

EN Medication Nutrient Interactions Reflection

Drug-nutrient interactions (DNI) are defined as the physical, chemical, physiological, or pathophysiological interactions between a drug and a nutrient.¹ The causes for most clinically significant drug-nutrient interactions are dependent on a number of factors. Failure to recognize and manage these interactions can have catastrophic repercussions and negatively affect patient outcomes.

Drug-nutrient interactions is a topic I'm aware of but have limited knowledge on. I knew there were some nutrients that could influence the absorption and efficacy of some drugs, like vitamin K interfering with Warfarin effectiveness, and vice versa. However, that was the extent of my knowledge on the subject. This video does a marvelous job of discussing what DNI's are, why they're important to Dietitians, what types of DNI exist, and the Enteral Nutrition practice recommendations from ASPEN.

The various types of DNI were the most enjoyable part of the video. I learned about the different interactions that can occur between drugs and nutrients via direct contact during prep and administration, when medication is administered in an altered fashion to what the manufacturer had intended, and interactions that lead to alteration in nutrient absorption, distribution, metabolism, and elimination (ADME).² Several factors can impact physical, pharmaceutical, and pharmacokinetic DNI's and there are various prevention strategies to improve efficacy and ADME.

It's important to be aware of practices that can reduce drug-nutrient interactions which is why the EN guidelines by ASPEN should be studied as there are plenty of good tips for Dietitians and for the rest of the healthcare team. Establishing the suitability of the feeding tube route and drug dosage form, preparing each drug separately for administration, diluting medications, avoid mixing medications with feeding formulas and flushing tubes with purified water at the appropriate times are all vital practices to prevent significant DNI's.²

There was no difficulty in comprehending the topic. I tend to retain information better if it's discussed in visual or audio format. However, pictorial representations of the various medications that were discussed in the video would've been preferred for a better learning experience.

References

1. Chan LN. Drug-nutrient interactions. *JPEN J Parenter Enteral Nutr.* 2013;37(4):450-459. doi:10.1177/0148607113488799
2. Enteral Nutrition Drug Nutrient Interactions. www.youtube.com.
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