## **RESEARCH REPORT**

# Provision of Nutritional Counseling by Physical Therapists in the State of Tennessee

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#### ABSTRACT

**Objectives:** To determine whether physical therapists (PTs) in Tennessee are legally permitted to provide nutritional advice to patients and if providing nutritional advice should be a part of the preferred physical therapy practice patterns. Background: Proper nutrition is critical to the maintenance of health and the prevention of many diseases. The American Physical Therapy Association (APTA) states that physical therapists promote healthy lifestyles, wellness, and injury prevention. If proper nutrition is critical to health, and physical therapists (PTs) promote health and wellness, then it logically follows that PTs should advise their patients on proper nutrition. Methods and Measures: The APTA, Commission on Accreditation in Physical Therapy Education (CAPTE), and Guide to Physical Therapy Practice websites were searched using key terms such as nutrition, wellness, and diet. The Tennessee practice acts and accompanying policies and the Occupational Outlook Handbook (published by the US Bureau of Labor Statistics) for various professions were reviewed. Lastly, the website for the Center of Nutrition Advocacy (CNA) was reviewed. *Results*: No official position on the provision of nutritional counseling by PTs in Tennessee could be found from the APTA, CAPTE, Guide to PT Practice, or the Tennessee Board of Physical Therapy, APTA has a policy that entry-level PTs are expected to recognize that nutrition is a "barrier that may impact the achievement of optimal functioning within a predicted time frame". CAPTE lists nutrition as a primary content area in the "Foundational Sciences Matrix" of its normative model, which provides guidelines on what schools should teach PT students. The Guide to PT Practice lists nutrition as a "clinical finding" that may be reviewed during the patient history and lists nutritional status under "Factors That May Require New Episode of Care or That May Modify Frequency of Visits/Duration of Episode." Search of the CNA website resulted in their official position regarding the provision of nutritional counseling by healthcare professionals. The CNA states that, "nutrition is not the sole purview of any single profession, but is a toolset skillfully used by a wide variety of trained professionals to improve the health of those they serve." Conclusion: The lack of specific inclusion of "nutrition" in the Tennessee PT scope of practice does not absolutely signify that PTs cannot provide nutritional counseling. "Diet" and "nutrition" are also not specifically mentioned in the physician, dentist, nurse, or chiropractor practice acts, even though they may all counsel patients on nutrition as part of their practices. PTs can legally provide services and information related to nutrition. Considering nutrition affects the patient and the physical therapy intervention, nutritional counseling should be included in the preferred physical therapy practice patterns.

#### Background

The CDC Division of Nutrition, Physical Activity, and Obesity states "proper nutrition is critical to good health".<sup>1</sup> Poor nutrition has been identified as a major risk factor in preventable chronic diseases (such as heart disease, stroke, cancer, diabetes, and arthritis), which now account for seven out of ten deaths in the United States.<sup>2</sup> In 2010, total health expenditures were \$2.6 trillion,<sup>3</sup> of which 75% (\$1.95 trillion) went to the treatment of chronic diseases.<sup>4</sup>

The American Physical Therapy Association (APTA), which endorses the CDC's national initiative promoting fitness and health,<sup>5</sup> defines health as "a state of being associated

with freedom from disease, injury, and illness that also includes a positive component (wellness) that is associated with a quality of life and positive well-being".<sup>6</sup> APTA also states "physical therapists are uniquely qualified to assume leadership positions in efforts to prevent injury and disability, and fully supports the positive roles that physical therapists and physical therapist assistants play in the promotion of healthy lifestyles, wellness, and injury prevention".<sup>7</sup> As proper nutrition is critical to health, and physical therapists (PTs) promote health and wellness, the following clinical questions were considered:

- Are physical therapists in Tennessee *legally* permitted to provide nutritional advice to patients?
- If so, should nutritional counseling be a part of the preferred physical therapy practice patterns?

## Methods

The researchers completed an extensive review and received input from various healthcare professionals, utilizing a variety of sources, including the best available level of evidence to answer the questions posed.

The APTA, CAPTE, and Guide to PT Practice websites were searched with key terms such as nutrition, wellness, and diet. The Tennessee practice acts and accompanying policies and the Occupational Outlook Handbook (published by the US Bureau of Labor Statistics) for various professions were reviewed. Level five evidence was sought in the form of the opinions of licensed PTs and PT faculty members at Tennessee State University.

Websites for the Center of Nutrition Advocacy, Centers for Disease Control, and the Academy of Nutrition and Dietetics were reviewed. Scientific literature was also used to validate the effects of nutrition on health and healing.

