Science to Simple: Making the Science of Nutrition and Well-Being Accessible, Positive, and Practical for Consumers



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Disclosures: Speaker's Bureau for the South Carolina Beef Council and the Beef Checkoff, Gatorade Sports Science Institute consultant, Illinois Pork Producers

Today's Objectives

1. Translate current nutrition and well-being science into effective, simple, and structured recommendations consumers and clients can confidently carry out.

2. Utilize creative, positive, inclusive consumer-friendly messaging to simplify nutrition and well-being recommendations.

3. Create easy-to-implement "eat, move, and groove" actions for consumers and clients in a "science to simple" method.



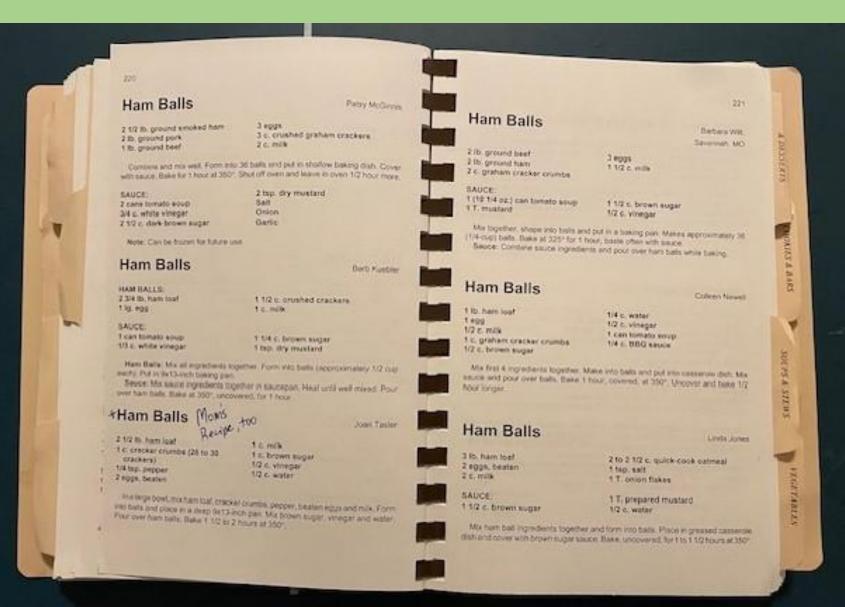


Behold the Mighty Ham Ball

...otherwise known as "Know Your Audience"

- What is important to your audience or your client/patient?
- What is your audience concerned about? What motivates them? What do they *like to eat*?
- How can science impact people on a daily basis?
- How can implementing recommendations from solid science *solve people's problems*?
- Our audience must TRUST us as professionals who know what we are talking about.
- We must LISTEN to concerns and challenges of our audience/clients/patients.

St. Joseph's Church Cookbook (1980's)



The effect of nutrition intervention on the knowledge and self-reported nutritional intakes of college-age women

by

Susan Mara Kundrat

A Thesis Submitted to the Graduate Faculty in Partial Fulfillment of the Requirements for the Degree of MASTER OF SCIENCE

> Department: Food Science and Human Nutrition Major: Nutrition

Graduate Colle

Iowa State University Ames, Iowa

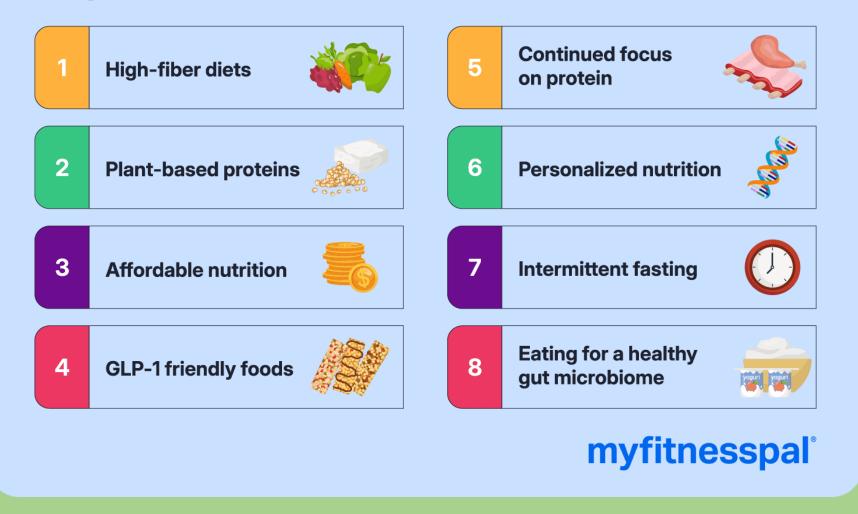
1993

The purpose of this study was to investigate the effectiveness of nutrition education counseling incorporating a computer-generated nutrient analysis of a three-day food intake record for changing the knowledge and self-reported dietary behavior of college-aged women. The objectives were to:

- (1) Determine the effectiveness of nutrition counseling incorporating a computergenerated nutrient analysis for changing female college students' knowledge of the adequacy of their food intake for meeting their requirements for major nutrients and food groups.
- (2) Determine the effectiveness of nutrition counseling incorporating a computergenerated nutrient analysis for changing the eating behavior of college female students to more closely conform to the food servings recommended in the USDA Food Guide Pyramid, and to more closely meet the RDA for major nutrients and the carbohydrate, fat, and protein distribution recommended to reduce the risk of chronic disease.

Breakthrough Study!

