Cholesterol and eggs, eggs and cholesterol. They are often spoken in the same sentence with advice to avoid or eliminate, but is it really warranted? Cholesterol became the nutrition and health no-no in the 1980s. If you wanted to treat yourself to a healthy lifestyle and mitigate heart disease, you had to avoid high cholesterol-containing foods. Why? Because dietary cholesterol was thought to increase blood cholesterol, causing increased arterial blockages, which could lead to heart attack and/or heart disease. Enter the 2015 Dietary Guidelines Advisory Committee (DGAC), jointly appointed by the Secretaries of the USDA and HHS, and consisting of 14 top nutrition experts in the country. They were tasked with evaluating the most current body of science on nutrition in order to develop the Dietary Guidelines for Americans, which sets recommendations for America’s food intake and how to lead a healthy lifestyle.

The 2015 Dietary Guidelines for Americans focus more on healthy eating patterns rather than on individual nutrients. The importance of following healthy eating patterns, instead of specific nutrients, is to help people meet nutrient recommendations but also allow for cultural and personal preferences. We cannot and do not eat the same way. We don’t have the same budgets, access to food, or exact nutrient needs. Patterns give the public a more personal path to health.

Another significant shift in the 2015 Guidelines is the recommendation on cholesterol. Since the inception of these Guidelines, cholesterol has been listed as a dietary component to limit or even eliminate. Today, that thinking has evolved and the science examined. Cholesterol has been shown to have a minimal effect in the diet compared to saturated and/or trans fat. In past decades, saturated fat was as big a concern for heart disease as cholesterol. Since saturated fat and cholesterol are often found in the same foods, cholesterol inherited the title of public health enemy #1. The American Heart Association now advises limiting saturated fat intake to 5 to 6 percent of total calories. For someone eating 2,000 calories a day, that’s about 13 grams of saturated fat. The World Health Organization also advises limiting saturated fat intake to <10% of calories per day and recognizes that eggs are rich in cholesterol but do not contain saturated fats. Given that intake of total saturated fats is controlled, the WHO contends there is no need to restrict eggs in the diet. Additionally, the DGAC concluded that limiting cholesterol intake to 300 mg/day was not warranted. This doesn’t mean that cholesterol-containing foods should be eaten without care. Rather, it recognizes that we moved the public in the wrong direction for years when saying that eggs were to be stricken from our diets.

**Cholesterol: What’s all the fuss?**

The body needs cholesterol for cell development and structure. Without it, our cells would not take shape. It also helps the liver produce bile acids, which aid in digestion of fats. And cholesterol is used by glands to produce hormones. That said, we do not need to consume cholesterol from food to meet these functional needs as our bodies make what we need. Many other factors contribute to increasing cholesterol in the bloodstream, thereby increasing one’s risk for heart disease. For example, smoking will raise the heart disease risk of someone with a cholesterol level of 200 mg/dL to that of someone with a level of 250-300 mg/dL.
As a foodie, registered dietitian nutritionist and egg-lover, I am thrilled with the recent trend to “put an egg on it,” or, top just about anything (especially healthy fare like vegetables and whole grains) with a nutrient-dense protein food, like eggs.

Adding eggs to various dishes not only has tasty culinary implications by adding variety to everyday fare, but it also provides nutritional benefits as well. Eggs can:

- **Help Increase Carotenoid Absorption:** Researchers found that carotenoid absorption was much higher when eggs were co-consumed with mixed vegetable salad versus when salads were served without eggs. The carotenoid content of eggs also contributed to higher levels of carotenoids in the blood following consumption of egg-containing salads.¹

- **Contribute a Number of Important Nutrients:** One egg has varying amounts of 13 essential vitamins and minerals, high-quality protein, and the antioxidants lutein and zeaxanthin, all for 70 calories. Eggs are also one of the few natural foods that are a good source of vitamin D, a nutrient of concern.

- **Provide 6 grams High-Quality Protein per Egg:** Eggs provide one of the highest quality proteins of any food available. High-quality protein, like the protein in eggs, helps build muscles and allows people to feel full longer and stay energized, which can help them maintain a healthy weight.

Eggs can go on anything and everything – just think outside the egg carton (or box, if you prefer). You can put an egg on:

- Fresh salads
- Veggie pizzas or flatbreads
- Whole grain sandwiches or grilled cheese
- Grilled veggies
- Breakfast or avocado toast

Plus, the American Egg Board and Egg Nutrition Center offer recipes and tutorials for perfectly cooked eggs every time. In fact, we just launched a new Easy-Peel Hard-Boiled Eggs recipe that cooks 30 percent faster than classic hard-boiling methods and has significantly easier-to-peel shells.

