Letter from the Editor:

This issue of SCAN Connection is a little different from our previous issues. We’re taking a break from the evidence-based nutrition science information and, instead, exploring the “softer side” of our practice—the patient-provider connection. We wanted to take a look at outside influences that may be acting as barriers to a successful relationship and positive behavior change. This is something we all deal with often. If it wasn’t then we’d most likely be out of a job since everyone could just read (insert Nutrition 101 textbook here) and be on their merry way. However, we know this isn’t the case, and there are many things that can influence a person to behave as they do. People are constantly making choices, and while some of these choices are based on things beyond our (and our clients’) control, it is our job as nutrition professionals to figure out what IS in our realm of influence and help our clients tackle it.

Our first article focuses on the ever-daunting challenges of work-life balance. The background provided helps remind us that things we may feel are “excuses” may have more merit than we suspect. We also look at one of the most integral parts of a successful nutrition counseling practice, which is building rapport and trust with your client. While the emphasis in this article is on the young athletic population, the ideas presented are applicable to a wide variety of audiences.

We often get so wrapped up in learning and teaching the science of what we do (slight plug for the Resources page in our newsletter!), that we sometimes forget we’re dealing with people and that comprises a whole different type of science in itself. We round out this issue with a snippet of the Blue Zones project and how it is trying to lessen some of the influences that tend to be out of our control, as let’s be honest, we can’t do it all by ourselves!! I hope you enjoy this exploration into the softer side of our business.

And now, it’s time to connect...

Rebecca Rivera Torres, MS, RD
Connection Corner

SCAN CONNECTION EDITORIAL TEAM

Newsletter Editor-in-Chief
Rebecca Rivera Torres, MS, RD
SCANConnection@gmail.com

Sports Nutrition Section Editors
Yasi Ansari, MS, RD, CSSD
eatwellwithyaas@gmail.com

Emily Bhattacharjee, MS, RD
ekoziarski@gmail.com

Wellness & Cardiovascular Health Section Editors
Susan Vannucci, PhD, RD
sjvannucci@gmail.com

Crystelle Fogle, MS, RD
cfogle@mt.gov

Want to write for our newsletter? Have thoughts on something you read? Or, maybe you just have a great topic for an article you’d like to see covered? Connect with one of the Sports Dietetics-USA or Wellness/CV subunit section editors above today!

In this Issue

2 LETTER FROM THE EDITOR

3 CONNECTION CORNER
Connect with us, and get involved with SCAN!

4 THE IMPACT OF WORK ON CARDIOVASCULAR HEALTH, WELLNESS, AND BEHAVIOR CHANGE
Explore how work hours and stress can affect nutrition behavior choices

5 COMBATTING OUTSIDE NUTRITION INFLUENCES WITH TRUST
Focus on trust to heighten your credibility

6 CONNECTING CENTER STAGE
Your Daily Environment and Your Health: From Obesogenic to Blue Zone Living
Are the “Blue Zones” holding the secret to success?

7 RESOURCES AND EVENTS
Check out these educational opportunities for you and tools for your practice.

Are you reaping all the benefits of your SCAN membership?

We have myriad resources available, including ready-made fact sheets to use with your patients; PULSE, our peer-reviewed publication; and continuing professional education (CPE) via PULSE, webinars, sessions at FNCE®, and Symposium. Go one step further and join our complimentary subunits to get more in-depth topic information and networking by accessing your My Profile area on SCAN’s website, scrolling down to Membership Details, and checking the boxes for any (or all!) of the subunits that interest you. And, what better way to network and discuss nutrition advances and best practices with other RDs like yourself than to converse directly via our electronic mailing lists (EMLs)? Don’t forget, we’re social too! Like us on Facebook and follow SCANdpg on Twitter, Instagram, LinkedIn, and Pinterest. So, what are you waiting for? Be in the know and make your SCAN connections today!

