

# THE GRAPEVINE

TEACHERS COLLEGE, COLUMBIA UNIVERSITY



*Farmer's Market Frequented by Cindy Zheng*

## How Sourcing Locally Cured My Homesickness

By: Cindy (Luyue) Zheng

One of the many consequences of the COVID-19 outbreak was that it forced a long period of separation between my family and me. While video calls mitigated my homesickness temporarily, the holiday season had me missing my grandma's Seafood Chow Mein and family gatherings.

Prior to the pandemic, I was better able to handle the hunger of my homesickness, as authentic Chinese food is readily available in New York City throughout predominantly Asian neighborhoods, like Chinatown.

However, since relocating to Gainesville, Florida in August, sourcing satisfying Chinese food or ingredients has been a challenge. It is particularly difficult to find fresh

vegetables, like bamboo shoots, and special cuts of meat, such as beef tendon. In November, I spent quite a long time searching for duck meat to make a traditional Chinese winter soup, *duck soup with agrocybe* (茶树菇老鸭汤). Unfortunately, I could not find whole ducks anywhere in the nearby grocery stores. Though I recognized that duck is less popular in the U.S, my thoughts of and yearning for home made my craving for this dish more intense- I knew my homesickness would only be reduced by drinking duck soup.

Then, in November 2020, Professor Koch and Professor Gussow led a discussion in Nutritional Ecology on thinking and eating locally. In the session, we discussed the different

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## LETTER FROM THE EDITOR

Dear Students, Faculty, Alumni and Staff,

2021 has brought with it a wave of new: a new administration; a new vaccine; a new edition of the Dietary Guidelines for Americans; a new integrated MS-RDN model at Teacher's College Program in Nutrition; a new group of TC students applying to their dietetic internships; a new set of nutrition trends and technological advancements, be it the coining of "climitarians" or lab-grown meat. However, some facets of our pandemic world has still stayed the same: we continue to work remotely, trying to balance our work and home life; many travel bans have remained in place, separating us from our loved ones; flexibility and freedom to explore campus, experiment with exercise classes and extracurriculars, and engage in social events have remained limited; our community has continued to remain physically separated, only to be joined together by Zoom classes and webinars.

That is why for this Winter's edition of *The Grapevine*, the first of 2021, I wanted to focus on our students. While traditionally jam-packed with research-driven articles, this issue is taking a different approach, focusing on our classmates and alumni's experiences, celebrating their accomplishments, and empathizing with their struggles. As you read, I urge you to try and remember that we are a part of a larger community, one that is based on the common goal of bettering the livelihood of all through nutrition. When you read about Jiakun's remote experience working for a major China Food Corporation, or how Cindy cured her homesickness with the help of a farmers' market, I hope you can feel their optimism and passion and that it brings out that very same feeling in you as well. Whether it is participating in a Health Nuts event, joining one of your peers' virtual workout classes, engaging in a dialogue with Victoria on *Kiss the Ground*, or emailing a classmate or teacher to congratulate them on a recent accolade, I hope you find a way to connect to your Teacher's College community this winter.

I look forward to seeing how you all engage with each other, and continue to move gracefully through this unprecedented time. I want to thank everyone who contributed to this issue and I wish everyone health and safety.



Amanda Wahlstedt

A handwritten signature in black ink that reads "Amanda Wahlstedt". The signature is fluid and cursive.

Editor-in-Chief

# The Grapevine Staff

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Nutrition & Public Health

## Faculty Advisors

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Associate Professor & Program  
Director

**Isobel R. Contento**

Professor

## Contributing Writers

**Cindy (Luyue Zheng)**

Nutrition & Exercise Physiology

**Victoria Rinsem**

Nutrition & Exercise Physiology

**Kathryn Baird**

Nutrition & Exercise Physiology

**Amanda Wahlstedt**

Nutrition & Public Health

**Jiakun Yi**

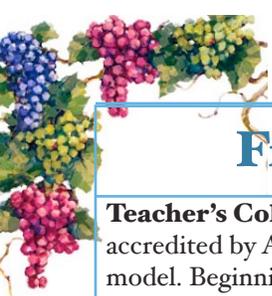
Nutrition & Public Health

**Valerie Charles**

Nutrition & Exercise Physiology

**Sydney Navid**

Nutrition & Exercise Physiology



## Fresh Off the Vine: Events and Announcements

**Teacher's College Program in Nutrition Transitions to an Integrated MS-RDN Track:** Teacher's College has been accredited by ACEND of the Academy of Nutrition and Dietetics, meaning it will move towards an integrated MS-RDN model. Beginning September 2021, the Program in Nutrition will include the dietetic internship into its competency-based program, blending coursework and practical experience. For more information or help with academic planning, email Dr. Randi Wolf at [wolf@tc.columbia.edu](mailto:wolf@tc.columbia.edu)

### Save the Date:

*Spring Conference, Nutrition Education in a Changing World:* On Friday, May 21st from 1:00 - 5:00 pm, "Nutrition Education in a Changing World" will celebrate and honor our beloved Professor, Dr. Isobel Contento.

