

## Other

### **Developing and utilizing an algorithm for incorporating new evidence into practice**

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**Introduction:** Change in practice can result from a recommendation(s) in a practice guideline, a systematic review or meta-analysis of research. New evidence can change practice recommendations and/or the strength of evidence that can impact dietetic practice. The volume of nutrition research published each year makes it challenging to identify the best approach to systematically identify and incorporate new research into practice.

**Objectives:** Practice questions are the backbone of Practice-based Evidence in Nutrition - PEN® System, and the answers to these questions provide recommendations based on the best available evidence. To keep PEN content current, an algorithm was developed to explore options for updating content when new evidence becomes available, in a specified timeframe, and/or based on users' needs and topic priority.

**Methods:** A literature search identified how organizations update scientific reviews or practice guidelines. International representatives, including PEN evidence analysts and content developers, were utilized to inform the process.

**Results:** Peer-reviewed research described the creation of a checklist via a consensus-based process that is used by the Cochrane Collaboration to update systematic reviews. An algorithm was developed to update PEN content based on currency, relevance, quality and impact on dietetic practice. A process was established to rapidly incorporate systematic reviews (RISR) when new information enhances the credibility, quality and/or currency of PEN content. Examples are provided of how this process was utilized to develop and update PEN evidence in a variety of topic areas, including: nutritional supplements to improve immune function, nutrition interventions for lupus, fibre recommendations for cardiovascular disease, among others.

**Conclusions:** Incorporating new evidence to effectively support practice requires consideration based on criteria that includes utilizing limited resources. The algorithm, processes and checklist developed support evidence-based dietetic practice.

**Significance:** The algorithm could help organizations and programs identify and prioritize content to be included in developing and/or updating nutrition care processes.