Top 8 Food & Nutrition Predictions for 2025



https://blog.myfitnesspal.com/food-trends-2025/

Ten Key Health and Nutrition Trends for 2025

Kerry Health and Nutrition Institute[®]

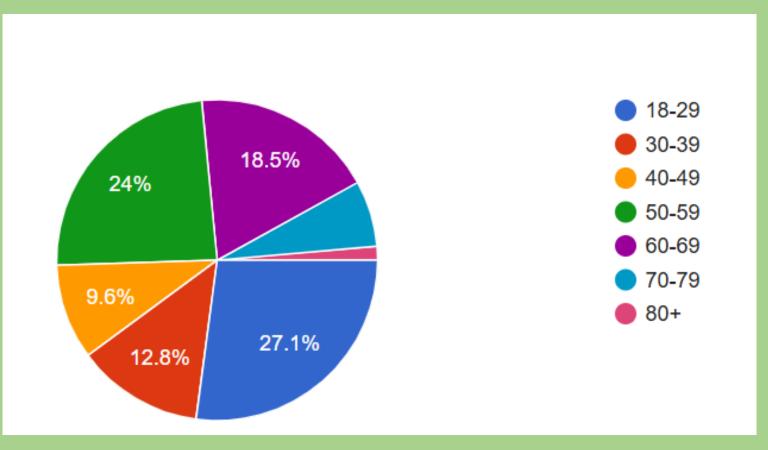
Ten Key Health and Nutrition Trends for 2025





Kerry Health and Nutrition Institute. Ten Key Health and Nutrition Trends 2024. 2024. Available from: https://khni.kerry.com/trends-and-insights/ten-key-health-and-nutrition-trends-of-this-year/

Ask questions of the experts – your audience, clients, patients, and customers



Eat Move Groove Wellness Survey, 2023 (n=509; 81.5% female)

What would help you enhance your well-being?

- Ways to "reset" when life gets in the way of my well-being (55%)
- Easy recipe (47%)
- Simple ways to strengthen my body (44%)
- Simple snack ideas (41%)
- Ways to be attentive to my own feelings about body and my well-being (37%)
- Positive goal-setting tips (31%)
- Ways to eat more fruits and vegetables (32%)
- Sample meal plans (29%)
- Simple ways to move my body (29%)
- Simple tracking plans for daily eating and moving (29%)
- Hydration ideas (26%)
- Ways to add protein to meals and snacks (25%)
- Ways to practice gratitude (25%)
- Ways to eat and move to help manage my health concerns (21%)



Eat Move Groove Wellness Survey, 2023

How to translate nutrition and health research to practice for clients, patients, and consumers.



March 26, 2024

International Food Information Council Publishes Science Communications Guide On National Science Appreciation Day

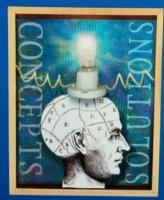
Supporting food and nutrition communicators to convey credible information to the public and build trust in science

(*Washington, D.C.*) — In the wake of years marked by misinformation and polarization, trust in science is on the decline.¹ The spread of misinformation on social media, the politicization of scientific issues, and sensationalized headlines have all contributed to this erosion of trust. As a result, efforts to bridge the gap between the scientific community and the public have become increasingly crucial: Now, more than ever, scientific literacy—and tools to help increase scientific literacy—are critical.

Understanding this need, the International Food Information Council (IFIC) recently published a new science communications guidance document, *Understanding & Interpreting Food & Health Scientific Studies: Guidance For Food & Nutrition Communicators*, fulfilling IFIC's mission to effectively communicate science-based information on food safety, nutrition, and sustainable food systems. In publishing this document, IFIC celebrates scientific advancements and seeks to build trust in science by making science accessible and approachable.

IMPROVING PUBLIC UNDERSTANDING

FOR COMMUNICATING EMERGING SCIENCE ON NUTRITION, FOOD SAFETY, AND HEALTH



For Journalists, Scientists, and Other Communicators

Harvard School of Public Health

1998

https://ific.org/media-information/press-releases/science-communications-guide/

"This guidance document aims to improve understanding of scientific publications to enhance communicator effectiveness.

In turn, communicators will better support the public in making informed food and health decisions."



Understanding & Interpreting Food & Health Scientific Studies

Guidance For Food & Nutrition Communicators

MARCH 2024



https://foodinsight.org/wp-content/uploads/2024/03/IFIC-Science-Communication-Guidance-Document.pdf

Hierarchy Of Evidence





Understanding & Interpreting Food & Health Scientific Studies Guidance For Food & Nutrition Communicators

MARCH 2024

KEY QUESTIONS TO ASK WHEN CRITICALLY REVIEWING THE RESULTS SECTION OF SCIENTIFIC STUDIES



International Food Information Council What is the statistical significance of these results?

- To whom do these results apply?
- How do these results compare to results from other studies on the subject?



Understanding & Interpreting Food & Health Scientific Studies Guidance For Food & Nutrition Communicators MARCH 2024 How to translate nutrition and health research to practice for clients, patients, and consumers • Understand the Research: Familiarize yourself with the latest evidence-based findings in nutrition science.

• **Simplify Complex Information**: Break down research findings into clear, straightforward language. Avoid jargon and technical terms.

- Focus on Practical Application: Provide actionable steps.
- Individualize Recommendations: Tailor your advice to meet the unique needs, preferences, lifestyle, dietary restrictions, and cultural factors of your audience.
- Educate and Empower: Teach clients about the importance of nutrition research and how to evaluate nutrition claims themselves. Empowering them with knowledge fosters long-term healthy habits.

International Food Information Council

How to utilize social media use to reach your clients/patients/audience.