Follow SCAN
The Impact of Work on Cardiovascular Health, Wellness, and Behavior Change

By Alessandra Stasnopolis, RDN, LDN

As dietitians we are all aware that lack of time or stress due to work presents a significant challenge to our patients’ and clients’ lifestyle behaviors and readiness to change. We too may struggle to balance work and life. A survey analyzed by Gallup in 2014 found that 50% of those polled worked more than 40 hours per week.1 People are working longer hours while attempting to balance social and family responsibilities, which may result in less time dedicated to other concerns, such as personal health. It is probable that this disproportionate work-life balance, coupled with work-induced stress, is a contributing factor to the increasing rates of chronic disease and mortality in the United States and abroad.

THE CONNECTION WITH TIME SPENT AT WORK

Lack of time due to work demands is a primary factor as to why some neglect their health. Current research shows a trend in how shift work (working nights or a mix of day and night shifts) and working overtime (above 40 hours a week) increases one’s risk for chronic disease and poor work-life balance.2 Nurses represent a population that has been extensively studied in this regard, and the results of these studies are applicable to the population at large. A review paper observing nurses in the United States and South Africa found that unbalanced eating habits—such as skipping meals, high consumption of junk food, and inconsistent eating schedules—were most commonly attributed to long and demanding work hours and domestic demands.3 Findings also suggested that longer workdays contributed to fatigue, leaving little time or energy left for meal preparation at home. Thus, working overtime or mixed shifts can impact a person’s ability to regulate sleep patterns and implement a consistent dietary routine, often resulting in an increased reliance on convenience foods. Nurses commonly experience shift changes, 10- to 12-hour work days, and on call responsibilities, making it harder to take the time to cook, let alone eat, 3 balanced meals per day. A study of British, Irish, South African, and American nurses showed time constraints can also limit available food options during work, citing the inability to access healthy food outside of regular office hours being due to food running out or limited options at those times.3 Others found that they either had limited space to refrigerate food brought from home or had a lack of access to microwaves, leading them to eat out instead. The nursing population is a great example of how inconsistent schedules and long work hours can impact one’s health. Lack of time due to work demands can further impede behavior change in regard to exercise or improved sleep. According to the World Health Organization (WHO), chronic disease rates are rising not only in the United States but also globally, and work demands could be contributing to these increases.2 This is a valuable insight and challenge for dietitians and other health professionals as they are tasked with finding creative and simple ways to help people achieve their health and wellness goals.

THE IMPACT OF WORK-RELATED STRESS

Time spent at work is not the only factor influencing lifestyle and behavior change; work stress may also have a significant impact on heart and overall health. Stress can negatively affect health both mentally and physically. According to the National Institute for Occupational Safety and Health (NIOSH) study through the Centers for Disease Control and Prevention, 40% of workers reported their job was very or extremely stressful; 75% of employees believed that they had more job stress than the previous generation; and 26% felt they were often burned out due to work.4 The study also found that job stress is more associated with health complaints than financial or family problems. Although originally published in 2003, these statistics are still relevant to today’s society, especially with chronic disease percentages rising. In a review paper assessing the barriers and facilitators to healthy eating for nurses in the workplace, research supported that long working hours and high workload were considered stressful by many nurses.3 In turn, these nurses were more likely to engage in disordered, stress-induced, and emotional eating. A study assessing both American and Swedish nurses found that emotional eating was used as a coping strategy for work stress.3 Work stress is clearly contributing to people’s eating habits and choices, further explaining their behavior and shedding light on how difficult it can be to make changes and find alternative coping mechanisms.
The Impact of Work on Cardiovascular Health, Wellness, and Behavior Change, cont.

Stress can severely impact heart health as well. A review paper assessing psychosocial stress at work and cardiovascular health found that in certain individuals stress could lead to deterioration of the cardiovascular system directly through activation of neuroendocrine stress pathways and initializing atherosclerosis. Stress can also indirectly lead to decline in cardiovascular health and increased dyslipidemia through certain lifestyle behaviors used to cope, such as smoking, alcohol consumption, unbalanced diet, and lack of exercise. These documented effects on mental, physiological, and social health serve as indicators of the detrimental impact of work-related stress. Thus, addressing stress in this scenario is key to designing interventions to improve cardiovascular and overall health.