Find the new Easy-Peel Hard-Boiled Eggs recipe and more on our website, and explore new ways to put an egg on it!

Egg Nutrition Center

Meet Anne Alonzo, American Egg Board’s new President & CEO

Anne Alonzo is a recognized leader in the public, private and non-profit sectors with significant experience in agriculture, food and sustainability. And now, as President and CEO of the American Egg Board (AEB), Anne is eggstatic to help lead this organization into its next 40 years of success. We posed a few questions to her upon her recent arrival.

How do you like your eggs?
“‘I love my eggs sunny side up and if possible accompanied with a little flair—flour tortillas. Growing up in a Latino family and community, we ate eggs all the time. Now in my position with AEB, I feel like we have an incredible opportunity to reach and engage the Latino community, and other diverse communities, with even more ways to eat and enjoy this nutrition powerhouse that is affordable as well.”

What do you think about the research on the health benefits of eggs?
“I have to admit, I wasn’t aware of the breadth of research being supported by ENC. It’s truly impressive to see there are 40-plus ongoing studies at universities across the country. We already know the nutrient package in eggs promotes good health, so I look forward to the results of the new studies to find out more about eggs and health. I also want to build on ENC’s first-in-class work and challenge us to broaden our relationships and scope to reach even more folks!”

How would you describe the typical egg farmer?
“Very entrepreneurial, proud and hardworking, and typically hailing from a family with decades of experience producing delicious, nutritious and affordable eggs. This is a 365-day, 24-hour job. Without fail, I find that America’s egg farmers are committed to do what’s right for their hens, the environment and their communities.”

What questions were you most eggcited to ask the first egg farmer you met?
“I was most interested to ask and learn about the hens in general: What’s involved with their daily care? How many eggs are laid per day? And, oh yes, do brown hens produce brown eggs and white hens produce white eggs?”

How do you personally feel about taking on this important role in the egg industry?
“For these egg producers to fund and entrust the promotion, marketing and research of their lovingly produced eggs to AEB is both an honor and a huge responsibility. I’m so proud to help tell their stories and promote the Incredible Edible Egg across this country!”

Eggs are grade A after all

Continued from page 1

a significant impact. Blood pressure and weight status are also significant contributors to heart disease. We know that overconsumption of sodium and total fat can increase weight and blood pressure. But it is unreasonable to suggest that eliminating one food from the overall diet will have a meaningful impact on disease risk, hence the Academy of Nutrition and Dietetics’ position, Total Diet Approach to Healthy Eating. This position emphasizes choosing a balance of foods and beverages within energy needs rather than any one food or meal. An important reminder in this world of constant guilt inducing, single food-focused recommendations.

Incredible and even more edible

Eggs are inexpensive, easy to prepare, and most importantly pack a health punch. When nutrition professionals talk about nutrient density, eggs are often cited as a perfect example. Eggs contain 70 calories yet provide a wealth of high-quality protein, B vitamins, lutein for eye health, choline for brain function, plus iron and zinc. Many vegetarians include eggs as their only animal source of protein because of eggs’ nutrient density.

With such a glowing nutrition report card, it is puzzling why we don’t enjoy eggs beyond breakfast. Time to change that by preparing an egg-based entree for your next dinner. Add a well-chosen wine to pair with your dish and voilà, a match made in a healthy heaven. Try these wines to enhance your next egg-centric dinner:

- Sauvignon Blanc will pair well with egg dishes that include goat cheese, herbs, asparagus or seafood. Think of a quiche or frittata with any of these ingredients or baked eggs in a casserole with herbs and goat cheese. Consider France’s Loire Valley when shopping for Sauvignon Blanc.

- Rosés are notorious wines to pair with more obscure or difficult ingredients. A fine rosé from Provence made with Grenache, Syrah, Cinsault or Mourvedre, or a blend of any of these grapes, will pair with just about any egg dish. Chill and enjoy for brunch, lunch or dinner.

- Gamay, otherwise known as Beaujolais, or reds on the unoaked and lighter side like Pinot Noir, will pair nicely with egg dishes containing mushrooms, sausage or cured meats. The best Gamay wines are in France’s southeastern Beaujolais region. Pinot Noir from France’s Burgundy or Oregon’s Willamette Valley regions will not disappoint either.

Lisa D. Katie, RD, CSW, is a registered dietitian, certified specialist of wine, and wine educator. She hosts a blog, “Katie’s Korner,” and is President of K Consulting, where Food+Wine=Health, where Katie pairs simple, healthy recipes with favorite wines to maximize enjoyment of both.

