



### **Evidence-Based Practice**

## Regulatory and Professional Obligations for RDs



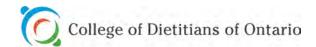
**Science** 



+ Client Input



+ RD Practice





Section 1. What is evidence-based practice?

Section 2: Evidence-Based Practice in Changing Dietetic Environments.

Section 3: Integrating Evidence into RD Practice: The 5-Step EBP Model for RDs.

Illustration: <u>5-Step EBP Model</u>

EBP Model Step 1: Ask

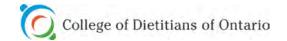
EBP Model Step 2: Access

EBP Model Step 3: Appraise

EBP Model Step 4: Act

EBP Model Step 5: Assess

Section 4: Summary





### Section I

### What is Evidence-Based Practice?

- Scientific Research & Theory
- Client's Contribution
- RD Practice Experience and Wisdom

Evidence

### **Practice**

Effectively integrating evidence into dietetic practice.

Ensuring public safety and client-centred services

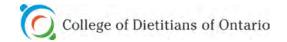
Public



### A common definition of evidence-based practice

"...the conscientious, explicit & judicious use of current best evidence in making decisions about the care of individuals (clients)"

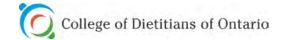
(Sackett 1997)



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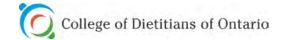
### Dietitians of Canada (2012)

"Evidence-based decision-making refers to making decisions that affect [client] patient care based on the best available evidence"



### College of Dietitians of Ontario, 2012

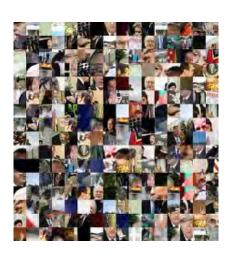
"Evidence-based practice is using the best evidence to balance anticipated benefits and risks to support decisions for optimizing client-centred services."





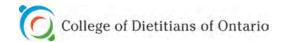


Science



+ Client Input + RD Practice







### Section II

### Evidence-Based Practice in Changing Dietetic Environments.

- Scientific Research & Theory
- Client's Contribution
- RD Practice Experience and Wisdom

Evidence

### Practice

RD professional & regulatory obligations for EPB including keeping current, self-assessment and professional development.

EBP ensures public safety and client-centred services

**Public** 



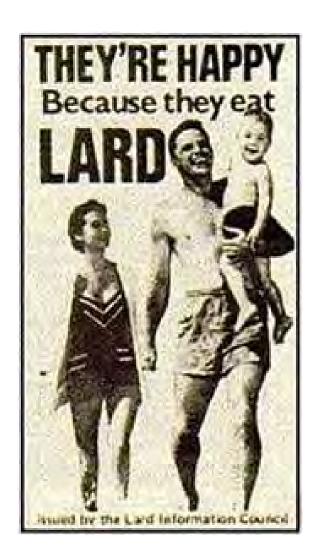
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# Evolving Changing Advancing











## Eggs versus the Double Down: Guess who wins?

**CARLY WEEKS** 

The Globe and Mail Nov. 01 2010,
It turns out that one egg yolk
could be more harmful to
those at risk of a heart attack
or stroke than an entire
Double Down sandwich,
according to a new report
from Canadian researchers at
the University of Western
Ontario and Toronto's St.
Michael's



## Self-Assessment Continuing Education Professional Development

Regulated Health Professions Act Quality Assurance Regulation

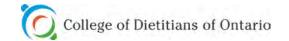


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### **Reflective Questions**

What does evidence-based practice mean for you?

What are you doing to keep abreast of scientific information in your area of dietetic practice?





### Section III

### Integrating Evidence into Dietetic Practice

- Scientific Research & Theory
- Client's Contribution
- RD Practice Experience and Wisdom

Evidence

### Practice

The 5-Step EBP Model for RDs helps integrate evidence into dietetic practice.

EBP ensures public safety and client-centred services.

