

"Dirty Genes" Self-Assessment

Are your genes healthy and working optimally? Did you know that diet, lifestyle, and environmental exposure have the potential to flip unhealthy genes on and off?

This self-assessment, adapted from Dr. Ben Lynch's book "Dirty Genes", is a useful tool for exploring how personality traits and health concerns may be linked to overburdened and poorly functioning genes. Please present these results to your health practitioner and use them to guide lifestyle modifications and supplementation accordingly.

Part I: Check each box if the condition has occurred <u>frequently within the last 60 days</u> or is generally true.

MTHFR gene

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I suffer from headaches
I sweat easily and profusely when exercising
I take supplements with folic acid and/or eat foods <i>enriched</i> with folic acid (not folate)
I struggle with depression
I have cold hands and feet
TOTAL

DAO gene

I tend to suffer from 1 or more of the following symptoms after eating leftovers, citrus, or fish:
irritability, sweatiness, nosebleeds, runny nose, and/or headache
I'm sensitive to red wine or alcohol
I'm sensitive to many foods or suffer from leaky gut syndrome
I generally feel better 2-3 hours after a meal compared to 20 minutes after eating
I felt better during pregnancy and could eat more varied foods
TOTAL

COMT - slow gene

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I get headaches
I find falling asleep a challenge
I easily become anxious or irritable
I suffer from PMS
I'm sensitive to pain
TOTAL

COMT – fast gene

I struggle with attention and focus
I'm easily addicted to substances or activities: shopping, gaming, smoking, alcohol, social media
I'm prone to feelings of depression
I often lack motivation
I feel an initial happy rush after eating lots of carbs or starchy foods, but feelings of depression return
quickly
TOTAL



MAOA – *slow* gene

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I'm easily stressed, panicked, or made anxious
I find it hard to calm down after becoming stressed or irritated
I enjoy cheese, wine and/or chocolate but tend to feel irritable or "off" after I eat them
I'm plagued by migraines or headaches
I have difficulty falling asleep; but when I do, I tend to stay asleep
TOTAL

MAOA – fast gene

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	I fall asleep quickly but wake up earlier than I'd prefer
	I'm prone to depression and a lack of desire
	I find that chocolate gives me a great mood lift
	I tend toward smoking or excessive use of alcohol
	I achieve a better mood after eating carbs, but that improved mood doesn't help my focus or attention
	TOTAL

GST/GPX genes

I breathe air and drink water (Yes, you read that right!)
I'm sensitive to chemicals
I developed grey hair early
I have a chronic condition such as asthma, autoimmune disease, diabetes, eczema, psoriasis
I have a neurological disorder with symptoms such as tics, tremors, seizures, or problems with gait
TOTAL

NOS3 gene

I have above normal blood pressure (higher than 120/80)
I have cold hands and feet
I tend to heal slowly after an injury or surgery
I'm a type 2 diabetic
l'm postmenopausal
TOTAL

PEMT gene

I tend to have generalized muscle pain
I've been diagnosed with fatty liver
I'm a vegetarian/vegan, or I don't eat much beef, organ meat, caviar, or eggs
I have gallstones or have had my gallbladder removed
I've been diagnosed with small intestine bacterial overgrowth (SIBO)
TOTAL

Score the total points from each category and write this in the "TOTAL" column.



Part II: Complete the more in-depth analysis below, for genes that you scored 3 or more in part I.

