle in her breakfast cereal or in the morning, and the other before bed. She had also found that after a week or so of starting the Fortini Compact Multi Fibre, M's appetite for food was improving.

M was tolerating the Fortini Compact Multi Fibre well with no symptoms of loose stools or digestive discomfort. Her weight had increased 400g in a month, therefore maintaining her weight on the 2<sup>nd</sup> to 9<sup>th</sup> centile. Her height had increased to 100cms which was on the 25<sup>th</sup> to 50<sup>th</sup> centile.

The 2 bottles of Fortini Compact Multi Fibre provided the majority of her requirement for iron, calcium and Vitamin D. Combined with her improved food intake, I was confident that M would be having sufficient vitamin and minerals to prevent any deficiency.

#### CONCLUSION

I was really pleased with how well M tolerated the Fortini Compact Multi Fibre. The smaller volume was less intimidating for her to manage and she enjoyed the flavour. This helped us to achieve the aims of preventing further faltering of M's weight and to ensure she was meeting her micronutrient needs.



### Jennifer Robison, Specialist Cystic Fibrosis Dietitian, Lewisham and Greenwich NHS

#### **BACKGROUND**

Child L is a 7 year old boy with cystic fibrosis (CF). He was diagnosed at 4 weeks of age through new born screening. He lives with his 2 parents and his older sister. At diagnosis he was on the  $2^{nd}$  centile for weight and  $25^{th}$  centile for length, his weight had dropped from the  $25^{th}$  centile at birth. He was found to be pancreatic insufficient and commenced pancreatic enzyme replacement therapy (PERT).

After the introduction of PERT L's weight improved and he reached the 50<sup>th</sup> centile 5 months after diagnosis and by one year he was on the 75<sup>th</sup> centile for weight and length. CF and nutritional status are closely linked, and good health outcomes are associated with good nutritional status. An additional 20-50% is added to nutritional requirements to meet the increased energy demands of the CF.

At around two and a half years L's growth was faltering with weight dropping to 25-50<sup>th</sup> centile. L also had a poor appetite and didn't have a wide range of foods he ate well. He was following a high energy diet and food fortification to try to meet his high nutritional demands. He was commenced on 2x200ml Fortini Multi Fibre unflavoured daily to replace the full fat milk he was having, to boost his energy intake. This provided at total of 600kcal and 14g protein.

L's growth stabilised on the Fortini Multi Fibre, but at times he was finding the volume difficult to manage. His dose had been reduced to 300ml with an additional 10ml cream to fortify (total 485kcal and 10.5g protein) and to try to help improve his intake of other meals. His food range had increased well over coming years but overall L's nutritional status was still concerning.

#### **TRIAL**

L and his family agreed to be part of the 28 day Fortini Compact Multi Fibre Trial. He was randomised into the Fortini Compact Multi Fibre cohort and commenced on 2x125ml per day. He chose the neutral flavoured version as this is what he was used to.

Using the Fortini Compact Multi Fibre product reduced the volume of the supplement by 75ml per bottle and provided 600kcal and 14g protein per day. At the start of the trial L's weight was 20.48kg (27th centile) and 120.3cm (55th centile) with a BMI of 14.1kg/m² (9th centile).

L tolerated the Fortini Compact Multi Fibre well. He had no gastro intestinal symptoms and there was no sign of malabsorption/maldigestion related to his pancreatic insufficiency (he had been advised on the dose of PERT required per bottle). His portion sizes increased, he was able to finish the supplement easier and it was felt that overall he was eating better. At the end of the 28 days L's weight was 20.78kg (29th centile) and his height was 121.3cm (59th centile) and his BMI remained at 14.1kg/m². It was agreed that as he tolerated the product well and he was eating more, L would continue on the Fortini Compact Multi Fibre.

#### ON GOING REVIEW

L's growth has remained stable but there is an obvious difference with the size of the meals that L can now manage. He easily finishes adult portions of meals when before the trial he was struggling to finish small child size portions. His parents have reported meal times are not as stressful trying to get him to finish a portion and sometimes they are amazed at the amount he has eaten.