*SNEB Annual Conference:* The Society for Nutrition Education and Behaviors, of which Professor Pamela Koch is the president, is having their annual conference this summer, from August 7th to 10th. Read more about the conference here: <https://www.sneb.org/2021>

### Sending a Special Congratulations To Our Peers:

Thu Thu May Oo and her powerful piece on the state of conflict in Myanmar, and their struggle for Democracy. You can read Thu Thu's article here: <https://www.tc.columbia.edu/articles/2021/february/myanmars-agony-why-the-world-should-pay-heed/>

Juan Castillo, Elizabeth Bradley, and Amanda Wahlstedt, with the help of Dr. Kate Burt, for their acceptance of "MSG Is A-OKAY: Exploring the xenophobic history of and best practices for consuming Monosodium Glutamate" in the Journal of the Academy of Nutrition and Dietetics (forthcoming).

To all of our classmates that have recently submitted their dietetic internship applications - we wish you the best of luck and congratulate you on your accomplishments thus far.

**Health Nuts Update:** Come join us at our next Health Nuts event! We would love to meet new faces and provide some support and entertainment while we're all stuck at home! So far, we have hosted a game night and a cookie baking event. Upcoming events will include a yoga/pilates workout class, Codenames night, and an exciting event with NYCNE and Diversify Dietetics at the end of the semester. Watch your Nutrition News emails for more information, and let us know if you have any questions @[healthnutsevents@gmail.com](mailto:healthnutsevents@gmail.com). Hope to see you soon!

## SUPPORT YOUR TC PEERS AND COMMUNITY

See below for a few ways that you can connect with and support your peers. From virtual workout classes to Zoom cooking courses, participate in some of the inspiring projects that your classmates are up to.

**Sydney Navid's Cooking Classes and Dessert Boxes:** "As our world continues to become more digital, it has been wonderful to see individuals share their passions with the masses during this time of uncertainty. I've had the privilege of offering monthly cooking classes via Zoom that elevate vibrant plants through unique spices, herbs, and flavor combinations. It's also been so special for me to share cherished Persian recipes that I learned from my mom and grandma through my *Fundamentals of Persian Cooking* series. Since being home in Los Angeles, I've also had the pleasure of selling homemade dessert boxes locally and donating a portion of the proceeds to an organization whose mission I align with. If you're interested in learning more about my plant-based cooking classes and monthly dessert boxes, head on over to the "shop" section of my website [sydneynavid.com](http://sydneynavid.com) or follow me on Instagram @sydneynavid to stay in the know."

**Vinny Panza's Gorilla Vinny Kickboxing and Personal Trainings:** "I am a fitness instructor with 20+ years of experience in martial arts. I have a black belt in Kenpo Karate and a Blue Belt in Brazilian JiuJitsu, plus many years of training in muay thai, boxing, and kung fu. I incorporate training techniques from boxing, kickboxing, and other combat sports to improve an individual's endurance, strength, and overall agility. A typical session follows a HIIT or bootcamp flow, beginning with warm up and stretching before moving into "rounds" of technique drills or fighting combos. All levels of fitness and experience are welcome for private or group, online or in-person sessions. Group Zoom classes occur on Tuesdays at 7:00 PM and Wednesday at 6:00 PM. They are donation based (\$15-20 recommended). Private Zoom sessions are available too, along with in-person sessions on the Upper West Side. Contact me at [gorillavinnytraining@gmail.com](mailto:gorillavinnytraining@gmail.com), and check my YouTube at Gorilly Vinny Training or follow me on Instagram @gorillavinny."

Have your own business or project that you would like to have featured? Email a description to [grapevinetceditor@gmail.com](mailto:grapevinetceditor@gmail.com)

## How Sourcing Locally Cured My Homesickness (continued from cover)

subscription models of CSA farms nationwide. Intrigued by this idea, I started googling CSA farms near me to see different management approaches in response to COVID-19. I unexpectedly came across a meat vendor who participates in a Saturday Farmers Market that was only a 15-minute drive from me. Thinking of my duck soup, I instantly called him and inquired about duck meat. The butcher's answer thrilled me - not only did he have a whole duck, but he offered to cut the duck into stew size pieces for my soup! I was delighted by the customer service and I could not wait to pick up the meat at the farmers market that Saturday.

I was amazed by how the concept of "thinking locally" that I learned in Nutritional Ecology was going to remedy my homesickness. Prior to this, neither me nor my roommate had ever ordered meat from a butcher in America before. While buying from a butcher who meets your personal specifications is quite common in China, I had



Braised Duck (酱鸭)

been buying my meat from supermarkets, such as H-Mart and Costco, prior to this experience.