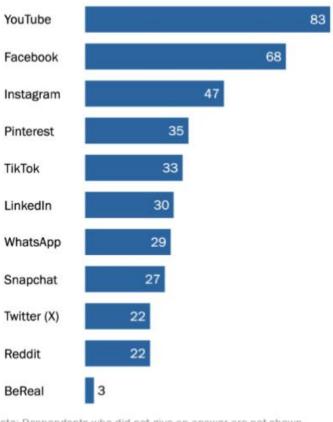
RESEARCH TOPICS -	PUBLICATIONS	OUR METHODS	SHORT F
Home > Research Topics > Ir	nternet & Technology >	Platforms & Services >	Social Media
REPORT JANUARY 31, 2024			SHARE 🛨

Americans' Social Media Use

YouTube and Facebook are by far the most used online platforms among U.S. adults; TikTok's user base has grown since 2021

Most U.S. adults use YouTube and Facebook; about half use Instagram

% of U.S. adults who say they ever use ...



Note: Respondents who did not give an answer are not shown. Source: Survey of U.S. adults conducted May 19-Sept. 5, 2023. "Americans' Social Media Use"

PEW RESEARCH CENTER

https://www.pewresearch.org/internet/wp-content/uploads/sites/9/2024/01/PI_2024.01.31_Social-Media-use_report.pdf



Ï

Who uses each social media platform?

Usage of the major online platforms varies by factors such as age, gender and level of formal education.

% of U.S. adults who say they ever use ___ by ...

105		RACE &	HOUSEHOLD	EDUCATION	001040000
AGE	GENDER	ETHNICITY	INCOME	EDUCATION	COMMUNITY

Ages 18-29 30-49 50-64 65+

<============				
Facebook	68	78	70	59
Instagram	76	66	36	19
LinkedIn	40	41	30	15
X (formerly Twitter)	38	25	15	8
Pinterest	43	43	33	22
Snapchat	65	32	14	4
YouTube	93	94	86	65
WhatsApp	30	40	28	18
Reddit	46	35	11	4
TikTok	59	40	26	10
BeReal	10	2	1	<1

Our presence is needed on social media and IN the media!

- We can add an evidence-based, practical, realworld perspective.
- We can answer key nutrition questions of consumers in simple, positive ways.
- We learn from consumers when we engage in social media and have a better understanding of their concerns and needs.
- If you're new to creating content, learn from students and interns! They are fantastic!



the **FOCUS**

Keep it simple and positive!

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Keep your family healthy with this list of immune-boosting fall superfoods

BY ALLISON PALMER OCTOBER 15, 2024 4:33 PM | 💭



Getty Images

 Only have a minute? Listen instead
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Whether your favorite thing about fall is the changing leaves or cozy sweaters, it's also a great time to think about boosting your family's wellness with seasonal produce. As kids head back to school and cold season looms, nourishing superfoods can do wonders to support their immune systems. Here are some top choices for your family's fall menu, plus some helpful tips from dietitians.

How to shift your new year's resolutions into positive opportunities for lasting change

WUWM 89.7 FM | By Audrey Nowakowski, Kobe Brown Published January 19, 2022 at 2:58 PM CBT 🔸 🗶 🖄

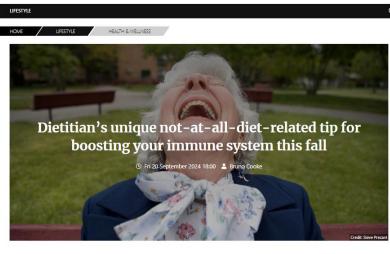
New year's resolutions

While the beginning of a New Year can act as a type of re-set or incentive for goalsetting, for some people it can be a difficult & triggering time.

There's a lot of pressure to make big changes in the new year, especially around health, nutrition, weight, and exercise. So how can you best approach your goals with a healthier and more positive mindset?

"I might challenge to think of it as any kind of new opportunity...to really first do a bit of an assessment as opposed to just jumping into something," says Susie Kundrat, clinical professor of kinesiology and a faculty member in the nutritional sciences program at UVH-Milwaukee.

She notes that something as simple as assessing your refrigerator or making a list of favorite fruits and vegetables to have on hand could make a huge impact in reaching a health goal.



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Whether it's the common cold, man flu, the real flu, or a case of the seasonal heebiejeebies, fall is wont to spring ailments upon us. The cold, dark months stretch out ahead, and we get feverish, tucked up in bed.



RACLS - RECEITER - LOOSICS - EVENTSCHEDULE - CETINVOLVED - AREAINFO - ABOUTUS Pre-Workout Nutrition Tips from Susie Kundrat

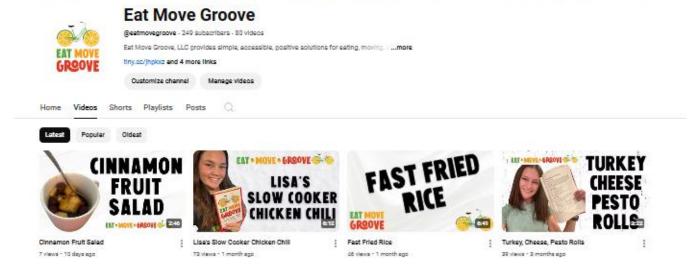
me + Pre-Race + Pre-Workout Nutrition Tips from Susie Kundrat



RECENT POST - Yoga and Running: The Perfect Duo - Distributes Rise to Doffer a Long-- Distributes Rise - Hamstring Injuries & Running - Returning to Running Postparture - Hamstring Injuries & Running - Returning to Running Postparture - Research Research Research - 2004 Referral Rewords Program - Runnited in 2004 - Tips for A Successful Rase Day

Make it fun!