### Jane Phillips, Paediatric Dietitian, Airedale NHS Foundation Trust

#### **BACKGROUND**

Bill was referred to the Dietitian with faltering growth. He was 18 months old at referral and had a background of 22q deletion, truncus repair, aortic stenosis, and delayed motor milestones.

He had struggled with his growth from birth (weight was on or below the 0.4th centile and length 2nd centile) and had been taking a high energy infant formula.

#### **ASSESSMENT**

Bill was referred to the Dietitian by the Paediatrician because she felt he was **outgrowing his formula at 18 months** and needed a full nutritional assessment.

When first seen at 20 months old he was taking approximately 400mls of a high calorie infant formula (providing approximately 364 kcal). Parents described him as a faddy eater whose intake could be variable.

A typical day would include a small bowl of cereal with cow's milk for breakfast, a bottle of high calorie infant formula mid-morning, lunch would be a cheese spread sandwich or beans on toast followed by a small piece of fruit and mini yoghurt and his evening meal a pasta dish or scramble egg followed by yoghurt or custard and then a further bottle of high calorie infant formula at bedtime.

He would only eat a few mouthfuls of his main courses. He had previously seen a speech & language therapist who had given advice regarding texture progression and parents felt he had moved forward with this, and was now managing all textures.

Parents also felt that he was **prone to constipation** which could affect his appetite. He had previously been taking lactulose medication but was not taking this at the time of the assessment.

His weight at his initial assessment was  $8.34 \, \text{kg} \, (0.4^{\text{th}} \,$  centile). His estimated requirements were calculated

as 1050kcal, 23.3g protein for catch up growth of 10g/kg/day.

Parents were given advice around food fortification and ensuring he was offered little and often. We discussed the trial and parents were given time to decide if they wanted to participate. He continued on the current high energy formula in the interim."

#### **REVIEW**

Parents agreed to participate in the randomised controlled trial and Bill was assigned to the Fortini Compact Multi Fibre group. A home visit was planned to initiate the trial and at the baseline his weight was recorded as 8.55kg (0.4th centile), length was 76.8cm (0.4th centile) and head circumference 45.5cm (2nd centile). We discussed aiming for 2 Fortini Compact Multi Fibre drinks daily for him, and these were to be offered mid-morning and at bedtime.

Bill was visited again a month later on completion of the trial and had tolerated the product well. His weight had increased to 8.82kg (just above 0.4th centile), length was 78.3cm (0.4th centile) and head circumference was 46.9cm (9th - 25th centile).

Parents felt that this was the best rate of weight gain that they had seen since his birth. They also felt that he had more energy and had made good developmental progression. They reported an improvement in his constipation since starting the trial product. Parents were keen to continue the product and were very pleased with the ongoing delivery service.

#### THREE MONTH LATER

3 months after completing the trial, Bill's weight had increased to 9.6kg (0.4th -2nd centile). He continued to take 2 Fortini Compact Multi Fibre drinks a day.

Despite being ill over 3 weeks, and eating very little he still managed to gain weight.

#### SIX MONTHS AFTER TRIAL

Bill continued to do well and his weight had increased to 10.2kg (0.4th-2nd centile). The decision was made to stop the supplements as he had built up his nutritional status. Since stopping the supplements he has been eating 3 meals and snacks and was maintaining his growth. He attends a day nursery and this has also helped to develop his feeding skills. He no longer has any problems with constipation and his prescription for lactulose has been discontinued.

#### CONCLUSION

Mum said that Bill had a difficult start to life with his medical problems, but the area they had found the most challenging out of everything had been his feeding difficulties. She commented that him starting the Fortini Compact Multi Fibre was a turning point and felt it improved his nutrition and development. The parents felt that the drink was palatable and the dosage was achievable as the volume was small. Fortini Compact Multi Fibre boosted his nutritional status and his well-being, enabling him to move onto a normal diet which is always our aim.