Public





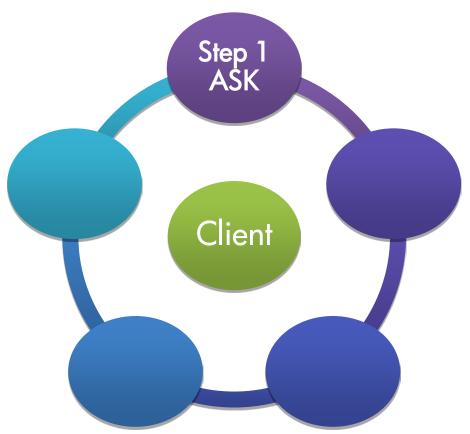
### 5-Step EBP Model for RDs



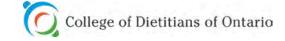
(Gilgun 2005; Spring 2007; Smith 2008; Fischer & Orme 2009; Mazurek Melnyk 2010)



## 5-Step Evidence-Based Model Step 1: Ask Focused Questions



(Gilgun 2005; Spring 2007; Smith 2008; Fischer & Orme 2009; Mazurek Melnyk 2010)





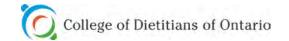
### **PICO Model**

## Problem or Population or Client Intervention

Comparison

Outcome

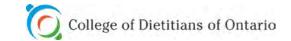
(UMN 2007; Purdue 2012)



### **PICO Model**

- Problem or population of client Who or What? Describe a group of clients similar to your own.
- ntervention/exposure/ maneuver How? What intervention are you considering?
- Comparison What is the main alternative? (If appropriate)?
- Outcome What are you trying to accomplish, measure, improve, effect?

(UMN 2007; Purdue 2012)





## PICO Case Scenario Elderly suffering from bedsores

Population: Elderly or aged

ntervention: Nutrition supplement

Comparison: None

Outcome: Reduction in incidence and severity of bed sores

### Question:

"What nutrition interventions reduce the incidence and severity of bed sores in elderly residents of LTC facilities?"

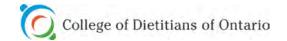


### **Reflective Question**

Using PICO, determine whether the dietitian in the scenario below is using evidence-based practice.

"I have read many articles and strongly believe a vegan diet is the key to keep us healthy and reduce heart disease and obesity in our society.

I would like to promote this diet and consider it unethical to recommend anything but a vegan diet to my clients."





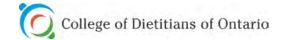
### PICO Identifies Gaps for Asking a Focused Question

**Population:** The RDs client population and age group for heart disease and obesity is not specified.

Intervention: Administering a vegan diet to all clients.

Comparison: It is unclear, based on the information given, whether comparisons were made to other diets to evaluate the benefits of a vegan diet (e.g., Canadian Food Guide, non-vegan diet, healthy heart diet or diet Bariatric surgery).

Outcome: Unclear because the population information is too vague and too broad.



### PICO Case Scenario: Vegan Diet

Using the information below, develop an answerable question that will help conduct a more focused literature search.

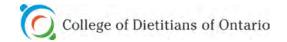
Population: individuals 18+ with cardio vascular disease

**Intervention:** vegan diet

**Comparison:** Canadian Food Guide and other vegetarian diets

Outcome: reduction of cardio-vascular disease and increased health and wellness

(UMN 2007; Purdue 2012)

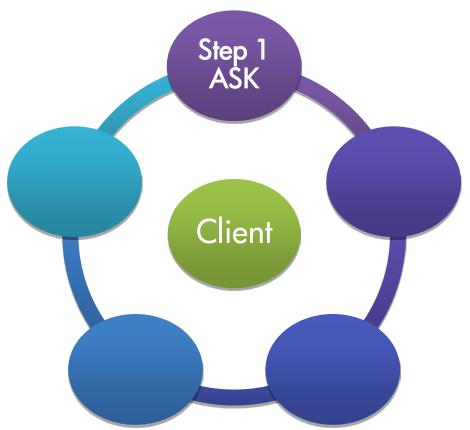


### PICO Case Scenario: Vegan Diet Aswerable Question

Is there a significant reduction in cardiovascular disease when adults suffering from the disease are treated with a vegan diet in comparison to other vegetarian or healthy heart diets?