ERT - MOVE - GROOVE -

SUPER SALAD IN A JAR



99 views - 3 months ago

SI







11 Minute Creating Energy Yoga 65 views - 2 months ago

CREATING ENERGY YOGA





20 questions with Eat Move Groovel 29 views - & months app

Super Saled in a Jar 50 views - 2 months ago

51 views - 2 months ago

211 Simple Salad ÷. 52 views - 2 months app

FAT + MOVE + GROOVE CA-





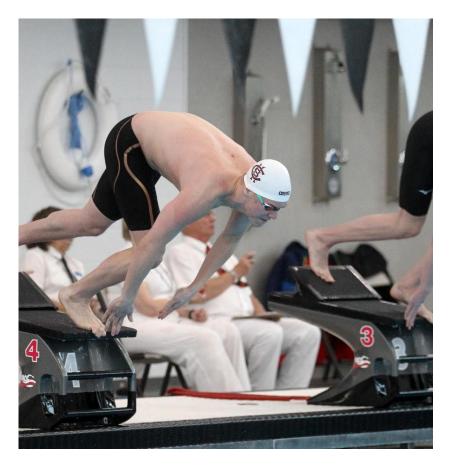
: Easy Blender Banana Milk . 45 views - 4 months ego



Meet Nolan

High school swimmer

- 18 years old
- 6'2"
- 200#
- Main Goals:
 - Get stronger
 - Swim faster
 - Recover better
 - Win the Illinois State Title in the 200 FREE



Nolan – Nutrition Focus Areas

1. Increase total energy intake

2. Boost muscle energy during training

3. Optimize recovery fuel

- 4. Get stronger
- 5. TEAMWORK with Nolan and Mom



Nutritional Needs in the Professional Practice of Swimming

- Aquatic sports include a variety of sport disciplines with varying degrees of metabolic, strength, and technical demands.
- As the displacement speed of the swimmer increases, the drag forces also intensify, requiring an increase in strength as performance levels rise.
- An adequate nutrition and supplement plan can improve the health and performance of swimmers.

Domínguez, R., Sánchez-Oliver, A. J., Cuenca, E., Jodra, P., Fernandes da Silva, S., & Mata-Ordóñez, F. (2017). Nutritional needs in the professional practice of swimming: A Review. *Journal of Exercise Nutrition & Biochemistry*, *21*(4), 1–10. https://doi.org/10.20463/jenb.2017.0030

Carbohydrate Intake Recommendations

- 6-8 g/kg/day (2.7-3.6 g/#/day) on days with moderate to high training volume with low intensity.
- 10-12 g/kg/day (4.5-5.5 g/#/day) on days with moderate to high volume high intensity.
- 1-2 g/kg (.5 to 1.0 g/#) of carbohydrate within 3-4 hours of training.

Protein Intake Recommendations

- 1.2 2.0 g/kg/day (.55 .9 g/#/day) depending on level of training and goals.
- 2.0 g/kg/day (.9 g/#/day) when training at high intensity and to maximize power and strength.
- 0.3 g/kg (0.14 g/#) protein intake at meals and snacks 5-6 times per day to maximize protein timing.
- Consume high bioavailable protein sources each day.
- To maximize recovery, ingest 20-25 g of protein with 1 g cho/kg (.5 g/#) after training.

Nutrient Needs - Nolan



Average daily nutrient needs (180#):

CALORIES: 3,500 – 4,000 per day (increase by 1,000+) CARBOHYDRATE: 600 grams or more (3-4 g of carbohydrate per pound per day)

PROTEIN: 180 grams (2.0 grams per kg or 0.9 g of protein per pound per day evenly distributed)

RECOVERY: 90 grams carbohydrate (.5 g of carbohydrate per pound) with 15-30 grams protein post-workout and eat a meal within 1-2 hours

Early Morning and Afternoon Practices – Sample Day

Night before: 2 granola bars + a big handful of peanuts + water

Early morning pre-workout: 20-ounce bottle of apple juice + water

Post-workout: Protein bar and 20-ounce bottle of apple juice + water

Breakfast: 4 eggs + 4 slices French toast + extra water

Lunch: Steak burrito + water

Snack: Banana + handful of peanuts + handful of Wheat Thins + water

Pre-workout: Quesadilla easy on the chicken/cheese + handful of grapes + 20-ounce apple juice + water

Post-workout: Protein bar + 20-ounce apple juice + water

Dinner: 6 ounces grilled chicken breast + side of veggies + potatoes + water



Nolan's Keys to Boost Performance

- ✓ Changing WHEN I eat and knowing WHY I need to eat at certain times
- ✓ Increasing carbs and focusing on refueling every day
- ✓ Eating enough high-quality proteins
- ✓ Replacing water with apple juice simple!
- ✓ I eat foods I like and am used to eating
- ✓ Being consistent
- ✓ I know I am fueling my body well
- ✓ I still go on my donut run every Sunday morning!



"I'm kind of known for my apple juice"

-- Nolan

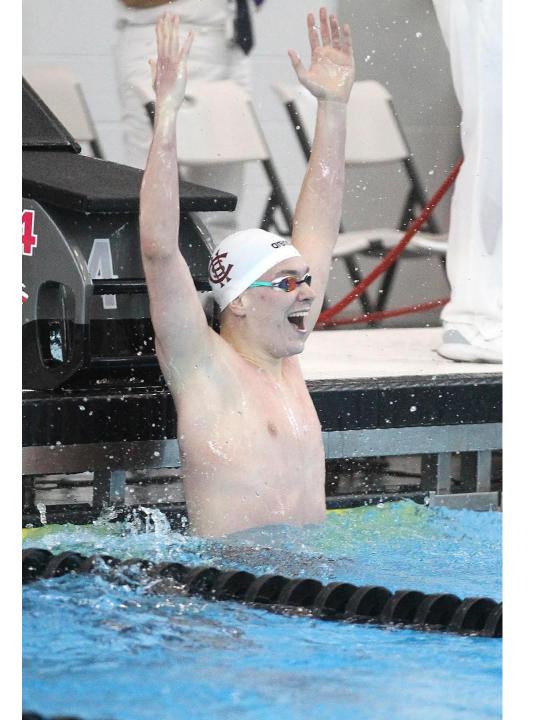
Karyn's Nutrition Tips

- Understanding misconceptions around food like "sugar is bad for you."
- ✓ Offering practical, easy-toimplement solutions at home, at meets, and when we were on the road.
- Staying in close touch so we could brainstorm food ideas on the road and when we needed to make modifications.
- ✓ "You didn't always give Nolan the answers I thought you would."



