

How To Perform An Evidence-Based Nutrition/Lifestyle/Anti-Aging Assessment: A comprehensive guide for health professionals

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During my 24 years as a nutrition professor I have taught students and practitioners how to conduct an evidence-based patient evaluation that leads to safe and meaningful nutrition, exercise and supplementation recommendations that are appropriate for the patient's specific circumstances. My concern is that practitioners at times make recommendations of this nature without assessing all of the confounding variables that are critical to each individual's circumstances, which can result in providing advice that is not optimal for the patient, or may even be dangerous in regards to drug-nutrient interactions or co-morbidity issues, or may put place the patient at risk for a cardiac event or a bleeding disorder.

From a standpoint of professional responsibility and liability, I strongly suggest that before you issue advice pertaining to dietary modifications, exercise prescription and/or nutritional supplements, your recommendations be based upon the findings of an evidence-based assessment protocol. A proper evidence-based protocol includes the incorporation of the following factors, which will be briefly highlighted below:

1. Age
2. Gender
3. Assessment Of Current Dietary Patterns
4. Anthropometric Assessment (including Body Mass Index, Waist Circumference and if possible, Percentage Body Fat)
5. Exercise Behaviors –assessment of current exercise status and contra-indications involving aerobic, strength training, and flexibility.
6. Signs and Symptoms Suggesting Nutrient Deficiencies
7. Lifestyle Practices Known to Deplete Nutrients (e.g. specific drugs, caffeine, alcohol)
8. Current or Recurring Health Conditions (e.g. eczema, fibromyalgia, osteoarthritis)
9. Family History of Conditions Where Genetic Component Is Strong
10. Medication Use (screening for contra-indications to specific diet and/or supplement recommendations)
11. Other Contra-Indications To Evaluate (health conditions, pregnancy, breast feeding, organ transplants)
12. Specific Blood, Urine and Other Appropriate Investigations (baseline and early detection screening tests as a means of establishing important objective status of specific health parameters and risk factors. These can be addressed by the patient and their physician as your job is primarily to make the patient aware of them)

Let's examine some of the factors listed above and then I will leave you with a website at the end of the article that will enable you to access the free online Nutrition/Lifestyle/Anti-Aging Assessment I developed for my patients and for other chiropractors to use with their patients if they so choose:

Age

Age must be factored into the assessment due to the fact that after age 40 the body's aging clock triggers time bombs that go off, at predictable points in our time line, which increase vulnerability for congestive heart failure, high blood pressure, cancer, virulent infections, bone demineralization, prostate enlargement in men, cognitive decline, menopausal symptoms in women, and erosion of joint cartilage leading to osteoarthritis. As such, it is appropriate to explain to patients, based upon their current age, how to counter the aging time bombs, as a means to help extend their functional life, through the use of evidence-based anti-aging/disease prevention supplements that specifically counter the age-related enzymatic and other metabolic changes associated with these age-related health problems. As one example, we know that coenzyme Q10 synthesis markedly declines by age 45-50, at which time it is in the patient's best interest to include CoQ10 in their supplementation regime to prevent high blood pressure, congestive heart failure and possibly cancer.

Gender

Gender is an important consideration for men, as after age 40 the prostate gland increases conversion of testosterone to dihydrotestosterone (DHT), which is linked to prostate enlargement and prostate cancer; a condition reported to occur in at least one in nine men in the North America in their lifetime. Studies demonstrate that a supplement combination of specific herbs and isoflavones can block the enzyme (5-alpha-reductase) that converts testosterone into DHT, thereby reversing early and moderate stage prostate enlargement, and inhibiting important steps in prostate cancer development. On the other hand, the combination of certain herbal agents can help reduce menopausal symptoms in women (at around age 50) and attention to other nutrients can help prevent osteoporosis, which affects many more women than men. Women simply need to be more aggressive than men in defending against bone loss from an earlier age.

Assessment Of Current Dietary Patterns

Before making recommendations about dietary modifications the practitioner must first get a snap shot of the patient's current nutritional practices, assessing, at least, the following variables: Intake of saturated fat, trans-fats and cholesterol; fruit and vegetables; fiber; refined sugars; alcohol; artificial food additives including nitrates (e.g. processed meats); protein; calcium; fried foods; smoked, BBQ, charred, blackened meat or fish, as well asking about established food allergies or gastrointestinal conditions (e.g. Celiac disease, Crohn's disease, Ulcerative Colitis, Active Ulcer, GERD etc)

Anthropometric Assessment

The patient's body mass index (BMI) and waist circumference are important indicators of their risk for premature heart disease, hypertension, lipid disorders, diabetes and, according to some reports, colon and reproductive cancers. A proper assessment of the patient's health status must address these anthropometric indices before an appropriate dietary and exercise program can be provided to a patient. In-office assessment and monitoring of these indices, along with % body fat evaluation

(if equipment is available), are important considerations when providing a program to overweight patients.

