Research Commercialization

Nutrition Focused Physical Examination & Assessment (NFPE&A)

Technology #2018-093

Nutrition focused physical examination and assessment (NFPE&A) refers to a head to toe physical examination by a Dietitian to determine signs and symptoms of malnutrition and nutrient deficiencies and factors impacting food and fluid intake and dysphagia risk, including inspection and palpation of the head, neck, mouth, muscle and fat stores and skin and cranial nerve examination. Integration of NFPE&A training and education can increase NFPE conduct by students in supervised practice and professional clinical practice as registered dietitian nutritionists (RDNs).

Benefits of NFPE&A include:

- Appropriate for training RDNs across all levels of practice.
- Been in use for educating dietetic interns and students and nutrition faculty globally.
- Greater depth and breadth, and interactivity, which is essential for learning, than is available from other alternatives such as books and online education.

"Malnutrition is a major contributor to increased morbidity and mortality, decreased function and quality of life, increased frequency and length of hospital stay and higher health care costs."* It is characterized by muscle and fat wasting, fluid accumulation (edema), decreased functional status, weight loss, and poor dietary intake.

A nutrition focused physical examination and assessment (NPFE&A), which can be performed by registered dietitian nutritionists (RDNs) to identify its diagnosis, and to establish an intervention and monitoring plan to reduce further complications and health care costs.

Summary:

Researchers and educators in the Department of Clinical and Preventive Nutrition Sciences at Rutgers University's School of Health Professions have created a unique curriculum and training program for learning how to conduct nutrition focused physical examination and assessment (NPFE&A). The curriculum is a series of computer assisted instruction (CAI) modules that provide instruction and demonstration of NPFE&A of the orofacial region, upper body muscle and fat stores, and skin along with dysphagia and malnutrition risk. The content covers knowledge and skills essential for registered dietitian nutritionists (RDNs) to use as part of comprehensive nutrition care.

NFPE&A is a multi-media module that is available for use on virtual learning platforms. The module includes media and content including; audio and video presentations, related reading materials, case studies, knowledge

[Image of NFPE&A logo]
testing, and asynchronous discussion forums. Simulated practice assessment and live educational sessions on NFPE&A skills occur through a virtual classroom.

**Market Opportunities for the NFPE&A Modules**

- Consultants and other service providers providing training for RDNs or other professionals with a need to conduct NFPE&A.
- Nutrition and dietetics educators and residency directors from entry to advanced practice
- Integration of the curriculum into other existing nutritional educational materials available on digital learning platforms.

For information about courses offered by Rutgers University School of Health Care Professions, Department of Nutritional Sciences for continuing professional education of registered dietitian nutritionists, click: [http://shp.rutgers.edu/dept/nutr/INI/cpe.html](http://shp.rutgers.edu/dept/nutr/INI/cpe.html)


**Inventors**

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Dr. Touger-Decker is Professor and Chair of the Department of Clinical and Preventive Nutrition Sciences, School of Health Professions and Director of the Division of Nutrition, School of Dental Medicine at Rutgers University. She is a registered dietitian and is internationally recognized for her expertise and leadership in nutrition and oral health/dental education, nutrition focused physical exam and advanced practice dietetics education. Her research has explored diet and orofacial pain, nutrition and tooth loss, nutrition and head and neck cancers, and nutrition focused physical examination practices of dietitians. Dr. Touger-Decker is the lead editor of Nutrition and Oral Medicine.

**Rebecca Brody, PhD, RD, LD, CNSC**

Dr. Brody is an Associate Professor in the Department of Clinical and Preventive Nutritional Sciences in the School of Health Professions at Rutgers, The State University of New Jersey. She completed her undergraduate degree in dietetics at the University of Vermont and her Master of Science in Clinical Nutrition, and PhD in Health Sciences (nutrition track) at the University of Medicine and Dentistry of New Jersey (now Rutgers University). She teaches and mentors masters and doctoral research students, and conducts research on nutrition focused physical assessment, dysphagia screening, nutrition support therapy, and advanced practice topics.
Jennifer Tomesko, DCN, RD, CNSC

Dr. Tomesko is an Assistant Professor in the Department of Clinical and Preventive Nutrition Sciences in the School of Health Professions at Rutgers University. She is the Program Director for the Entry Level Master of Science in Clinical Nutrition, an ACEND accredited Graduate Future Education Model Program. Dr. Tomesko is a Registered Dietitian with expertise in acute care nutrition, clinical nutrition management and has been certified in nutrition support since 1999. Her research interests include teaching nutrition focused physical examination through the use of computer assisted instruction.

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Dr. Rigassio Radler is an Associate Professor in the Department of Clinical and Preventive Nutrition Sciences in the School of Health Professions, and a Clinical Assistant Professor in the Department of Diagnostic Sciences, Nutrition Division in the School of Dental Medicine at Rutgers, The State University of New Jersey. Her research interests include nutrition and oral health, and worksite wellness and weight management. She is also Director of the Institute for Nutrition Interventions which offers continuing professional education to nutrition and dietetics professionals.