Nutrition Perspectives in Physical Therapy

Part 1: Overview

APTA Landmark Motion Passes

RC 12-15: The Role of the Physical Therapist in Diet and Nutrition
by Megan Pribyl

Is nutrition within our scope of practice? As the instructor for “Nutrition Perspectives for the Pelvic Rehab Therapist” offered through Herman & Wallace, I hear this question frequently and have long felt the answer is - absolutely; now the APTA is endorsing this view. It’s an exciting time to be a rehab professional, especially for those looking to broaden clinical perspectives and scope of services to include basic nutrition and lifestyle information.

At the APTA House of Delegates in early June 2015, a landmark motion passed - RC 12-15: The Role of the Physical Therapist in Diet and Nutrition. (http://www.apta.org/uploadedFiles/2015PacketI.pdf). As our profession advances towards a more integrative model, this motion symbolizes an acknowledgement of the rehab professional's broader role as a health care provider. We, as physical therapists are uniquely positioned to offer patients more comprehensive lifestyle-related education including topics in nutrition. Both the World Health Organization (WHO, 2008) and the Physical Therapy Summit on Global Health (Dean, et.al, 2014) have called upon all health care providers to stand in unity to help the public with epidemics of lifestyle-related diseases; the APTA has given it’s nod of approval as well.

The motion states: “as diet and nutrition are key components of primary, secondary, and tertiary prevention of many conditions managed by physical therapists, it is the role of the physical therapist to evaluate for and provide information on diet and nutritional issues to patient, clients, and the community within the scope of physical therapist practice. This includes appropriate referrals to nutrition and dietary medical professionals when the required advice and education lie outside the education level of the physical therapist*.” Further, “this motion clearly incorporates the intent of the new Vision Statement for the Physical Therapy Profession by transforming society and improving the human experience.” (APTA, 2015)

This powerful development provides us with both challenge and opportunity. How can we, as rehab professionals, be armed with the most cutting edge nutritional information available? What nutrition information lies within our scope of practice? How can we apply this information to our clients? It is my passion to share this information and I welcome you to join me in this journey towards integrated practice.

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World Health Organization Action Plan:
Global Strategy for the Prevention and Control of Non-Communicable Diseases

ENDORESES the action plan for the global strategy for the prevention and control of noncommunicable diseases
URGES Member States:
(1) to strengthen national efforts to address the burden of noncommunicable diseases;
(2) to consider the proposed actions in the action plan for the prevention and control of noncommunicable diseases and implement relevant actions, in accordance with national priorities;
(3) to continue to implement the actions agreed by the Health Assembly in resolution WHA60.23 on the prevention and control of noncommunicable diseases: implementation of the global strategy;
(4) to increase provision of support to the work of the Secretariat to prevent and control noncommunicable diseases, including the implementation of the action plan;
(5) to give high priority to the implementation of the elements of the WHO Framework Convention on Tobacco Control;

“A Challenge and an Opportunity”

Excerpts from the WHO Action Plan:

Promoting healthy diet:
Implement the actions recommended in, but not limited to, the Global Strategy on Diet, Physical Activity and Health in order to:
A. promote and support exclusive breastfeeding for the first six months of life and promote programs to ensure optimal feeding for all infants and young children;
B. develop a national policy and action plan on food and nutrition, with an emphasis on national nutrition priorities including the control of diet-related noncommunicable diseases;
C. establish and implement food-based dietary guidelines and support the healthier composition of food by:
• reducing salt levels
• eliminating industrially produced trans-fatty acids • decreasing saturated fats
• limiting free sugars
D. provide accurate and balanced information for consumers in order to enable them to make well-informed, healthy choices;
E. prepare and put in place, as appropriate, and with all relevant stakeholders, a framework and/or mechanisms for promoting the responsible marketing of foods and non-alcoholic beverages to children, in order to reduce the impact of foods high in saturated fats, trans-fatty acids, free sugars, or salt.

Promoting physical activity
Implement the actions recommended in, but not limited to, the Global Strategy on Diet, Physical Activity and Health in order to:
A. develop and implement national guidelines on physical activity for health; B. implement school-based programs in line with WHO’s health-promoting schools initiative; C. ensure that physical environments support safe active commuting, and create space for recreational activity, by the following:

- ensuring that walking, cycling and other forms of physical activity are accessible to and safe for all;
- introducing transport policies that promote active and safe methods of travelling to and from schools and workplaces, such as walking or cycling;
- improving sports, recreation and leisure facilities;
- increasing the number of safe spaces available for active play.

Reducing the harmful use of alcohol

In order to respond effectively to the public-health challenges posed by harmful use of alcohol – in accordance with existing regional strategies and guided by the outcome of current and future WHO global activities to reduce harmful use of alcohol – Member States may wish to:

A. consider the following areas:

- under-age drinking (as defined in the country)
- the harmful use of alcohol by women of reproductive age
- driving or operating machinery while under the influence of alcohol (including all traffic-related injuries involving alcohol)
- drinking to intoxication
- alcohol-use disorders
- the consumption of alcoholic beverages that have been illegally produced and distributed
- the impact of harmful use of alcohol on other health conditions, in particular on cancers, liver and cardiovascular diseases, and injuries.