2023 Illinois State Champion

200 FREESTYLE!



Meet Ann

- 67-year-old active female
- Optimize overall well-being
- Decrease inflammation
- Maintain strength, balance, and fitness
- Main Goals:
 - Decrease my risk of developing heart disease
 - Boost strength and function stay active!
 - Maximize muscle and bone!

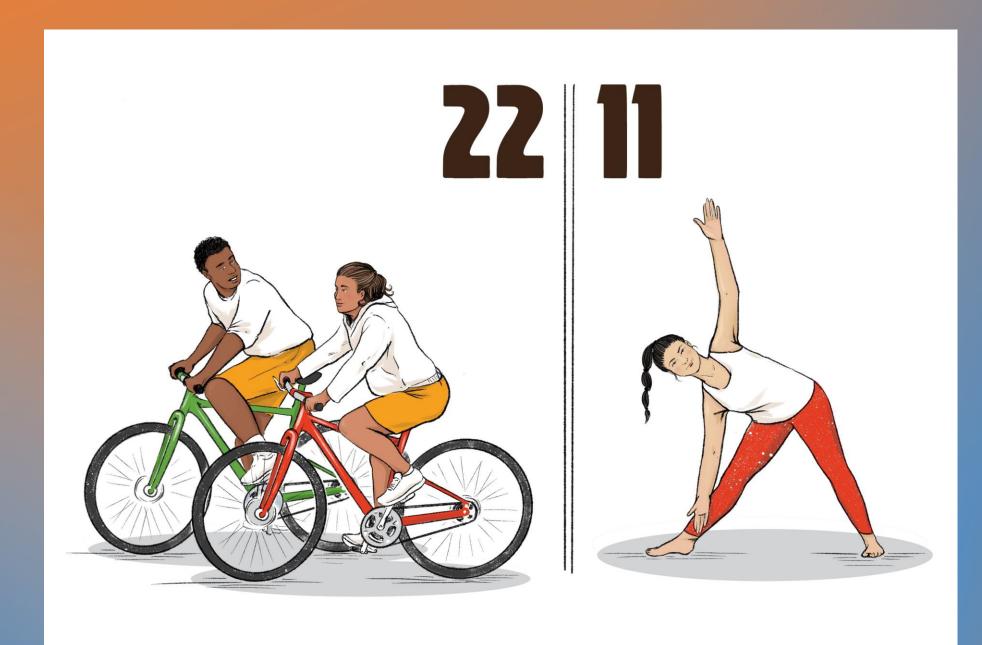


Physical Activity Guidelines for Americans

- Move more and sit less throughout the day.
- For substantial health benefits, do at least 150 minutes to 300 minutes a week of moderate aerobic physical activity, or 75 minutes to 150 minutes a week of vigorous aerobic activity—or a mix of both.
- Moderate to vigorous muscle-strengthening activities that involve all major muscle groups two or more days a week gives you additional health benefits.



https://odphp.health.gov/sites/default/files/2019-09/Physical_Activity_Guidelines_2nd_edition.pdf



Systematic review and meta-analysis of protein intake to support muscle mass and function in healthy adults

- Untrained or trained healthy men and women 18 or older from 74 randomized control trials.
- Does increased protein intake improve lean body mass in young and old healthy adults?
- The recommended protein intake worldwide for healthy adults is in the range of 0.8-0.9 g protein/kg body weight/ per day.
- A higher protein intake (1.2 1.6 g/kg/day) has been recommended to maintain or increase lean body mass in young and old adults.

Nunes, E. A., Colenso-Semple, L., McKellar, S. R., Yau, T., Ali, M. U., Fitzpatrick-Lewis, D., Sherifali, D., Gaudichon, C., Tomé, D., Atherton, P. J., Robles, M. C., Naranjo-Modad, S., Braun, M., Landi, F., & Phillips, S. M. (2022). Systematic review and meta-analysis of protein intake to support muscle mass and function in healthy adults. *Journal of Cachexia, Sarcopenia and Muscle*, *13*(2), 795–810. https://doi.org/10.1002/jcsm.12922

Results

- Additional protein ingestion of 1.6 g of protein/kg/day or higher in younger (<65 years) subjects led to small increases in lean mass when combined with resistance exercise.
- The effect on increases in lean body mass in older (65 years or older) adults with protein intakes of 1.2 to 1.59 g of protein/kg/day was significant.
- Overall, the effect of protein intake on lean body mass was more pronounced in younger subjects.
- Factors including protein intake per meal may also affect results.

Higher Protein Diets and Weight Management

- In a meta-analysis reviewing protein intake and weight loss, higher-protein diets were found to aid with weight loss.
- Protein intakes of 1.2 to 1.6 g/kg/day were considered "high protein."
- Specific protein quantities of at least 25-30 grams of protein per meal are also recommended.
- Higher-protein diets were noted to result in improvements in appetite, body weight management, cardiometabolic risk factors, and overall health outcomes.



Leidy HJ, Clifton PM, Astrup A, Wycherley TP, Westerterp-Plantenga MS, Luscombe-Marsh ND, Woods SC, Mattes RD. The role of protein in weight loss and maintenance. Am J Clin Nutr. 2015 Jun;101(6):1320S-1329S. doi: 10.3945/ajcn.114.084038. Epub 2015 Apr 29. PMID: 25926512

Randomized Controlled Trial > Nutrients. 2023 Jun 25;15(13):2870. doi: 10.3390/nu15132870.