Lydia Collins, Paediatric Dietitian, Cumbria Partnership NHS Foundation Trust

#### **BACKGROUND**

Jack is an 8 year old boy with a chromosomal disorder, developmental delay, poor weight gain and growth. Like with most chromosomal disorders children tend to struggle to gain weight. Jack's weight had been an ongoing issue lying below the 0.4th centile for both his weight and height, and it had become static.

Jack was eating regular meals but very small amounts and struggling with big volumes. He was also very fussy around food which had been a longstanding problem. We had been working towards a food first approach, fortifying his diet with cream, butter, and cheese, using oral nutritional supplements (ONS) alongside. Jack was on two ONS each day but struggled to take both due to the volume and his fussy eating. Despite fortifying his diet Jack's weight gain and growth had been minimal for over a year.

#### **ASSESSMENT**

Jack presented in clinic with a weight of 16.6kg which was well below the 0.4th centile and a height of 109.5cm, also below the 0.4th centile. Jack was susceptible to being ill and was just overcoming another chest infection. We discussed the opportunity to be involved in a randomised control trial which involved the possibility of being allocated a new product. Jack was randomised the new product, Fortini Compact Multi Fibre.

#### **REVIEW**

Jack commenced on the 28 day trial and was started on two Fortini Compact Multi Fibre each day, providing him with 600kcal and 14g protein in 250mls compared to 400ml from 2 regular ONS. Jack's estimated dietary intake was 1400kcal.

He had a deficit of 580kcal and was started on two Fortini Compact Multi Fibre. Jack tolerated and took to the product well, he took the strawberry drink intermittently but mum found the neutral flavour most useful as she was adding it into his porridge, which he was having morning and night.

Jack was reviewed four weeks later and his weight had increased to 17kg (an increase of 0.4kg which put Jack closer to the 0.4th centile) and his height had also increased by 0.5cm. This was good progression for Jack as his growth had become very static in the last year.

#### SIX MONTHS LATER

6 months later Jack continues to take Fortini Compact Multi Fibre and his weight has increased further to 18kg. Mum had commented that she liked how easy the product was to use by adding it into his porridge each day. Mum had also struggled with Jack to take a vitamin supplement and was reassured that the product contained micronutrients to help meet his nutritional requirements. Mum reported that since Jack had commenced the product he had much more energy and that it had helped to increase his appetite.

#### CONCLUSION

It was pleasing to see how well Jack took to the new product because he is very selective around food and drink. The product was tolerated well and came in two standard flavours, strawberry and neutral which can be added to foods. The smaller volume of the product and different flavours makes it much more versatile and easier to consume, which can aid with compliance.



Catherine Casewell, Specialist Paediatric Dietitian, Ashford and St Peters NHS Foundation Trust

#### **BACKGROUND**

Jack is a **7 year old boy** who was referred to our dietetic team regarding **exacerbation of his faddy eating after commencing Atomoxetine** (a medication used to better control his **ADHD**).

The change in medication, which was initiated a month before his dietetic appointment, appeared to be benefitting his ADHD behaviours but it had caused his appetite to become significantly worse, which was also affecting his weight.

At the first dietetic appointment his weight was 24.80kgs (75<sup>th</sup> centile) and height was 123cms (75<sup>th</sup> centile). Although this weight and height were both appropriate for his age at the consultation, **the trend was showing a downwards progression** with a weight of 27.25kgs (91st centile) a month before.

#### **DIETARY ASSESSMENT**

Jack's mother provided a feeding history which suggested that he was taking a minimum of 1-5 bites to a maximum of ¼ portion of his normal meal each day. The foods he would accept were very limited in variety and included mainly carbohydrate foods such as plain pasta, Yorkshire puddings, toast, croissants, and occasionally yoghurts. Jack's mum had therefore initiated 2 different over-the-counter supplements which he refused, or manage a small proportion of.