On Saturday, my roommate and I went to the Farmers' Market. It was a wonderful activity to stroll amidst outdoor stalls of fresh produce while learning about the people who grow a variety of nutritious food around the area. A butcher in his fifties with dark oval sunglasses, Jan Costa, looked cheerful when I informed him of my name for pick up. "Tell me how you will cook the pork skin," the butcher asked as he handed me a bag with vacuum-packed duck, pork skin and pork feet. "It's for fillings of soup dumplings!" I chuckled. "The jelly of boiled pork skin liquifies during steaming, making soup dumplings juicy." The butcher was fascinated with this cooking secret and boasted that he also provides special cuts of meat used in Chinese cuisine, like pork brain. My eyes lit up when hearing the unique cut of meat, which is only popular outside of the United States. Overall, I found that a wider variety of food is offered and available in a local food system. Plus, the connection between butchers and customers give people a sense of belonging. For me and my roommate, reconnection in a new environment reduced our sense of isolation during the pandemic, which is an unexpected psychological benefit of eating locally.

Isn't it awesome to have the burden of sourcing special-cut and antibiotic-free meats be reduced by building a relationship with a local butcher? When the cozy aromas of my duck soup wafted from the

kitchen, I felt less homesick. I did not realize cultural food practice may reconcile with the local food movement, but in my case, sourcing locally cured my homesickness.



Duck Soup with Agrocybe (茶树菇老鸭汤)

## KISS THE GROUND: FILM REVIEW

By Victoria Rinsem

There is no shortage of films on the topic of climate change. Most drive the same message home, urging individuals to make a difference by reducing their carbon footprint with ideas such as reducing plastic use, cutting down on food waste, recycling, or choosing sustainable foods.

In September of 2020, *Kiss the Ground*, the most recent of these documentaries, was released on Netflix.

However, it came with a twist. Woody Harrelson, the film's narrator, introduced a newfound solution in a fight that at times seems hopeless and where fear typically dominates the discussion. This newfound solution, he states, rests right under our feet – the soil. The film goes on to follow the history of soil on our planet, from where we went wrong with the introduction of current farming practices, such as tilling, pesticides and chemical fertilizers, to USDA price guarantees to farmers, which lead to erosion and desertification of once healthy and thriving soils and ecosystems. Around the world, 40 million people are forced off their land each year due to this desertification, and according to the United Nations, the world's remaining topsoil will be gone within 60 years.

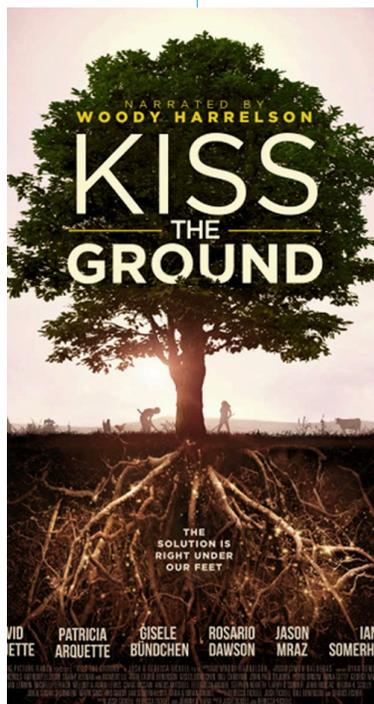
Cue up the inspiring solution of regeneration and the recurring theme in the film - oil, plants, our climate, and our health are all interconnected. Along with focusing on reducing carbon emissions, Harrelson emphasizes the importance of increasing the amount of carbon in the soil. In 2015, 30 countries signed an agreement, known as "4 per 1000," that was proposed by the French INRA Science team to increase the carbon in their soils by 0.4% annually to meet emission. In order to commit to this agreement, drastic changes in the way agriculture is handled must take place and is an instrumental step in the right direction. Although three of the largest agricultural producers - India, China, and the United States - did not attend COP21 and sign this agreement, there is work being done in the U.S. by the Natural Resources Conservation Service (NRCS) as part of the

USDA's initiative to teach farmers to reduce tilling, as well as the Soil Health Partnership, where now 5% of U.S. farms are managed for soil health with a stated goal of 50% by 2025.

Beautiful farms, images, and stories of those involved in regenerative agriculture - a conservation and rehabilitation approach to food and farming systems focusing on topsoil regeneration and increasing biodiversity - are shown throughout the second half of the film both across the world and the United States. Images of once eroded soil now blossom with a diverse range of plants, crops, and livestock. San Francisco is highlighted as one example of a large city implementing composting practices, collecting 700 tons of food scraps per day which also helps to grow their economy. The microbial diversity in the soil is highlighted as a direct influence on our own microbiomes from the food we eat and where it comes from. When considering food sources and their climate impact, animal meats are often portrayed as a problem. While unethical concentrated animal feedlots have been viewed as a consequential factor in our planet's carbon emissions, *Kiss the Ground* points to animal husbandry as a solution to reversing desertification when raised humanely and

roaming freely. And the cycle so continues: increasing soil microbe growth spurs plant growth, bringing more rain and sequestering more carbon (not to forget mentioning the natural beauty of it all).

