MARCH // 2022 // ISSUE #1

The Full Plate

The Newsletter for Pace University's
Coordinated MS in Nutrition and Dietetics Program

Department Chair Welcome

Greetings Students, Alumni, Advisory Board, Preceptors and Colleagues!

I am thrilled to share the first edition of "The Full Plate" - Pace University's Coordinated Program in Nutrition and Dietetics Newsletter. This newsletter is our way of sharing exciting news, program updates, and student, faculty and preceptor accomplishments. On this note, I am pleased to announce that our program has been granted full accreditation by the Accreditation Council for Education in Nutrition and Dietetics (ACEND)! I want to extend my sincere thanks to all those who participated in our site visit and have shared insights and recommendations since the program's inception. Your contributions and candid feedback are the reasons why our program is successful and will continue to grow and thrive for many years to come.

I would also like to extend a belated congratulations to our graduating classes of 2020 and 2021. These students met the challenges of completing their graduate degrees and supervised practice rotations during the height of the COVID-19 pandemic with grit and determination.

IN THIS ISSUE

They have gone on to begin their RDN careers in acute and long-term care, K-12 food service management, private practices and more. Our current student cohorts continue to thrive and have resumed in-person classes on the Pleasantville campus. We are also excited to share that we have resumed in person culinary courses with our partner Zwilling J.A. Henckels cooking studio in Pleasantville. Check out some photos of cohorts 3 and 4 in the studio below!

Finally, as we prepare to admit our 5th cohort of students this fall, we will be implementing the new ACEND 2022 Standards. These standards include terminology updates and clarifications of existing standards, enhanced clinical practice competencies in domain 3 and a brand-new domain 5 that focuses on professionalism. Links to the full 2022 ACEND standards as well as a crosswalk highlighting the changes from 2017 to 2022 are included below. We look forward to developing exciting and innovative learning activities to ensure that our students are achieving high levels of competency.

2022 Accreditation Standards for Nutrition and Dietetics Coordinated Programs (CP) (PDF)

2022 RDN Program Competency Crosswalk (PDF)

Many thanks for your continued support of our program. We look forward to sharing many more exciting announcements and updates in future newsletters. Special thanks and acknowledgement to Nutrition and Dietetics (ND) Student and Graduate Assistant Gabrielle Dobies for producing and editing this newsletter and to ND Student Sophia Rizzutto whose suggestion was chosen as the name for our newsletter.

Jessica Tosto MS, RD, CDN, CSP, CNSC
Department Chair | Clinical Coordinator
Clinical Assistant Professor

Students from cohorts 3 & 4 working hard in the kitchen at Zwilling J.A. Henckels cooking studio.

Student Happenings

Clinical Supervised Practice – Westchester Medical Center

By Erica Bay, Cohort 3

While I never envisioned myself pursuing a career as a clinical dietician, my experience at Westchester Medical Center has sparked an interest in and appreciation for this field of work. When I was notified of my placement at WMC for my clinical rotation, I was extremely nervous but also excited for the challenge. My time at WMC has been nothing short of amazing. Each and every preceptor brought something new to the table and I was able to successively build upon each bit of knowledge I gained as I progressed through the rotation. I was unsure of myself when working with patients and writing notes in the beginning. I was worried I was going to say something wrong or forget to ask something - and of course that happens occasionally - but you learn and continue to grow.

The most valuable piece of advice came from Jackie Maxwell, professor of Advanced Nutrition I & II at Pace University and the Trauma ICU and Surgical ICU clinical dietitian at WMC. She told me, “Your mistakes are your biggest opportunity to learn” and that proved true throughout my experiences. She embodies the true essence of a lifetime learner and has left an imprint on me and energized my aspirations in the field. During my time with Professor Maxwell, she challenged me with biochemical pathway questions and inspired me to always inquire about how and why things work. She taught me to look beyond the one problem a patient is having and instead at the whole person to figure out why they were having said problem. Often times the intervention would change based on utilizing this frame of reference. It has truly been an honor to have Professor Maxwell as both a professor and a preceptor.

