

# Exploring the attitudes, knowledge, and receptivity of community-working pharmacists regarding two over-the-counter medications (OTCs)

Robin Spielmann, John Redwanski, PharmD.  
University of New England, College of Pharmacy

## Introduction/ Purpose

Many patients go without access to contemporary or traditional Western medicine due to lack of quality health insurance. Thus, more patients are turning to other less expensive, alternative forms of treatment. A report by the Centers for Disease Control (CDC) from December 2008, stated that in 2007, almost 4 out of 10 adults (38.3%) and 1 in 9 children (11.8%) in the United States had used some type of complementary alternative medicine (CAM) in the past 12 months, both showing an increase since the 2002 report.<sup>1</sup> In 2014, the CDC reported use of non-vitamin, non-mineral dietary supplements (17.9%) was greater than any other complementary health approach used by U.S. adults in 2012.<sup>2</sup> One study from 2005 found over 80% of practicing pharmacists surveyed at a CE program, fewer than 40% had "heard of" 4 of the 6 common references used by health professionals when looking for information on CAMs.<sup>3</sup> Furthermore, 91% of pharmacists surveyed were not comfortable counseling on vitamins/herbs.<sup>4</sup>

Our analysis of several different community-pharmacies in Maine, Indiana, Ohio, and Kentucky showed that many practicing pharmacists know little about these types of alternative therapies, and make little effort answering questions and/or making a safe recommendation about these products. Two OTCs were chosen with purpose: Calcium with Vitamin D and Grape Seed Extract. A convenience sample of pharmacies and pharmacists were selected based on travel time and location. Pharmacists were asked several detailed questions about two OTCs via a "live encounter" without warning and were not informed of information regarding this study. Their responses were qualitatively assessed for amount and accuracy of information.

The purpose of our study is to raise awareness on the current problem associated lack of knowledge about CAMs and everyday OTCs across community-pharmacists in the United States. Through our analysis we hope to bring to attention, the responsibility we as pharmacists share in making sure that our patients are receiving the highest level of quality care in terms of relevant and proper medication use.

## Methods

- Calcium was chosen for discussion based on its familiarity and importance in everyday health. The many different formulations and brands of available calcium also made this a good choice. There are also concerns regarding increased cardiovascular risk and the use of calcium. Brands were chosen based on content accuracy as found on ConsumerLab.com.
- Grape Seed Extract was chosen based on its questionable effects and uses as a CAM. Its recognizability, yet unfamiliarity allowed for this agent to serve as gauge in pharmacists' receptivity and overall attitude towards making a CAM recommendation.
- A total of 29 pharmacies were visited during weekdays only during daylight hours. Times varied as to ensure busiest times would not bias our data.
- Two calcium agents were selected for comparison and grape seed extract (if found) was brought to the consultation counter. Conversations varied in depth and time, but 6 main questions were asked of each pharmacist.

### Questions Asked:

- Are these calciums different?
- How do you know which calcium is better?
- Which calcium do you recommend?
- Can calcium cause heart attack?
- What does "lab tested", "GMP", "USP", etc... mean?
- Will Grape Seed Extract interact with vitamin C?

## Results

100% of pharmacists asked recognized that the two formulations of calcium brought to the counter were different.