The documentary does not seem to focus on taking a political stance, however the timing of its release in early fall of last year seemed to attempt a statement in light of the upcoming election. With a new administration underway in the United States who has vocalized the importance of the climate change fight, there is a new light shed on the film's encouraging undertone. Although it is clear there is a lot of work to be done, we must continue the fight, getting involved in regenerative farming practices, influencing both climate change and the state of nutrition.



## 2021 ALUMNI PANEL: RECAP

By Kathryn Baird

On Wednesday, January 27th, the Annual Nutrition Program Alumni Panel provided an unprecedented, unique, and exciting opportunity for all the panelists and its attendees. Four alumni took the virtual stage over zoom, sharing their experiences and insights from all across the globe –connecting from Japan, China, London, and New Jersey. This year’s panel featured Lieutenant Commander Pamela Cole Foss, MS, RDN, CCSSD; Lin Wan, MS, RDN; Natalia Stasenko, MS, RDN; and Matt Abel, MS, RDN. The speakers graduated from TC’s Program in Nutrition between 2010 and 2018, and specialized across all the various concentrations (Education, Public Health, and Exercise Physiology). After graduating, all the alumni subsequently completed the TC dietetic internship. During the event, each panelist shared significant aspects of their scholastic and professional journeys, while providing words of advice and encouragement regarding academics, internships, and careers to the TC community.

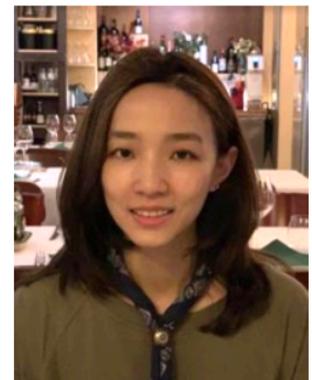
The panelists represented a diverse application of nutrition in the world: Lieutenant Commander Pamela Cole Foss serves in the U.S. Navy; Lin Wan conducts clinical research trials at Mérieux NutriSciences; Natalia Stasenko designs child feeding solutions; and Matt Abel counsels bariatric patients and athletes. However, while their day-to-day work may differ, the alumni were all drawn towards the field of nutrition for the philanthropic purpose of making a meaningful difference in the community. It took time, diligence, and exploration for these panelists to reach the point they are at today; three out of the four alumni were career changers, and each worked among various professions before discovering their niche. For instance, after a few years with athletes, Lieutenant Commander Pamela Cole Foss transitioned to working at the Naval hospital in Okinawa, Japan as a military dietician and is currently the associate director of healthcare and business operations.

Natalia Stasenko, when discussing her web-based resource for child feeding practices, stated, “what started as a private practice is now reaching parents virtually all over the world.”

Upon being asked about their favorite aspects of their current work, the alumni expressed the enjoyment of being asked about their favorite aspects of their current work, the alumni expressed the enjoyment of problem solving, interpersonal care, and continual opportunities for learning. The alumni also expressed the gratification they feel when their day-to-day efforts come to fruition, such as the publishing of Lin Wan’s research trials or Matt Abel’s patients achieving their dietary goals. In response to their least favorite part of their jobs, all the alumni laughed in unison.... “charting and paperwork.”



*Lieutenant Commander Pamela Cole Foss, MS, RDN, CCSSD*



*Lin Wan, MS, RDN*



*Natalia Stasenko, MS, RDN*



*Matt Abe, MS, RDN*

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## *2021 Alumni Panel: Recap (cont.)*

The alumni reminisced fondly over their education and dietetic internship experiences at TC. Each member recognized this time as a pivotal growth and learning period, equipping them with the knowledge, skills, and resources for future competency in the professional realm. Moreover, the alumni discussed the value of the foundational principles acquired from TC courses and how they are incorporated into their work. As Matt Adel gratefully expressed, “TC gave all the scaffolding in which I could build upon.” In addition, the alumni spoke highly of TC’s dietetic internship, highlighting its flexibility, site diversity, and individualization.

Before answering questions from the virtual crowd, the alumni offered words of wisdom to current students and interns. The panelists advised listeners to stay curious and open-minded by proactively seeking work opportunities and exploring areas that may be unfamiliar; as Lieutenant Commander Pamela Cole Foss stated, “growth happens where you feel uncomfortable.” The alumni not only emphasized the significance in establishing external connections, but the importance of forming a strong internal network among peers and professors. “There’s a lot of opportunities that can come out of the group that you create,” Lin Wan said. If one thing’s made certain from this event, it is that TC’s widespread and welcoming community crosses seas, borders, and screens!