Upon completing my clinical rotation, I wanted more experience and have been continuing at WMC for my elective rotation. I have had the opportunity to be responsible for an entire unit, complete necessary documentation while following patients throughout their stay, and participate in interdisciplinary rounds making meaningful contributions. Despite these responsibilities being initially daunting, I owe my success to all of my preceptors who were kind, patient, knowledgeable, and truly interested in my professional growth. I now see a career in clinical dietetics as something that greatly interests me.

Westchester Rockland Dietetic Association Student Liason

By Marisa Lau, Cohort 3

As a Student Liaison for the Westchester Rockland Dietetic Association (WRDA), I am responsible for facilitating communication between the WRDA board members and student volunteers. I also engage in student volunteer recruitment and participation from nutrition students who reside in or attend nutrition programs within the area. Currently, I am collaborating with student volunteers to produce peer-reviewed monthly blog posts for the WRDA website. For instance, January’s blog post focuses on Hashimoto’s disease as January is National Thyroid Awareness Month. Further, I attend WRDA board meetings and events which enable me to meet and network with registered dietitians, nutrition and dietetics students, and other dietetic professionals in the local area. It is a pleasure working with the WRDA and its members!

Student Happenings

Stone Barns Community Education Workshop

By Andrea Polvere, Cohort 4

I attended the Stone Barns Community Education workshop as part of the Farm Lab group, where we observed the cattle and sheep pastures set on the 332 shared acreage with Rockefeller State Park Reserve. My group was extremely diverse and consisted of chefs and suos chefs from Blue Hill, Livestock Managers, Farm and Ecology Directors, GIS Managers, and even members of Emma's Torch, a nonprofit organization that empowers refugees, asylees, and survivors of human trafficking through culinary education. This workshop highlighted how Stone Barn's holistic rotational grazing system seeks to mimic the natural movement of herbivores across the landscape. What I learned was that there are several factors that are considered when implementing this rotational grazing system. Time passed since last used by animals is crucial, along with length of grass and the stages of the plants. These grasses are carefully inspected and should have 3.5 to 4 tiller leaves, a shoot that arises from the base of a grass plant, before animals are brought back to graze. Allowing these plants to mature ensures that enough photosynthesis has taken place to recharge energy reserves to provide the proper nutrients for the animals. Additionally, their grazing system aims to address the ecological challenges inherited from previous land use and improve the ecological resilience of the landscape. They regularly check carbon levels and overall soil health to ensure nutrients aren't being depleted.

As we gathered for lunch, I had the opportunity to speak with a professor from Culinary Institute of America as well as Blue Hill front of the house employees. This relaxed atmosphere was ideal for sharing ideas, hearing about other people's experiences, and networking with all different types of people in the food and nutrition world. They served a hearty and delicious beef stew with an array of fresh toppings, and finished with a perfectly-sweetened apricot scone.

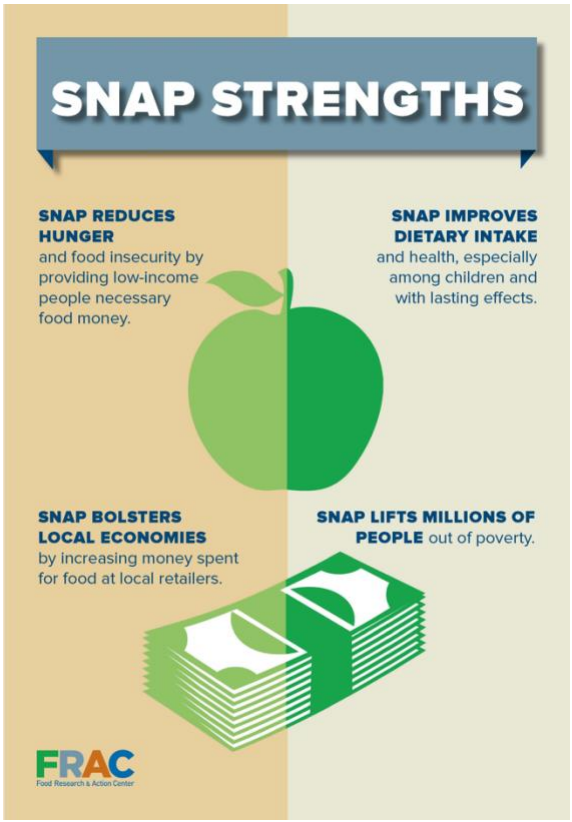
While we enjoyed our meal, we heard from a butcher at Blue Hill as he described his journey from growing up in Ecuador watching his grandparents butcher animals to working at one of the most pretigious restaurants in the country. We also heard from a gentlemen who raised pheasants in upstate New York and even got to witness a male and female pheasant be released into the wild right from the courtyard. Overall, this experience offered so much incredible insight into the world of sustainable practices of farming and I would recommend to anyone!