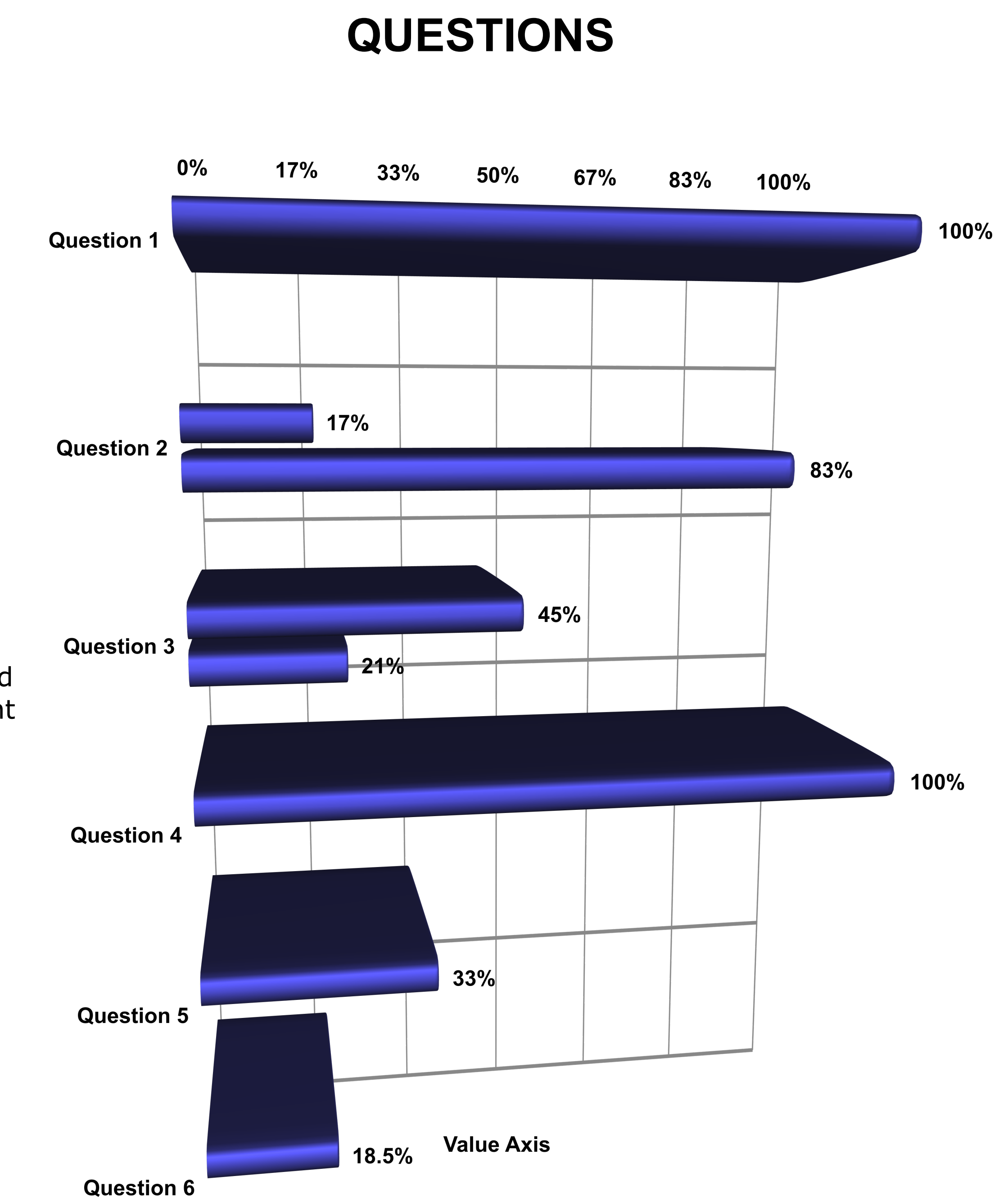
17% = depends on dose, 83% one is not better than the other

45% of pharmacists recommended that the choice should be made based on patient preference and 21% of pharmacists recommended Viactiv even though ConsumerLab.com found the product contained more than 182.2% of the vitamin D component stated on the label.<sup>5</sup>

100% of pharmacists stated that calcium does not or is not known to cause heart attacks

Only 33% of pharmacists explained the meaning behind labeled claims

Only 18.5% of pharmacists answered that Grape seed extract would not interact with vitamin C



## Evaluation/Conclusion

- We were generally disappointed with our findings. Most pharmacists were confident speaking about calcium, but when discussing grape seed extract, the conversation shifted and most pharmacists quickly shied away from or avoided the topic. No pharmacists appeared confident about making a recommendation about grape seed extract (some also didn't know if they even carried it in their store). Only 2 pharmacists had a positive attitude about the use of grape seed extract.
- A study from 2006 suggested that there is a strong agreement that pharmacists want additional training (on dietary supplements) as they do not perceive their knowledge of dietary supplements to be adequate.<sup>6</sup>
- Current literature suggests that pharmacists are willing and comfortable about making recommendations to patients, but this study suggests that pharmacists are willing and comfortable about making recommendations to patients ONLY in regards to common dietary supplements (e.g. calcium), and make little effort to answer questions about herbal products for the patient.
- There is a true need to implement more natural product lessons into pharmacy school curriculum. Drug information classes need to be utilized more so that pharmacy students can become more familiar with the resources and databases specific to CAMs.
- More continuing education programs need to be developed for practicing pharmacists on at least the most popular herbal supplements.
- For now, pharmacists should take an honest stance and be more confident with their recommendations.

## References

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