The Alumni Panel was supported by the Program in Nutrition faculty, organized by the HealthNuts Club, and moderated by Camille Motte-Dit-Falisse. *To stay up to date with TC’s Program in Nutrition’s information and news, make sure you are receiving emails from [nutritionnews@tc.columbia.edu](mailto:nutritionnews@tc.columbia.edu) for weekly updates, and The Health Nuts.*

# THE 2020-2025 DGAs EXPLAINED

By Amanda Wahlstedt

This past December, the 2020-2025 Dietary Guidelines for Americans (DGAs) were released. The Guidelines, developed by the US Department of Agriculture (USDA) and US Department of Health and Human Services (HHS) are released every 5 years, and serve as the basis for federal food programs, such as WIC, National School Lunch Programs, and more. They are also used as the foundation for nutrition information and health promotion for the general public, exemplified through MyPlate. With over 74% of the US adult population overweight, proper nutrition and diet is of the utmost importance. The highlights and critiques of the ninth edition of the DGAs, headlining the slogan “Make Every Bite Count,” is recapped here:



Image retrieved from The 2020-2025 DGAs

## Summary of the 2020-2025 DGAs:

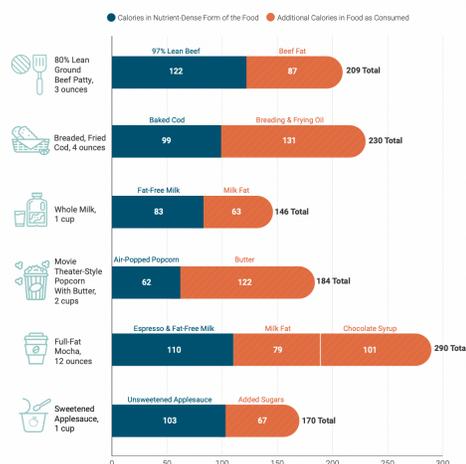
The DGAs have four key recommendations that shape their 150 page document. These guidelines include:

1. Following a healthy dietary pattern at every stage of life.
2. Customize and enjoy nutrient-dense food and beverage choice to reflect personal preferences, cultural traditions, and budgetary considerations.
3. Focus on meeting food group needs with nutrient-dense foods and beverages and staying within calorie limits.
4. Limit foods and beverages higher in added sugars, saturated fat, and sodium and limiting alcoholic beverages. This includes keeping added sugars to less than 10% of calories per day starting at age 2, saturated fat to less than 10% of calories per day starting at age 2, and allotting a total of 15% of daily calories for added sugar, saturated fat, and

alcoholic beverages. They also recommend keeping sodium to less than 2,300 mg/day.

The above recommendations are offered as a framework for a healthy diet throughout all stages of life. Similar to the previous edition of the DGAs, they emphasized the importance of dietary patterns as a whole over individual nutrients or foods, allowing for greater flexibility and relatability from consumers. The DGAs also noted that Americans are falling short of meeting various nutrition recommendations: 90% of Americans are not meeting the 2 1/2 cups of vegetables/per day recommendation; 80% are missing their daily fruit target; 98% are eating less than the recommended 3 oz./day of whole grains, with 74% exceeding the limits for refined grains. To help consumers meet these goals, the DGAs offered approachable and tangible advice, such as nutrient-dense options that one can use in place of traditional, high-calorie, low-nutrient foods (see table below).

Figure 1-1  
Examples of Calories in Food Choices That Are Not Nutrient Dense and Calories in Nutrient-Dense Forms of These Foods



The DGAs then go on to give more tailored nutrition advice for the various stages of life, ranging from infancy to older adulthood (ages 60+).

**Positive Changes to the 2020 DGAs:** For the first time in 40 years, the DGAs now provide dietary recommendations for all stages of life, most notably the inclusion of recommendations for infants up to 1 year of life. In the infancy section, the DGAs emphasize the importance of exclusively breastfeeding infants for the first 6 months of life. While the DGAs state that

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“human milk feeding alone is the ideal form of nutrition from birth through about age 6 months,” and that “exclusive human milk feeding is one of the best ways to start an infant off on the path of lifelong health nutrition,” they do note that if unavailable, formula or donor milk should be given, discouraging water or any additional beverage or food. Moreover, the DGAs offered food allergy prevention tactics, recommending that high-risk infants be exposed to peanut-containing foods and other allergens as early as 4-6 months. In addition to the new infant and toddler section, the DGAs expanded their section on dietary patterns during pregnancy, lactation, and breastfeeding. They also included a new section that discussed the harms of obesity-stigma and discrimination, urging citizens and health professionals alike to be mindful of the challenges to and barriers of weight loss.

### **How the DGAs Can Be Improved:**

While the 2020-2025 DGAs do touch on cultural traditions and budgetary considerations, there is still room for improvement: rather than simply nodding to the potential incorporation of traditional cultural foods, the DGAs should use a variety of foods in their recommendations throughout the report, moving away from the white, euro-centric MyPlate. For example, their sample meals include oatmeal with banana and walnuts, and Tilapia with broccoli and pasta - by swapping out one of these American style meals for a different culture’s traditional dish, such as daal or paella, the report would be more inclusive, increasing the relatability for our diverse society.

