Keeping Pace with Innovations in Nutrition Care

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The College encourages RDs to keep abreast of innovative approaches to nutrition care, incorporating those that enhance the delivery of safe, competent, and ethical dietetic services. This article uses a framework to illustrate the professional obligations RDs need to consider when incorporating new and emerging nutrition approaches within their dietetic practice.

We are using the example of nutrigenomics to demonstrate how RDs can fulfill their professional obligations when incorporating innovative approaches to dietetic practice. Please note that the College is neither endorsing nor discouraging the use of nutrigenomics.

Keeping abreast of innovative approaches to nutrition care such as nutrigenomics can enhance the delivery of safe, competent, and ethical dietetic services. Prior to doing so, RDs should reflect, examine and fully understand their professional obligations as outlined in this article when exploring their options for offering such approaches to nutrition care in dietetic practice.

WHAT IS NUTRIGENOMICS?

Nutrigenomics is the study of how individual genetic variation may affect a person's response to ingested foods and individual nutrients. The results may have an impact on a person's risk of nutrition-related chronic diseases.[1,2]

Testing involves a client providing a saliva sample that is analyzed for specific genetic markers in his/her DNA that affects their bodily response to particular nutrients. If clients are found to be carriers of particular genetic markers, they may respond differently to foods and nutrients. For example, there is a specific genetic marker that effects how individuals break down caffeine. Those who have a particular version of a gene may have difficulty breaking down caffeine thus increasing their risk of heart disease when caffeine is ingested. In others without this genetic variation, ingesting caffeine may not have any effect or may even have a protective effect on heart disease.[2]

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Need to Know

Clients must consent to disclosing any personal health information to third parties such as insurance companies and employers. This includes the results of any genetics testings. Even if an insurance company/employer requests such information, clients have the right to refuse such disclosure.

This right is outlined in the *Personal Health Information Protection Act, (2004)* as well as Bill 127, *Human Rights Code Amendment Act, (2013)* that proposes to include genetic characteristics as a prohibited ground of discrimination.

1. L.R. Ferguson and M.P.G. Barnett (2012). Research in nutrigenomics and potential applications to practice. *Nutrition & Dietetics*. 69: 198–202.

2. Nutrigenomix. (2013). *FAQ*. Available from: https://www.nutrigenomix.com/faq

Framework for Keeping Pace with Innovations in Nutrition Care

1. IS THE TASK WITHIN THE RD SCOPE OF PRACTICE?

BROAD CONSIDERATIONS

The RD scope of practice statement in the *Dietetics Act* and the College's *Definition of Practising Dietetics* permits a very broad spectrum of activities as the scope relates to using the knowledge of food and nutrition, and working in areas related to nutrition conditions and disorders and the prevention and treatment of these.

Incorporating any evidence-based approach that will enhance nutrition assessments and treatment would be within the RD scope of practice.

NUTRIGENOMICS

Nutrigenomics falls within the dietetic scope of practice as it involves the assessment of nutrition and nutrition conditions and the treatment and prevention of nutrition-related disorders by nutrition means. It does not involve a controlled act.

2. ARE THERE ANY LEGAL BARRIERS?

BROAD CONSIDERATIONS

Organizational policies, the *Regulated Health Professions Act*, *Dietetics Act*, *Public Hospitals Act*, and other legislation may limit who can do what and under what conditions.

Consider whether there are any legal restrictions in adopting a new approach to nutrition care.

Where legal restrictions occur (e.g., performing controlled acts), explore the required authority mechanisms (e.g., direct orders, medical directives/delegations) to carry out the task.

NUTRIGENOMICS

In a public hospital, nutrigenomics may be considered ordering a diagnostic procedure, restricted to certain professions under the *Hospital Management Regulation* of the *Public Hospitals Act* (1990). RDs should check with their employer if they wish to use nutrigenomics testing in a public hospital and seek out the appropriate authority, as applicable.

Currently, most nutrigenomics testing simply involves the client providing a saliva sample that is sent to an external private lab for analysis and this is not a controlled act. Outside of a public hospital setting, RDs may offer nutrigenomics testing to clients.

If working within an organization, consult employer policies (as applicable) to ensure there are no restrictions to offering nutrigenomics testing to clients. This would include collecting the sample for testing as well as using a private lab for analysis.

Caution

While nutrigenomics testing is not diagnostic in nature, when interpreting and communicating the results of nutrigenomics testing to clients, care must be taken not to perform the controlled act of communicating a diagnosis as outlined in schedule 1, section 27(2.1) of the *Regulated Health Professions Act, 1991*. RDs may explain the findings, including clinical significance (carrier/non-carrier of particular genetic markers) and the impact of the results on the client's nutrition care plan.

Provide clients with supporting educational materials (as applicable) to help explain the results of the nutrigenomics testing and the impact on the client's nutrition care plan.