THE GREATER POPULATION

Nurses are a well-researched example of how work-life balance and stress can impact health and lifestyle behaviors. As stated earlier, this body of research can be applicable to many other types of occupations. For instance, a study performed in South Korea found that shift workers and those who worked nights, evenings, or weekends experienced poor work-life balance. Those who worked long hours and non-standard hours also expressed discontent with the amount of time spent with children and family outside of work. Another study looking at Malaysian adults found that work-family conflict, emotional eating, and eating out were positively correlated to unbalanced food consumption. These findings were consistent with current research that revealed emotional eating could increase the positive association between stress and unhealthy food choices. Finally, regarding heart health, a cross-sectional study revealed that Finnish men, with or without preexisting cardiovascular disease, had an increased risk of cardiovascular disease when working overtime consistently on the weekends. Similar to what was found with the nursing population, these individuals based in different occupations found that their lack of work-life balance affected their social obligations, increasing risk of disordered eating habits, decreasing heart health, and causing overall dissatisfaction. It is clear that regardless of the profession, if one is overworked or stressed, it can impact health and behavior change negatively.

WHAT CAN WE DO?

When looking at work-life balance, one must consider the many factors that impact this, including work hours, number of jobs, overtime, work stress, irregular shift work, and social responsibility. In this day and age, it is extremely difficult for most to balance work-life responsibility, causing stress, burnout, and unhappiness. These feelings can lead to individuals refusing to change lifestyle behaviors, further impacting one’s lifestyle and physiological deterioration from prolonged stress. It is clear that changes need to be made to work culture and stress management to increase willingness and readiness to change. One evidence-based solution may be the incorporation of corporate wellness programs that address multiple lifestyle factors such as balanced eating, exercise, stress management, and time management. Focusing attention on corporate wellness programs in all occupational settings may be a good starting point to helping people improve their health in a multifaceted way through providing individuals with tools to succeed and achieve change despite their current work demands.

AUTHOR’S BYLINE

Alessandra Stasnopolis, RDN, LDN, is a Corporate Wellness Dietitian and Wellness Coordinator in the Dallas area for Baylor Scott and White. She aspires to attain her CDE, get a Masters in Sports Nutrition, and become a Certified Intuitive Eating Counselor.

REFERENCES:

It’s no secret the general population is lacking in nutrition knowledge. Pair this with targeted marketing campaigns and a desire to be the best, and you will be looking at the life of the majority of adolescent athletes. Studies show most athletes are obtaining nutrition information from coaches, trainers, parents, and the internet.\(^1\) Although some of these sources might hold a genuine interest in helping these athletes master their art, few hold the scientific backing to provide sound advice. One study found that despite coaches being a primary source for dietary advice, they only scored 59% on a sports nutrition knowledge questionnaire.\(^1\) So why are these athletes being influenced by individuals who aren’t the experts?

As a young impressionable group, trust is a major influencer and can substitute for credibility. These individuals typically trust their coaches, athletic trainers, and parents, which automatically gives their advice merit regardless of actual nutrition knowledge. Professional athlete endorsements are also viewed as credible because these individuals are role models. The justification becomes, “If the athlete I want to become is following this diet and taking supplements, then I must do the same to become like them.” As professionals, we know this way of thinking is far from the truth; however, the flashy advertisements and quick fix promises can seem credible to someone lacking nutrition knowledge. While this advice might be well intentioned, it can have significant impacts on performance in both the short and long term.

Diet culture also seems to be “the norm” these days, with low carbohydrate diets leading the way. Many athletes are latching on to Paleo, Whole30, and other restrictive diets in an attempt to “eat clean.” For athletes, the number one concern with dieting is inadequate energy availability. Over the short term this caloric deficit might induce some weight loss, but the loss will typically come at the cost of overall energy and explosiveness. In the long term, a caloric deficit can also lead an athlete down a path of stress fractures and medical instability. A secondary concern of dieting is macronutrient distribution. Most team sports require short bouts of explosive energy, relying heavily on glycogen stores for ATP synthesis. Someone following the ketogenic diet, for example, may be consuming adequate calories; however, their available energy systems won’t match what is needed to perform the task at hand. Athletes may not correlate a decrease in performance with their diet, as the beneficial changes, such as weight loss, may be masking the reality.