MTHFR

I have low thyroid function
My white blood count (WBCs) has been on the low end of normal range most my life
I get strong side effects from laughing gas (nitrous oxide)
I had to have IVF or significant interventions to become pregnant and go to full-term
1 or more of my children are on the autism spectrum or have Down Syndrome
I get menstrual cramping and have clots in my menstrual blood
I don't tolerate medications such as methotrexate, 5-fluorouracil, or phenytoin as well as other patients
My folate, vitamin B12, or homocysteine levels are elevated
I can't tolerate alcohol of any type well
I don't eat leafy green vegetables every day
I feel noticeably better after eating leafy greens
I get shortness of breath or become red in the face after exercising
At times, I get exercise-induced asthma
My moods often fluctuate between irritability and depression
I generally feel tired and "toxic"
I tend to be able to focus and concentrate quite well – when I'm not mad or sad
I have difficulty falling asleep at times
When I get irritated, it takes me quite some time to calm down
TOTAL

COMT – slow

I've always been able to focus and study for long hours
I enjoy traveling and exploring
I don't like taking risks and am fairly cautious
When I get stressed, it takes me a long time to calm down
I tend to work hard for weeks, then crash and need to take a long break to recharge
I get anxious and panic easily
I find that caffeine increases my stress
I'm easily irritated and wake up on the wrong side of the bed often
I have strong bones
It takes me a long time to fall asleep
My skin glows and people compliment me on it
My period started before I turned 13 years old
I usually get PMS
I experience heavy menstrual bleeding (menorrhagia)
I have or have had uterine fibroids
I'm sensitive to pain compared to others
Eating a higher-protein diet (such as GAPS or Paleo) makes me feel more irritable
I do poorly with stimulant medications such as Ritalin, Adderall, Vyvanse, and Focalin
I'm a very happy, enthusiastic person - but it's easy to irritate me
I'm not very patient
My doctor put me on birth-control pills to control acne or heavy bleeding
TOTAL



COMT - fast

COIVIT	- fast
	I have a difficult time paying attention, or have a diagnosis of ADHD
	I tend to go with the flow
	I'm not a workaholic
	When I get stressed, I recover quite quickly and move on
	I fall asleep quickly
	Where's my cup of coffee? I need it!
	Eating a higher protein diet (such as GAPS or Paleo) makes me feel great
	I tend to be more depressed than enthusiastic, and have been for years
	I don't get PMS
	I have (or had) typically light menses
	I have weaker bones
	I'm very tolerant of pain compared to others
	I do better with CNS stimulant medications such as Ritalin, Adderall, Vyvanse, and Focalin
	When I get stressed out, I can calm down quickly
	I am a risk taker and I enjoy pulling stunts, because I feel awesome afterward
	I am the class clown, I love to make people laugh
	I find myself fidgeting and moving constantly
	I sometimes pinch myself so hard that it hurts
	I can easily get addicted to things or activities such as video games, social media, smoking, or drinking
	I'm not very interested in sex
	I crave high-fat, high-sugar foods, and they do make me feel better- for a bit
	TOTAL

DAO

I'm often irritable, hot, or itchy after eating
I can't tolerate citrus, fish, wine, chocolate, or cheese
If my skin gets scratched, it stays red for several minutes
I can't tolerate yogurt, sauerkraut, or kefir (a type of fermented milk)
I can't tolerate shellfish
I can't tolerate alcohol, especially red wine
I have sweaty feet
I'm frequently itchy
I often get heartburn and frequently need an antacid
My eyes often itch
I have skin issues, such as eczema or urticaria (hives)
I get frequent nosebleeds
I struggle with asthma or breathing difficulty
I get migraines or other headaches often
I get carsick, seasick, or generally feel dizzy
I have ringing in my ears at times, especially after eating
I seem to react to many foods
I get diarrhea at times without any reason I can identify
I struggle with ulcerative colitis
I frequently have to take antihistamines



ſ	I frequently have a runny nose or am congested
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	I have trouble falling or staying asleep
	I have blood pressure lower than 100/60
	I struggle with asthma, exercise-induced asthma, or wheezing
	I frequently have joint pain that comes and goes, and moves around a lot
	I have arrhythmia (a heart condition)
	When I was pregnant, I could eat more foods than usual without symptoms
	I get side effects from morphine, metformin, NSAIDS (aspirin and ibuprofen), antacids, or clonidine
	I can't tolerate many probiotics
	I have SIBO
	I have Crohn's disease
	TOTAL

