Your Outreach Librarian – Helen Pullen

Whatever your information needs, the library is here to help. Just email us at library@uhbristol.nhs.uk

Outreach: Your Outreach Librarian can help facilitate evidence-based practice for all in the team, as well as assisting with academic study and research. We also offer one-to-one or small group training in literature searching, critical appraisal and medical statistics. Get in touch: library@uhbristol.nhs.uk

Literature searching: We provide a literature searching service for any library member. For those embarking on their own research it is advisable to book some time with one of the librarians for a one-to-one session where we can guide you through the process of creating a well-focused literature research. Please email requests to library@uhbristol.nhs.uk

Training Calendar 2018

All sessions are one hour

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<th>February (12.00-13.00)</th>
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<td>1st (Thu)</td>
<td>Literature Searching</td>
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<td>9th (Fri)</td>
<td>Critical appraisal</td>
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<td>12th (Mon)</td>
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<td>20th (Tue)</td>
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<td>28th (Wed)</td>
<td>Critical appraisal</td>
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<td>20th (Tue)</td>
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<td>9th (Mon)</td>
<td>Critical appraisal</td>
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<td>17th (Tue)</td>
<td>Statistics</td>
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<td>25th (Wed)</td>
<td>Literature Searching</td>
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Journal Tables of Contents

Click on the journal title (+ Ctrl) for the most recent tables of contents.

If you would like any of the papers in full text then please email the library: library@uhbristol.nhs.uk

**American Journal of Clinical Nutrition**
January 2018, Volume 107, Issue 1

**Journal of Human Nutrition & Dietetics**
February 2018, Volume 31, Issue 1

**Journal of the Academy of Nutrition and Dietetics**
February 2018, Volume 118, Issue 2

**Gut**
March 2018, Volume 67, Issue 3

**BMJ**
Current articles

**Lancet**
February 10 2018, Volume 391, Issue 10120
Library Clinic

Stop by and find out more about our services. We will be here to answer any questions you may have!

March 7th: **Canteen (Level 9, BRI) 12.00-14.00**

March 19th: **Welcome Centre, BRI 10.00-16.00**

April 4th: **Foyer, Education Centre 12.00-14.00**

April 11th: **Foyer, St Michael’s Hospital 12.00-14.00**

May 2nd: **Canteen (Level 9, BRI) 12.00-14.00**

June 6th: **Terrace (Level 4, Education Centre) 12.00-14.00**

June 19th: **Welcome Centre, BRI 10.00-16.00**

July 3rd: **Welcome Centre, BRI 10.00-16.00**

July 4th: **Canteen (Level 9, BRI) 12.00-14.00**

August 8th: **Foyer, Education Centre 12.00-14.00**

August 29th: **Foyer, St Michael’s Hospital 12.00-14.00**

September 5th: **Canteen (Level 9, BRI) 12.00-14.00**

September 11th: **Welcome Centre, BRI 10.00-16.00**

October 3rd: **Terrace (Level 4, Education Centre) 12.00-14.00**

November 7th: **Canteen (Level 9, BRI) 12.00-14.00**

December 5th: **Foyer, Education Centre 12.00-14.00**

December 11th: **Welcome Centre, BRI 10.00-16.00**
### Updates

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<tr>
<th><strong>NICE National Institute for Health and Care Excellence</strong></th>
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<td><strong>Guidelines for the provision and assessment of nutrition support therapy in the pediatric critically ill patient</strong> : Society of Critical Care Medicine and American Society for Parenteral and Enteral Nutrition  [PDF]</td>
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<tr>
<td>01 July 2017 - Publisher: Society of Critical Care Medicine</td>
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<tr>
<td>Pediatric Critical Care Medicine: July 2017 - Volume 18 - Issue 7 - p 675–715 1 month and 2-3 days in a PICU admitting medical, surgical, and cardiac patients. In total, 2032 citations were...</td>
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<th><strong>Cochrane Library</strong></th>
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<th><strong>UpToDate®</strong></th>
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### Other – NHS ‘Behind the Headlines’, Guidance etc

| **Over half of 12-24 year olds have side effects from energy drinks, survey reports**  |
| Tuesday January 16 2018  |
| **Sugary fruit juices and drinks linked to childhood asthma**  |
| Wednesday December 20 2017  |
Database Articles