B. adopt measures in support of an appropriate monitoring system for the harmful use of alcohol.

Much more information can be found within this document. Please refer to reference list.

Health-Focused Physical Therapy Practice  (Adapted from Dean, 2009)

1. The construct of health and wellness
2. Epidemiology of lifestyle conditions
3. Modifiable risk factors of lifestyle conditions
   a. Hypertension and stroke
   b. Obesity
   c. Type 2 diabetes and metabolic syndrome
   d. Musculoskeletal health
   e. Psychosocial health
4. Rationale for Multi-pronged strategies to reduce lifestyle conditions
   a. Smoking cessation
   b. Nutrition and weight control

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c. Regular physical activity and exercise prescription
d. Promotion of moderate alcohol consumption
e. Stress and sleep management
5. Implications for physical therapy in the 21st Century

6. Health-focused practice: Rationale
7. Health-focused practice: Components

Focus A: Smoking reduction and cessation
Focus B: Nutrition optimization
Focus C: Weight control (weight reduction or gain, and normalizing)
Focus D: Physical activity (progressive increase in regular daily activity)
Focus E: Exercise (structured exercise programs)
Focus F: Stress reduction and management
Focus G: Sleep hygiene and optimization
Focus H: Substance abuse cessation (e.g., alcohol and drugs)

8. Health-focused practice: Health assessment and evaluation
9. Health-focused practice: Risk factor assessment and evaluation
10. Health-focused practice: Interventions
11. Smoking cessation counseling
12. **Basic nutrition counseling (see below)**
13. Regular physical activity and exercise prescription
14. Mental health, stress management, and sleep hygiene recommendations
15. Effecting positive health and health behavior change
   a. The stages of readiness to change (Prochaska and DiClemente, 1982)
      Precontemplation
      Contemplation
      Preparation
      Action
      Maintenance
16. Follow-up
17. Health-focused practice: Implications

**Basic Nutritional Counseling** (Dean, 2009):

“Optimal nutrition is essential for healing and repair, immunity, maintaining an optimal body weight as well as providing energy for metabolism. Physical therapists who exploit exercise as a primary therapeutic intervention to prevent, remediate, or mitigate the effects of disease and disability **perturb metabolic demands in their clients and patients.**”

“Physical therapists need an understanding of metabolism and the factors that influence it, and of healthy nutrition, nutritional assessment, and nutritional regimens to maximize human performance in patient populations.”

“Familiarity with established nutritional guidelines is essential for basic advice”

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The First Physical Therapy Summit on Global Health: Implications and Recommendations for the 21st Century (Dean et al 2011)

Guiding Questions:

Who are we as a profession and what do we do?
What “models” underlie our practice?
What are global health needs and indications for promotion and service delivery?
What is the evidence to support the exploitation of noninvasive interventions to address health priorities?
How well is our practice aligned with health needs and indicators?
What is the congruence of our professional education with health needs and indicators?
What are our research priorities and directions?
To what extent can the profession address escalating health costs and maximize its cost benefit to global health services?
What are the implications of the Summit findings for an action plan to guide contemporary clinical practice, entry-level education, and research?

The Human Movement System: Our Professional Identity (Sahrmann, SA 2014)

1. Evolution of thinking about the movement system
2. Identifying our body of knowledge
3. The scope of human movement
4. Rationale for defining the movement system as a physiological system
   4.1. Can the movement system be considered a physiological system?
5. Proposed model of the human movement system
6. Movement system concepts applied across the practice spectrum
7. Compelling case for embracing the human movement system as the foundation for physical therapist practice, education, and research
   a. What are the Advantages of associating physical therapy with a system of the body?
      i. Professions that have minimal difficulty gaining recognition for their expertise are associated with a physiological or anatomical system of the body.
      ii. Association with a body system provides a parallel to the role of other doctoring professions.
      iii. Currently identified and validated physical therapy specialties are essential to the comprehensive management of the human movement system over the course of the lifespan.
      iv. The movement system concept provides a context and format for describing diagnoses within the scope of physical therapy.
      v. Physical therapy’s identity as a profession will be enhanced when other health care professionals can identify or recognize our expertise.

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vi. Recognition for contributing to clinical science in a manner that benefits patients, clients, and other health care practitioners.

8. Relationship to Movement Science

References Part 1:


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Part 2: Foods that Hinder, Foods that Heal

“Foods” that Hinder:

Health and physiology are supported by the nutrients taken in and absorbed/ utilized by our bodies. Here, we have a look at common food products that hinder contrasted with those foods that heal. In general, these guidelines would be beneficial as a starting point for all practitioners hoping to make suggestions for patients with nutrition and health-related questions.