### Results

No official position on the provision of nutritional counseling by PTs in Tennessee could be found from the APTA, CAPTE, Guide to PT Practice, or the Tennessee Board of Physical Therapy.

The following Tennessee practice acts were reviewed:

- Physical therapy
- Physicians
- Nurses
- Advanced practice nurses
- Dentists
- Chiropractors
- Registered dieticians (RD)

The Center for Nutrition Advocacy and the Academy of Nutrition and Dietetics websites provided the official positions regarding the provision of nutritional counseling by healthcare professionals and the provision of physical activity counseling by RDs, respectively.

In each state, PTs are governed by "practice acts." APTA's section on licensure states the following: "PTs must practice within the scope of physical therapy practice defined by these state licensure laws (physical therapy practice acts). The entire practice act, including accompanying rules, constitutes the law governing physical therapy practice within a state."<sup>8</sup>

To ensure PTs in Tennessee are legally permitted to provide nutritional counseling, the Tennessee Physical Therapy Practice Act was consulted. No information specifically referencing nutrition is listed.<sup>9</sup> Likewise, "wellness services" is not listed in the definition of physical therapy. However, there is a clause stating that the practice of physical therapy includes "reducing the risk of injury, impairments, functional limitation and disability, including the promotions and maintenance of fitness, health and quality of life in all age populations." Further definitions of these terms are not provided.

Similar ambiguous clauses are found in most physical therapy practice acts. The APTA published a formal document interpreting the "specific language in state PT practice acts" regarding wellness, fitness, and health promotion. The top of the document has the following statement:

> Note: Physical therapy services to promote health, wellness and fitness are considered within the scope of practice for physical therapy whether or not the state in which you are providing or plan to provide services is included below. However, applying state law to specific programs or services varies based on a number of factors including the specific legal language describing physical therapy services in your state licensing law, specific inclusions or exclusions, additional formal interpretations made by your state Board of PT, and the existence and level of direct access. (Health, Wellness, and Fitness in State Practice Acts).<sup>10</sup>

The Tennessee PT practice act does not list any specific inclusions or exclusions, and direct access (defined here as the provision of physical therapy without prior referral) does exist in Tennessee. The Tennessee board of physical therapy has not issued a formal interpretation of the aforementioned health clause. However, the board did issue the following policy that may be applicable:

> The Board of Physical Therapy hereby adopts the following resolution relative to multidisciplinary health screenings: The board resolves that health screenings in disciplines other than in one's scope of practice are unsafe to the public and may subject the

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This issue is important because it is APTA's policy that entry-level PTs are expected to recognize that nutrition is a "barrier that may impact the achievement of optimal functioning within a predicted time frame".<sup>12</sup> If improper nutrition inhibits the patient's healing process or overall health, PTs should advise the patient on proper nutrition to optimize the PT intervention.

The Guide to Physical Therapy Practice<sup>13</sup> was reviewed to determine if nutrition is listed in any of the preferred physical therapy practice patterns. In these patterns, nutrition is listed as a "clinical finding" that may be reviewed during the patient history." <sup>13</sup> Nutritional status is also listed under "Factors That May Require New Episode of Care or That May Modify Frequency of Visits/Duration of Episode."<sup>13</sup> However, nutritional counseling is not listed under the tests and measures or interventions sections. Conversely, "wellness" is listed under interventions as "Patient/client-related instruction may include instruction, education, and training of patients/clients and caregivers regarding health, wellness, and fitness programs." Given that nutrition is mentioned as a factor in the healing process, it appears the Guide to PT Practice implies nutritional counseling could fall under the category of wellness education.

An official position regarding nutritional counseling could not be found on the APTA website.<sup>14</sup> The researchers contacted APTA representative L. Culver DPT, MBA (email communication, October 2013) and confirmed that APTA does not have a position that specifically addresses nutrition.

PTs are expected to inquire about nutrition in the patient history and recognize when it is affecting the client's health and/or healing. One now has to consider whether

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entry-level PTs are qualified to discuss nutrition with patients.