Effects of Consuming Ounce-Equivalent Portions of Animal- vs. Plant-Based Protein Foods, as Defined by the Dietary Guidelines for Americans on Essential Amino Acids Bioavailability in Young and Older Adults: Two Cross-Over Randomized Controlled Trials

Gavin Connolly ¹, Joshua L Hudson ¹, Robert E Bergia ¹, Eric M Davis ¹, Austin S Hartman ², Wenbin Zhu ², Chad C Carroll ³, Wayne W Campbell ¹

- Methods: 30 younger adults (26 YO average age) and 25 older adults (64 YO average age) completed four testing sessions with two-oz equivalents of either unprocessed lean pork, whole eggs, black beans, or sliced almonds.
- Two-ounce equivalents of protein-rich foods, according to the Dietary Guidelines, equates to 2 ounces of cooked meat, poultry, or fish; 2 eggs; ½ cup cooked beans, or 1 ounce of nuts or seeds.
- Two oz-equivalent portions of pork (7.36 g EAA) and eggs (5.38 g EAA) resulted in greater EAA bioavailability than black beans (3.02 g EAA) and almonds (1.85 g EAA) in young and older adults, separately or combined (*p* < 0.0001 for all).
- Bottom line choose a wide range of high-quality proteins clients enjoy and will consistently consume.

Protein Optimization for Ann



- Ann's weight: 150#
- Protein needs/day: 1.4 g/kg/day (.6 g/#/day)
- Total protein = 90 grams per day
- Protein (grams/meal) to maximize muscle protein synthesis: 30 grams per meal
- Build snacks around produce and protein









Anti-Inflammatory Properties of Diet: Role in Healthy Aging

Kristine Stromsnes ¹, Angela G. Correas ¹, Jenny Lehmann ^{2,3}, Juan Gambini ^{1,*} and Gloria Olaso-Gonzalez ¹

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- ² Department of Molecular Toxicology, German Institute of Human Nutrition, Potsdam-Rehbrücke, Arthur-Scheunert-Allee 114-116, 14558 Nuthetal, Germany; jenny.lehmann@uni-potsdam.de
- ³ Institute of Nutritional Science, University of Potsdam, 14558 Nuthetal, Germany
- * Correspondence: juan.gambini@uv.es; Tel.: +34-963-86-46-46



- Inflammation is acutely activated by infections, trauma, toxins, or allergic reactions.
- However, if it becomes chronic, inflammation can end up stimulating the development of diseases such as cardiovascular disease, autoimmune disease, neurological disease, or cancer.
- Additionally, during aging, inflammation becomes increasingly more chronic.

Key points

- Inflammation is a key physiological process in immunity and tissue repair.
- As we age, inflammation becomes more chronic.
- Specific foods have anti-inflammatory properties, especially fruits, veggies, whole grains, fish, nuts, seeds, legumes, and oils.
- A combination of foods rich in compounds with anti-inflammatory activity could exert beneficial effects during aging and in pathologies associated with inflammation and in reducing detrimental effects of foods with proinflammatory activity.
- Anti-inflammatory foods in our diet could help alleviate the inflammatory processes derived from diseases and suboptimal diets and promote healthy aging.

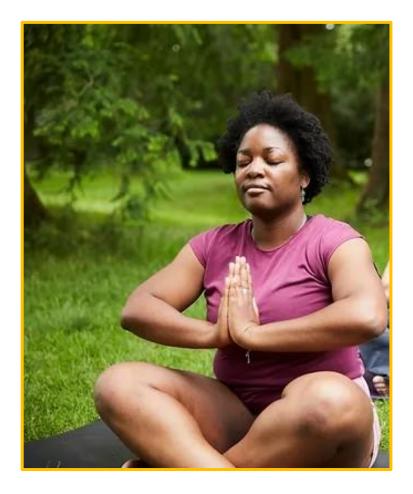
Ann's Plan

- Fresh, local foods when possible
- Meals =
 - Colorful fruits and veggies
 - High-quality proteins
 - Whole grains and starches
 - Healthy fats
 - Flavor!

<u>Colors</u>	Fruits and Veggies	
Green	Broccoli, Brussels Sprouts, Bok Choy, Cauliflower, Cabbage, Kale, Collards, Mustard Greens, Green Peppers, Kiwi, Spinach, Limes, Leeks, Avocados	
Orange/Yellow	Oranges, Tangerines, Yellow Grapefruit, Peaches, Lemons, Papaya, Pineapple, Nectarines	
Red/Purple	Red Grapes, Purple Grape Juice, Cherries, Berries, Plums, Prunes, Raisins	
White	Onions, Chives, Garlic	

Meet Shonda

- 38-year-old busy mom
- Limited time, energy, and finances
- Looking for: simple, easy high-nutrient meals on a budget
- Main Goals:
 - Keep up my energy to take care of myself and my teenagers
 - Prepare healthy meals on a budget with limited time
 - Prioritize my well-being in ways I can sustain for the long term
 - Lower my risk for developing high blood pressure



"We love fruits and veggies, but we rarely eat them!"

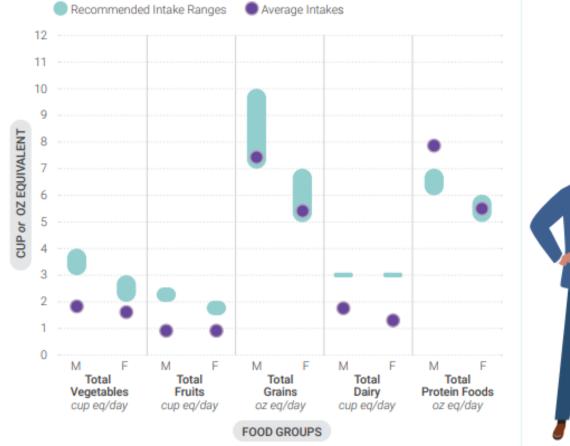
- 12.3% of adults meet the 1.5 2 cups of fruit recommended per day
- 10.0% of adults meet the 2 3 cups of vegetables recommended per day
- 2 cups each meal provide simple options!



