From Chapter 2 in the Metabolic Approach to Cancer book

Whether you aim to prevent cancer, have recently been diagnosed with it, or are in remission, it's essential to assess the diet and lifestyle elements that may contribute to the cause. By identifying and prioritizing the potential drivers of your individual cancer process, you gain the ability to put the brakes on the runaway truck of this complex disease. Cancer, when viewed positively, can actually be a messenger – a required invitation to learn how your life is out of balance. Then you need to decide if you want to change it. You, your cancer, and the processes driving it are multifaceted. You are a whole lot more than a name, age, and diagnosis. In this questionnaire you can begin to assess and identify which of your terrain elements are most out of balance by taking the following ten short quizzes. This will help determine where to focus and what potential next steps are. Consider it an at home self-assessment.

This questionnaire is not intended to prevent, diagnose, treat or cure your cancer, rather to simply highlight awareness. Often, we have heard our clients say, "I was so healthy before cancer," which can make their diagnosis that much more shocking. Yet after these same people complete this questionnaire, and really look under the hood, the "ah ha" moments start to happen. That said, don't be overwhelmed if you score high in every section – most people do. The goal is to merely draw your attention to what needs support, and what you have control over. To interpret your score, see which of the terrain areas have the highest number of "yes" answers. The top few will be the areas you will want to prioritize focusing on the soonest. Do know that starting to address any one of these ten areas will significantly enhance your body's response to conventional treatments, reduce side effects, and make you stronger.

If you score high in one or more areas, you are a good candidate for a consultation with a Terrain Advocate or if you want to learn more, buy the book, <u>The Metabolic Approach to Cancer.</u>

| GENETICS AND EPIGENETICS | Yes/No/I don't know | If Yes, provide details |
|---|------------------------|-------------------------|
| Have you been told or had an abnormal test for a DNA repair mutation (i.e. BRCA1 BRCA2, ATM, Lynch syndrome, CHEK2, GATA3, TP53)? | | |
| Do you eat less than three servings of dark leafy green or cruciferous vegetables a day? | | |
| Do you know if you have heterozygous or homozygous for a MTHFR mutation? | | |
| Do you have a history of thyroid disorder, miscarriage, cardiovascular disease, cleft palate, and/or neural tube defects? | | |

| Do you have a personal or family history of cancer? | |
|--|--|
| Were you, your parents, or grandparents affected by a major stressful period, or adverse childhood event? | |
| Have you had X-RAYS, scans (MRI, PET, CT, DEXA), radiation treatment, radon exposure, and/or frequent airplane travel? | |
| Did your mother smoke, drink alcohol, or take any types of drugs or medications while she was pregnant with you? | |
| Do you eat a vegan, low-fat, or vegetarian diet? | |
| Are you currently on, or have taken in the past, any prescriptions, or over the counter medications? | |

Our genes, which make us who we are, are marked by polymorphisms called genetic SNPs. These genetic SNPs get turned on or off by what we consume, the stress in our lives, toxins, inflammation, and more. Genetic SNPs can either support us or make us more susceptible to disease. You may have heard that our genes are not our destiny. Our food and lifestyle choices have the most significant impact on genetic regulation. If you are ready to change the fate of your genes, grab a bowl full of your favorite cruciferous vegetables drizzled with cold-pressed organic olive oil, a dash of sea salt, and olives, and click here to book a <u>Nutrition Genome</u> appointment with one of our patient advocates.

| BLOOD SUGAR BALANCE | Yes/No/I don't know | If Yes, provide details |
|--|------------------------|-------------------------|
| Do you have a self-professed sweet tooth? | | |
| Do you experience mood changes ("hangry") if you skip or delay a meal, find it difficult to fall asleep without an evening or late snack, and/or wake at night hungry? | | |
| Do you often need to take a nap, grab caffeine, or a sugary boost in the afternoon (aka the 3 pm bonk)? | | |
| Have you ever been told you have elevated glucose, insulin or HBA1C levels? | | |
| Are sugar or processed carbohydrate-based foods (candy, cookies, cake, soda, bread, waffles, etc.) what you crave the most, and/or are considered your comfort foods? | | |
| Do you consume more than 25 grams of added sugar a day (the average Western diet consists of approximately 100 grams of sugar per day)? | | |