The Commission on Accreditation in Physical Therapy Education (CAPTE) is the accrediting body for entry-level education programs for PTs and PTAs (physical therapy assistants). CAPTE produces the "normative model" which provides guidelines on what schools should teach PT students. In this model, nutrition is listed as a primary content area in the "Foundational Sciences Matrix." The following lists the accompanying information regarding nutrition:

- "Primary Content
  - > Nutrition
    - Normal dietary intake
    - Performance enhancing supplements and side effects
    - Basic energy systems
  - Examples of Terminal Behavioral Objectives (After the completion of the content, the student will be able to...)
    - Compare and contrast diets for all populations for health, fitness, and wellness
    - Examine the health, wellness, and fitness of diets (including any supplements) and activity for all populations
  - Examples of Instructional Objectives
    - Describe the normal intake of carbohydrates, proteins, fats, vitamins, water, and minerals in daily American diets
    - Compare the differences in diet in athletes of different sports
    - Describe the effects of performance enhancing supplements and the side effects of usage of these supplements
    - Discuss the scientific basis for weight loss, muscle gain, and diet and performance

- Discuss the effects of diet and socioeconomic factors on Native Americans
- Describe the nutritional intake of calcium for pregnant and postmenopausal women<sup>315</sup>

The result of this review seems to suggest that PTs should be qualified to discuss nutrition, nutrition is a part of health and wellness, and PTs promote health and wellness. Therefore, PTs should discuss and provide nutritional advice to patients, especially considering that the APTA, Guide to PT Practice, and CAPTE indicate that nutrition is a complimentary intervention and affects other physical therapy interventions.

### Discussion

The lack of specific inclusion of "nutrition" in the Tennessee PT scope of practice does not absolutely signify that PTs cannot provide nutritional counseling. "Diet" and "nutrition" are also not specifically mentioned in the physician, dentist, nurse, or chiropractor practice acts,<sup>16,17,18,19</sup> even though they may all counsel patients on nutrition as part of their practices.<sup>20,21,22,23</sup> It is apparent that nutritional counseling is included in several occupations. This seems to support the following anecdotal view, issued by the Center for Nutrition Advocacy:

> "Nutrition is not the sole purview of any single profession, but is a toolset skillfully used by a wide variety of trained professionals to improve the health of those they serve. Whether it is a clinical nutrition professional providing medical nutrition therapy to someone with a health condition, a pharmacist counseling about drugnutrient interactions, or a health coach teaching someone how to implement healthy dietary changes, these and many other professionals have a crucial role to

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play in addressing our nation's health crisis."<sup>24</sup>

This evidence supports the view that PTs have the legal authority to provide nutritional counseling, at least to some extent.

If nutrition was legally under the sole purview of a single profession, it would likely be the registered dietician (RD) occupation. Fortunately, the Tennessee RD practice act also addresses this:

> "Nothing in these rules shall be construed to constrict or limit: The Medical Practice Act, Osteopathy Practice Act, Nursing Practice Act or other licensed health professionals who are currently authorized to practice nutrition in their scope of practice from engaging in the practice of dietetics/nutrition in accordance with their scope of practice of their professions."<sup>25</sup>

Although the PT practice act is not specifically mentioned, it could be argued that PTs could be included in the "other licensed health professionals" category.

Similar to nutritional counseling not being limited to RDs, counseling patients on physical activity and exercise is not the sole purview of any single profession. In fact, as part of "A Physical Activity Toolkit for Registered Dietitians" published by the Academy of Nutrition at Dietetics, RDs are recommended to "assess and review every patient's/client's physical activity level at every visit. Patients/clients should then be counseled on including physical activity in their lifestyle".<sup>26</sup> This raises the question of whether the RD practice act includes counseling on physical activity and exercise. The Tennessee RD practice act has a similarly open-ended health clause as found in the PT practice act. It could be argued that RDs are legally permitted to counsel patients

on physical activity and exercise as part of the clause to achieve and maintain health, as RDs integrate and apply "scientific principles of food, nutrition, biochemistry, physiology, management and behavioral and social sciences in achieving and maintaining health through the life cycle and in the treatment of disease."

It is clear that practice acts are not comprehensive in nature. Nutrition is not specifically included in the practice acts of all health professionals who provide nutritional advice. Likewise, neither are physical activity and exercise.

Another question to consider is why PTs should address nutrition with their patients at all rather than referring to an RD. Unfortunately, it does not appear that PTs can directly refer to RDs in the state of Tennessee. Tenn. Code Ann. § 63-25-105 states:

> "No therapeutic dietary regimen may be developed unless pursuant to the appropriate orders and/or referral of licensed practitioners of medicine, osteopathy, chiropractic, dentistry or podiatry when incidental to the practice of their respective professions."<sup>27</sup>

PTs are not specifically listed as individuals who can refer a patient to an RD. Thus, if a PT wanted a patient to see an RD they would have that patient make an appointment with their general practitioner, dentist, chiropractors, podiatrist, and so forth. Then the aforementioned individuals who have the power to refer patients would refer the patient to an RD. This complication means the patient would incur unnecessary financial costs and loss of time to receive counseling from an RD. Furthermore, it is unclear to what extent nutritional counseling from an RD benefits the patient above nutritional counseling from other health professionals. Therefore, the back and forth

referral of patients becomes an unnecessary burden on healthcare as a whole.