References

5. Nutrition--Recommendations for Preventing Cardiovascular Diseases, World Health Organization, Available at http://www.who.int/nutrition/topics/.
Nearly 50 million people in the United States can be classified as food insecure. This staggering number supports the need for healthcare professionals to actively fight against hunger. Healthcare professionals can improve their patients’ outcomes by working with community organizations to increase access to food.

The common visualization of hunger features children with bloated bellies, crying eyes, and skinny limbs. In the United States, food insecurity has a different face. Food-insecure patients can have normal growth patterns, and often have an overweight diagnosis. It is a face that hides an invisible epidemic. While some people with food insecurity lose weight due to malnutrition, many others are at risk for obesity because they consume high quantities of food that are low-cost, high-calorie, and nutrient deficient.

Food is a fundamental requirement for survival. If the basic need for food is not met, a patient is unlikely to comply with medical advice or nutritional counseling. In most cases, patients believe it is more important for them to feed their family than pay for their own medication. To compensate for a food shortage, families reduce the size of their meals, and frequently go without food. They often prioritize food over electricity, rent, transportation, and medical expenses. If a diabetic patient chooses food over medication, or is skipping meals frequently, their blood sugar can be difficult to regulate.

Food insecurity has been shown to affect many dimensions of people’s lives. Food insecurity with malnutrition places a patient at risk for poor health, which makes them more susceptible to disease and less able to fight it. Malnutrition also increases the risk for acute infections, stress, poor health, nutrient deficiencies, developmental delays, and mental health problems.

While hunger impacts everyone’s health negatively, it crushes children. Nourishing food is critical to a child’s emotional health, mental development, and physical growth. Children facing hunger struggle with social and behavioral problems, impacting their ability to learn in school. They often have lower academic achievement, resulting in lower paying jobs as an adult. They are more likely to be hospitalized, and they have a higher risk for chronic health conditions such as obesity and anemia. These children also have an increased risk of depression and suicide.

Healthcare professionals can fight hunger and improve their patients’ outcomes by screening for food insecurity using a validated 2-statement tool, The Hunger Vital Sign. The prevalence of food insecurity necessitates that healthcare professionals in clinical settings, especially those in low-income communities, use this tool. The Hunger Vital Sign uses statements about food insecurity to measure a family’s concern regarding their access to food. Patients answer by choosing “often true,” “sometimes true,” or “never true.” The two statements are:

- “Within the past 12 months we worried whether our food would run out before we got money to buy more.”
- “Within the past 12 months the food we bought just didn’t last and we didn’t have the money to get more.”

The screening questions should be discussed during each routine office visit. If a patient answers “often true” or “sometimes true” to one or both statements, the family is at risk for food insecurity.

Early identification, assessment, and nutrition intervention of malnourished individuals or individuals at risk for malnutrition are critical to improve patients’ medical outcomes. After a positive screening, a healthcare professional refers the patient to local public health professionals and community resources who can help with food assistance programs, such as the Supplemental Nutrition Assistance Program (SNAP), the Special Supplemental Nutrition Assistance Program for Women, Infants, and Children (WIC), school nutrition programs, and emergency food resources.

Curbing our nation’s food insecurity epidemic requires a multidisciplinary approach that involves collaboration.
between healthcare professionals and public health educators. Healthcare professionals empower patients to improve their health by teaching them the skills needed to gain access to food. Patients trust healthcare professionals, so it is up to these professionals to leverage this relationship in order to screen, diagnose, and discuss food insecurity with patients.

Clancy Cash Harrison, MS, RD, LDN is a food security advocate and the award-winning author of the "Feeding Baby" cookbook. Clancy provides parents with logical and affordable approaches for healthy eating and believes food should be fun, not stressful or complicated.

References:


ENC was proud to support 14 abstracts that were presented this month at the 2016 Experimental Biology Conference. To learn more about these new research findings and the ENC research grant program, please visit our website: eggnutritioncenter.org

*All cost calculations used Walmart online prices and the cheapest brand available unless noted.
Do you need a protein supplement to build muscle?

By Pamela Hernandez, CPT

There is always a desire to find the answer to our health and wellness concerns in a pill. According to Forbes magazine, the nutritional supplement industry produces revenue of approximately $32 billion annually. The broad definition of the term “supplement” includes everything from your basic daily multivitamin to the vast selection of protein shakes and weight loss pills advertised in fitness magazines.