### 5-Step Evidence-Based Practice Model Step 1: Ask Focused Questions



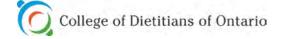
(Gilgun 2005; Spring 2007; Smith 2008; Fischer & Orme 2009; Mazurek Melnyk 2010)



## 5-Step Evidence-Based Practice Model Step 2: Access Best Available Evidence

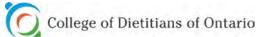


(Gilgun 2005; Spring 2007; Smith 2008; Fischer & Orme 2009; Mazurek Melnyk 2010)



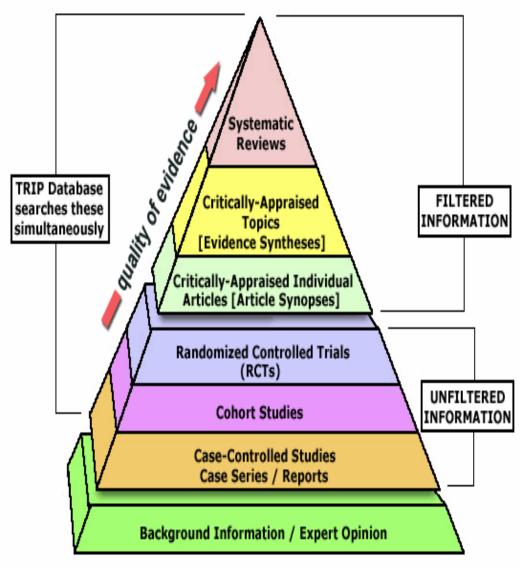




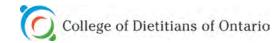




## Hierarchy of Scientific Evidence



(Gray & Gray 2002)



- Electronic Health Library
   <a href="http://www.ahpdf.ca/healthlibrary">http://www.ahpdf.ca/healthlibrary</a>
- PubMed
   http://www.ncbi.nlm.nih.gov/pubmed/



Cochrane Library
 http://www.thecochranelibrary.com/



- Wiley Online
   <a href="http://onlinelibrary.wiley.com/">http://onlinelibrary.wiley.com/</a>
- TRIP (Turning Research into Practice) Database <a href="http://www.tripdatabase.com/">http://www.tripdatabase.com/</a>



PEN (Practice based Evidence in Nutrition)
 <a href="http://www.pennutrition.com/">http://www.pennutrition.com/</a>

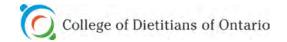






### **Use Reliable Websites for Research**







### Science alone is not sufficient.







Science + Client Input + Practice





### **Reflective Question**

Did you ever have an experience where you needed to access information at the point of service? What did you do?



## 5-Step Evidence-Based Practice Model Step 3: Critical Appraisal

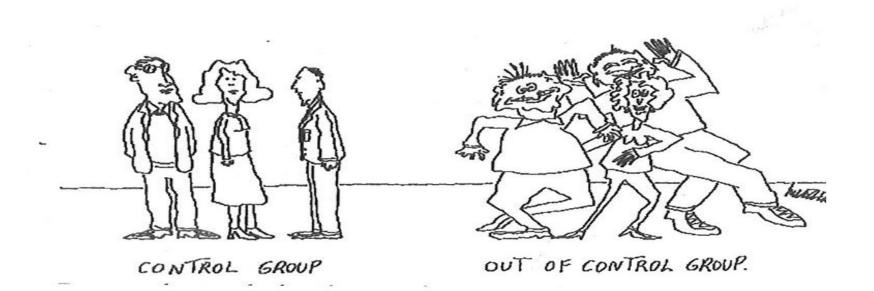


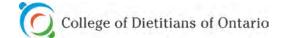
(Gilgun 2005; Spring 2007; Smith 2008; Fischer & Orme 2009; Mazurek Melnyk 2010)



