



**HILL** FUNCTIONAL  
WELLNESS

# Optimize Your Brain Health

When it comes to knowing how to direct our daily decisions to make the most beneficial impact on our health, things can get confusing. Following these 6 guidelines will help your body, and more specifically, your brain, function in a more optimal environment, which addresses the root-cause of many common issues such as insomnia, depression, anxiety, and neurodegenerative disorders.

## 1. Eliminate sugar and processed carbs.

Quite possibly one of the most powerful things you can do to reduce inflammation and foster a healthy internal environment.

## 2. Consume plenty of good quality fat, vegetables, and polyphenols.

Fats - not carbohydrates - are the preferred fuel of human metabolism.

## 3. Introduce probiotic/prebiotic foods and supps daily.

Probiotics, or beneficial bacteria, provide a nearly immeasurable beneficial impact for overall health, but these are particularly helpful for brain health.

## 4. Drink clean, filtered water (and plenty of it).

Access to pure water helps eliminate potential sources of chemicals, heavy metals, and other contaminants. Drink half your weight in ounces each day.

## 5. Incorporate exercise into your daily routine.

Exercise is essential to maintain brain health. It promotes a decrease in anxiety, improves sleep, and stimulates brain growth factors (amongst other benefits!).

## 6. Utilize fasting to your advantage.

Fasting, or periods of caloric/food restriction, is a practice that has been used for centuries. Recent studies have shown that the health benefits are vast.

**1.** High sugar intake leads to a cascade of events in the body that ultimately result in systemic (whole body) inflammation, which is a major driving force for disease. When this occurs consistently, it can fuel the onset and progression of:

- intestinal permeability
- imbalance of gut bacteria
- mitochondrial damage
- immune system compromise
- brain degradation and degeneration

Your brain needs the proper energy source to function most efficiently, and limiting intake of sugary foods and beverages is the best place to start. This includes processed carbs as well, as they are easily converted to sugar in your body.

**2.** Speaking of the proper energy source for your brain, fat is just that. On top of including more healthy fats in your diet, eating plenty of vegetables is key as well. A diet high in rich sources of fiber feeds good gut bacteria and produces the right balance of gut (and brain) nutrients.

Polyphenols are powerful antioxidants found in plants. Multiple studies have shown that they significantly reduce oxidative stress and the risk for neurological ailments. Some common sources of polyphenols are fruits and vegetables, plant-derived beverages like coffee, red wine, and tea, as well as dark chocolate.

A list of good-quality food choices is included on the last page of this handout.

**3.** A healthy gut microbiome is, in many respects, one of the most important (yet all-too-often overlooked) aspects of overall health - especially for the nervous system. These bacteria, when in good proportion, provide a host of benefits to us - things like: maintaining integrity of the gut lining, serving as natural immune-boosters, increasing the availability of vitamin and mineral absorption, and producing important neurotransmitters like serotonin and dopamine.

Prebiotic foods are the foods we eat that are, in turn, consumed by beneficial bacteria to optimize their impact on us.

A list of probiotic and prebiotic foods is included on the last page of this handout.

**4.** We are blessed to live in a society that has the ability to process and clean out the majority of potential contaminants in our tap water. But research is showing that the excess use of chlorine to do so may be negatively affecting our microbiome and other aspects of our health. Because of this, using a household water filtration system is of great benefit. It doesn't have to be fancy - many of the standard faucet or pitcher filters will do most of the work, so decide which kind best suits your circumstances and budget.

Adequate water intake cannot be overstated. It is essential to hydrate your cells and give your kidneys a chance to filter out non-beneficial substances.

**5.** Get this. Recent studies have shown that physical exercise stimulates the production and release of growth factors that literally affect the production and growth of brain cells, the growth of new blood vessels in the brain, and the abundance and survival of new brain cells.

Many studies even document larger brain volume in those who exercise regularly. Whoa. What does this mean? Well, besides the other well-established benefits of exercise on overall health, we know that your brain is a MAJOR benefactor as well. Whether it is a daily walk or a regimen of weightlifting and high intensity intermittent training (HIIT), your brain needs exercise on a regular basis to stay healthy.

**6.** A regular routine of fasting is beneficial in many, many ways. It increases insulin sensitivity, reduces oxidative stress, triggers the expression of genes to manage stress and resist disease, switch your body into fat-burning mode, increases the number of mitochondria (energy producers in you cells), improves antioxidant function, stimulates the growth of new brain cells, and gives beneficial bacteria an environment in which they can thrive. It also helps your body scavenge unused material to be recycled and more optimally utilized by the body.

Fast for a 24-48 hour period, drinking lots of water and avoiding caffeine. Do this as often as desired, whether it is monthly or seasonally, to capitalize on its benefits.

## Good Quality Food Choices

- **Vegetables:** leafy greens and lettuces, collards, spinach, broccoli, kale, chard, cabbage, onions, mushrooms, cauliflower, Brussels sprouts, artichoke, alfalfa sprouts, green beans, celery, bok choy, radishes, watercress, turnip, asparagus, garlic, leek, fennel, shallots, scallions, ginger, jicama, parsley, water chestnuts
- **Low-Sugar Fruit:** avocado, bell peppers, cucumber, tomato, zucchini, squash, pumpkin, eggplant, lemons, limes
- **Fermented Foods:** yogurt, pickled fruits and vegetables, kimchi, sauerkraut, fermented meat, fish, and eggs
- **Healthy Fat:** extra-virgin olive oil, sesame oil, coconut oil, avocado oil, grass-fed tallow and organic or pasture-fed butter, ghee, almond milk, avocados, coconuts, olives, nuts and nut butters, seeds (flaxseed, sunflower seeds, pumpkin seeds, sesame seeds, chia seeds)
- **Protein:** whole eggs, wild fish (salmon, black cod, mahimahi, grouper, herring, trout, sardines), shellfish and mollusks (shrimp, crab, lobster, mussels, clams, oysters), grass-fed meat, fowl, poultry, and pork (beef, lamb, liver, bison, chicken, turkey, duck, ostrich, veal), wild game
- **Herbs, Seasonings, and Condiments:** mustard, horseradish, tapenade, and salsa if they are free of gluten, wheat, soy, and sugar (kiss ketchup goodbye), no restrictions on herbs and seasonings

**\* Remember to choose organic wherever possible, and it's probably a good idea to include non-GMO as well (due to heavy pesticide/herbicide use) \***

### Probiotic Foods

- Live-cultured yogurt
- Kefir
- Kombucha tea
- Tempeh
- Kimchi
- Sauerkraut
- Pickles
- Pickled fruits and vegetables
- Cultured condiments
- Fermented meat, fish, and eggs

### Prebiotic Foods

- Acacia gum (or gum arabic)
- Raw chicory root
- Raw Jerusalem artichoke
- Raw garlic
- Raw leek
- Raw onion
- Cooked onion
- Raw asparagus

\* There are also supplement powders that include these ingredients.