So how do we reign these individuals back in with so many competing sources of nutrition information? The first step happens before any nutrition counseling occurs—building rapport.

You might have the best advice in the world, but if the athlete doesn’t trust you, it will fall on deaf ears. Build relationships with the influencers of your athlete. If you find yourself battling against these individuals as sources of information, find a common ground with your client about why these people are giving them advice.
Combatting Outside Nutrition Influences With Trust, cont.

In combating fad diets and misinformation, dietitians often get wrapped up in the numbers of calories and macronutrients. It is common for an athlete to say, “If you just give me a detailed meal plan, I will follow it.” Doing this will not provide the support and knowledge they need to be successful, rather it will only put you on the same plane as the other nutrition sources offering a quick fix. Instead, turn the conversation to gain insight about their cultural, economic, and nutrition experiences. One study showed despite having access to nutrition professionals, European soccer players didn’t buy into the program because they didn’t feel it supported their cultural preferences.1 Especially when working with athletes who have limited exposure to new foods or little experience cooking, you will be more successful creating a plan with familiar foods, instead of the “perfect plan” with exact macronutrients. For example, this may include suggesting healthier menu options at fast food restaurants. This may seem basic in the face of fad diets providing all of the detail they are asking for, but it is important to keep the long game in mind. Focus on having your suggestions outlast those of their fad diet. They are likely to try your menu suggestion at their favorite restaurant next time and start noticing results, which will keep them coming back to you.

Another technique for connecting with these athletes is getting out of your counseling comfort zone. Sitting at a desk talking about nutrition for an hour might be comfortable for you, but it likely isn’t the most effective setting for your athlete. Plan counseling sessions that are relevant to their sport and keep things competitive. Incorporate nutrition competitions, grocery store tours, and cooking demonstrations. Keep your athlete engaged to demonstrate how scientifically backed nutrition can be fun and enjoyable. If getting out of the office isn’t an option, try to keep your conversations sport-specific, and always bring your recommendations back to their performance goals. For example, if you are providing education to a football athlete following the TB12 diet with NFL goals, focus the conversation on what they are asking of their body. Ask about intensity, duration, and body composition for their specific position. Ask why that diet might be effective for Tom Brady and to consider what other factors might contribute to his success. Have them reflect on the differences between themselves and Tom. Pick one of the differences and provide the nutrition science with suggestions of how to incorporate it into their own life.

Additionally, if time is a factor, focus your session(s) on one impactful change. For example, instead of going for the ideal and removing all processed foods from the athlete’s diet, set a goal to remove one processed item from the diet and replace it with a nutrient-dense one. Discuss how this small change ties into their goals of improving body composition and agility.

In conclusion, it is up to you as the professional to meet the athlete where he or she is and formulate an appropriate individualized plan. Continue chipping away at the goals and building trust to help them view you as the true nutrition expert you are!

AUTHOR’S BYLINE

Elizabeth McNear, RD, CSSD, is the Director of Sports Nutrition at UC Berkeley Athletics. She has worked in college athletics for 5 years and has been heavily involved in education and application of nutrition principles for student athletes.

REFERENCES:
One of three healthy eating patterns to meet nutrient Dietary Guidelines for Americans (DGA) standards, the Healthy Mediterranean-Style is reflective of the eating patterns associated with positive health outcomes in scientific studies and emphasizes fruits and vegetables, whole grains and good fats from nuts, fish and olive oil, with small amounts of meat and dairy. The diet also recommends seasoning foods with herbs and spices, rather than salt, and savoring small amounts of polyphenol-containing treats like dark chocolate and red wine.

Although they are not native to Mediterranean countries, fresh avocados fit right in with a Healthy Mediterranean-Style Eating Pattern. One serving of avocado, one-third of the fresh fruit, contains 5 grams of monounsaturated fatty acids (MUFA), a hallmark nutrient of Mediterranean eating that can help the body absorb fat-soluble nutrients such as vitamins A, D, K and E.