The white normative limitations of DGAs can be further seen by the inclusion and recommendation of dairy products as essential to a healthy diet. While the DGAs do include fortified soy products in the dairy section, they fail to incorporate this option in the Food Group recommendations. Moreover, dairy is consistently discussed as a dietary goal rather than calcium-heavy products, which could add to consumer confusion around the necessity of dairy. The DGAs should make a stronger case for the consumption of water over milk, and note that the consumption of dairy is not applicable for many of our citizens. Currently, 95% of Asian Americans, 60-80% of African Americans and Ashkenazi Jews, 80-100% of Native Americans, and 50-80% of Hispanics are lactose intolerant, making the consumption of dairy inappropriate. Moreover, in many cultures dairy is not a commonly consumed food.

While the DGAs took a slightly harder stance on processed meat than they have in the past, their language and recommendations remain vague. Considering that the World Health Organization classifies processed meat and red meat as Group 1 and Groups 2A carcinogens respectively, the DGAs have a duty to warn consumers of this potential link. While the DGAs do state that Americans should consume a “relatively lower consumption of red and processed meats,” they fail to clarify what this looks like in practice, and are hesitant to point out the frequency of processed meat consumption throughout the report. While they define processed meat as hot dogs, sausages, ham, and deli meats, they fail to make the explicit connection between processed meat consumption, its contribution to daily saturated fat intake and health ailments.

Finally, the DGAs also failed to mention sustainability or the environmental impact of food choices, despite an outcry from the public prior to their release. In doing so, the DGAs would have allowed consumers to connect their food choices to their environment, and understand the carbon footprint of choosing factory farmed animal meats or ultra-processed foods.

Other critiques from organizations like The Physicians Committee for Responsible Medicine and Union of Concerned Scientists centered around the lax recommendations on added sugar and the influence that agribusinesses have in influencing the DGAs. While the 2020-2025 DGAs have made some small improvements, work is still to be done on increasing the transparency on the food, health, and environmental connections to consumers.

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Last year, I was planning to go back to China during the summer break, and was actively looking for a summer internship in the field of food and nutrition in the metropolitan areas of Beijing, Shanghai or Guangzhou, China. However, everything completely changed in March—the US issued a travel ban to mainland China, my air tickets were rescheduled and canceled over and over again, and the recruiting processes of many internship opportunities in both the US and China were forced to stop when on-site work became impossible. Stuck in the US, I had to wait and hope that internships would shift to a remote schedule so that I could work online. Luckily, the Nutrition & Health Research Institute of the China Oil and Foodstuff Corporation offered me the opportunity to work remotely for their online nutrition and health professional knowledge service system. From April 2020 to January 2021, I worked as a part-time intern at the Institute.

## **About COFCO and the Nutrition & Health Research Institute:**

Based in Beijing, China, COFCO is the largest state-owned food processing holding company. Founded in 1949, COFCO has become a leading supplier of agri-products with grain, oil, sugar and cotton, forming their core business. According to their website, “COFCO has the leading edge in the Chinese market and is well positioned to take its first steps as an International agribusiness.” Within COFCO is the Nutrition & Health Research Institute (NRI), the research and development department within the company. It is also the first industry-based Research & Development center that targets the nutritional demands of the Chinese population. I worked on the online nutrition and health professional knowledge service system. The system aims to provide comprehensive knowledge on nutrition and health to various groups of audiences, including researchers, industry professionals, and the general public.

## **My Experience:**

My first task was a comparative analysis report on the knowledge promotion to the general public and national nutrition and health education programs in developed countries. I researched the dietary guidelines, governmental nutrition and health programs and their evaluations, and the efforts of major non-governmental associations in countries like the US, UK, Canada,

Australia, Korea and Japan. In the report, I summarized the characteristics as well as pros and cons of the nutrition knowledge promotion strategies of each country. Since the knowledge service system and nutrition education in China are still underdeveloped, I concluded with some analysis on how the NRI could improve their nutrition education services. While the pros of China's knowledge promotion include their up-to-date information on nutrition, availability of current data from government international organizations and market reports, along with accessibility of the various tools for DRIs, food safety inspection results, diet analysis and scoring, etc., the visualization and simplification of the platform can be improved so it is more user friendly. Also, unlike many other countries, which have one-pagers on the key points of their dietary guidelines, there is no simplified version for the Dietary Guidelines for Chinese Citizens. The NRI should also develop some additional resources for the dietary guidelines, such as healthy recipes, to encourage better engagement with food and nutrition among users.

After this, I started to work on client-centered knowledge promotion and communication. The first group I worked with was food and nutrition professionals, specifically the Fellows of the Chinese Academy of Engineering. I reviewed the latest literature and news on pesticide residues, veterinary medicines and antibiotics in the food system, as well as seafood processing technology and bioactive ingredients from aquatic food sources. My work for the food and nutrition professionals was relatively simple as they are familiar with the field and, at the very least, have a rudimentary understanding of nutritional science. On the other hand, my work for the general public was more challenging.

