



**PEN: Practice-based Evidence in Nutrition®**

**PEN® GRADE**

**International Review Panel**

**November 2017**

## PEN<sup>®</sup> GRADE Process

As part of the regular and ongoing review of evidence synthesis processes used in the PEN<sup>®</sup> system, in September 2015, the PEN<sup>®</sup> Content team made the decision to adopt the GRADE (Grading of Recommendations, Assessment, Development and Evaluation) approach to developing practice recommendations. In a [PEN eNews article](#) (November 2015) we state: “the GRADE approach is guided by leaders in evidence-based medicine with a desire to create a common evidence grading system that is credible, reproducible and understandable by guideline users everywhere”.

The PEN<sup>®</sup> GRADE process (Figure 1) relies heavily on the GRADE Handbook developed by the GRADE Working Group and PEN<sup>®</sup> authors and members of the International Review Panel are encouraged to review relevant sections of the handbook for further details: <http://gdt.guidelinedevelopment.org/app/handbook/handbook.html>

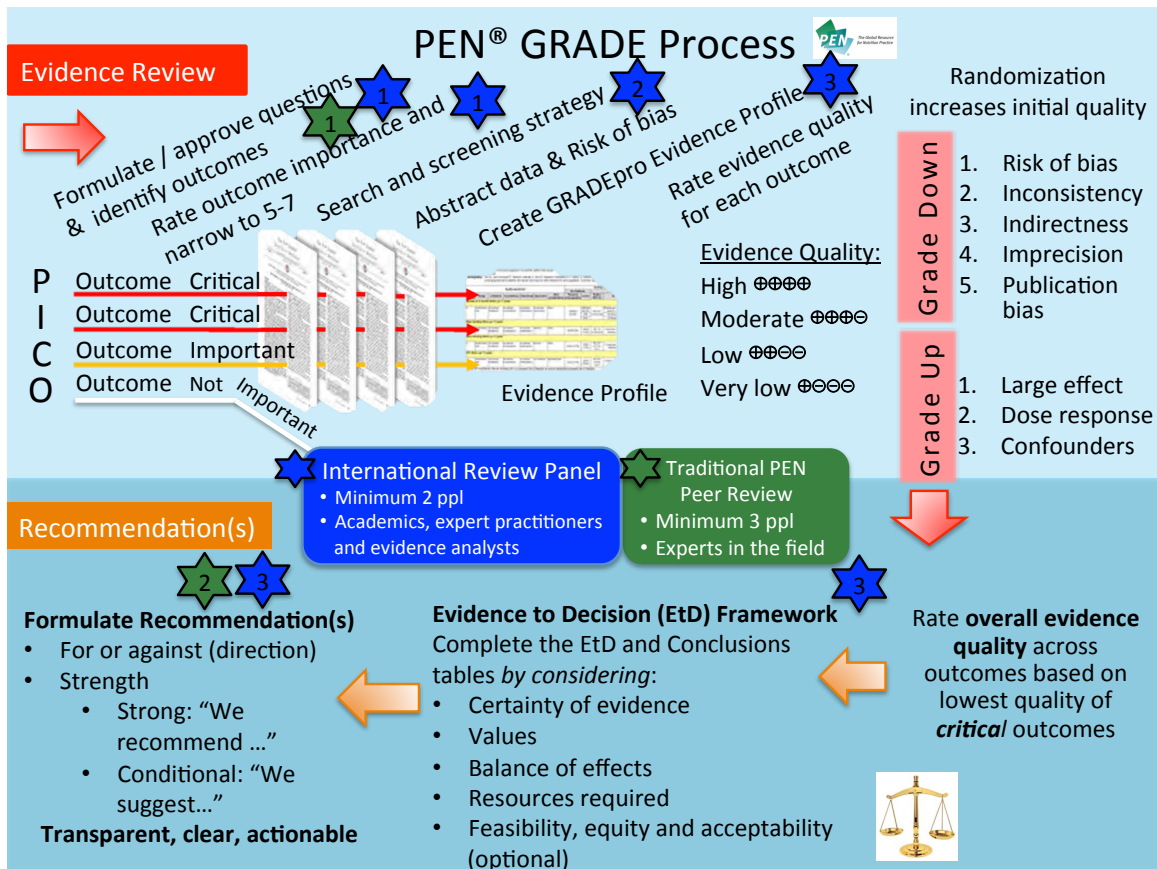


Figure 1: PEN<sup>®</sup> GRADE Process (Adapted from GRADE meeting, Edinburgh 2009). For a quick tutorial on the GRADE approach, see: <https://www.youtube.com/watch?v=OV0tk3TdkMo>

The PEN<sup>®</sup> GRADE process is comprised of 6 steps:

1. Develop the practice questions and outcomes of interest
2. Search the literature using a hierarchal approach to identify evidence
3. Summarize and assess the evidence for each outcome for an intervention or risk factor
4. Assess the quality of evidence for each outcome across studies – create an Evidence Profile Table
5. Summarize the evidence for all important factors to decision making (e.g. benefits and harms, values, resources) – complete the Evidence to Decision Framework
6. Formulate the recommendation noting the strength of the recommendation and the quality of evidence upon which it is based, and the associated Remarks.

## **Role of the International Review Panel (IRP) in developing practice questions for the PEN<sup>®</sup> system.**

★ **The IRP** is comprised of academic experts, practitioner experts with an advanced degree or evidence analysts. At least one person will be an academic and at least two partner countries will be represented. These panel members will be a resource for the author through the entire process of developing the PEN content from identifying the questions and outcomes to approving the final recommendations. The 3 main types of feedback requested are:

1. **Approval of the practice questions and importance of outcomes** - members will independently provide feedback on the author's questions, and recommended 'critical' and 'important' outcomes
2. **Feedback on search strategy and literature retrieved** - review and provide feedback on the search strategy and articles retrieved
3. **Review the overall quality of evidence and Recommendations** – review the Evidence Profile tables for each outcome and Evidence to Decision Tables. Provide feedback to the author on written Recommendations, Remarks, Summary of Evidence and Evidence to Decision Summary

An IRP member will be listed in the PEN<sup>®</sup> system as a co-author

Reminder – you can include your contribution to the PEN<sup>®</sup> system on your curriculum vitae. In many jurisdictions contributing to the PEN<sup>®</sup> system qualifies for continuing education credits towards competency attestation or ongoing credentialing.

### **Related Tools, Resources and Learning Materials**

Guidance on how to interpret the Evidence Profiles and work through the Evidence-to-Decision framework, is included in these short video tutorials:

- Summarizing evidence using the Evidence Profile table:  
<https://www.youtube.com/watch?v=hxptlg6ilzU>
- Making recommendations using the Evidence to Decision framework:  
<https://www.youtube.com/watch?v=iGVEdNa1xFY>
- Strong and conditional recommendations: <https://www.youtube.com/watch?v=0ifM01mcewE>

### **Time Commitment** (roughly estimated)

This will depend on the number of questions, amount of literature etc. It also depends on whether one has an understanding of the GRADE process or if one plans to do more to understand this process other than review the basic materials indicated above.

### **Estimate for Core Group members of the IRP:**

1. Initial teleconference call to discuss questions, outcomes and review process - 1 hour
2. Review search criteria and literature retrieved – 15-30 mins per question
3. Review evidence analysis and draft of GRADE recommendation - 2-3 hours per question
4. Possible additional discussion / review of recommendation - 1 hour per question

This would take place over a period of 4-6 months with an expectation that one would provide their review within 4 weeks of receiving material.

Another way to look at it is approximately 2 hours / week for 4 to 6 months for a complete Knowledge Pathway of approximately 10 questions.