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| Do you eat more than one serving a day of grains or legumes? | | | |
|--|---------------------------|-------------------------|--|
| Is your Body Mass Index (BMI) over 25% and/or is your belly wider than your hips? | | | |
| Do you or any family member have a history or diagnosis of hypoglycemia, prediabetes, insulin resistance, Polycystic Ovarian Syndrome (PCOS), fatty liver, pancreatitis, pancreatic cancer, Type 1 or 2 diabetes? | | | |
| Do you consume more than three alcoholic beverages or servings of alcohol per week? | | | |
| Did you know that periodic and continuously increased blood sugar and insulin levels are the basis for some progressive and recurrent cancers (Winters & Higgins Kelley, 2017). The amount of sugar present in modern-day diets is at an all-time high and is causing an incredible amount of health problems. | | | |
| TOXIC BURDEN | Yes/No I don't know | If Yes, provide details | |
| Do you currently live, work, or were you raised near (within 10 miles) any agriculture, superfund site, educational or medical campus, golf course, factory, military base, industrial sites, or airport areas? | | | |
| Do you have environmental sensitivities, especially to odors like perfume and/or diesel fuel? | | | |
| Are you exposed to screens (laptop, cell phone, TV, video gaming) more than 3 hours a day? | | | |
| Do you use pesticides or herbicides in or around your home or on pets (i.e. Spray Round-up in your garden, or use flea or tick products on pets)? | | | |
| Do you use commercial body care, hair dye, and/or household cleaning products like shampoo and laundry detergent that are non-organic? | | | |
| Do you use Teflon/non-stick cookware, microwave food, or drink beverages from plastic containers? | | | |
| Are you exposed to indoor toxins i.e., cigarette smoke, scented candles, high heat cooking, mold, dryer sheets, or air fresheners? | | | |
| Do you have mercury fillings, work in the dental industry, eat fish more than 3 times a week, and/or have you been exposed to heavy metals including lead? | | | |

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| Do you use tap water for drinking and showering? | |
|--|--|
| Do you find it difficult to break a good sweat more than three times a week? | |

With over 10,000 known toxins in and outside of our homes, it is no wonder many of us have a high toxic burden. What we eat, drink, wear, inhale, and sleep on potentially carries an incredible amount of toxins that our bodies need extra support to detoxify. Let us help you learn about what is burdening your system and how to detoxify. When you are ready to book an appointment, grab a tall glass of <u>filtered water</u> with freshly squeezed lemon to help stimulate detoxification pathways in your liver. We also suggest checking the toxic load in your drinking water by entering your zip code into the <u>Environmental Working Groups water database</u>.

| MICROBIOME AND DIGESTIVE FUNCTION | Yes/No I don't know | If Yes, provide details |
|--|---------------------------|-------------------------|
| Were you born via C-section? | | |
| Were you fed infant formula before age 1? | | |
| Have you ever, or do you now, use hand sanitizer and antimicrobial soap? | | |
| Do you have digestive symptoms including gas, bloating, diarrhea, constipation, SIBO, colitis, Crohn's, or colon cancer? | | |
| Have you taken more than one round of antibiotics or the recommended prep for a colonoscopy? | | |
| Do you eat non-organic meat and dairy products? | | |
| Have you had chemotherapy? | | |
| Do you take NSAIDs (i.e. Tylenol, aspirin or ibuprofen) or antacids more than a couple times a year? | | |
| Do you eat less than 5 servings of vegetables a day? | | |
| Do you eat processed, non-organic grains including pasta, bread, or cookies more than once a month? | | |

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Hippocrates stated that all disease begins in the gut.

