

## Eicosanoid Status

1. **Daily Performance:** Improvements in your daily physical performance (especially increased energy) indicate that your levels of “good” eicosanoids are on the rise. The increase in “good” eicosanoids causes this effect by increasing oxygen transfer from the blood to organs like the brain, heart, and muscles. A decrease in daily performance means a buildup of arachidonic acid (AA) and a corresponding increase in the production of “bad” eicosanoids.
2. **Appetite for Carbohydrates:** The craving for carbohydrates will decrease and may disappear altogether with a decrease of “bad” eicosanoids, since they stimulate insulin synthesis.
3. **Lack of Hunger Between Meals:** Since “good” eicosanoids inhibit insulin secretion, blood glucose levels remain stabilized and hunger is suppressed. You should not be hungry for more than four hours after a meal if that last meal was hormonally balanced.
4. **Fingernail Strength:** Keratin, the structural protein that determines the strength of your nails, is controlled by eicosanoids. “Good” eicosanoids increase its synthesis, leading to rapid fingernail growth with excellent strength. On the other hand, “bad” eicosanoids decrease keratin synthesis, leading to brittle fingernails that break easily.
5. **Hair Strength:** Keratin is also the principle structural component of hair. Thick, shiny, lustrous hair indicates “good” eicosanoids. Dull brittle hair with split ends indicates an increase in “bad” eicosanoids.
6. **Stool Density:** An over production of “good” eicosanoids will lead to too much water flow into the colon, producing a very loose stool or diarrhea. On the other hand, an overproduction of “bad” eicosanoids will decrease water flow, leading to a very dense stool or constipation. When your stool floats but has a firm consistency, it’s likely that you have the right balance of “good” to “bad” eicosanoids.
7. **Sleeping Time:** The need for sleep is determined by the amount of time required to reestablish neurotransmitter equilibrium. This process speeds up with “good” eicosanoids, so you need less sleep; the process slows down with “bad” eicosanoids so you need more sleep.
8. **Grogginess on waking:** Any increase in tiredness on waking indicates that an overproduction of “bad” eicosanoids is taking place inside the central nervous system.
9. **Sense of Well-being:** “Good” eicosanoids give you a happier outlook on life and enable you to feel good about yourself and the world around you. A build up of “bad” eicosanoids has the opposite effect. You’re more likely to feel depressed, anxious and irritable and to have a negative outlook.
10. **Mental Concentration:** Maintained by maintaining your blood sugar with insulin balance. “Bad” eicosanoids increase insulin secretion causing you to seek out more carbohydrates. More carbs causes a spike in insulin followed by plunges in blood sugar causing hypoglycemia. Decreased mental concentration is a sign of hypoglycemia.
11. **Fatigue:** Fatigue can result from an overproduction of “good” eicosanoids, which can deplete electrolytes in your bloodstream through increased urination. On the flip side, fatigue can result from an overproduction of “bad” eicosanoids, which hampers blood flow, preventing an efficient transfer of oxygen. If you experience fatigue, try to determine which type of eicosanoids is being overproduced by checking other indicators such as grogginess on waking and stool density.

12. **Skin Condition:** Overproduction of “bad” eicosanoids will lead to dry skin and eczema (caused by increased leukotriene formation). On the other hand, “good” eicosanoids are anti-inflammatory, stimulate collagen synthesis, and improve blood flow to the skin through increased vasodilation.
13. **Flatulence:** Flatulence, or gas, is caused by the metabolism of anaerobic bacteria in the lower intestine. Overproduction of “good” eicosanoids increases the peristaltic action of the intestinal tract, thereby delivering greater amounts of nutrients to these anaerobic bacteria. The result is greater metabolic activity of these bacteria, with increased gas as the end product of their metabolism. If you have this problem, decrease your intake of fish oil.
14. **Headaches:** Headaches are similar to fatigue in that you can experience them at either end of the eicosanoids spectrum. You might have either a vasodilation headache (too many “good” eicosanoids) or a vasoconstriction headache (too many “bad” eicosanoids). To determine which category you fall into, look at other indicators in this list to gain a clear picture of your eicosanoids status.

Check your Triglyceride/HDL level before beginning and monthly until you reach a good ratio.

4 or greater	=	Chronic disease condition
3	=	On a path to a chronic disease
2	=	On a path to wellness
1	=	Ideal state of wellness

Begin with maintenance dose of 2.5 grams per day of pharmaceutical-grade fish oil. Take Eicosanoid Status Report one week after beginning then take the test twice a month to help you monitor your progress. If no improvement, increase dose to 3.5 grams per day and continue monitoring your progress. When your progress plateaus, slowly reduce your dose to see what dose best maintains it.

The gold standard test is an AA/EPA ratio. (Arachidonic Acid/Eicosapentaenoic Acid ratio)

15 or greater	=	Chronic disease condition
10	=	On a path to a chronic disease
3	=	On a path to wellness
1.5	=	Ideal state of wellness

Fasting insulin (uU/ml) can also be tested to monitor progress.

15 or greater	=	Chronic disease condition
13	=	On a path to a chronic disease
10	=	On a path to wellness
5	=	Ideal state of wellness

