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**Citation:** Breaks, A., Smith, C., Bloch, S. & Morgan, S. (2018). Blended diets for gastrostomy fed children: A scoping review. *Journal of Human Nutrition and Dietetics*, 31(5), pp. 634-646. doi: 10.1111/jhn.12563

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**Table 2 Summary of Aims and Findings of the Studies**

| Author                 | Year of Publication | Aim                                                                                                                      | Finding                                                                                                                                                                                                                                                       |
|------------------------|---------------------|--------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sullivan, M. et al     | 2001                | To investigate levels of contamination in hospital prepared tube feeds                                                   | Commercial feeds from prefilled or closed systems are safest in terms of microbial contamination                                                                                                                                                              |
| Novak, P. et al        | 2002                | To gain perspective of MDT members on the issues surrounding BD                                                          | Balanced account of the pros and cons of BD from a range of perspectives                                                                                                                                                                                      |
| Sullivan, M.M. et al   | 2004                | To analyze the nutritional quality and viscosity of blenderized enteral tube feedings                                    | Hospital prepared blenderized enteral tube feedings give unpredictable levels of micro and macronutrients and The viscosity of the feed may be unsuitable for infusion through feeding tubes                                                                  |
| Mundi, M               | 2014                | To compare the force required to deliver a range of feeds with new EnFit system                                          | Homemade blended feed required most force and commercial 1kcal/ml fibre formula required the least                                                                                                                                                            |
| Hurt, R.T. et al.,     | 2015                | To learn more about the use of BD amongst home enteral nutrition population                                              | Most patients used BD as part of nutritional regime                                                                                                                                                                                                           |
| Waitzberg, D.L et al   | 2013                | To analyse BD in comparison to commercially prepared formula                                                             | Batches of BD cannot be guaranteed as being consistent. Energy levels were insufficient to meet needs. Increasing calorific content risks increasing viscosity                                                                                                |
| Johnson, T.W et al     | 2013                | To describe and evaluate all aspects of Bd with a real case                                                              | Balanced report and useful decision making tree                                                                                                                                                                                                               |
| Johnson, T.W et al     | 2015                | To elicit experiences of paediatric dietitians with BD in clinical practices                                             | 98% were positive about use of BD and 28% wanted more information about it. Parental request is the main reason for use                                                                                                                                       |
| Edwards, S. et al.,    | 2016                | Review of management, tube weaning and emotional support of tube fed children                                            | Limited evidence suggests blenderized tube feedings may reduce side effects in children with a fundoplication. Randomized controlled trials are needed to evaluate the effectiveness of blenderized tube feedings in children with and without fundoplication |
| O'Hara, C              | 2015                | Describe a case when BD resulted in scurvy in a child with multiple diagnoses                                            | Fussiness may be improved by BD but more serious deficiencies can occur so BD nutrition should be agreed by dietitian                                                                                                                                         |
| Jonkers-Schuitema, C.F | 2009                | To share basic sources of nutrients which can be used for homemade feeds and rules of preparation                        | Advised on equipment nutrient and hygiene issues                                                                                                                                                                                                              |
| Hurt et al             | 2016                | To examine the impact of the proposed new connector on a number of clinical areas including BD                           | ENFit design may negatively impact patients who use PEGs for venting, for delivery of medications and BD, compared to the current legacy system.                                                                                                              |
| Epp L et al            | 2016                | Study to assess the prevalence of the use of BD amongst members of the Oley Foundation                                   | Most patients use some BD, making it essential that clinicians expand their knowledge related to BD to appropriately care for this patient population                                                                                                         |
| Vermilyea S et al      | 2016                | Invited review to present the different methods of enteral nutrition (EN) access placement, maintenance, formula         | Whole EN 'process' should be regularly monitored by MDT                                                                                                                                                                                                       |
| Brown B et al          | 2014                | To inform clinicians of research regarding use of specialty formulas,                                                    | EN products do not have to undergo the 4-phase process for gaining FDA approval, as required for pharmaceutical agents. Standard formulas, however, are rarely studied, except when being compared with specialty formulas.                                   |
| Nowak-Copperman et al  | 2013                | To describe tube weaning programme                                                                                       | Hunger based weaning may be appropriate but a MDT approach including family and child are crucial                                                                                                                                                             |
| Seche G                | 2014                | To gain clinical perspective on feeding with Rett syndrome                                                               | Parents wanted more information about blended diets and blenders and issues to be aware of that may arise out of their need for high calorie diets                                                                                                            |
| Pentiuk S et al        | 2011                | To evaluate effect of BD diet on children with fundoplication                                                            | BD is an effective way of feeding these children and can lead to reduction in gagging and retching                                                                                                                                                            |
| Bobo E                 | 2016                | To summarize history of diets, and points to consider when using a BD                                                    | Despite EN policy stating commercial feeds should be used no RCT have evaluated BD vs Commercial formula                                                                                                                                                      |
| Campbell S             | 2006                | To summarise advances in tube feeding formulas in USA                                                                    | Describes the range of commercially available formulas and their benefits                                                                                                                                                                                     |
| Walia C et al          | 2016                | To provide advice to dietitians about advantages and disadvantages of BD including patient selection and recipe planning | Current literature on BD is mainly based on expert opinion and more research is required into this area                                                                                                                                                       |