Ultimately, it remains difficult to answer whether nutritional counseling is within Tennessee's scope of PT practice. The researchers offer the following opinions:

- Are physical therapists in Tennessee legally permitted to provide nutritional advice to patients?
  - Yes, PTs are legally permitted to provide services and information related to nutrition.
- Can physical therapists in Tennessee competently and safely provide nutritional advice to patients?
  - Yes, PTs can competently and safely provide nutritional advice to patients.
- If so, should nutritional counseling be a part of the preferred physical therapy practice patterns?
  - Yes, nutrition affects the patient's overall health and wellness and compliments physical therapy interventions to optimize health and healing.

The researchers propose the following guidelines for PTs regarding nutritional counseling with their patients.

- PTs should discuss nutrition when taking the patient's history, including asking if the patient is currently following a specific diet or has been prescribed a diet by an RD or MD
  - If the patient has been prescribed a diet, the PT should encourage adherence to the diet
- PTs should ask if patients would like to be referred to an RD, explaining the process for referral
- PTs should absolutely refer patients to an RD or MD for nutritional therapy when the PT does not feel comfortable discussing nutrition related to the patient's disease or condition and the patient is receptive to referral

- If the patient is not under the care of an RD and does not want to be referred, AND the PT feels comfortable discussing nutrition related to the patient's disease or condition, PTs should counsel patients on nutrition supported by evidence-based practices that typically result in the prevention, delay or management of diseases and/or conditions
- PTs should monitor the patient's nutrition through food diaries throughout the duration of physical therapy provision

In addition, PT programs should teach nutrition more explicitly and fully. PTs must learn to assess a patient's nutrition and make a nutritional diagnosis in order to counsel patients on nutritional strategies and interventions to optimize the physical therapy intervention.

## Conclusion

The researchers propose the following items to definitively answer their research questions:

- APTA should provide an official position regarding nutrition in the PT scope of practice.
- APTA should issue guidelines on addressing nutrition with patients in the preferred physical therapy practice patterns of the Guide to PT Practice.
- Tennessee Board of PT should issue a formal policy regarding nutrition in the PT scope of practice until a time when nutritional counseling can be explicitly added to the PT scope of practice.
- Tennessee RD practice act should be amended to allow direct referral from PT.
- Tennessee RD practice act should be amended with the following bolded item:

- Nothing in these rules shall be construed to constrict or limit:
  - The Medical Practice Act, Osteopathy Practice Act,
    - **Physical Therapy Practice Act**, Nursing Practice Act or other licensed health professionals who are currently authorized to practice nutrition in their scope of practice from engaging in the practice of dietetics/nutrition in accordance with their scope of practice of their professions.
- Enforcement by CAPTE to ensure PT programs are providing appropriate education on nutritional counseling in the PT program's curriculum.

The researchers will petition APTA, the Tennessee board of PT, and the Tennessee board of Dieticians/Nutritionist Examiners to begin the process of making the above changes.

#### References

- Division of nutrition, physical activity, and obesity. *Centers for Disease Control and Prevention*. 2013. Available at: http://www.cdc.gov/nccdphp/dnpao/index.html. Accessed October 21, 2013.
- Chronic diseases and health promotion. Centers for Disease Control and Prevention. 2012. Available at: http://www.cdc.gov/chronicdisease/overview/index.htm. Accessed October 21, 2013.
- Health expenditures. *Centers for Disease Control and* Prevention. 2013. Available at: http://www.cdc.gov/nchs/fastats/hexpense.htm. Accessed October 21, 2013.
- Chronic disease prevention and health promotion. *Centers for* Disease Control and Prevetion. 2013. Available at: http://www.cdc.gov/chronicdisease/index.htm. Accessed October 21, 2013.
- National and international initiatives promoting fitness & health. American Physical Therapy Association.2013. Available at: http://www.apta.org/PreventionWellness/GovernmentalInitiat
- ives/. Accessed September 17, 2013.
  Physical fitness, wellness, and health definitions. *American Physical Therapy Association*. 2013. Available at:
- http://www.apta.org/uploadedFiles/APTAorg/About\_Us/Poli cies/Practice/PhysicalFitnessWellnessHealthDefinitions.pdf. Accessed September 4, 2013.
- Health promotion and wellness by physical therapists and physical therapist assistants. *American Physical Therapy Association*. 2012. Available at: http://www.apta.org/uploadedFiles/APTAorg/About\_Us/Poli cies/Health\_Social\_Environment/HealthPromotionWellness. pdf. Accessed September 4, 2013.
- 8. Licensure. American Physical Therapy Association. 2013.