3. IS IT EVIDENCE-BASED?

BROAD CONSIDERATIONS

Always practice in an evidence-based manner. Examine the scientific evidence to support the use of any new approach to nutrition assessment and treatment in dietetic practice.

For more information, refer to the College's e-learning module on Evidence-Based Practice: http://files.collegeofdietitians.org/en/pdf/Workshops/2012/March/index.htm

NUTRIGENOMICS

Examine the scientific literature and use professional judgement to support the use of nutrigenomics testing with clients in dietetic practice. The College has been made aware of a draft *Position Paper of the Academy of Nutrition and Dietetics: Nutritional Genomics*. Consult the draft and the final version once it becomes available: Refer to: http://www.eatright.org/

4. DO RDS HAVE THE NECESSARY SKILLS AND COMPETENCE TO PERFORM THE TASK?

BROAD CONSIDERATIONS

RDs have a professional obligation to ensure they have the necessary knowledge, skills & judgment to offer new approaches to nutrition care and seek appropriate training to become competent in a particular area.

Continued learning and education would be essential in order to be able to provide up-to-date information and expert advice to clients.

NUTRIGENOMICS

Nutrigenomics is a complex field and RDs have a professional responsibility to ensure they have the appropriate knowledge, skills & judgment to determine the purpose, cost, benefits and alternatives prior to offering nutrigenomics testing to clients. RDs must also have the competence to effectively communicate the results of nutrigenomics testing to clients.

Seek out appropriate training; continued learning and education would be essential as this field evolves in order to be able to provide up-to-date information to clients.

5. WOULD THE NEW APPROACH FACILITATE CLIENT-CENTRED CARE?

BROAD CONSIDERATIONS

RDs have a professional responsibility to provide safe, ethical and competent client-centered services. Assess whether an innovative approach to nutrition care would be indicated given a client's conditions and the potential impact on their nutrition care planning and goal setting.

Review any cost-benefit analysis associated with an innovation to nutrition care.

NUTRIGENOMICS

Nutrigenomics may help RDs tailor a client's nutritional needs and develop customized dietary recommendations through the results of genetics-based testing.

Assess whether nutrigenomics testing is clinically indicated given the client's specific conditions and the potential impact that the testing and results may have on their nutrition care and goals.

Discuss with clients the benefits of knowing the results of the nutrigenomics testing in relation to the cost of the test itself.

6. HAS INFORMED CONSENT BEEN OBTAINED?

BROAD CONSIDERATIONS

In keeping with section 11(3) of the *Health Care Consent Act*, prior to engaging in any nutrition assessment or treatment, informed consent must be obtained from a client. Review the following information with a client before engaging in any nutrition assessment or treatment: the nature of the assessment/treatment; who will be providing the assessment/treatment; reasons for the assessment/treatment; material effects, risks and side-effects; alternatives to the assessment/treatment; consequences of declining the assessment/treatment; and specific questions or concerns.

NUTRIGENOMICS

Prior to nutrigenomics testing, informed consent must be obtained from a client. Discuss with the client the rationale and nature of the test; cost of the test; how the sample for the test will be obtained; who will be analyzing the results; alternatives to nutrigenomics testing; advantages and disadvantages of nutrigenomics testing as well as any specific questions or concerns expressed by the client.

Within the informed consent process, protect the clients' interests and fully disclose any known potential risks and benefits of genetic testing, including possible non-medical uses of the information by employers and/or insurance providers.

It is imperative that clients are aware that nutrigenomics testing is not diagnostic in nature, (e.g., diagnosis of a disease state or condition) but rather indicative of one's relative risk.

7. IS THERE A CONFLICT OF INTEREST?

BROAD CONSIDERATIONS

A conflict of interest (COI) occurs when an RD has a personal interest (benefit, profit, or other advantage) that could improperly influence professional judgment.

As clients rely on RDs to provide nutrition expertise and professional advice, RDs have a responsibility to only recommend innovative approaches to nutrition care that are based on client need, rather than any other personal or professional benefit such as monetary gain, research opportunities, etc.

When offering a new innovative approach to nutrition care, in some situations, RDs can manage any actual, potential or perceived COI by using the DORM Principle described below. Some COI should be avoided altogether (see Chap 9 of the *Jurisprudence Handbook for Dietitians in Ontario*).

Above all, being honest and transparent is always the best client-centred approach.

NUTRIGENOMICS

RDs have a professional duty to recommend nutrigenomics testing based on client need, rather than being motivated by financial benefit.

When offering nutrigenomics testing, manage any actual, potential or perceived COI by using the DORM Principle:

- Disclosure: Disclosing to clients the cost of the nutrigenomics testing as well as any financial benefit for the RD (e.g., cost of time for counselling clients about their results).
- Options: Indicate all options that clients may have for nutrigenomics testing as well as their right to refuse testing.
- Reassurance: Reassure clients that their care will not be compromised should they accept or decline the nutrigenomics testing.
- Modifications: Implement any other modifications that would help alleviate either an actual or perceived COI in relation to nutrigenomics testing.