Figure 4-3

Current Intakes: Ages 31 Through 59

Average Daily Food Group Intakes Compared to Recommended Intake Ranges





Current Intakes Ages 31-59, Dietary Guidelines 2020-2025

Current Intakes

Figure 3-8

Current Intakes: Ages 14 Through 18

Average Daily Food Group Intakes Compared to Recommended Intake Ranges



Current Intakes Ages 14-18, Dietary Guidelines 2020-2025

Fruits, vegetables, and health: A comprehensive narrative, umbrella review of the science and recommendations for enhanced public policy to improve intake

- Optimal consumption of fruits and vegetables can help reduce inflammation, prevent effects of various chronic diseases, and extend life expectancies along with an individual's healthy years.
- Current global intakes of fruit and vegetables are severely below recommendations.

- Eat least 2 servings of fruit and 3 servings of vegetables a day.
- Optimal consumption of produce resulted in a 56% reduction in all-cause mortality.
- Diet has been suggested to be a more important factor associated with disease burden in the United States than both physical activity and BMI.

Wallace, T. C., Bailey, R. L., Blumberg, J. B., Burton-Freeman, B., Chen, C. O., Crowe-White, K. M., Drewnowski, A., Hooshmand, S., Johnson, E., Lewis, R., Murray, R., Shapses, S. A., & Wang, D. D. (2019). Fruits, vegetables, and health: A comprehensive narrative, umbrella review of the science and recommendations for Enhanced Public Policy to improve intake. *Critical Reviews in Food Science and Nutrition*, *60*(13), 2174–2211. https://doi.org/10.1080/10408398.2019.1632258

Fruit and vegetable consumption and all-cause, cancer and CVD mortality: analysis of Health Survey for England data

- Review of over 65,000 participants 35 years or older in the 2001-2008 Health Surveys for England
- Fruit and vegetable intake was associated with reduced all-cause mortality (0.67 HR for consumption of 7+ portions a day)
- Fruit and vegetable intake was associated with reduced cancer and cardiovascular mortality
- Vegetables may have a stronger association with reduced mortality than fruit
- Consumption of vegetables or salad was most protective

Oyebode O, Gordon-Dseagu V, Walker A, et al Fruit and vegetable consumption and all-cause, cancer and CVD mortality: analysis of Health Survey for England data J Epidemiol Community Health 2014;**68**:856-862.

DASH DIET

RECOMMENDED DAILY FOOD SERVINGS



Food Group	Daily Servings (Except as noted)	Serving Sizes
Whole Grains	6-8	1 slice 100% whole grain bread 1 cup whole grain cereal ½ cup cooked rice, quinoa, or whole grain pasta
Vegetables	4-5	1 cup raw leafy vegetables 1/2 cup cooked vegetable 1/2 cup vegetable juice
Fruits	4-5	1 medium whole fruit 1/2 cup fresh or frozen fruit 1/4 cup unsweetened dried fruit
Fat-free or low-fat dairy products	2-3	1 cup milk 1 cup yogurt 1½ ounces cheese
Lean meats, poultry, and fish	6 or less	1 ounces cooked lean meats, poultry, or fish 1 egg
Nuts, seeds, and legumes	4-5 per week	1/3 cup or 1 ½ ounces nuts 2 tablespoons or ½ ounce seeds ½ cup cooked legumes (dried beans or peas)
Fats and oils	2-3	1 tablespoon mayonnaise 2 tablespoons salad dressing 1 teaspoon olive oil or vegetable oil
Sweets and added sugars	5 or less per week	1 tablespoon sugar 1 tablespoon jelly or jam, or syrup ¹ / ₂ cup sorbet, 1 cup lemonade

Review > Cureus. 2023 Sep 4;15(9):e44692. doi: 10.7759/cureus.44692. eCollection 2023 Sep.

DASH Diet: A Review of Its Scientifically Proven Hypertension Reduction and Health Benefits

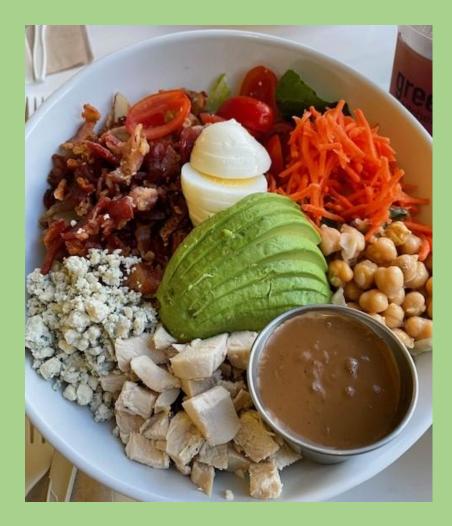
Chidera Orwuzo ^{1,2}, John O Olukorode ¹, Olutomiwa A Omokore ¹, Oluvatobi S Odunaike ¹, Raymond Omiko ¹, Osadebanwen W Osaghae ¹, Walid Sange ³, Dolapo A Orimoloye ⁴, Herrtage O Kristilere ¹, Fihicoben Addeh ¹, Somtochukwu Omwuzo ⁵, Lisa Omoragbon ¹

