Nestlé Health Science CPD Programme

A dietitian's journey of conducting an acceptability study for Isosource® Junior Mix as part of a liquidised feeding regimen.

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Introduction.

Isosource® Junior Mix (Nestle Health Science) is a nutritionally complete 1.2kcal/mL ready to hang enteral tube feed. It contains ingredients derived from real food (vegetable and chicken powder, peach puree and concentrated orange juice). The part-blended feed is available throughout Europe in 500ml RTH bottles and can be stored in the same way as other commercial tube feeds.

Background.

The prevalence of children on home enteral nutrition is increasing[1] and homemade liquidised diets (also referred to as blended diets) are becoming popular amongst parents and caregivers[2]. The British Dietetic Association updated tube feeding guidelines state that "dietitians can suggest blended diet as an option where they believe there to be potential physiological, social or emotional benefits to the tube-fed individual and their family". They have developed a risk assessment tool[4] to safely guide health care professionals on how to support parents, children or caregivers who wish to pursue liquidised diet feeding. It is important to understand what the perceived benefits of a liquidised diet are and to manage the expectations of families when discussing the initiation of a blended diet.

Some small studies have shown improvements in stool consistency and reflux on a blended diet.[5] The importance of the social aspects of blended diets have also been documented by families in qualitative literature[1]. Some families and care givers feel blended diets are more effective than formula feeding[5].

In view of the improvements seen, Nestlé Health Science approached health care professionals to trial a new formula called Isosource Junior Mix.

Acceptability study.

A busy London hospital's paediatric outpatient department agreed to take part in a prospective acceptability study of Isosource® Junior Mix. The Trust's R&D team were informed and agreed to support the study.

Two participants were recruited for the study.

Study Aim

To assess the acceptability and gastrointestinal tolerance of the new enteral formula amongst participants

Study duration: 7 days

Study preparation

In my role as study dietitian:

- Assess the participant's eligibility to take part in the study, including feeding route (those fed via jejunostomy were excluded), dietary and cultural preferences and allergies based on the exclusion criteria
- Work with families and children to match their current nutritional requirements and feeding regimen to the new 1.2kcal/ml to ensure nutritional requirements were met with minimal changes to current feeding regimen
- Once the 7-day feeding regimen was agreed, order a one -time delivery of the feed direct to the participants' home

During the study

- Support suitable participants throughout the seven-day study (an enjoyable and new experience for me)

- Intake and tolerance diaries were provided by the study team as well as templates for GPs and consultants - I sat with families and children and showed them how to fill in the diaries and they were given time to ask questions

Results.

Two participants were recruited for the study.

Child A.
Child A discontinued the study as they became unwell. It's difficult to know whether this was feed related, due to always vomiting when the feed was changed, or an infective cause, as there are no further details.

Child B.
Presented with particularly interesting results:

- ✓ Parents of this child reported, after 5 days on Isosource® Junior Mix, improved concentration noticed too by both the child's teacher and speech and language therapist.
- ✓ Improved eye contact was also noticed
- ✓ The parents were therefore keen to continue with this feed and to explore blended diets in the future.
- ✓ Case studies have reported the "developmental progress" in children on a blended diet[1].

Conclusion.

The use of liquidised diets, or an enteral feed with food-derived ingredients such as Isosource® Junior Mix, provides choice for parents and children. Having had quite a few children admitted to hospital on long-term blended diets at home, this type of feed may also be used safely during an acute admission, ensuring safety and nutritional adequacy while respecting choice of children and families.

Liquidised diets may not be suitable for all and risk assessment must be undertaken to ensure clinical effectiveness and safety. Regular monitoring and engagement with the healthcare team and dietitian is strongly advised. Commercial formulas are currently advised as first line and are nutritionally complete and safe for use. Isosource® Junior Mix with "real" food ingredients appears to be safe and effective. This may be a step towards routine provision of blended diets in the future.

In summary, I had a positive experience undertaking this acceptability study and as it has been approved by ACBS. I am happy to recommend Isosource® Junior Mix feed to parents and families wishing to consider this option.

The views and opinions within this article are of the authors.

References.

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