Jack was encouraged to take 3 x 200mls of these over-the-counter food supplements per day (one with each meal) which would provide him with approximately 680kcals per day. His calorie requirements were estimated to be approximately 1650-1800kcals/day and the food supplements would provide approximately 40% of his EAR for energy/day. Jack often struggled to consume this volume of supplement to meet his nutritional requirement.

#### **MANAGEMENT**

A new product, Fortini Compact Multi Fibre (which is a nutritionally complete, high energy 2.4kcal/ml

and low in volume supplement), was made available as part of its product evaluation to the Trust. Jack agreed to take Fortini Compact Multi Fibre in between meals twice a day to allow a focus on building up his intake of a variety of foods at each mealtime.

Some psychological strategies were also advised to increase the variety in his diet including managing the environment at family mealtimes, offering family meals at structured times alongside his favourite foods, helping to prepare foods, and reducing parental anxiety and messy play for Jack outside of mealtime.

#### DIETETIC AIMS AT REFERRAL

- · Improve nutritional status
- Maintain weight
- Ensure tolerability/palatability to ensure compliance with the dietary advice and supplements

A month later Jack continued to experience a poor appetite and unfortunately his oral intake remained very poor. He was tolerating 2 x 125mls of Fortini Compact Multi Fibre which provided him with an additional 600kcals. Jack's weight had increased slightly (by 200g) to 25kgs which was most likely due to his compliance of Fortini Compact Multi Fibre.

A recent clinic appointment with the Consultant Paediatrician has resulted in reluctantly stopping the Atomoxetine due to it having a major side effect on his appetite and resulting weight loss and he would not eat throughout the day despite all the best efforts of his parents and Dietitian's. Dietetic follow-up is planned again for 3 months' time to monitor his weight and food intake again with a hope of his appetite returning to normal, therefore discontinuing the supplements.

#### DISCUSSION

Poor appetite is a well-known side-effect of the medication Atomoxetine and clinicians are very familiar with this. The results of initiating Fortini

	Requirements/day	Paediasure Shake (250mls)	Fortini Compact Multi Fibre (2 x 125mls)	
Calories kcals	1650-1800kcals	204	600	
Protein g	23-25g	6.1	14.25	
Calcium mg	324-552 mg	194	420	
Iron mg	4.7-8.7mg	2.9	6	
Folic acid ug	75-150ug	51	108	

Compact Multi Fibre for Jack were encouraging. The change to Fortini Compact Multi Fibre from the previous over-the-counter food supplements was well tolerated, and Jack was taking, on average, 2 x 125mls per day (the prescribed volume), in addition to 3 minimal portions at each meal.

Jack's weight didn't increase significantly (increase of 200gs) which suggested that the Fortini Compact Multi Fibre was prescribed at the correct volume (250mls/600kcals) to provide a calorie intake similar to his calorie intake prior to commencing the Atomoxetine. Fortini Compact Multi Fibre also resulted in an improvement in his micronutrient intake, bringing his intake of nutrients such as iron, calcium and Vitamins A, B, C, and D much closer to RNI's for his age.

Prior to Jack being seen by a Paediatric Dietitian, he had a minimal diet and was not able to comply with the volume of over-the-counter food supplements. Following a change to Fortini Compact Multi Fibre (2 x 125mls/day) he was able to consume nearer to his nutritional requirements, as it is a much more nutrient dense supplement in a small volume.

The availability of neutral Fortini Compact Multi Fibre was useful as Jack could then use it on breakfast cereals, and alter the flavours accordingly using a variety of powdered milkshakes.

#### **SUMMARY**

Fortini Compact Multi Fibre is designed for the dietary management of children over the age of 1 year, >8.0kgs with faltering growth or who are unable to meet their nutritional requirements through diet alone. The use of 2 x 125mls Fortini Compact Multi Fibre in this patient achieved our desired goal of maintaining his weight and improving his nutritional status whilst Atomoxetine could be provided to help control his ADHD behaviours.