SIMPLE, POSITIVE EATING

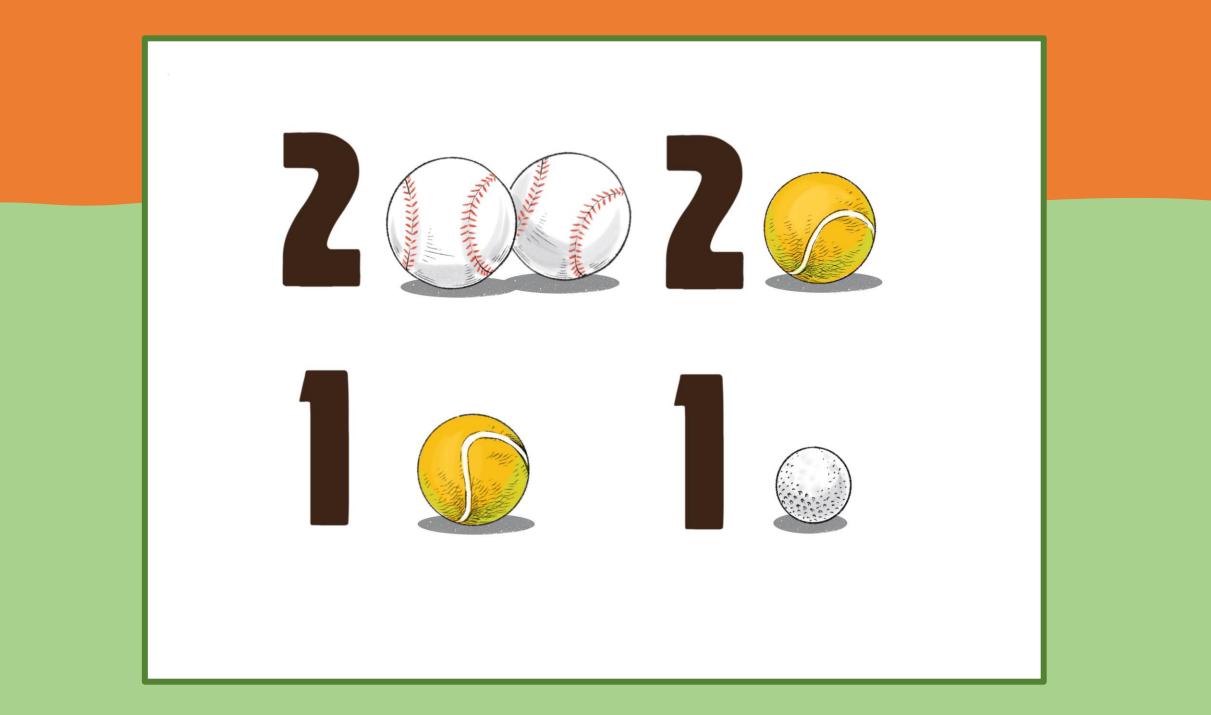
- Choose a plant-forward eating plan to optimize health and well-being.
- Eat a wide range of fruits and vegetables every day (at least 6 cups).
- Focus on produce and high-quality proteins (lean meats, poultry, dairy, legumes, eggs, nuts, seeds) first.



SIMPLE, POSITIVE EATING



- Include protein-rich foods in meals and snacks.
- Choose healthy fats each day.
- Eat in moderation, listening to your body.
- Focus on what to eat instead of what not to eat.
- Enjoy your food!
- Include your LOVE foods.



Easy Budget-Friendly Protein Options

- Beef, pork, poultry, and fish in bulk
- Milk
- Yogurt
- Cheese and cottage cheese
- Eggs (sometimes!)
- Dry beans and canned beans
- Nuts and nut butters
- Seeds
- Canned tuna and salmon
- Skillet meals; crock pot meals



Southwest Skillet Meal

Preparation time: 5 minutes

Cooking time: 10-12 minutes

Number of servings: 6

Ingredients

- 1-pound lean ground turkey or ground beef (at least 90% lean)
- 1 15-ounce can tomato sauce
- 1 green pepper
- 1 red or yellow pepper
- 1 1.5-ounce package taco seasoning
- 1 ½ cups elbow macaroni (try whole grain macaroni)
- 1/2 cup shredded cheddar cheese
- 1 1/2 cups water



KEY PRODUCE GROUPS FOR HEALTH

Food groups	Examples
Cruciferous vegetables	Broccoli, cauliflower, cabbage, kale, arugula, Bok choy, turnips, watercress, rutabaga, and collard greens.
Dark-green leafy vegetables	Kale, turnip greens, cabbage, broccoli, Swiss chard, spinach, mustard greens, and romaine lettuce.
Citrus fruits	Oranges, tangerines, lemons, limes, grapefruit, kumquats, and pomelos.
Dark-colored berries	Blackberries, raspberries, and blueberries.

Start boosting produce intake with high-impact fruits and veggies clients and patients already like – fresh, frozen, canned, dried, juices – all forms!

FAST SIMPLE MEAL OPTIONS

- 2 cups produce
- 4 ounces protein
- Whole grain
- Healthy fat



Breakfast

- 1 cup orange juice
- 1 banana
- 1 cup low fat milk with coffee
- 2 scrambled eggs
- 2 slices whole grain toast/jam

Dinner

- Crock pot veggie, potato, and beef soup
- Canned pears

Lunch

- 1 apple
- 1 cup baby carrots
- Turkey and cheese sandwich on whole grain bread with avocado spread and veggies
- Cookies

Snack ideas (produce + protein)

- Handful of nuts with an apple
- Baby carrots and cheese sticks
- Smoothie with 100% OJ, frozen peaches, and Greek yogurt
- Jerky with clementines



How do we help clients, patients, and consumers eat, move, and support personal well-being to nurture a vibrant **HEALTH SPAN?**

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Employ simplicity and positivity to foster simple EAT, MOVE, and GROOVE opportunities each day

More Science to Simple?

Stay in contact with Susie for more **Science to Simple** "research to practice" recommendations.

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