KNOW YOUR IMPORTANT NUMBERS

It's Not Magic, It's Simple Mathematics

Getting thinner, smarter, and happier is not hard...if you do it by the numbers. Here are 19 numbers that are critical to know and maintain on your journey to great health. When these numbers are out of whack, it can reduce brain function and prevent you from losing weight or feeling great. Optimizing these numbers can help you achieve your weight goals and help you maintain your mood, memory and brain health.

1. Body Mass Index (BMI)

This number tells you the health of your weight compared to your height. A normal BMI is between 18.5 and 25; 25 to 30 is overweight; and more than 30 is obese. We will automatically calculate your BMI whenever you enter in your weight.

2. Waist-to-height ratio (WHtR)

This is another way to measure the health of your weight. Divide your waist size by your height in inches.

Note: You have to measure your waist size at your belly button! Do not guess or go by your pants size. Clothing manufacturers often adjust clothes sizes and many people have bellies that hang over their waistbands.

Women	Men
Ratio less than 35: underweight	Ratio less than 35: underweight
Ratio 35 to 42: extremely slim	Ratio 35 to 43: extremely slim
Ratio 42 to 49: healthy	Ratio 43 to 53: healthy
Ratio 49 to 54: overweight	Ratio 53 to 58: overweight
Ratio 54 to 58: seriously overweight	Ratio 58 to 63: seriously overweight
Ratio over 58: highly obese	Ratio over 63: highly obese

3. Number of fruits and vegetables you eat a day

Eat 5-10 servings of fruits and vegetables per day to decrease your risk of cancer and eat more vegetables than fruits.

4. Daily water requirement

Even being slightly dehydrated lowers brain function and can lead to bad decisions. Divide your weight by 2 and drink at least that number in ounces daily. No more than 125 ounces a day to avoid electrolyte imbalances.

5. Number of hours you sleep at night

Lack of adequate sleep is associated with lower overall blood flow to the brain, greater calorie intake, and increased cravings. Aim for 7-8 hours a night for adults, 8-9 hours for teens.

6. Blood pressure

High blood pressure is associated with lower overall brain function, which means more bad decisions.

Systolic (high number) _____ mg/dl

Diastolic (low number) _____ mg/dl

Check your blood pressure or have your doctor check it on a regular basis. If your blood pressure is high make sure to take it seriously. Some behaviors that can help include losing weight, daily exercise, supplementing with fish oil and, if needed, medication.

Below 120 over 80	Optimal
120-139 over 80-89	Prehypertension
140 (or above) over 90 (or above)	Hypertension

Know These Lab Values

7. Vitamin D level

Low levels of vitamin D have been associated with obesity, depression, cognitive impairment, heart disease, and many other diseases. Have your physician check your 25 hydroxy-vitamins D level, and if it is low get more sunshine and/or take a vitamin D supplement.

Low	< 30ng/dl
Optimal between	50-90ng/dl
High	> 100ng/dl

Monitor your vitamin D status until you are in the optimal range. If you are taking high doses (10,000 units a day), your doctor must check your calcium, phosphorous, and parathyroid hormone levels every three months.

8. Thyroid

Having low thyroid levels decreases overall brain activity, which can impair your thinking, judgment, and self-control, and make it very hard for you to lose weight.

———— TSH (0.350 – 3.0 uIU/ml)

———— Free T3 (300-400 pg/dl)

———— Free T4 (1.0 – 1.80ng/dl)

There is no one perfect way, no one symptom or test result, that will properly diagnose low thyroid function or hypothyroidism. The key is to look at your symptoms and your blood tests, and then decide. Doctors typically diagnose thyroid problems by testing your TSH levels and sometimes your T3 and T4 level.

9. C-reactive protein

This is a measure of inflammation, which is associated with several medical conditions. Fat cells produce chemicals that increase inflammation. A healthy range is between (0.0 – 1.0 mg/dL).

This is the best test for inflammation. It measures the general level of inflammation, but does not tell you where it is from. The most common reason for an elevated C-reactive protein is metabolic syndrome or insulin resistance. The second most common is some sort of reaction to food—either a sensitivity, a true allergy, or an autoimmune reaction as occurs with gluten. It can also indicate hidden infections.

10. HbA1c

This test shows your average blood sugar levels over the past two to three months and is used to diagnose diabetes and prediabetes. Normal range is 4 to 5.7 percent.

11. Lipid panel

Make sure your doctor checks your total cholesterol level as well as your HDL (good cholesterol), LDL (bad cholesterol), and triglycerides (a form of fat). According to the American Heart Association, optimal levels are as follows:

———— Total Cholesterol   (<200 mg/dL)

———— Cholesterol HDL   (>= 60 mg/dL)

———— Cholesterol LDL   (<100 mg/dL)

———— Triglycerides   (<100 mg/dl)

If your lipids are off, make sure to get your diet under control, as well as take fish oil and exercise. Of course, you should see your physician. Also, knowing the particle size of LDL cholesterol is very important. Large particles are less toxic than smaller particle size.

12. Testosterone

Low levels of testosterone, for men or women, are associated with low energy, heart disease, obesity, depression, and Alzheimer's disease.

Male	**Female**
_____ Testosterone Total Male (280-800ng/dL, normal, 500-800ng/dL optimal)	_____ Testosterone Total Female (6-82 ng/dL)
_____ Testosterone Free Male (7.2-24 pg/mL)	_____ Testosterone Free Female (0.0-2.2 pg/mL)

13. Ferritin

A measure of iron stores, a number that increases with inflammation and insulin resistance. Levels between 30 to 200 ng/mL are ideal. Women often have lower iron stores than men, due to blood loss from menstruation. Some theorize that this is one of the reasons that women tend to live longer than men. However, you don't want ferritin levels that are too low, as this is associated with anemia, restless leg syndrome, ADD, and low motivation and energy. High iron stores have been associated with stiffer blood vessels and vascular disease. Some research suggests that donating blood to lower high ferritin levels may enhance blood vessel flexibility and help decrease the risk of heart disease. Plus, when you give blood you are being altruistic, which is also good for your mind and body.

14. Risk Factors

Know how many of the 12 most important modifiable preventable causes of death health risk factors you have... then decrease them. Check all that apply.

- Smoking
- High blood pressure
- BMI overweight/obese
- Physical inactivity
- High fasting blood glucose
- High LDL cholesterol
- Alcohol abuse
- Low omega-3 fatty acids
- High bad fat intake
- Low healthy fat intake (omega-3s in fish, avocados, green leafy vegetables, olive oil, nuts and seeds)
- High dietary salt intake
- Low intake of fruits and vegetables