|                              |      |                                                                                                                              |                                                                                                                                                                                            |
|------------------------------|------|------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| British Dietetic Association | 2013 | To provide advice to dietitians about BD and their professional duty                                                         | Dietitians can support families who wish to sue BD but cannot recommend the use                                                                                                            |
| Santos V et al               | 2009 | To evaluate nutritional quality of BD and growth parameters                                                                  | Despite inconsistent levels of macro nutrients and energy BD had no negative effect on patients' weight                                                                                    |
| Klek S et al                 | 2011 | To examine the effect of HEF on clinical outcomes                                                                            | Home nutrition support is up to 75% more cost effective than hospital or nursing home                                                                                                      |
| Samela K et al               | 2016 | To determine the effects of BD on children with intestinal failure                                                           | 100% transitioned to real food formula and it was well tolerated and improved stooling patterns                                                                                            |
| Mascarenhas M et al          | 2008 | To discuss optimal nutritional management of neurologically impaired child                                                   | Improved nutritional status is linked with improved QoL and health outcomes                                                                                                                |
| Jalali M et al               | 2009 | To assess levels of microbacterial contamination in hospital prepared blends                                                 | Microbial quality of majority of blenderised feeds are not within safety guidelines                                                                                                        |
| Fredstrom et al              | 1991 | To determine levels of fibre in different types of formula feeds                                                             | Fibre levels vary greatly and there is no ideal content, but changing from blenderised to soy polysaccharide fibre may be beneficial                                                       |
| Heimberger D.C et al         | 1985 | To provide a framework to evaluate products and assist clinicians in selecting most appropriate formula                      | Framework provided to simplify decision making and decrease patient cost                                                                                                                   |
| Anderson K et al             | 1984 | To quantify and analyse bacterial contamination of formulas                                                                  | Use of sterile nonmanipulated formulas in a closed administration set is recommended, along with routine, periodic bacteriologic surveillance of enteral feeding programs.                 |
| Shils M et al                | 1977 | To analyse the nutritional content of a range of commercial formulas                                                         | More comparative studies regarding efficacy of various formulas are required                                                                                                               |
| Brown S                      | 2014 | To describe how information was gathered and risk assessments developed to enable BD in hospice setting                      | Hospice was able to replicate care and support in the home thus enabling continued BD in the hospice environment                                                                           |
| Zettel S                     | 2016 | To describe approaches to planning a blended diet                                                                            | BD can be a viable option for some but need nutritional guidance                                                                                                                           |
| Amaral Felisio B et al       | 2012 | To evaluate nutritional value and make proposals to improve qualitative and quantitative aspects of BD in a hospital setting | Found significant losses of nutrients during processing and preparation and daily energy intake was insufficient                                                                           |
| Machado de Sousa L et al     | 2014 | To evaluate the quality of homemade BD analysing stability, viscosity, flow, pH, chemical and nutritional composition.       | Diets were inadequate in terms of macronutrients, but adequate for physical chemical aspects. Recommend using mixed formula and BD to meet nutritional requirements and psychosocial value |
| Martin, K. and Gardner, G    | 2017 | To review current practice in HEN with regard to current and future practice and highlight gaps in research                  | Due to trend towards BD, clinicians need to be informed about BD                                                                                                                           |
| Armstrong J et al            | 2017 | To explore paediatric dietitians' perceptions and experiences of BD use.                                                     | Dietitians experienced significantly fewer issues with the use of BD in clinical practice compared with their self-reported apprehensions in the survey.                                   |
| Coad, J. et al.              | 2016 | Review evidence around BD                                                                                                    | May be benefits to BD but concerns still remain                                                                                                                                            |
| Boullata, J et al            | 2017 | Provide recommendations for safe practice around enteral nutrition                                                           | Registered dietitians should be involved in development of the BD composition for patients                                                                                                 |
| Escuro A and Hummell A       | 2016 | Evaluate different enteral formulas                                                                                          | Careful evaluation of formulas required in conjunction with available scientific and research studies prior to routine use in clinical practice.                                           |
| Guenter P and Lyman B        | 2016 | To examine benefits and challenges for Enfit                                                                                 | Need open dialogue between manufacturers, clinicians and patients for success                                                                                                              |
| Thiyagesh V and Hill H       | 2016 | Single case study to describe impact of BD                                                                                   | Improved tolerance and reduction in reflux and increase weight gain                                                                                                                        |
| Thomas S                     | 2016 | To develop a protocol around administering BD in schools                                                                     | Package of care and protocol developed                                                                                                                                                     |