

**Take 3 – Practical Practice Pointers® November 11, 2019 Edition**  
**Vaccination Update, Red Meat Consumption, Conflict of Interest**

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**From the CDC Advisory Committee on Immunization Practices (ACIP)**

**1) Vaccination Updates: Pertussis and MMR**

The CDC's Advisory Committee on Immunization Practices (ACIP) recently made two recommendations that will impact present practice. These included:

- 1) The ACIP decided health care personnel born in 1957 or later who have no evidence of immunity to measles will need a two-dose series of the measles, mumps, rubella (MMR) vaccination at least four weeks apart. Those born before 1957 who have no evidence of immunity can consider a two-dose series of MMR vaccine.
- 2) The ACIP voted to change its policy so that either the tetanus-diphtheria (Td) or the tetanus, diphtheria and pertussis vaccine (Tdap) can be used for;
  - the decennial Td booster,
  - tetanus prophylaxis for wound management and
  - additional doses of the catch-up immunization schedule for patients age 7 or older.

The pertussis workgroup concluded that using Tdap in place of Td presented no substantive safety concerns, and thus, the benefits of doing so outweighed the harms.

**My Comment:**

The first recommendation had me going back to my military health records to find documented evidence of measles immunity. While there's no known harm to a booster, I have learned that I have a "relative trypanophobia," and so avoid needles when possible (it has improved with age ....).

The 2<sup>nd</sup> recommendation will hopefully help me "not have to remember" what I never seemed able to remember anyhow when it came to the various tetanus options! Thank you ACIP!

**References:**

ACIP Agenda October 23-24: [Link](#)

AAFP News: [Link](#)

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**From the Literature/Guidelines**

**2) Red Meat Consumption – Healthy to Eat ... or Not?**

Like other guidelines, ideally dietary guideline recommendations require consideration of the certainty in the evidence, the magnitude of potential benefits and harms, and explicit consideration of people's values and preferences. Because it is very difficult to perform a randomized trial of nutrition over a long period of time due to the many confounding variables, most nutritional studies are observational or epidemiological in design.

A recently published set of recommendations on red meat and processed meat consumption was developed on the basis of 5 de novo systematic reviews that considered the criteria noted above. The recommendations have prompted much controversy, as it is counter to present guidelines from multiple organizations, including the American College of Cardiology, the American Heart Association, and the National Heart, Lung, and Blood Institute, and even the US Department of Agriculture, among many others.

The recommendations were developed by using the Nutritional Recommendations (NutriRECS) guideline development process, which includes rigorous systematic review methodology, GRADE methods to rate the certainty of evidence for each outcome, and a specific process to move from evidence to recommendations. A panel of 14 members, including 3 community members, from 7 countries voted on the final recommendations. It was felt that the strict criteria limited the potential conflicts of interest among panel members. Considerations of environmental impact or animal welfare did not bear on the recommendations. Four systematic reviews addressed the health effects associated with red meat and processed meat consumption, and 1 systematic review addressed people's health-related values and preferences regarding meat consumption.

The researchers used the data to gauge the potential impact of eating three fewer servings of processed or red meat each week on cancer, cardiovascular disease, and mortality, as well as how people viewed red meat. The researchers found that the effects of cutting three servings of red meat resulted in seven fewer cancer-related deaths per 1,000 people. The researchers similarly said they found "very small absolute risk," or statistically insignificant differences, and weak evidence related to potential harms for many of the other outcomes measured.

They concluded that given the present evidence, that adults continue current unprocessed red meat consumption (weak recommendation, low-certainty evidence) and continue current processed meat consumption (weak recommendation, low-certainty evidence).

### **My Comment:**

I decided to review this study as it has received a fair amount of press given its conclusion. The study and subsequent debate serve as a wonderful reminder of the multiple angles by which the same set of data can be viewed, often leading to very different conclusions. It also demonstrates how challenging it can be to understand on a population scale how what we eat affects our health.

To provide another perspective, I asked one of our colleagues, Beth Polk, MD, who is our local Lifestyle Medicine expert and is gaining a regional/national reputation for this (and her incredible skills as a yoga instructor), to comment on this study. Here are her thoughts:

"To provide context in this particular case, the lead author of this study was also the lead author of a study published in 2016 questioning present recommendations to cut down on dietary sugar consumption which was funded by International Life Sciences Institute, a large agribusiness industry group. So, needless to say, from my perspective, his "lens" is configured in a certain way with regard to data interpretation. Additionally, it is certainly important in the pursuit of answers that we maintain our

intellectual curiosity and critical thinking skills and are open to having our minds changed as new information emerges. It is also vital to remember that absence of the highest level evidence does not necessarily mean lack of ANY evidence (ie: absence of evidence is not evidence of absence).