MAOA – fast

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Since I was a kid, I've had a hard time focusing and paying attention
I crave cheese, wine, and chocolate, and I feel better after I consume them
I crave carbohydrates, and they make me feel less depressed
I fall asleep quite well, but I tend to wake up in the night - a snack helps me fall back asleep
I have an autoimmune disease (e.g. Grave's disease, Hashimoto's thyroiditis, MS, or active celiac)
I'm chronically inflamed
Winter and prolonged darkness affect my mood
I love exercising, it helps my mood
Lithium makes me feel more depressed
An SSRI (pharmaceutical anti-depressant), inositol, and/or 5-HTP improve my mood
I tend to be anxious and depressed, or am a worrier
I get a bit obsessive about things
I have fibromyalgia, constipation, or IBS
Melatonin works quite well to help me sleep
TOTAL

MAOA – slow

I tend to be rather aggressive
It takes me a while to slow down
When I drink alcohol, I become an angry drunk
I'm not drawn to carbs and I feel less irritable if I restrict my intake of them
I'm more irritable and angry when I eat cheese and/or chocolate or drink wine
It takes me a while to fall asleep
When I do fall asleep, I tend to stay asleep through the night
Anti-depressants called SSRIs, or 5-HTP, make me feel anxious or very irritable
Melatonin doesn't work well for me - it makes me feel more awake and irritable
Caffeine tends to make me irritable
Lithium helps my mood
Inositol overstimulates me
I'm self-confident
TOTAL
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GST/GPX

I am (or have been) infertile
I'm sensitive to chemicals and smells
I feel better after a sauna or intensive exercise
It's easy for me to gain weight even though I eat well
Cancer runs in my family
I notice grey or white hairs coming in when I get stressed, or my hair went grey early.
I have high blood pressure
I just finished fighting another infection
I tend to be chronically stressed out
I have an autoimmune disease
I have chronic inflammation
I have asthma or difficulty breathing; I often feel like I can't get enough air
I generally feel tired and "toxic"
TOTAL

NOS3

I have high blood pressure or heart disease
Many people in my family have high blood pressure or heart disease
Heart attacks and/or strokes are common in my family
I've had a heart attack
I have a lot of circulation issues due to my diabetes
I frequently have cold hands and feet
I was diagnosed with preeclampsia when I was pregnant
I struggle with asthma
I snore, breathe through my mouth, or have sleep apnea
I'm noticing that my memory is getting worse
I'm postmenopausal
My moods are all over the place
I don't exercise or move much
I have an autoimmune disease
I'm chronically inflamed
TOTAL



PEMT

I have general pain everywhere – muscles, joints, all over
I'm Vegetarian, Vegan, or find that I don't feel well eating too much meat or eggs
Breastfeeding wears me out physically and mentally
I've been told I have fatty liver and/or someone in my family has fatty liver
I rarely eat leafy green vegetables
During pregnancy, my gallbladder acted up
I have SIBO (Small Intestinal Bacterial Overgrowth)
I've had genetic testing and know that I have the MTHFR C677T genetic polymorphism
I'm vitamin B12 deficient
I'm intolerant of fatty foods
My estrogen levels are low
I take antacids
I have pain or discomfort in the upper right quadrant of my abdomen
My right shoulder is tight, by my scapula
I tend to have constipation
I tend to be itchy
I have gallstones or had to have my gallbladder removed
My symptoms started part way through pregnancy and have gotten worse since
My child has a congenital birth defect
TOTAL

Score the total number in each affected category.

Scoring:

1-4 points: This gene needs a little bit of attention.

5-7 points: This gene is a little bit dirty, some attention can be spent on this gene.

8 or more points: This gene is dirty. Time should be spent with your health practitioner to identify the factors that are affecting its function.

Source:

Lynch, B. (2018). *Dirty Genes: A Breakthrough Program to Treat the Root Cause of Illness and Optimize Your Health*. HarperCollins.