With more than 80% of our immune cells residing in our gut, what we feed them matters! Fiber from vegetables and fruit is critical for the health of your gut, so we challenge you to try one new vegetable a day! The daily recommended fiber intake for adults is approximately 25 grams.

| IMMUNE FUNCTION | Yes/No I don't know | If Yes, provide details |
|---|---------------------------|-------------------------|
| Are your vitamin D levels below 50 ng/mL? | | |
| Do you have a personal or family history of autoimmune disease? | | |
| Do you suppress fevers with over-the-counter medications? | | |
| Do you have a history of EBV (mono), HPV, CMV, STDs, COVID-19, shingles, Lyme's, yeast infections, or parasites? | | |
| Are you either never sick or catch every cold and flu that comes your way? | | |
| Do you have seasonal allergies, asthma, hives, and/or IgE food allergies? | | |
| Have you been diagnosed with celiac or gluten intolerance? | | |
| Have you had vaccinations and/or flu shots, i.e., micro RNA injections for COVID, shingles shots, vaccines for travel, or immunotherapies (i.e. Keytruda, Opdivo, or Yervoy)? | | |
| Have you ever taken steroids (i.e., Prednisone, Dexamethasone) either topical, inhaled, or oral? | | |
| Do you have a child under age 5 living in your house, and/or work in a school, hospital, or medical setting? | | |



| If you scored high in this immune section, please focus on Chapt Our immune system is constantly on high alert, looking for that can potentially cause ill-health. With modern lifestyles our overburdened, and unarmed due to poor diet, environmental to | invaders such immune syste | as viruses and bacteria ms have become stressed, |
|---|-------------------------------|---|
| INFLAMMATION | Yes/No I don't know | If Yes, provide details |
| Any history of skin conditions such as eczema, psoriasis, acne, flushing or rashes? | | |
| Ever been diagnosed with arthritis or any other pain syndrome and/or experience chronic pain? | | |
| Have you ever been told you have an elevated C-reactive protein level, homocysteine, LDH, or Sed Rate? | | |
| Do you have food allergies, or experience gastric reflux inflammatory bowel disease (including IBS or ulcerative colitis)? | | |
| Do you eat and/or cook with vegetable oils i.e. corn, canola, safflower, or soybean? | | |
| Do you drink less than 30 ounces of water per day? | | |
| Do you rely on NSAIDs, steroids, or opiates for pain management? | | |
| Have you ever or do you now experience high amounts of stress? | | |
| Do you exercise vigorously more than 3 days a week or less than 30 minutes three times a week? | | |
| Would you consider yourself overweight? | | |



There are numerous dietary factors that may contribute to inflammation, but the main culprit is an overconsumption of omega 6 fats and a low consumption of omega 3 fats. Omega 6 fats are found in processed foods including salad dressing, barbecue sauce, corn oil, soybean oil, safflower oil, cottonseed oil, microwave meals, breads, chips, pizzas, French fries, cookies, ice cream, pastries, margarine, butter replacers, and fast food. Meanwhile, omega 3 fats are found in foods like cold-water fish (preformed EPA/DHA), flaxseeds, walnuts, and certain dark leafy greens.

| BLOOD CIRCULATION AND ANGIOGENESIS | Yes/No I don't know | lf Yes, provide details |
|--|---------------------------|-------------------------|
| Do you bruise easily? | | |
| Have you ever been diagnosed with a clotting disorder? If so, which? | | |
| Have you ever been diagnosed with hemochromatosis or elevated ferritin (high iron storage)? | | |
| Do you have a history of deep vein thrombosis? If so, when? | | |
| Do you have a history of pulmonary emboli? If so, when? | | |
| Do you have high or low blood pressure, and do you take any blood pressure medication? | | |
| Have you ever had abnormal levels of D-Dimer, fibrinogen activity, VEGF, and/or ceruloplasmin? | | |
| Do you take pharmaceutical blood thinners like Coumadin, Pradaxa, Xarelto, or Lovenox? | | |
| Are you on blood pressure medication (i.e. a statin drug, ACE inhibitor, or beta-blocker) or take a daily aspirin? | | |
| Do you snore and/or been diagnosed with sleep apnea? | | |

There is an Eastern quote that says, "A man will live 100 years if he takes 100 steps after every meal" and we believe it. Sedentary lifestyles increase both cancer risk and risk of cardiovascular disease. Americans are sitting an average of thirteen hours a day and sleeping an average of eight hours resulting in a sedentary lifestyle of around twenty-one hours a day. Sitting is considered the new smoking! Do get your blood moving, start by taking a 30-minute walk outside every day. You will find energy AND mood improves!