### Sarah O'Toole Paediatric Dietitian Lewisham and Greenwich NHS Trust

#### **BACKGROUND**

Anna is an 11 year old girl who has been under the care of the hospital dietitian for over seven years for poor weight gain. She is a carrier of the thalassemia trait but has not experienced any health problems except for anaemia in the past. In some forms of thalassemia, growth can be retarded. It is unclear however if Anna's difficulty to gain weight is related to this blood disorder.

From the age of four, Anna's weight consistently tracked along the 9<sup>th</sup> centile whilst her height followed the 75<sup>th</sup> centile. A greater than two centile difference and low Body Mass Index (BMI) which followed the 0.4<sup>th</sup> centile indicated that Anna's growth was faltering.

Barriers to weight gain included a low appetite and difficulty managing age appropriate portion sizes at mealtimes. Unfortunately food fortification techniques to increase the energy density of Anna's diet were, rendered unsuccessful and consequently a range of supplements of various styles and flavours were prescribed following each review at the dietetic clinic. Anna's compliance to the supplements prescribed was poor as she struggled to take in the required volume. Additionally, her mum felt that these drinks were counterproductive as they increased satiety at mealtimes, which further reduced her daily nutritional intake. Consequently, in seven years there has been minimal catch up growth.

#### **ASSESSMENT**

Anna was reviewed by my predecessor. Her weight at 28.32kg followed the 9<sup>th</sup> centile whilst her height measured at 146.5cm tracked between the 50-75<sup>th</sup> centile. Her BMI was plotted below the 0.4<sup>th</sup> centile and her weight for height was calculated as 75.5% (Grade 2 acute malnutrition Waterlow).

It was a concern for mum that Anna was starting to develop **anxiety and body image.** A nutritional **diagnosis** 

of faltering growth and stunting due to low dietary intake as evidenced by anthropometry and dietetic assessment was formed.

The opportunity to be involved in a 28 day randomised controlled nutrition trial was discussed with and accepted by both Anna and her mum and Anna was randomised to receive the trial product which was the high energy density, low volume oral nutritional supplement for children, known as Fortini Compact Multi Fibre. All previous supplements were discontinued and Anna was advised to take the trial product once each day to provide her with 300kcal and 7g of protein.

#### **REVIEW**

After just one month on Fortini Compact Multi Fibre, Anna experienced a significant weight gain of 1.5kg (5% body weight). For the first time, her weight increased to the 25<sup>th</sup> centile and her BMI tracked upwards to the 2<sup>nd</sup> centile. When compared to previous interventions, Fortini Compact Multi Fibre provided Anna with more nutrients in less volume.

Anna found the smaller volume more manageable and the oral nutritional supplement in general is more palatable despite the higher energy density. Her compliance increased and her weight subsequently improved. Additionally mum reported that her appetite slowly increased at mealtimes and overall her diet became healthier as she was less reliant on sugary snacks to meet her nutritional needs. Anna continued on Fortini Compact Multi Fibre following the end of the trial.

#### TWO MONTH REVIEW

Anna's weight continued to track along the 25<sup>th</sup> centile, while her height tracked slightly upwards towards the 75<sup>th</sup> centile. Considering her parents' tall stature, and likely genetic disposition, the dietetic goal agreed was to maintain her weight and height

along current centiles (within two centiles). **Overall it was reported that Anna had developed a more positive body image since gaining weight** and it was agreed that she would continue on Fortini Compact Multi Fibre until her 12<sup>th</sup> birthday with a view to discontinuing nutritional supplements at this stage.

#### **CONCLUSION**

As a dietitian, having access to a product which is high in energy yet low in volume without compromising on taste is essential, particularly for patients like Anna who struggled with compliance to nutritional supplements in the past. Her increased appetite at mealtimes and healthier snack choices improved the nutritional adequacy of her diet, which was a reassurance to her mum. After seven years of trialling a range of supplements, Fortini Compact Multi Fibre has enabled Anna to achieve the desired weight gain. For the first time, the dietetic team are considering taking her off supplements as the dietetic goal has been reached.



# **NOTES**



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