Below is a selection of articles related to paediatric nutrition that were recently added to the healthcare databases. If you would like any of the following articles in full text, or if you would like a more focused search on your own topic, then get in touch: library@uhbristol.nhs.uk

   **Author(s):** Ayers, Phil; Boullata, Joseph; Sacks, Gordon
   **Source:** Nutrition in clinical practice : official publication of the American Society for Parenteral and Enteral Nutrition; Feb 2018; vol. 33 (no. 1); p. 46-52
   **Publication Date:** Feb 2018
   **Publication Type(s):** Journal Article Review
   **PubMedID:** 29323437
   **Abstract:** Parenteral nutrition (PN) is an important therapeutic modality used for a variety of indications in adults, children, and infants. PN is a complex, high-alert medication that requires appropriate education and ongoing competency assessment to ensure a safe process. PN is not recognized by many organizations as a medication, which leads to underreporting of errors. This article will provide important insight and recommendations to promote a safe PN process.
   **Database:** Medline

   **Author(s):** Alhagamhmad, Moftah H
   **Source:** Nutrition in clinical practice : official publication of the American Society for Parenteral and Enteral Nutrition; Jan 2018
   **Publication Date:** Jan 2018
   **Publication Type(s):** Journal Article Review
   **PubMedID:** 29323428
   **Abstract:** Crohn's disease (CD) is a chronic condition that affects the gut and has adverse effects on growth and development. There is a global increase in the incidence and prevalence rates, and several factors are believed to contribute to this rise, including dietary habits. In contrast, the use of enteral nutrition (EN) as an exclusive source of nutrition is increasingly becoming the preferred induction treatment of pediatric CD patients in part to address the nutrition complications. However, EN therapy is considered less effective in adults with CD. A better understanding of the molecular mechanisms of enteral therapy will help improve the clinical management of CD. It is increasingly becoming evident that the therapeutic utility of EN is in part due to the reversal of the
microbial changes and the direct immunomodulatory effects. Moreover, there is a potential
tendency for enhancing the efficacy of EN therapy by improving the palatability of the given
formulas and, more important, by magnifying the anti-inflammatory properties. Recent observations
have shown that the immunomodulatory effects of EN are mediated at least in part by blocking
nuclear factor-xB. Furthermore, it is likely that several ingredients of EN contribute to this activity, in
particular glutamine and arginine amino acids. In addition, manipulating the composition of EN
therapy by altering concentrations of the key ingredients is found to have the potential for more
efficient therapy. In this review, the underlying mechanisms of EN actions will be discussed further
with a focus on the potential methods for enhancing the efficacy.

Database: Medline

Author(s): Yi, Dae Yong
Source: Pediatric gastroenterology, hepatology & nutrition; Jan 2018; vol. 21 (no. 1); p. 12-19
Publication Date: Jan 2018
Publication Type(s): Journal Article Review
PubMedID: 29383300
Available at Pediatric gastroenterology, hepatology & nutrition - from Europe PubMed Central - Open Access
Available at Pediatric gastroenterology, hepatology & nutrition - from nih.gov
Abstract: Pediatric patients require specialized attention and have diverse demands for proper
growth and development, and thus need a different approach and interest in nutritional assessment
and supply. Enteral nutrition is the most basic and important method of nutritional intervention, and
its indications should be identified. Also, the sites, modes, types, and timing of nutritional
intervention according to the patient’s condition should be determined. In addition, various
complications associated with enteral nutrition supply should be identified, and prevention and
treatment are required. This approach to enteral nutrition and proper administration can help in the
proper growth and recovery of pediatric patients with nutritional imbalances or nutritional needs.
Database: Medline

4. Comparison of the finger-feeding versus cup feeding methods in the transition from gastric to
oral feeding in preterm infants.
Author(s): Moreira, Cláudia M D; Cavalcante-Silva, Regina P G V; Fujinaga, Cristina I; Marson,
Francine
Source: Jornal de pediatria; 2017; vol. 93 (no. 6); p. 585-591
Publication Date: 2017
Publication Type(s): Comparative Study Randomized Controlled Trial Journal Article
PubMedID: 28711457
Available at Jornal de pediatria - from EBSCO (MEDLINE Complete)
Abstract: OBJECTIVES
To assess the finger-feeding technique when compared with the cup feeding method during the early stage of preterm infant feeding transition regarding milk loss, milk ingestion period, and complications.