Available at: http://www.apta.org/Licensure/. Accessed October 20, 2013.

- 9. General rules governing the practice of physical therapy. *Rules of the Tennessee Board of Physical Therapy*. 2007. Available at: http://state.tn.us/sos/rules/1150/1150-01.pdf. Accessed October 20, 2013.
- Prevention, wellness, and disease management. *American Physical Therapy Association*. 2013. Available at: http://www.apta.org/PreventionWellness/. Accessed September 4, 2013.
- Policy: Multidisciplinary Health Screening. Department of Health Policy Statements. November 14, 2008. Available at: http://health.state.tn.us/boards/PT/PDFs/PT\_Multi\_Health\_S creen.pdf/. Assessed November 5, 2013
- Minimum Required Skills of Physical Therapist Graduates at Entry-Level BOD G11-05-20-49. *APTA*. October 1, 2013. Available: http://www.apta.org/uploadedFiles/APTAorg/About\_Us/Policies/Education/MinimumRequiredSkillsPTGrads.pdf#search =%22nutrition%22/. Assessed September 18, 2013.
- 13. <u>Guide to physical therapist practice. 2nd ed. Alexandria, Va.:</u> <u>American Physical Therapy Association, 2003. Print.</u>
- American Physical Therapy Association. *APTA*. 2013. Available at: http://www.apta.org/. Assessed September 25, 2013.
- The Normative Model: Foundational Sciences Matrix. "Chapter 3 Curriculum – Foundational and Clinical Sciences". Available at: <u>https://www.calstate.edu/app/dpt/documents/ch3.pdf</u>. Assessed September 25, 2013.
- General Rules and Regulations governing the Practice of Medicine. *Rules of Tennessee Board of Medical Examiners*. September, 2002. Available at: http://www.state.tn.us/sos/rules/0880/0880-02.pdf/. Assessed October 5, 2013.
- General Rules. Rules of Tennessee Board of Dentistry. December, 2007. Available at: http://www.state.tn.us/sos/rules/0460/0460-01.pdf/. Assessed September 24, 2013.
- Rules and Regulations of Registered Nurses. *Rules of the Tennessee Board of Nursing*. June, 2007. Available at: http://www.state.tn.us/sos/rules/1000/1000-01.pdf/. Assessed October 5, 2013.
- The Rules of the Board of Chiropractic Examiners. *The* Official Site of the Tennessee Government. 2013. http://www.tn.gov/sos/rules/0470/0470-01.pdf. Accessed October 26, 2013.
- Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook, 2012-13 Edition*, Physicians and Surgeons, on the Internet at http://www.bls.gov/ooh/healthcare/physicians-and-surgeons.htm. Accessed November 4, 2013.
- Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook, 2012-13 Edition*, Dentists, on the Internet at <u>http://www.bls.gov/ooh/healthcare/dentists.htm</u>. Accessed November 4, 2013.
- Frequently Asked Questions. American Chiropractic Association. 2013. http://www.acatoday.org/level3\_css.cfm?T11D=13&T21D=6
- 1&T3ID=152#conditions. Accessed November 12, 2013.
   Henning, M. Nursing's Role in Nutrition. *CIN Computers, Informatics, Nursing*. October 2009; 27(5): 301-306. Available at this: http://www.nursingconter.com/lng/static2pageid=984069

http://www.nursingcenter.com/lnc/static?pageid=984069. Accessed October 1, 2013.

- Empowering Professionals to Transform Health Through Nutrition. *Center for Nutrition Advocacy*. 2013. http://www.nutritionadvocacy.org/about-us. Accessed September 29, 2013.
- 25. The Rules of the Board of Dietitian/Nutritionist Examiners. *The Official Site of the Tennessee Government.* 2013.

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http://www.tn.gov/sos/rules/0470/0470-01.pdf. Accessed October 26, 2013.
26. Referring Patients to an RD. *Academy of Nutrition and*

- Referring Patients to an RD. *Academy of Nutrition and Dietetics*. 2013. http://www.eatright.org/HealthProfessionals/content.aspx?id =6863. Accessed October 15, 2013.
   Development of therapeutic dietary regimens. *Tennessee*
- 27. Development of therapeutic dietary regimens. *Tennessee Code Unannotated*. 2013. http://www.lexisnexis.com/hottopics/tncode/. Accessed October 26, 2013.