I am often asked about supplements in my personal training practice. I always remind clients of the dictionary definition: “A thing added to something else in order to complete or enhance it.” I explain that changing their bodies and improving their health starts with creating habits of eating a balanced diet of whole foods, and exercising in accordance with their goals. Supplements are designed to enhance or complement their efforts, not serve as a substitute.

Protein supplementation is an excellent example. Whey protein is a longtime bodybuilding standard that has gone mainstream. Women in particular are looking to protein supplements as the answer to their desire to lose weight while maintaining lean muscle and strength. What gets lost in the advertisement of popular protein shakes is that they must, as the fine print often says, be partnered with a sensible diet and an exercise program. A 2015 study highlights the problem of seeking results from supplementation alone.

This Australian study published in The Journal of Nutrition followed a group of postmenopausal women for two years. The women were provided a 30 g whey protein supplement daily. At the end of the study they found no impact on the preservation of lean mass or improvement in physical function.

On the surface, this study may appear to discourage protein supplementation. However, if we think about the definition of supplement and look at the evidence regarding strength training coupled with supplementation, it reinforces the idea that diet plus exercise must be combined before any type of supplementation can be effective.

Strength training on its own has been proven repeatedly to help preserve lean body mass as well as improve the ability to perform normal activities of daily living, particularly in older adults. If we look at a study of protein supplementation with a strength-training program added, we see a very different outcome than the Australian study.

In this study, published in the Journal of Nutrition, Health and Aging, postmenopausal women were again provided with daily protein supplementation along with unilateral resistance training four times per week. On two days a week, training one side of the body, they consumed a whey protein supplement post workout. They consumed a placebo drink post workout the other two days of the week after training the other side of the body. The goal was to study the strategic timing of a protein supplement, not the effects overall. What they found was that the timing of the whey protein had no significant effect. However, there was a significant increase in both muscle strength and size.

We can conclude from this that the real key to improving muscle mass is resistance training, which may be aided by protein supplementation. In fact, supplementation may be critical if the overall protein requirements are not being met through whole food sources.

Another study published in 2014 in the Journal of Nutrition Health and Aging looked at the issue of daily protein intake and its effects on sarcopenia. The subjects, also postmenopausal women, were divided into two groups based on daily protein consumption. Those assessed as having a low-protein diet (less than 0.8 g/kg bodyweight) had impaired physical function compared with those who reported a higher daily protein intake. None of the subjects were provided supplementation, so we can only assume that those with a higher intake ate a diet richer in whole food lean protein options.

We can take away from these studies two key points:

- Resistance training and adequate daily protein intake is required to preserve lean muscle mass and physical function.
- Supplementation alone is not the answer to maintaining lean mass and daily function, but may help improve a diet that is low in protein intake.

Encouraging women of all ages to include a quality source of protein at each meal (I recommend 10-30 g per meal to my clients) should be enough to ensure they meet the daily minimums suggested. Protein supplements can be a useful tool to make sure they meet this requirement. The goal is to remember that supplements are meant to enhance and not replace a regular diet of nutrient-rich whole foods.

Pamela Hernandez is an ACSM Certified Personal Trainer and ACE Health Coach. She runs Thrive Personal Fitness in Springfield, MO and is the author of the new book “Motivation Is Made Not Found.” Pamela’s goal is to empower women with fitness and help them take control of their lives by taking control of their health.

References


Eggs were once avoided and criticized for their cholesterol content. However, government and health organizations have revised their dietary cholesterol recommendations.

Check out the new dietary cholesterol infographic on our website: www.eggnutritioncenter.org.
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ENC 2016 Spring Calendar

Look for ENC at these upcoming health professional events:

Preventive Cardiovascular Nurses Association Annual Symposium
April 14 – 17, Orlando, FL

American College of Sports Medicine Annual Meeting
May 31 – June 4, Boston, MA
“Nutrition, Exercise and Cardiometabolic Health: New Concepts & Controversies”
June 3, 11:30 am – 1:00 pm
Featuring: Dariush Mozaffarian, MD, DRPH and Robert Sallis, MD, FACSM
To register, visit: bit.ly/1SJm8Xu

National Nurse Practitioner Symposium
July 7 – 10, Keystone, CO
“Putting the 2015 Dietary Guidelines for Americans into Practice with Patients”
July 6, 6:00 pm – 7:30 pm
Speaker: Robyn Kievit Kirkman, FNP-BC, RDN, LDN, CSSD, CEDRD

We welcome your ideas!
Please send topic and author suggestions to ENC@eggnutritioncenter.org

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