There is no “one formula fits all” product available as pediatric renal patients’ nutritional requirements vary widely. Currently, the formula toolkit for dietitians practising in pediatric nephrology is extremely limited. Using formulations currently available, customization is needed in order to achieve ideal energy, protein, electrolytes, volumes and concentrations. In the past, formula calculations were time-consuming exercises done manually using pen, paper and calculators involving large potential for errors.

In order to increase the accuracy and efficiency, dietitians at BC Children’s Hospital created an electronic version of the original manual worksheet. The originally spreadsheet was developed based on a few of the most consistently used formulae and their respective nutritional compositions. Overtime, additional features such as patient’s weight, concentrations and total volumes have been added.

Nutritional intake plays an integral role in the medical management of infants and children with kidney disease. At BC Children’s Hospital, development of a standardized tool to quickly, accurately customize feeds to meet the unique individual nutrition requirements has significantly improved nutrition prescription in our practise.

The Pediatric Renal Formula Calculator also provides a meaningful tool to communicate with team members about the nutritional content of patients’ current feeds/formulae.

As the range of commercial formulations change and evolve, this calculator requires careful attention to, and regular updating of, availability and formulations of commercially available.

This invaluable tool can be reproduced by pediatric renal dietitians practising in different jurisdictions internationally by adding and/or substituting regionally available product formulations into the excel spreadsheet.

**BACKGROUND**

**PEDIATRIC RENAL FORMULA CALCULATOR IN PRACTISE**