PER SERVING (1/3 OF A MEDIUM AVOCADO)
FRESH AVOCADOS CONTRIBUTE SIX GRAMS OF NATURALLY GOOD FATS, A GOOD SOURCE OF FIBER AND NEARLY TWENTY ESSENTIAL VITAMINS + MINERALS TO THE DIET, MAKING THEM A HEALTHY, NUTRIENT-RICH & VERSATILE FOOD CHOICE TO INCLUDE IN THE HEALTHY MEDITERRANEAN-STYLE EATING PATTERN.

Love avocados in a healthy Mediterranean-style eating pattern

Breakfast
Avocado Shakshuka
+ 1 slice whole-wheat toast with blueberries

Add avocados for a breakfast double bonus: you’ll get fresh fiber from the fruit to help you stay full + powerful protein from eggs.

Lunch
Grilled Chicken Flatbread with Avocado Yogurt
+ sweet potato fries and apple

A dish full of textures: creamy, crunchy and chewy. Blend avocados with Greek yogurt for bright color and heart-smart monounsaturated fats.

Snack
Mayo-Free Avocado Tuna Salad
+ grapes and dark chocolate

Swap mayo in a traditional tuna salad for fresh avocado to help reduce your intake of saturated fat, calories and cholesterol. Grapes + dark chocolate welcome polyphenols for an antioxidant boost in this PM snack.

Dinner
Oven-Roasted Salmon with Avocado Citrus Salsa
+ corn, brown rice and snap peas

A Mediterranean medley: fresh avocado, salmon and citrus. Need we say more? This dish packs a nutritious punch with monounsaturated fat, omega-3s, lean protein and potassium!

Is this meal plan on track with the DGA?
When included in a 2,000-calorie diet, the meal plan above meets DGA recommendations of:

- < 10% saturated fat
- < 10% added sugars
- < 2,300 mg sodium
- Protein DV (50g)
- Fiber DV (28g)
- Majority of fat is good fat.

These are some of the key dietary recommendations outlined by the DGA; the Physical Activity Guidelines for Americans should also be met in order to achieve an overall healthy lifestyle.
Your Daily Environment and Your Health: From Obesogenic to Blue Zone Living

By Susan J. Vannucci, PhD, RD

We all know that obesity and obesity-induced diseases, such as diabetes and heart disease, have reached record levels and constitute a major public health problem in the United States and throughout the world. Although the cause of obesity is multifactorial, the impact of living in an obesogenic environment has recently been gaining attention. In the past decade, numerous studies have provided evidence linking both the built environment and food environment in their contributions to increased obesity in various communities.1 The built environment includes the physical design and transportation systems of a community, for example, availability or lack of outdoor space, safe walking/biking paths, and easy access to recreational facilities and shops. Interestingly, perceived safety and distance to local destinations has been positively associated with lower body mass index, with increased walking suggested as the mediator.2 Food environments include food prepared at home as well as out-of-home sources, such as availability of vending machines, restaurants, supermarkets, convenience stores, and greenmarkets. Not surprisingly, recent studies support strong associations between the density of fast food sites and weight in children/adolescents.1 Clearly, this is an emerging and highly relevant field with a wide array of current studies aimed at teasing out the essential components of current and future city planning.

One organization—the Blue Zones Project—is already actively engaged in remodeling and transforming obesogenic cities across the United States. As described on their website (www.bluezones.com), the “Blue Zones” are unusual areas throughout the world where the inhabitants live happily and well into their 100s. Based on the common and unifying principles learned from studying these populations, the Blue Zones Project is already working in several cities to lower smoking and obesity rates, with consequent reduction in healthcare costs, as well as improvements in lifestyle and happiness. While research continues on effective city planning, we can all learn a great deal from the Blue Zones principles and how to apply this to both our local and work environments—as well as to help our clients!

For more information on the Blue Zones Project, visit https://www.bluezones.com/services/blue-zones-project/.