Unlike my previous work thus far, the food and nutrition knowledge promotion for the general public required more tailored and approachable language, as the everyday person may have limited knowledge on food and nutrition. One of the tasks I worked on was to create the “daily challenge quizzes” on AliPay, a popular mobile payment app in China. The goal of this daily challenge is to let the public distinguish between the “true” knowledge and many of the confusing claims and misinformation on ads and from influential leaders online in daily life matters, including food and nutrition. Also, as developers, my team and I were expected to ensure the consistent participation of the users

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the consistent participation of the users by creating high quality questions and explanations to the answers, and cooperating with the app to monitor the participation data. The most difficult part of this task was figuring out how to tailor and translate the language that we as the health professionals know to the public who are not experts in food and nutrition. I tried to use some real-life examples and also create some scenarios for the users to make it more approachable and easier to understand. Rather than asking, “Can fruit juices be a substitute to fresh fruits?” I modified the language to “Amy is always busy working from 9am to 9pm everyday. For convenience, she bought a whole box of fruit juices to replace fresh fruits. Do you think this is a healthy practice?” My teammates were also very good at modifying the questions to be simple and succinct. During my time at the NRI, it was apparent that engagement was up and we received positive feedback from users as well, increasing my confidence in my ability to communicate professional knowledge to the general public.

I was also tasked with writing short articles to the public via the NRI’s official social media account. These articles focused on “2020 hot topics” in the field of food and nutrition and the predicted 2021 top trends in food, nutrition, and health. I searched through many food service companies and retailers to see what characteristics consumers were looking for in the new normal after the pandemic. I found that consumers were concerned about immune-boosting functions of foods, artificial and lab-grown meats, and the nutritional values of plant-based foods. For an increased interactive experience, I worked on the visualization of the article and the compatibility on cell phone screens by incorporating images of foods and products. The series of the annual

reviews allowed me to have greater exposure to nutrition communication in the digital age.

Unlike the US, the industry of nutrition and nutrition education in China is just beginning to take off. In the US, nutrition education starts early and is incorporated into classes in schools, while in China this is not the case, as schools pay very little attention to food and nutrition education. Therefore, the primary sources of nutrition and health information is from the annual report from the National Health Commission, the Dietary Guidelines for Chinese Citizens and, more recently, social media. The field of food and nutrition in China also puts more emphasis on basic scientific research, studying the relationship between food/nutrition and diseases, and industrial application, while nutrition education is still not mainstream or relatable to the public. However, as people care more about what is in their food and how eating can affect our health, I am optimistic that nutrition

education will be increasingly important in the country, with the support of the government and the hard work of professionals. Throughout this internship I was impressed by my colleague’s passion for learning, exemplified by their investigation of other countries’ nutrition education programs to establish and improve the effectiveness of their own, and their drive to boost knowledge promotion and raise people’s awareness of nutrition and health. I would say that my biggest takeaways from this internship are that we are science people, but we also feel it is also our responsibility

to “make the complex science simple” for the general public in an effort to make a change towards healthier future generations.

References:  
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Example Daily Quiz that Jiakun

Worked On

BY: VALERIE CHARLES

## Red Lentil, Bean, and Veggie Chili

### Ingredients

- 2 Tbsp avocado oil (or any neutral oil)-
- 1 medium yellow onion, diced
- 1-4 small jalapeños, diced\*\*
- 4 cloves garlic, finely minced
- 1/2 tsp salt
- 1/2 tsp pepper
- 3 Tbsp chili powder spice blend
- 2 Tbsp ground cumin
- 1 tsp smoked paprika
- 1 large red bell pepper, chopped
- 1 large green bell pepper, chopped
- 2 18-oz cans diced tomatoes
- 3 heaping Tbsp. tomato paste
- 1 3/4 cup water
- 3/4 cup dry red lentils (rinsed and drained)
- 1 15-oz can kidney beans (slightly drained)\*\*
- 1 15-oz can black beans (slightly drained)\*\*
- *Optional toppings:* cilantro, lime, avocado, sour cream or Greek yogurt, etc.

