

relationship, yet no study has examined longitudinal associations between these factors. The current study examined the role of negative affect reactivity to daily stressors as a mediating pathway between personality and physical health outcomes using three waves of data spanning 20-years from a nationwide probability sample of 1,176 adults. Results indicate that Wave 1 neuroticism was associated with greater negative affect reactivity at Wave 2, which then predicted the development of chronic conditions and functional limitations at Wave 3. Higher conscientiousness was associated with less negative affect reactivity, which in turn predicted better physical health at Wave 3. Negative affect reactivity partially mediated both personality traits and physical. These findings highlight the usefulness of using a daily stress framework for understanding how personality impacts health over time, which has important implications for disease prevention.

Session 2455 (Symposium)

ORAL HEALTH'S TRANSFORMATIVE IMPACT ON DIET AND SYSTEMIC HEALTH OUTCOMES

Chair: Michèle Saunders

The 2020-25 Dietary Guidelines for Americans identified dental caries as a major diet-related chronic disease of public health concern and suggested in the section for adults over 60, "Good dental health is critical to overall health, as well as the ability to chew foods properly." Poor oral health can lead to chronic diseases and impede one's ability to chew fruits, vegetables, whole grains, and other nutrient-rich foods across the life span. Almost 90 percent of adults ages 20 to 64 years and 96 percent of those over 65 years of age have dental caries. The overall prevalence of complete tooth loss is 2.2 percent among adults ages 20 to 64 years and jumps to 17.3 percent for those over age 65. As a result of COVID-19, some seniors are not seeking regular oral health services, which increases the need for preventive oral health practices and consuming a healthy dietary pattern recommended in the new Dietary Guidelines. Recent research will underscore the importance of saliva and oral health in cancer patients on radiation and in other chronic diseases. Saliva has also been shown to reduce specific infections that are related to influenza and HIV. Participants in this session will gain understanding of factors linking poor oral health and nutrition practices to chronic diseases and guidance on critical preventive oral health practices to increase saliva flow and decrease dental caries through all stages of the life cycle. Promoting oral health is the responsibility of the interdisciplinary team overseeing older adults.

MINIMIZING COMPLICATIONS OF AGING THAT LEAD TO DRY MOUTH AND POOR ORAL HEALTH

Athena Papas, *Tufts University School of Dental Medicine, Boston, Massachusetts, United States*

Poor oral health causes severe pain and untreated infections to spread throughout the body. For older adults, the prevalence of root decay exceeds that of any other medical condition. Our research shows tooth loss and edentulousness were associated with increased mortality and inversely associated with BMI, waist circumference, blood pressure, and fasting blood glucose. Our Stop-it study found people who lost bone density had fewer teeth, problems chewing, and involuntary weight loss and frailty. 88% of the elderly
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take medications that cause loss of saliva. Sjögren's and radiation therapy for head and neck cancer patients heighten risk. Without saliva, patients have increased tooth decay, periodontal disease and fungal infections, salivary gland blockage, and problems swallowing and speaking. Dry mouth leads people to suck on candy that further increase caries. Substituting sugarfree gum for candy increases salivary flow and reduces dental caries. Brushing, flossing, and limiting sugar also lessen tooth decay.

NUTRITION, ORAL HEALTH, AND CHRONIC DISEASES INEXTRICABLY LINKED

Teresa Marshall, *University of Iowa, Iowa City, Iowa, United States*

The 2020-25 Dietary Guidelines identified dental caries as a diet-related chronic disease of major importance. Preventing dental caries and other oral infectious diseases is critical to maintaining an individual's capacity to chew food, consume nutrient-rich diets, and sustain optimal nutrition status. Pain and infection from dental caries complicates consumption of adequate amounts of fruits, vegetables, dairy, and lean protein recommended in the Dietary Guidelines. Nutrition and dietary intake can affect the development and integrity of oral cavity and progression of oral diseases. Increased snacking throughout the day in place of three-meals daily raises the risk of obesity and dental caries throughout the life cycle. Older adults who make routine oral health preventive practices, such as brushing, cleaning between teeth, drinking fluoridated water, and chewing sugarfree gum to increase saliva flow can reduce dental caries and oral infectious diseases. Professionals must also consider the impact of sugar-sweetened beverages and sugar intake.

RESEARCH CONFIRMS EFFECTIVENESS OF ORAL HEALTH PREVENTIVE PRACTICES

Michael Dodds, *Mars Wrigley, Chicago, Illinois, United States*

Lack of insurance or funds for dental services, lack of access to dental offices, fear of dentists, and avoidance of dental offices during COVID can lead to oral health problems in older adults. Brushing, flossing, and drinking fluoridated water can protect teeth when dentists are unavailable. Limiting intake frequency of carbohydrates and chewing sugarfree gum after eating add protection. A recent systematic review and meta-analysis confirmed the effectiveness of sugarfree gum in reducing caries, in children and adults who chewed sugarfree gum compared with those who did not chew. Chewing sugarfree gum significantly reduced caries increment, with a prevented fraction of 28 percent, roughly equivalent to the prevented fractions for fluoride toothpastes and supplements. A follow-up systematic review provides further evidence that chewing sugarfree gum reduces the numbers of *Streptococcus mutans* in the oral cavity. Finally, chewing sugarfree gum could alleviate symptoms of xerostomia and may reduce caries.

Session 2460 (Symposium)

PRESIDENTIAL SYMPOSIUM: FROM DISRUPTION TO TRANSFORMATION: CHALLENGING AND CHANGING THE NEW NORMAL

Chair: Deborah Waldrop Co-Chair: Philip Rozario
Discussant: Emily Greenfield