REFERENCES
**Resources and Events**

**Events to Connect With Colleagues and Learn**

**Ongoing/On-Demand Events**

SCAN offers on-demand webinars
For information: https://www.scandpg.org/cpe/

CDR offers online continuing education modules in various areas
For information: https://www.cdrnet.org/products/assess-learn-online-continuing-education-modules

IAEDP offers on-demand webinars
For information: http://www.iaedp.com/webinars-schedule/

Eating Recovery Center offers on-demand webinars
For information: http://www.eatingrecoverycenter.com/professionals/on-demand-professional-development

Athletes and the Arts is looking for dietitians to get involved in this collaborative initiative to unite healthcare professionals and the performing arts community.
For more information: http://athletesandthearts.com

Renfrew Center offers ongoing, in-person conferences
For more information: http://renfrewcenter.com/events

**Conferences**

May 29, 2019
PINES Symposium: 10 Questions, 10 Experts: Sport Nutrition Myth Busters, Orlando, FL
For information: https://pinesnutrition.org/2019/03/19/pines-10-questions-10-experts-sport-nutrition-myth-busters/

June 6, 2019
Female Athlete Conference, Boston, MA
For information: https://bostonchildrens.cloud-cme.com/Aph.aspx?P=1&EID=910

June 13-15, 2019
ISSN 16th Annual Conference and Expo, Las Vegas, NV
For information: https://www.sportsnutritionsociety.org/conferencesDetails.php?idconf=65

August 9-12, 2019
American Association of Diabetes Educators (AADE) Annual Meeting, Houston, TX
For information: www.diabeteseducator.org

September 18-22, 2019
American Association of Cardiovascular and Pulmonary Rehabilitation (AACVPR) Annual Meeting, Portland, OR
For information: www.aacvpr.org

October 1-3, 2019
Annual National Wellness Conference, Kissimmee, FL
For information: www.nationalwellness.org

October 26-29, 2019
Food & Nutrition Conference & Expo™ (FNCE®) 2019, Philadelphia, PA
For information: https://eatrightfnce.org/attend/registration/

November 3-7, 2019
Obesity Week, Las Vegas, NV
For information: https://obesityweek.com/

November 8-10, 2019
Annual Renfrew Center Foundation Conference, Philadelphia, PA
For information: www.renfrew.com

**Resources to Connect With Your Patients**

- **American Stroke Association (ASA)**
  (www.strokeassociation.org)
  For downloadable patient information sheets on stroke prevention and life after stroke, search “Let’s talk about stroke” on the home page.

- **Critical Psychosocial Issues in Diabetes**
  (https://cme.ucsd.edu/psychosocialdiabetes)
  This site offers free online modules from UC San Diego Continuing Medical Education and the Behavioral Diabetes Institute on medication initiation and adherence.

- **Centers for Disease Control and Prevention**
  (www.cdc.gov)
  CDC’s Diabetes at Work 8 lesson plans can help employees manage their diabetes. The lesson plans include PowerPoint slides with talking points, a presentation guide, handout links, and suggested group activities. View the lesson plans at www.cdc.gov/diabetes/diabetesatwork/lesson-plans/index.html.

- **Million Hearts Initiative**
  (https://millionhearts.hhs.gov)
  The Million Hearts Initiative has created Cardiac Rehabilitation: Change Package to help cardiac rehabilitation programs improve care for patients. Focus areas are systems change, referrals, enrollment and participation, and adherence. From the home page, search “Cardiac Rehabilitation Change Package.”

- **National Center for Complementary and Integrative Health**
  (https://nccih.nih.gov)
  The National Institutes of Health’s National Center for Complementary and Integrative Health offers brief fact sheets on herbs and herbal supplements (scientific evidence, safety, etc) at https://nccih.nih.gov/health/herbsataglance.htm. HerbList can also be downloaded as an app from the Apple App Store or Google Play.

- **Preventive Cardiovascular Nurses Association**
  (http://pcna.net)
  Are your patients looking for heart healthy apps? PCNA has collected and summarized 8 such mobile apps. From the home page, search on “apps and gadgets.”