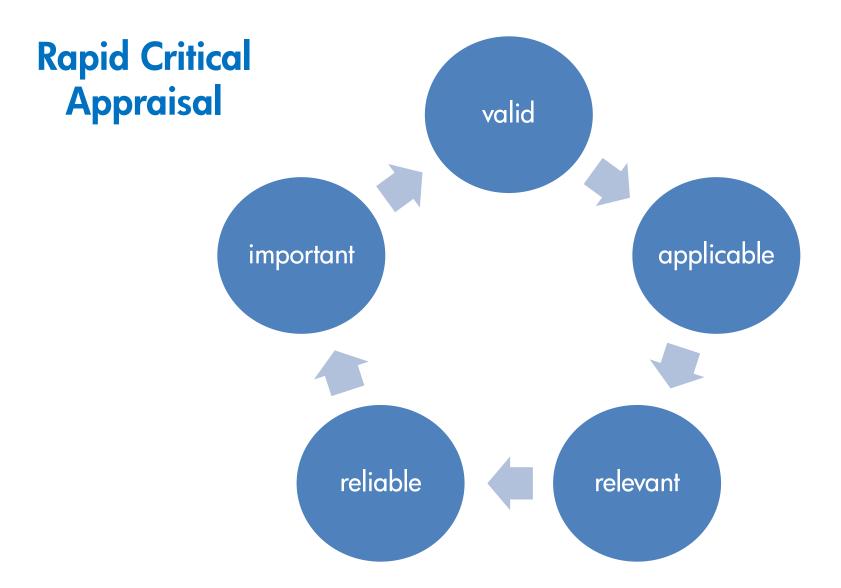


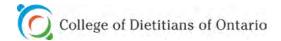
### Learn to tell good from bad research







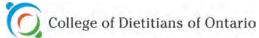




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## Critical Appraisal Gilgun's Four Cornerstones of EBP







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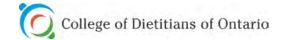






# Critical Appraisal Gilgun's Four Cornerstones of EBP



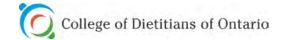


### Case Scenario: The Vegan Diet

In this scenario, the RD is making a recommendation based on her own beliefs, ethics and assumptions. The client's perspective is missing.

"I have read many articles and strongly believe a vegan diet is the key to keep us healthy and reduce heart disease and obesity in our society.

I would like to promote this diet and consider it unethical to recommend anything but a vegan diet to my clients."





### **Critical Thinking and Reflection**

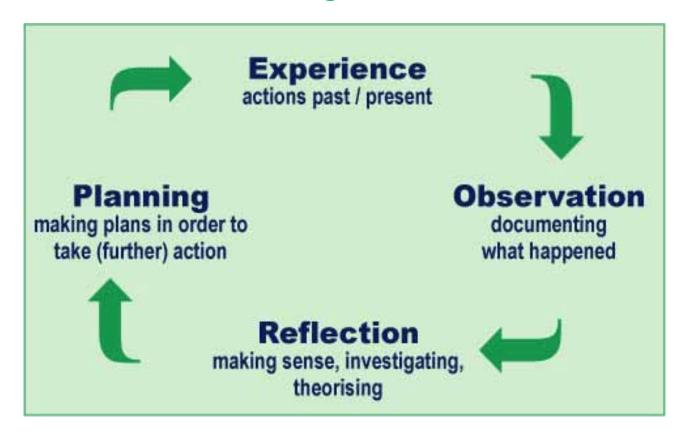






Science + Client Input + Practice

### **Critical Thinking and Reflection**

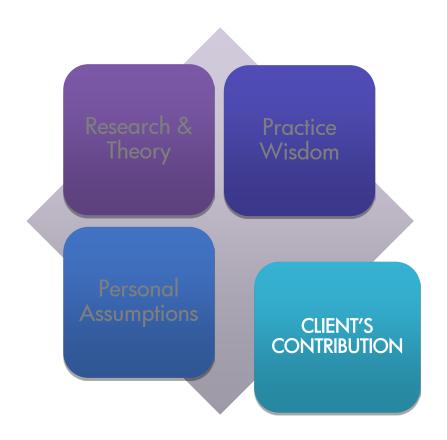


Kolb'S Learning Style Theory Revisited Educational and Psychological Measurement June 1, 1994, 54:317-327





# Critical Appraisal Gilgun's Four Cornerstones of EBP





## **Reflective Question**

Reflect on the goals set in your current SDL Tool.

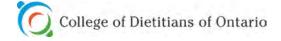
Reflect on your skills for critical thinking and appraisal. What did you learn from this section that would be of value in strengthening your evidence-based practice? Think of a specific example.



