

Supporting Brain Health

Memory, Mood, Focus, Stress, and Sleep

Brain health is the foundation for some of today’s most prevalent health concerns, including memory, focus and other cognitive functions; mood and behavior; stress and anxiousness; and sleep issues. Daniel G. Amen, MD, brain imaging expert, double board-certified psychiatrist, and founder of Amen Clinics and the BrainMD dietary supplement line, has developed a unique approach to supporting brain health and optimizing brain function. He has identified and documented 11 major risk factors that threaten brain health and formalized them with the mnemonic BRIGHT MINDS.

In Table 1, we detail these BRIGHT MINDS risk factors. We then discuss how diet can minimize the effects of these risk factors, and how supplementation can further support brain health.

Table 1. Risk Factors For Poor Brain Health (BRIGHT MINDS)

BRIGHT MINDS	RISK FACTOR CATEGORY	RISK FACTOR DETAILS
B	Blood flow	<ul style="list-style-type: none"> ■ Poor circulation ■ Sedentary lifestyle ■ Poor blood pressure control ■ Lack of exercise
R	Retirement and/or aging	<ul style="list-style-type: none"> ■ Age over 65 isolation ■ Working less than half-time ■ Limiting new learning ■ Social
I	Inflammation	<ul style="list-style-type: none"> ■ Poor gut health issues ■ Low antioxidant or omega-3 intake ■ Gum problems ■ Joint
G	Genetics	<ul style="list-style-type: none"> ■ A close family member with memory issues ■ ApoE4 gene ■ Certain other genes
H	Head trauma	<ul style="list-style-type: none"> ■ One or more concussions and/or other types of head injuries ■ Loss of smell
T	Toxins	<ul style="list-style-type: none"> ■ Alcohol ■ Drugs ■ Smoking ■ Pollution ■ Mold ■ General anesthesia ■ Personal care products
M	Mental health	<ul style="list-style-type: none"> ■ Mood ■ Mood cycling ■ Long-term stress ■ Other mental health issues
I	Immunity	<ul style="list-style-type: none"> ■ Autoimmune issues or other immune challenges ■ Chronic fatigue
N	Neuro-hormone deficiencies	<ul style="list-style-type: none"> ■ Thyroid ■ Cortisol ■ Estrogen ■ Testosterone ■ Progesterone ■ Dehydroepiandrosterone (DHEA)
D	“Diabetesity”	<ul style="list-style-type: none"> ■ Poor blood-sugar control ■ Overweight ■ Obesity
S	Sleep	<ul style="list-style-type: none"> ■ Snoring ■ Long-term sleep issues ■ Sleeping pills

Diet for Bright Minds

Dr. Amen has developed the following dietary recommendations to correspond to each of the BRIGHT MINDS risk factors. Certain recommendations apply to all the risk factors: REMOVE artificial dyes and preservatives from the diet. AVOID hydrogenated ("trans") fats. LIMIT sugar, salt, sodas, caffeine, alcohol, gluten, MSG, processed meats, charred meats, and high-glycemic, saturated fat foods such as pizza, processed cheeses and microwave popcorn. Always choose organically raised chicken and turkey, grass-fed beef, and wild-caught salmon.