Processed foods have become ubiquitous in our culture; we as health care practitioners have a duty to our patients to recognize their adverse affects on human physiology. Conversations about the basics have the potential to invoke positive lifestyle choices and the potential to reduce the burdens of chronic health for patients and the health care system. (Tick, 2015; Fardet et.al., 2015)

Artificial Sweeteners. (Aspartame, Nutra-Sweet, Splenda etc.); have been proven NOT SAFE; they are neurotoxic and carcinogenic


Colors / Numbers: neurotoxic; includes man-made chemicals like Red #40, Yellow #5 etc. found in candies, icing, macaroni & cheese etc.

High Fructose Corn Syrup (HFCS): creates MORE sugar cravings

Preservatives and Other Artificial Flavor Enhancers: overtaxes the body’s elimination systems; includes nitrates, sulfites, MSG, ETTA, BHT, Benzoate, sorbates etc.
Soft Drinks, especially Diet Soda (Soffritti, 2014): leads to weaker bones, delayed healing, osteoporosis

Trans-Fats (CRITICAL to AVOID!!!): FDA ban is in progress; contributes to arterial plaque formation and inhibition of normal cell function; found in any oils or shortening that are hydrogenated or partially hydrogenated (commonly found in cookies, crackers, chips, pastries, bagels, donuts, peanut butter, fried foods, coffee creamers, soups, fast food, candy, margarine, salad dressing, cereal bars etc.)

Foods that Heal

“Properly prepared wholesome food nourishes us; body, mind, and soul” (MP, Jan 2015)

Food has the power to transform physiology. By choosing a variety of wholesome, nourishing foods for balanced meals, our body has a better opportunity to access the thousands of micro and macronutrients it needs to support its many miraculous functions.

Clean Water & Clean, Whole Foods (Richard, 2013; Clinton, 2015; Tick, 2015)

Cultured / Fermented Foods (culturedfoodlife.com, with permission by Donna Schwenck, 2013; Carasi, 2015; Park, 2014; Selhum, 2014; Swain, 2014; Vina, 2014; Wolfe, 2015; Yang, 2010)

Dairy: pasture-based; caution with dairy substitutes (as they provide D2, not D3) (Hauswirth, 2004; Fallon, 2012)

Fiber Sources: emphasize healthy gut microbiota in addition to nut, seed, and vegetable (not grain) sources of fiber which serve to feed the healthy microbes in the gut

Fruits and Vegetables (ripe, seasonal, local, organic) (Main, 2014; Debrow, 2014; Grindler, 2015; Forman, 2012)

Gluten-Wise Approach: Gluten intolerance (including Celiac) goes hand in hand with osteoporosis, infertility, and many “unexplained symptoms”

Gut Barrier Protectors (gelatin, bone broth): (Morell, 2014; Scaldaferrri, 2014)

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Healthy Fats: combination of Saturated Fats, PUFA's, MUFA's (Terasaka, 2008; Moreno-Luna, 2012) (coconut oil, lard, pastured butter (grass fed), cold pressed olive oil; used liberally to satiety)

Healthy Proteins: clean plant and animal sources (McGraw, 2012; Dallas et.al., 2015) (eg. hormone and antibiotic-free: grass fed beef & free-range chicken, wild-caught fish, cage-free eggs with yolks)

Low-Glycemic Index Foods (Richard, 2013)

Nuts and Seeds (soaked and sprouted to neutralize phytic acid which hinders nutrient absorption) (Fallon, 2012)

References Part 2:


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For a heart-healthy diet, don’t fixate on fat. Instead, eat a variety of whole or minimally processed foods. (2014). *Harv Heart Lett, 24*(11), 1, 7.


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The Importance of Transdisciplinarity (excerpts from Pelletier, 2015)

“...to invest the time needed to acquire common understandings and relationships with practitioners; and to adopt “hybrid” language that is one part language of practitioners and one part language that stretches... thinking in ways [we] find useful...”

“...to build upon mutual trust and respect...”

“...enable [us] to move research and thought processes into new areas based on evolving understanding of the challenges and needs in the real world...”

“...there is broad scope for meaningful engagement in nutrition, health...”

“...willingness to stretch [ourselves] into new intellectual territory and to acquire the essence of what other fields or disciplines have to offer, without feeling compelled to become an expert or specialist in those fields....”

Nutrition Concepts & Clinical Practice Tools:

1. Nutrition Basics: Foods that Hinder, Foods that Heal
2. Breathing Program for Parasympathetic Stimulation
3. Sleep Hygiene
4. Work Capacity / Energy Balance Worksheet
5. Walking for Health
6. Going Gluten-Free
7. Gut Health Basics
8. Low FODMaPs Diet
9. The 7 Habits for Highly Effective Digestion
11. Anti-Inflammatory Alternatives
12. Nutrition: The Healthy Bowel
13. Fiber: Helpful Hints
15. Healing the Gut
16. Introduction to Elimination Diets

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Part 3 References:


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