So, back to red meat. The conclusion of this guideline is that the studies we presently have are weak (true), and that those who have come to other conclusions based on the same evidence also have an “agenda” in many cases (also true). One of the limitations of this study is their setting the criteria of eating 3 less servings of red meat per week as the measurement threshold. The study assumes that this “corresponds to the elimination of red and processed meat from the typical North American and western European diet based on the average intake of these foods in these populations”, which they report as 3-4 servings per week. However, approximately 1/3 of the US population reports eating 1 or more servings of red meat daily. If that is the case, the statement in the guideline to continue current red and processed meat consumption is misleading as it does not report these criteria.

Since nutrition research has historically been difficult to do and has resulted in confusing reports that are then sensationalized in the media. Considering all the concerns raised since publication about the choice of evidence grading, potential undisclosed conflicts of interest, choice of guideline panel members, and study inclusion bias, this paper just adds to that confusion. And perhaps that was the real intention.

The bottom line is that there is uncertainty as to whether it is okay to eat red meat, and if so, how much. Another way the authors could have delivered their conclusion, which would have been equally accurate, would have been to say, “*We found low- to very-low-certainty evidence that reducing unprocessed red meat intake by 3 servings per week is associated with a very small reduction in risk for cardiovascular mortality, stroke, MI, and type 2 diabetes* (direct quote from study). So, while the negative effect was confirmed, albeit weakly, in reality we just don’t know. Therefore, you may consider cutting red meat consumption for health or perhaps other reasons, and that seems a reasonable action. And, it is important to note there is no evidence that high consumption of red and processed meat is healthy for you.”

Much of the advice regarding specific food choices is founded on relatively shaky ground. It’s not that it’s wrong, necessarily—just unproven. In my opinion, if you want to stand on nutritional solid ground, I recommend “eat unprocessed food, mostly plants, and only enough to maintain a healthy weight.”

Thanks Beth! Wise words and helpful guidance for a topic filled with confusion.

**Reference:**

Johnston BC, et al. Unprocessed Red Meat and Processed Meat Consumption: Dietary Guideline Recommendations From the Nutritional Recommendations (NutriRECS) Consortium. *Ann Intern Med.* 2019 Oct 1. [Article](#)

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## **From Propublica - “Journalism in the Public Interest”**

### **3) Payments to Physicians From Pharma and Industry 2018**

In 2010, ProPublica first published their database called “Dollars for Docs” after investigating 7 companies who were required to make public their payments for promotional campaigns as part of settlements for whistleblower lawsuits. This was the same year that the Physician Payment Sunshine Act was passed by Congress (implemented in 2014).

They recently updated their database with 2018 data, which provides extensive information about such payments. Each year from 2014 to 2018, drug and medical device companies spent between \$2.1 billion and \$2.2 billion paying doctors for speaking and consulting, as well as on meals, travel and gifts for them. The report shows that over that 5-year period, more than 2,500 of those physicians received a total of at least half a million dollars from pharmaceutical companies and medical device companies, including more than 700 of those who received at least \$1 million. None of these payments included money paid for research or invention royalties.

Of the top 20 drugs with the most annual spending on doctors from 2014 to 2018, commonly used medications that made the list each year included Invokana (T2D), Xarelto, and Eliquis. Victoza was on the list for 4 years. The makers of Xarelto alone spent more than \$123 million over the past 4 years.

### **My Comment:**

Sigh ... There are numerous studies showing that medical decision-making is influenced by this type of detailing and these payments (industry wouldn't be spending this much for nothing!), even if we physicians want to deny it. And with plenty of more non-biased ways to learn about new medications in particular, such as the Prescriber's Letter, there is really no excuse in 2019 to be using the incredibly biased method of promotional talks and paid academic detailing to learn about new medications. Yet the process continues. And remember, this does not even include the estimated \$3.7 billion pharmaceutical companies spent in direct-to-consumer TV advertising in 2018 (which makes the \$25 million spent on lobbying congress in 2017 seem like play money).

Out of curiosity, I looked up the data on 3 physicians here in Roanoke who I know give a fair amount of pharma-sponsored talks. One, a psychiatrist, made over \$1 million dollars during this 5-year period, and the other two, both endocrinologists, were part of the “at least \$500,000” club. Oh, and I looked up me as well - \$65 since the start of official data collection in 2014 and that was in 2015. How about you?

### **References:**

- Propublica – “Dollars for Docs” updated October 17,2019. [Link](#)
- CMS Open Payments Data - [Look Yourself Up](#)

Feel free to forward Take 3 to your colleagues. Glad to add them to the distribution list.

*Mark*

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