METHODS
Experimental, randomized, prospective study including 53 preterm infants with gestation age 28 points in the Oral Feeding Readiness Assessment Scale. The preterm babies were randomized to be included in the control group, which underwent the feeding transition using a cup or in the experimental group, which used the finger-feeding technique. The analysis of data was performed using Student's t-test to evaluate differences between mean values of the appointed variables, and Fischer's test for categorical variables; the asymmetric variables were assessed by the Kruskal-Wallis ANOVA test.

RESULTS
When compared with the control group, the experimental group showed lower milk loss, longer milk ingestion time, and a lower frequency of complications during feeding. The significance level was set at 5%, with a confidence interval of 90%.

CONCLUSION
The finger-feeding technique was shown to be a better feeding transition method regarding efficacy when compared with cup feeding method, due to lower milk loss and fewer complication episodes.

Database: Medline


Author(s): Chandra, Raghav; Kesavan, Anil
Source: Clinical journal of gastroenterology; Dec 2017
Publication Date: Dec 2017
Publication Type(s): Journal Article Review
PubMedID: 29280097

Abstract: Pediatric short bowel syndrome (SBS) is a serious condition which occurs in children with congenital or acquired reduction in length of the small intestine. SBS results in excessive fluid loss, nutrient malabsorption, electrolyte abnormalities, increased susceptibility to infections, parenteral nutrition associated complications and affects weight gain and growth. In children, SBS is debilitating and uniformly fatal without treatment. The primary goal of treatment is to restore enteral autonomy and reduce long-term dependence on parenteral support by increasing the absorptive potential of the remnant intestine. In this review, the medical and surgical management of SBS including pharmacologic agents, parenteral nutrition, dietary strategies, surgical lengthening procedures, and small bowel transplant will be discussed.

Database: Medline

6. The validity of dietary assessment methods to accurately measure energy intake in children and adolescents who are overweight or obese: a systematic review.

Author(s): Walker, Jacqueline L; Ardouin, Stephen; Burrows, Tracy
Source: European journal of clinical nutrition; Dec 2017
Publication Date: Dec 2017
Publication Type(s): Journal Article Review
The accurate assessment of energy intake in children and adolescents is an important outcome measure for clinical and population-based research. This systematic review aimed to determine the validity of dietary assessment methods to measure energy intake in children and adolescents who are classified as overweight or obese by comparison with doubly labelled water. Five electronic databases were searched using keywords. Of the 5263 papers identified, seven papers describing six studies met the inclusion criteria. Studies were included in the review if participants were classified as overweight or obese, aged 0-18 years old, if they estimated energy intake via a dietary assessment method and if they compared this to total energy expenditure measured via the doubly labelled water method. All studies were cross-sectional in nature, and each used one dietary assessment method, including 14-day food record (FR; n = 1), 24 h dietary recall (n = 1), 8-day FR (n = 1), 9-day FR (n = 1), 3-day FR (n = 1) and diet history interview (n = 1). Sample sizes ranged from 9 to 59 participants, with the majority of studies including less than 30 participants (n = 4). Mis-reporting was evident in all of the studies, with under-reporting (n = 5) more frequent than over-reporting (n = 1). Findings from this review suggest that a 24-h dietary recall and diet history interview were the most accurate methods at the group level for children aged 4-14 years, where the parent or combined child and parent were the reporters.

Database: Medline

7. Dietary Therapies in Pediatric Inflammatory Bowel Disease: An Evolving Inflammatory Bowel Disease Paradigm.

Author(s): Lane, Erin R; Lee, Dale; Suskind, David L

Source: Gastroenterology clinics of North America; Dec 2017; vol. 46 (no. 4); p. 731-744

Publication Date: Dec 2017

Publication Type(s): Journal Article Review

PubMedID: 29173518

Abstract:Nutrition has long been recognized as a critical component in the treatment of pediatric inflammatory bowel disease (IBD). Formerly, nutritional interventions have focused on targeting improved weight gain and linear growth, as well as correction of micronutrient deficiencies. Recently, there has been growing interest and study of dietary interventions for induction and maintenance of remission. In addition to exclusive enteral nutrition, successes have been achieved with specific exclusion diets. This article evaluates current literature regarding the role of diet and nutrition in pathogenesis of disease, as well as the role of diet as primary therapy for pediatric IBD.