\*\* Omit jalapeños if you are sensitive to spice

\*\* You can use any beans you have on hand, such as pinto or garbanzo

### Directions

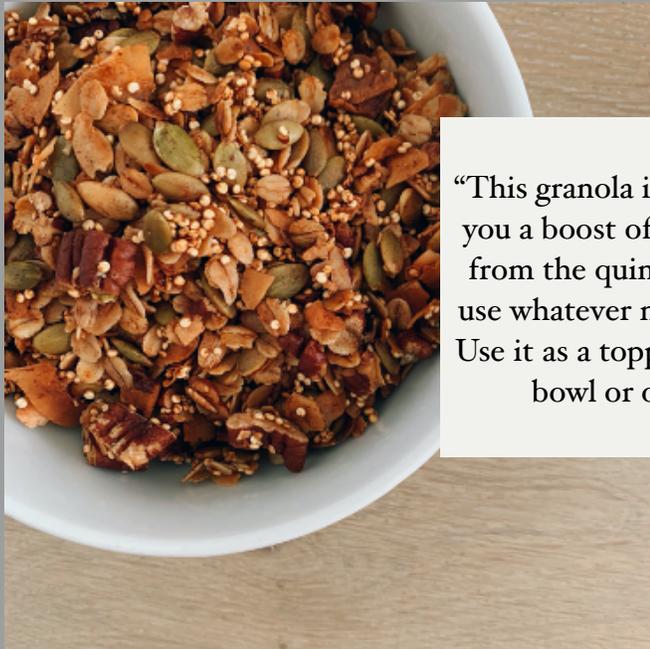
1. In a large pot, over medium heat, add oil and onion and sauté for 3-4 minutes to soften, stirring frequently
2. Add diced jalapeños, garlic, salt, and pepper and sauté briefly for about 1 minute.
3. Add 2 Tbsp of chili powder and 1 Tbsp of cumin, the smoked paprika, diced tomatoes, tomato pasta, and water. Stir to combine and adjust heat to medium high and bring to a boil.
4. Once boiling, add lentils. Then reduce heat to medium-low to bring to a gentle simmer (bubbling slightly, but not boiling). Cook for 15 minutes.
5. Once lentils are tender, add both cans of beans, the bell peppers, and remaining 1 Tbsp chili powder and 1 Tbsp cumin. Stir to combine.
6. Bring to a simmer over medium heat, then reduce to low or medium-low, cover, and simmer for 20 minutes. Stir occasionally.
7. Taste and adjust seasoning. Garnish with toppings and serve!

*Who doesn't love chili leftovers? Store in the fridge for 4 days or freezer*



“I love this recipe because it’s the first plant-based dish that I made for my family (chili purists!) where no one actually missed the meat. It felt like such a win! I hope that you and your family (including any meat lovers) enjoy it just as much” - Valerie

BY: SYDNEY NAVID



“This granola is nutty, perfectly sweet, and get’s you a boost of plant-based protein and crunch from the quinoa. It’s a super versatile recipe - use whatever nuts and seeds you have on hand. Use it as a topping in your AM fruit and yogurt bowl or on your smoothie” - Sydney



## Maple Quinoa Granola

### Ingredients-

- 1 cup old-fashioned rolled oats
- 1/2 cup uncooked white quinoa
- 1 cup pecans, roughly chopped\*\*
- 1 cup pumpkin seeds
- 1/2 cup unsweetened coconut flakes
- 1 tsp salt
- 1 tsp cinnamon
- 1/4 cup melted coconut oil
- 1/4 cup maple syrup
- 1 tsp vanilla extract

\*\*You can also use walnuts, almonds, or cashew in place of pecans

### Directions:

1. Preheat oven to 325°F.
2. Place quinoa in a small bowl and rinse with water. Use a paper towel to pat dry.
3. In a medium bowl, combine the oats, rinsed quinoa, nuts, pumpkin seeds, coconut, cinnamon, and salt.
4. In a small bowl, whisk together the coconut oil, maple syrup, and vanilla.
5. Pour the wet mixture over the dry ingredients and mix until everything is well combined.
6. Evenly spread the granola onto a parchment-lined baking sheet.
7. Bake for 30-35 minutes, or until golden brown and crispy, stirring halfway through.
8. Remove from oven and allow to cool completely. Store in a glass container or in the fridge/freezer.

BY: SYDNEY NAVID

## Wild Rice with Mushroom and Pomegranate

### Ingredients

#### *For the Rice:*

- 1 cup wild rice, rinsed
- 2 1/2 cups water or vegetable/chicken stock
- 1 tsp olive oil
- 1 garlic clove, finely minced

#### *For the Mushroom and Pomegranate Mixture:*

- 1/4 tsp salt
- 1/2 yellow onion, diced
- 1 large garlic clove, finely chopped
- 2 tsp olive oil
- Salt and pepper to taste
- Lemon to taste
- Pomegranate seeds to taste
- *Optional:* Parsley

### Directions:

1. Place rice, water/stock, olive oil, and salt in a saucepan and bring to a boil.
2. Put the lid on, turn to the heat down to low, and simmer for 30-40 minutes or until the liquid is absorbed and the rice is tender.
3. Pour oil into a large sauté pan and add chopped onion. Cook for about 10 minutes over medium heat until onions become translucent and soft.
4. Add garlic and mushrooms and cook for another 10 minutes or until mushrooms are cooked through. Add a squeeze of lemon to taste.
5. Add cooked rice into the pan with the mushrooms and combine.
6. Taste and adjust seasoning as needed (it will likely need more salt).
7. Garnish with pomegranate seeds and parsley.



“I love changing up my grains when I'm creating recipes. Wild rice is a nutrient-rich alternative that has a nutty, earthy flavor and great texture. Mushrooms add a hint of umami and pomegranate seeds give a pop of color and sweetness. This rice dish is the perfect cozy dish to enjoy on a cold winter night” -Sydney