A special thank you for this opportunity to:

Student's Take on the SNAP Challenge

Written by Dr. Christen Cooper Ed.D, RDN, Assistant Professor

The Supplemental Nutrition Assistance Program (SNAP) replaced the name of the Food Stamp Program over a decade ago. The food assistance program's name was changed to reduce the stigma around receiving government food benefits. Whereas years ago those receiving "food stamps" showed up at stores with blue and green stamps, program participants now swipe an Electronic Benefits Transfer card (EBT) that looks no different from a credit card. SNAP is meant to be supplemental, but for those who are unemployed, a number which grew drastically during COVID-19, these benefits can be lifesaving. SNAP has been well studied and evidence indicates that the program can lift people out of poverty and also help local economies to thrive.



Despite its steps towards modernization, the program has remained largely unchanged in 45 years, save for occasional adjustments for inflation. The Farm Bill of 2018 marked the first significant review of the dietary adequacy that SNAP "market baskets" (the foods that an individual or household is permitted to purchase with SNAP per month). The 2018 Farm Bill mandated a review of SNAP market basket adequacy and quality to take place every five years. It also mandated that allotment calculations take into account not only the cost of food, but Dietary Reference Intakes (DRIs), the Dietary Guidelines for Americans and other barometers of dietary adequacy.

Under the 2018 bill, the average daily allotment for food for an individual rose from around $4.15 per day to $6.00. Our students took on the "SNAP Challenge" during which they lived on the SNAP "Thrifty Food Plan" for a week. Students reported on their experiences, listing the following as outcomes:

- Headaches
- "Hangriness" (feeling hungry enough to feel angry)
- Fatigue
- Brain fog
- Inability to complete work/assignments without "cheating" (eating foods outside their budget)
- Embarrassment at having to take food they could not afford out of their shopping carts
- Lack of energy to exercise
- Boredom at mealtime, given the need to eat leftovers repeatedly
- Lack of fresh fruits and vegetables in the diet due to cost
- Inability to dine out with friends
- Inability to purchase foods for special diets, such as gluten-free products

As part of the project and corresponding lessons, the students learned that SNAP expenditures represent a small slice of the national budget and that 92% of the program funds to directly to participants and only 8% to administrative costs. Students voiced that advocating for larger SNAP funding is necessary in order to help lower-income people avoid the chronic conditions that affect the food insecure: type 2 diabetes, heart disease, cancer and other conditions.

They discussed the poverty-obesity paradox, learning that when people are food insecure they often resort to high-calorie, low-nutrient foods to satisfy hunger. They also may overeat when food is available to compensate for their hunger, which can lead to overweight.

The students reported that this exercise was valuable to their understanding of what lower-income people face on a daily basis in terms of food choice. They learned how to help future clients access food benefits and grew in terms of compassion for hungry Americans.

The Many Benefits of Going Clean

Written by Mary Opfer MS, RDN, CDN Clinical Assistant Professor

There are numerous benefits to eating clean. Perhaps most importantly, when you begin to consume real food and appreciate it for all its textures and flavors, your relationship with it will likely improve and motivate you to continue your journey. Clean eating does not involve giving anything up, but rather savoring the foods that are best for your mind and body.

Weight loss: Because a clean diet includes whole foods with their nutrition intact--it will keep you feeling satisfied with fewer calories. You will likely feel less inclined to snack because your body will be getting all the nutrients it needs to break down the food you eat and sustain your energy throughout the day. Being satiated will lead to fewer snacks and the positive outcome will be losing weight.

