

**Evidence Synthesis:** refers to the process of gathering and analyzing past information for a particular topic, possibly making a decision of some kind

- Helps to organize existing info in a useable manner, compare the findings of smaller studies, examine different conditions for a result, show a need for future studies, and demonstrate certain discrepancies between various articles

**Types:**

- **Narrative Review**
  - Analyzes some of literature and provides interpretation based on only expert's knowledge
- **Systemic Review** (Rigorous, but Timely and Tenuous) – 42 to 58 Weeks
  - Interpret and synthesize existing information, qualitative research, and possibility for future research – answers questions of diagnosis, qualitative, etc.
  - **Meta-Analysis:** defined by using statistics to gather data from various studies together and create a quantitative summary
  - **Scoping Review** and **Evidence Map** give a preliminary view of information and studies existing based on particular question
  - **Length of Time:** Varies according to the complexity of the study as well as focus given towards it
  - **Team:** Multiple roles that help with various tasks for the study and can be filled by the same person

**Steps:**

- *Prepare Your Topic:* PICO(D) – Talk to others to evaluate your question
- *Search and Screen:* Cast a wide net to find any relevant information – **Publication Bias** and **Reporting Bias**
- *Extract Data:* Pull info that will help answer question – Chance at finding inconsistencies
- *Analyze and Synthesize:* Evaluate the organized the data and make interpretations
- *Report Your Findings:* Write a report of the conclusions made and steps taken

## EvSynth Module Notes

### Omega-3 Fatty Acids:

- Systematic Review helped to reveal that taking this product does not actually lead to lower chances of a heart attack

### Obesity and C-Sections:

- By combining data from several source, researchers were able to determine the specific value that overweight, obese, and severely obese women would more likely have to undergo a C-Section.

### RAS Treatment:

- The lack of evidence supports the conclusion made that more research needs to be done on this topic
- Systematic Review is Wrong:
  - There's no available research on specific topic
  - Lack of existing research
  - Question can't be answered in this manner

If there isn't enough existing information on a topic, it is difficult to produce a comprehensive systematic review. Important to check beforehand.