Exercise Status

It is imperative to educate patients about the health and anti-aging benefits of aerobic, strength training and flexibility exercises, as well as providing them with a specific program to follow that is customized for to their needs and capability. Within this discussion the practitioner must have knowledge of the patient's current exercise program or lack thereof, along with the use of a screening questionnaire, which identifies patients who must see a physician or cardiologist for specialized testing, prior to engaging in an exercise program

Identifying Signs and Symptoms of Nutrient Deficiencies

There are numerous changes to the skin, mouth, lips, tongue, nails, along with easy bruising, lack of taste acuity, frequent colds, poor wound healing, that are often indicators of existing nutrient deficiencies. For instance, red dots under the skin (petechial hemorrhage) are an early indicator of vitamin C deficiency. Lack of taste acuity is often an indicator of zinc deficiency, which may also involve poor wound healing and frequent colds or other signs of a weak immune system. Specific screening questions in this regard should be included in the patient work-up.

Identifying Drugs and Lifestyle Practices Known to Deplete Specific Nutrients

The scientific literature provides information regarding mechanisms through which certain drugs reduce nutritional status of certain nutrients. For example, statin drug, used to lower blood cholesterol, block the synthesis of coenzyme Q10 as well as cholesterol. As such, physicians are advised to recommend 100 mg per day of CoQ10 to patients on these medications. In many cases this advice is not provided to the patient, which may increase risk for congestive heart failure. Many other common medications, such as aspirin, birth control pills, etc. deplete important nutrients, as does alcohol consumption, caffeine, stress, and aerobic exercise. A specific line of questioning involving nutrient-depleting drugs and other nutrient-depleting practices, can help identify which nutrients are of greatest concern and help the practitioner enlighten the patient as to the benefits of a high potency multiple vitamin and mineral in cases where it is appropriate

Current and Recurring Health Conditions

Research reveals that there are at least 60 different health conditions whereby established nutrition (and often supplementation and exercise) protocols are important in the adjunctive medical and/or chiropractic management of the patient's condition(s). In both medical and chiropractic practice these specific nutrition and lifestyle interventions are often over looked, or the practitioner lacks awareness of established lifestyle measures that can assist in the management of the condition(s). A comprehensive Nutrition/Lifestyle/Anti-Aging assessment must ask the patient if they suffer from any of these sixty conditions, in an attempt to provide optimal patient care and deal most effectively with co-morbidity issues that may affect the doctor's success with the

patient's chief complaint. My online questionnaire asks the patient about these sixty conditions and provides doctors with the established nutrition and lifestyle protocols with which to counsel their patients, should they answer YES to having any of these common health problems.

Family History

In cases where a patient has had a first-degree relative with a history of colon cancer, breast cancer, prostate cancer, heart attack before age 60 or Parkinson's disease, the patient is known to have an increased genetic risk for the same disease(s) (depending on their gender for some conditions). However, research suggests that more aggressive lifestyle strategies can help mitigate this genetic risk. In these cases patients should be educated about the most appropriate evidence-based lifestyle practices to follow to help defend against the development of these conditions, along with the use of early detection practices.

Contra-indications To Use Of Specific Supplement Due To Drug-Nutrient Interactions and Co-Morbidity Issues

Prior to suggesting supplement recommendations or dietary advice a specific line of questioning pertaining to known or plausible drug-nutrient interactions must be addressed, as well as questions disclosing specific health problems and health status that also affect the final recommendations made to the patient. For instance, pregnancy and breast feeding demand special consideration, as do history of organ transplant, liver or kidney disease, hemochromatosis, Wilson's disease as well as other conditions.

Specific Blood, Urine and Other Appropriate Investigations

Once the above information is gathered and incorporated into a customized nutrition, exercise and supplementation program for the patient, the patient should then be instructed to ascertain baseline measurements of key longevity and health indicators from blood tests, urine tests and other investigations that are appropriate for their age and gender. The chiropractor should acquire a copy of the patient's results and compare the results of each test against the ideal range for longevity (as posted on my website) to help the patient better understand their present health and longevity index. As such, patients sent by their chiropractor to complete my free online Nutrition/Lifestyle/Anti-Aging Assessment are provided with a document to print out, which outlines the key blood, urine and other investigative tests that are appropriate in their case.

Summary

In addition to in-office chiropractic care, chiropractic practitioners have an obligation, as holistic practitioners, to provide patients with individualized, evidence-based adjunctive lifestyle interventions that can help them live a longer functional, quality-filled life, combat existing health problems and help reduce onset of conditions to which they may be predisposed for genetic reasons. To access a comprehensive assessment of this nature, which I have taught to health practitioners for many years, log on to www.renaissance.com and click on the icon, "Nutrition/Lifestyle/Anti-Aging Assessment For Health Professionals." There is

no charge to take the assessment, or to use this assessment with your own patients if you feel it will assist you in delivering a more evidence-based wellness service to your community.