More energy: Research suggests that energy dips and peaks can result from eating processed carbohydrates. These refined sugars are quickly absorbed into the bloodstream, leaving us feeling depleted soon afterwards. The unprocessed carbohydrates (often referred to as complex carbs) in whole foods contain fiber and absorb more slowly, keeping our energy higher for longer.

Heart health: Cleaning eating supports optimal heart health. Whole foods are naturally low in sodium and contain monounsaturated and polyunsaturated fats and fiber. The lower sodium is beneficial for blood pressure while the fat content of whole foods contributes, to lowering LDL cholesterol (the bad cholesterol) and raising HDL (good cholesterol). Good cholesterol “cleans” the bad cholesterol from the arteries. Clean eating also includes heart healthy fats found in foods such as avocado, olive oil, nuts, and seeds, all of which lower LDL cholesterol. Additionally, The American Heart Association recommends limiting salt intake to about one teaspoon per day. Clean eating, which promotes fruits and vegetables, can help make up for the negative effects of sodium with potassium, which counteracts sodium in the body.

Better mental health: Food fuels not only the body, but the brain too. The choices we make affect the production of the “happy hormones,” dopamine and serotonin. A diet rich in healthy fats, including omega-3s from fish, nuts and avocados, enhances brain function. Diets high in refined sugars and processed foods promote inflammation and decrease insulin sensitivity. The B vitamins found in plant foods also support the production of energy to nourish the brain.

Disease management: A clean eating lifestyle helps to prevent and manage chronic diseases such as diabetes and heart disease. A diet rich in fruits, vegetables, and lean proteins is conducive to achieving and maintaining a healthy weight and decreases the risk of type 2 diabetes. Processed foods contain additives and preservatives, including saturated fat, and high levels of salt and sugar, all of which contribute to inflammation which underlies chronic disease.

Gut health: Diet plays a direct role in gut (digestive tract) health. Studies have shown there is a relationship between a diet high in processed foods and refined sugars and the health of the microbiome and production of serotonin. The gut microbiome (naturally occurring bacteria populating our intestines) plays a role in how we digest food, absorb nutrients, and produce nutrients that feeds the gut itself. The gut also seems to play roles in food metabolism and immune function. Eating a diverse and well-balanced diet containing unprocessed, wholesome foods can preserve gut health, boost nutrient absorption, and fortify the immune system.

Check out this recipe from Mary's new cookbook, *Clean Eating for Two*.

Bird's Nest Cauliflower Eggs

Prep time: 10 minutes | Cook time: 10 minutes | Serves: 2

What beats eggs and vegetables to start your day? Cauliflower contains sulfur, which helps with removing toxins from the body, making it perfect breakfast fare. Also with spinach and tomatoes, this is one nutrient-packed meal that you will want to make again and again.

- 3 teaspoons olive oil, divided
- ¼ cup chopped sweet onion
- ¼ cup chopped red bell pepper
- 1 small garlic clove, minced
- ½ teaspoon dried oregano
- ½ teaspoon salt, plus more for seasoning
- ¼ teaspoon paprika
- 1½ cups cauliflower rice
- 1½ teaspoons freshly squeezed lemon juice
- 5 ounces frozen spinach, thawed and well drained, or fresh spinach, chopped
- ½ cup chopped plum tomato
- ½ cup shredded Cheddar cheese
- 2 large eggs
- Freshly ground black pepper

1. In an 8-inch nonstick skillet or sauté pan, heat 2 teaspoons of oil over medium heat and swirl to coat the pan.
2. Add the onion, bell pepper, and garlic, and cook for about 2 minutes, until the onion begins to soften. Add the oregano, salt, and paprika, and stir.
3. Add the cauliflower rice and the remaining 1 teaspoon of oil, and cook, stirring frequently, for 1 to 2 minutes. Add the lemon juice and stir, then add the spinach and tomato and stir to incorporate all the ingredients.
4. Sprinkle the cheese evenly over the mixture and gently make two wells, one for each egg. Crack the eggs into the wells, cover, and cook for about 7 minutes for runny eggs, or longer for firmer yolks.
5. Season with additional salt and pepper. Divide the cauliflower mixture and place 1 egg on each plate to serve.