# 5-Step Evidence-Based Practice Model Step 4: Act – Making a decision



(Gilgun 2005; Spring 2007; Smith 2008; Fischer & Orme 2009; Mazurek Melnyk 2010)

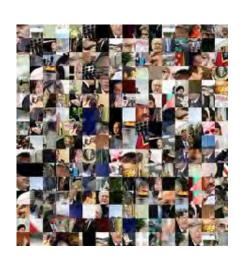




# Enable clients and the team to make "informed decisions"



Science



+ Client Input



+ RD Practice



### Select the best options for safe client-centred services.



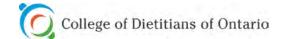




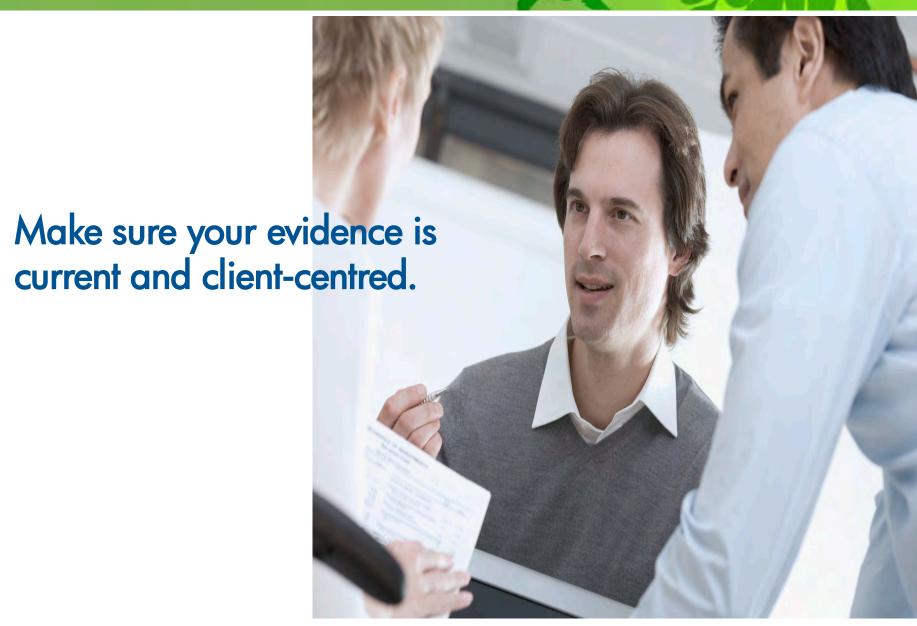
## Interprofessional Collaboration

Collaborative
Negotiating
Discussion











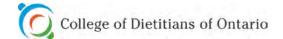
Evidence-based practice helps clients exercise their right and responsibility to make informed decisions and consent to treatment.





## **Reflective Question**

How do client needs and values affect the decision-making process in your practice?



# 5-Step Evidence-Based Practice Model Step 5 Assessing Performance



(Gilgun 2005; Spring 2007; Smith 2008; Fischer & Orme 2009; Mazurek Melnyk 2010)



## Step 5: Assessing Performance Audit and Feedback

- ✓ Monitor & evaluate
- ✓ Support positive changes
- ✓ Consider new benefits
- ✓ Pay attention to risks

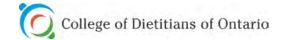




## **Reflective Question**

What changes have you made to your practice to help clients make informed decisions?

How did you evaluate the changes?





## Section IV – Summary

## Evidence-Based Practice Regulatory and Professional Obligations for RDs



Science



+ Client Input



+ RD Practice

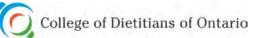


Evidence-Based Practice
Regulatory and Professional Obligations for RDs

Public Safety & Interest

Maintaining Competence



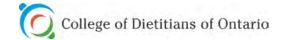




### **5-Step Evidence-Based Practice Model**



(Gilgun 2005; Spring 2007; Smith 2008; Fischer & Orme 2009; Mazurek Melnyk 2010)



### College of Dietitians of Ontario

Practice Advisory Service

(416) 598-1725 or 1-800-668-4990, ext. 397

practiceadvisor@cdo.on.ca