| HORMONE BALANCE Yes/No I don't If Yes, provide details know Know |
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| Do you have a history of taking birth control pills, bio-identical or standard Hormone Replacement Therapy, steroid use, fertility treatments, and/or hormone blockade therapies? | |
|---|--|
| For women, do you have a history of PMS, irregular cycles, fibrous breast, and/or menopausal symptoms? | |
| For men, have you had a change in sexual function and/or been diagnosed with erectile dysfunction? | |
| Do you have a low libido (sex drive)? | |
| Do you have a history of fertility issues including miscarriage? | |
| Have you ever been diagnosed with a thyroid disorder? | |
| Have you ever been diagnosed with adrenal fatigue and/or low cortisol? | |
| Would you consider yourself overweight? | |
| Do you eat non-organic, non-pasture raised dairy products from cows (milk, cheese, cream, yogurt) on a daily basis? | |
| Do you now, or have you ever followed a low-fat diet? | |

There is a large body of evidence coming from epidemiologic studies showing people who consume high amounts of phytoestrogens in their diets have lower rates of several cancers including breast, prostate, and colon cancer. Get started by sprinkling some sesame seeds onto your next salad! It is important to work with a certified Oncology Nutrition Consultant (ONC) to best understand the many factors at play when it comes to hormones, from genetics, to liver function, to GI health, and more. Whether or not to eat soy products depends on several individual variables. If you have breast or prostate cancer and want to understand more about the role food choices play in your process, schedule a consult with an Advocate today.

| STRESS AND BIORHYTHMS | Yes / No | If Yes, provide details |
|--|----------|-------------------------|
| Did any of your symptoms, labs, or diagnosis change or appear after a stressful period? | | |
| Are you a night owl and/or did you ever have a nightshift job or a childbearing job where you were up many nights? | | |
| Do you travel through many times zones often? | | |
| Do you have streetlights and/or the TV on during the night? | | |

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| Are you easily fatigued? | |
|--|--|
| Do you crave salt? | |
| Do you sleep less than eight hours a night and/or go to bed after 11 pm? | |
| Do you have screen time after 5 pm? | |
| Do you spend less than 30 minutes outdoors everyday? | |
| Do you feel that you experience high levels of stress every day? | |

"The Environment, through light, food, and stress flips the switches on genes to produce hormones, which in turn flip other genes – from growth, death or repair – on and off." --TS Wiley, Lights Out Cancer risk increases in those who don't sleep, is especially higher in shift workers and also in those who often cross time zones during air travel. In 2007, the IRAC concluded that shift work is probably carcinogenic to humans. When we sleep—adults need at least 8 hours and kids at least 12—hormones are released, tissue growth and repair occurs, neurological pathways are regenerated, detoxification occurs, and the immune system is replenished. And, you probably guessed it, sleep affects the body's reaction to insulin. Just two nights of poor sleep can increase levels of IGF-1. Sleep deprivation also causes a decrease in leptin, known as the satiety hormone, and an increase in ghrelin, or "the hunger hormone". Make sleep a priority by avoiding screens after dark and talk to your doctor about testing sleep (melatonin) and stress (cortisol) hormone levels.

| MENTAL AND EMOTIONAL HEALTH | Yes / No | If Yes, provide details |
|---|----------|-------------------------|
| Do you experience irritability, mood swings and/or unstable emotions? | | |
| Have you ever been diagnosed with a mental disorder, i.e. bipolar, depression and/or anxiety? | | |
| Are you easily offended? Give an example. | | |
| Are you sensitive to other people's energy and reactions? | | |
| Do you experience racing, repetitive thoughts? | | |
| Do you find it difficult to speak your truth in certain situations? | | |
| Have you ever self-medicated with drugs, sex, alcohol, shopping, TV, gambling, gaming, or time on the internet? | | |
| Do you feel that you do not have a good support system (i.e. Spouse, friends, and/or spiritual community?) | | |



| Do you have a spiritual practice? | | | | |
|---|--|--|--|--|
| Do you find it difficult to feel gratitude and joy? | | | | |
| Having emotional support and encouragement is extremely important when it comes to good health outcomes. We are here for you! Call us today to find out more about our Terrain Advocates. | | | | |

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