SUBSTITUTION TIP: Feel free to change out the Cheddar for your favorite cheese or omit altogether to make this dairy-free.

Per serving: Calories: 313; Fat: 21g; Sodium: 912mg; Carbohydrates: 13g; Fiber: 5g; Sugar: 5g; Protein: 18g

The Future of Food: Is 3-D Food Printing on the Horizon?

Dr. Christen Cooper of our Pace Nutrition and Dietetics Department is currently writing two scholarly papers with Jonathan Blutinger, a doctoral candidate in engineering at Columbia University. Mr. Blutinger built and has researched cooking food with 3-D food printers. The two scholars' collaborative papers discuss the benefits, drawbacks, origins and potential for this additive technology for cooking.

The two scholars met in 2019 when they participated in a video on this topic filmed by the BBC. (Link to video: https://www.bbc.com/reel/video/p07l59b1/can-we-3d-print-our-food-) Although they came to their collaboration with very different viewpoints, they found common ground on the potential benefits of 3-D food printing for people who require special diets. Pureed and thickened diets are often unappealing. The versatility, color potential and nutritional precision of 3-D printed food might prove to be a boon for patients with dysphagia and related conditions. 3-D technology also might come in handy for making sports nutrition products lighter, more compact and more palatable.

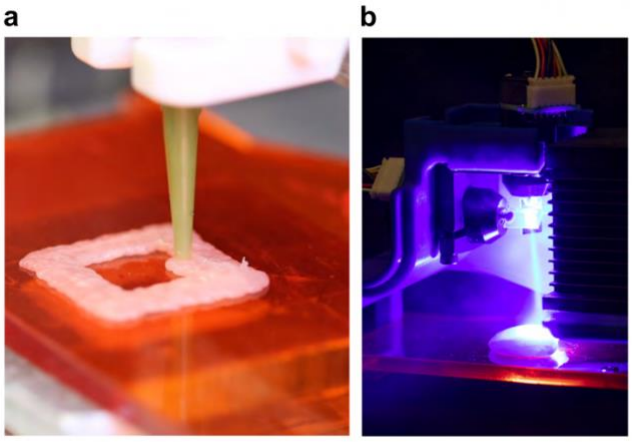


Figure 7.1: Printing and cooking apparatus. **a** Close-up of raw chicken being deposited in a square pattern from the food printer. **b** A blue laser beam being directed by a set of mirror galvanometers to a raw sample of chicken.

Image Credit: Jonathan Blutinger

The following is a taste of their research describing this technology:

Cooking food by analog means with a flame or radiant heat, which has been standard since the dawn of cooking 100,000 years ago. Inventions like the oven, stove, and microwave are still the conventional appliances purchased for cooking at home and in commercial and industrial kitchens. However, with advancements in digital technology, devices such as 3-D food printers are emerging as potential rivals to the conventional appliances. With most digital products still in an inchoate stage of development and recognition, little is known about consumers' or food scientists' perceptions and knowledge about their potential uses, benefits and limitations.

The core set of commonly-purchased kitchen cooking appliances has not changed substantially in many years. The reasons for this likely include that traditional cooking methods have not faced substantial, widespread challenges. Such common appliances are familiar and easy to use, purchase, repair and allow individuals to cook the foods they enjoy. New innovations may have the potential to change the way humans carry out all stages of cooking, from ingredient selection and preparation, to cooking, maintaining nutritional adequacy and enjoying food. In an age of customization and digital IoT-enabled devices, our research suggests that interest in software-controlled cooking appliances is growing. Considerations for successfully bringing digital cooking devices to the mass market might include: cost and efficiency, ease of use, cooking versatility, ability to cook conventional as well as new recipes and satisfactory healthfulness and quality of food.

In these collaborative publications, Dr. Cooper will contribute her views on the value of whole foods for the vast majority of people, with a rationale that for those who need a diet that requires better consistency and palatability, 3-D printing may offer an important tool for providing patients with appealing, nutritious food.