Database: Medline

8. Epidemiology, management and outcome of ultrashort bowel syndrome in infancy.

Author(s): Batra, Akshay; Keys, Simon Charlie; Johnson, Mark John; Wheeler, Robert A; Beattie, Robert Mark

Source: Archives of disease in childhood. Fetal and neonatal edition; Nov 2017; vol. 102 (no. 6); p. F551
Publication Date: Nov 2017
Publication Type(s): Journal Article Review
PubMedID: 28866623

Available at Archives of disease in childhood. Fetal and neonatal edition - from BMJ Journals
Available at Archives of disease in childhood. Fetal and neonatal edition - from BMJ Journals - NHS
Available at Archives of disease in childhood. Fetal and neonatal edition - from nih.gov

Abstract: Ultrashort bowel syndrome (USBS) is a group of heterogeneous disorders where the length of small bowel is less than 10 cm or 10% of expected for the age. It is caused by massive loss of the gut which in the neonatal period can be a result of vanishing gastroschisis or surgical resection following mid-gut volvulus, jejunoileal atresia and/or extensive necrotising enterocolitis. The exact prevalence of USBS is not known although there is a clear trend towards increasing numbers because of increased incidence and improved survival. Long-term parenteral nutrition (PN) is the mainstay of treatment and is best delivered by a multidisciplinary intestinal rehabilitation team. Promoting adaptation is vital to improving long-term survival and can be achieved by optimising feeds, reducing intestinal failure liver disease and catheter-related bloodstream infections. Surgical techniques that can promote enteral tolerance and hence improve outcome include establishing intestinal continuity and bowel lengthening procedures. The outcome for USBS is similar to patients with intestinal failure due to other causes and only a small proportion of children who develop irreversible complications of PN and will need intestinal transplantation. In this review, we will summarise the available evidence focusing particularly on the epidemiology, management strategies and outcome.

Database: Medline

9. Assessment of Micronutrient Status in Critically Ill Children: Challenges and Opportunities.

Author(s): Dao, Duy T; Anez-Bustillos, Lorenzo; Cho, Bennet S; Li, Zhilling; Puder, Mark; Gura, Kathleen M

Source: Nutrients; Oct 2017; vol. 9 (no. 11)
Publication Date: Oct 2017
Publication Type(s): Journal Article Review
PubMedID: 29143766

Available at Nutrients - from Europe PubMed Central - Open Access
Available at Nutrients - from nih.gov

Abstract: Micronutrients refer to a group of organic vitamins and inorganic trace elements that serve many functions in metabolism. Assessment of micronutrient status in critically ill children is challenging due to many complicating factors, such as evolving metabolic demands, immature organ function, and varying methods of feeding that affect nutritional dietary intake. Determination of micronutrient status, especially in children, usually relies on a combination of biomarkers, with only a few having been established as a gold standard. Almost all micronutrients display a decrease in their serum levels in critically ill children, resulting in an increased risk of deficiency in this setting. While vitamin D deficiency is a well-known phenomenon in critical illness and can predict a higher
need for intensive care, serum concentrations of many trace elements such as iron, zinc, and selenium decrease as a result of tissue redistribution in response to systemic inflammation. Despite a decrease in their levels, supplementation of micronutrients during times of severe illness has not demonstrated clear benefits in either survival advantage or reduction of adverse outcomes. For many micronutrients, the lack of large and randomized studies remains a major hindrance to critically evaluating their status and clinical significance.

**Database:** Medline
Library Opening Times

Staffed hours: 8am-5pm, Monday to Friday
Swipe-card access: 7am-11pm, seven days a week

Level 5, Education and Research Centre
University Hospitals Bristol

Contact your Outreach Librarian:

Helen Pullen

library@uhbristol.nhs.uk