Table 2. Dietary Recommendations for BRIGHT MINDS Risk Factors

<h3>Blood flow</h3> <ul style="list-style-type: none">■ Berries, green leafy vegetables, cayenne pepper, pumpkin seeds, and green tea■ Arginine-rich foods to support nitric oxide: beets, turkey, chicken, beef, salmon, clams, celery, watermelon, pistachios, walnuts, kale, and spinach■ Vitamin C-rich foods to support healthy circulation: acerola cherry, oranges, tangerines, kiwi, red and yellow bell peppers, dark green leafy vegetables (such as spinach and kale), broccoli, tomatoes, and peas <p>LIMIT salt, gluten, dairy, caffeine, and baked goods or fried foods</p>	<h3>Mental Health</h3> <ul style="list-style-type: none">■ Spices: saffron, turmeric, peppermint, and cinnamon (for attention)■ Dopamine-boosting foods for focus and motivation: turmeric, green tea, lentils, fish, lamb, chicken, turkey, beef, eggs, nuts and seeds (pumpkin and sesame), high-protein vegetables such as broccoli and spinach, and protein powders■ Serotonin-boosting foods for mood, sleep, pain, and craving control: Tryptophan is a building block for serotonin. Combine tryptophan-containing foods (eggs, turkey, seafood, chickpeas, nuts, and seeds) with healthy carbohydrates (sweet potatoes and quinoa) to elicit a short-term insulin response that drives tryptophan into the brain.■ Foods that support gamma-aminobutyric acid (GABA) for anxiety: broccoli, almonds, walnuts, lentils, bananas, beef liver, brown rice, halibut, gluten-free whole oats, oranges, rice bran, and spinach <p>LIMIT sugar, processed foods, caffeine, and alcohol</p>
<h3>Retirement or aging</h3> <ul style="list-style-type: none">■ Antioxidant-rich foods: blueberries, cocoa, acai, pomegranates, cloves, oregano, rosemary, thyme, walnuts, and artichokes■ Choline-rich foods to support acetylcholine, a key neurotransmitter: organic eggs, chicken, turkey, beef, cod, salmon, shrimp, scallops, chickpeas, and lentils <p>LIMIT charred meats</p>	<h3>Immunity</h3> <ul style="list-style-type: none">■ Allicin-rich foods: raw crushed garlic, onions and shallots■ Vitamin D-rich foods: fatty fish (salmon, sardines, tuna), eggs, mushrooms (maitake, morel, shiitake), grass-fed beef liver, and cod liver oil■ Zinc-rich foods: oysters, beef, lamb, spinach, shiitake and crimini mushrooms, asparagus, sesame seeds, and pumpkin seeds■ Mushrooms that supply glycans to support immunity: shiitake, maitake, white button, portabella, and Lion's mane <p>LIMIT sugar, sodas, processed foods, and foods high in omega-6 fats</p>
<h3>Inflammation</h3> <ul style="list-style-type: none">■ Folate-rich foods: spinach and dark leafy greens■ Omega-3-rich foods: salmon, sardines, walnuts, beef, walnuts and avocado■ Spices: turmeric (use in curries for better absorption), saffron■ Prebiotic-rich foods (to support healthy probiotic balance): asparagus, chia seeds, beans, cabbage, psyllium, artichokes, and root vegetables (sweet potatoes, yams, squash, jicama)■ Probiotic-boosting foods: kimchi, sauerkraut, kefir, miso soup, pickles, and kombucha tea <p>AVOID hydrogenated ("trans") fats and LIMIT excessively omega-6-rich foods (feedlot meats, corn, soy, and processed foods), sugar, gluten, and processed meats</p>	<h3>Neurohormones</h3> <ul style="list-style-type: none">■ Estrogen-boosting foods: fiber, soybeans, flaxseeds, sunflower seeds, beans, garlic, yams, beets, parsley, anise seed, red clover, licorice, hops, and sage■ Testosterone-boosting foods: pomegranate, olive oil, oysters, coconut, Brassica vegetables, and garlic■ Thyroid-boosting foods: (selenium-rich) seaweed and sea vegetables, Brassica vegetables, and maca <p>LIMIT sugar and animal meats that contain hormones or antibiotics</p>
<h3>Genetics</h3> <ul style="list-style-type: none">■ Polyphenol-rich foods: cocoa, dark chocolate, green tea, blueberries, kale, apples, cherries, cabbage, and sage <p>AVOID hydrogenated ("trans") fats and LIMIT sugar, salt, sodas, caffeine, alcohol, gluten, MSG, processed and/or charred meats, and high-glycemic, saturated fat foods such as pizza, processed cheese and microwave popcorn.</p>	<h3>Diabetes</h3> <ul style="list-style-type: none">■ Low-glycemic, high-fiber, nutrient-rich foods■ Spices: Cinnamon and nutmeg■ Fiber-rich foods: broccoli, spinach, lentils, green peas, winter squash, cabbage, green beans, coconut, artichokes, chickpeas, and chia seeds■ Protein and fat at each meal to stabilize blood sugar and cravings <p>AVOID sugar and high-glycemic, low-fiber foods like white and wheat bread, pasta, white potatoes, and rice.</p>
<h3>Head trauma</h3> <ul style="list-style-type: none">■ Spices: turmeric and peppermint■ Choline-rich foods to support acetylcholine: eggs, chicken, turkey, beef, cod, salmon, shrimp, scallops, chickpeas, and lentils <p>LIMIT sugar, processed foods, caffeine, and alcohol</p>	<h3>Sleep</h3> <ul style="list-style-type: none">■ Melatonin-boosting foods: tart cherry juice concentrate, sour cherries, walnuts, ginger root, asparagus, and tomatoes■ Healthy carbohydrates: sweet potatoes, quinoa, and bananas can increase tryptophan, which supports serotonin production and hence sleep <p>LIMIT caffeine, alcohol, and grapefruit at night</p>
<h3>Toxins</h3> <ul style="list-style-type: none">■ To support liver health: Brassica vegetables (cabbage, broccoli, brussels sprouts, cauliflower, collard, turnips, kale, and bok choy), other green leafy vegetables, berries, sesame and sunflower seeds■ To support kidney health: water, beets, and citrus (except for grapefruit)■ To support gut health: fiber■ To support skin health: water, green tea, colorful fruits and vegetables, salmon, avocados, and walnuts. <p>LIMIT processed meats, salt, and MSG, and REMOVE artificial dyes and preservatives</p>	