

INFLAMMATION & ACCELERATED AGING:

Aging is a multi-factorial & inevitable biological process that happens to all of us. Multiple reasons are often present in any one person. While we cannot stop the aging process, we can certainly slow it down & even reverse it to certain degree. This is the normal aging process which is under our control. However, the concern now is the ACCELERATED AGING that we face in most of us. Poor diet, Hormone Deficiencies, Toxic Overload, Nutritional Deficiencies, Hyperinsulinemia are some of the common causes. However CHRONIC INFLAMMATION is the main player. Understanding and controlling Chronic Inflammation is necessary not only to control aging but also to win the war against almost all the known medical conditions. Chronic Inflammation occurs silently due to many reasons. Sugars, Refined Foods, Gut Dysbiosis, Heavy Metal & Environmental Toxicity are the main culprits. Managing and silencing this silent inflammation need to be addressed seriously. There are many natural healing remedies that can help, such as Omega 3 EFAs, Curcumin, Vitamin C, Quercetin etc. While all of them help and a combination will even work better, let me focus on Omega 3 Fatty Acids especially from fish.

While traditionally the well-known benefits of fish oils for the Heart, Brain and Joints is a common knowledge, new studies show many more benefits. The main benefits of fish oils are due to their Anti Inflammatory effects. Omega 3 suppresses all the arms of inflammation esp. the NFkB & IL6. Giving a dose of 2 gm per day brings in clinical benefits within weeks of commencing treatment. Higher doses may be necessary in acute conditions and fish oil is safe even in larger doses. Let's look at what is new:

1. Protectins & Resolvins are wonder molecules that our body produces to control run away inflammation and this helps to slowdown aging. Omega 3 boosts the level of both these molecules.
2. Aging is associated with a lot of wear & tear. Accelerated healing means the ability to heal quicker resulting in preserving & improving cell / organ functions. Rapid healing of cell injury can promote Robust health & wellbeing. Omega 3 helps in repair of damaged tissues.
3. Inflammation increases Calcium deposition in the arteries, stiffening them and reducing the blood flow to tissues. Omega 3 reduces extraosseous Calcium deposition.
4. Keeps muscles young & healthy. 2 gm/ day helps to reduce age related loss in muscle mass & function.
5. Consumption of Omega 3 during pregnancy leads to improved brain function & IQ in children.
6. Study at Laboratory of Molecular Signalling has shown that besides improving Memory & the ability to learn new things, Omega 3 is necessary for growing new neurons enabling higher level of executive function & multitasking.
7. Omega 3 is a potent stimulator of Nitric Oxide synthesis. Nitric Oxide not only improves Heart & Vascular Function as well as Sexual health but also improves Immune Function, promotes Lipolysis (even without controlling diet) , promotes strong muscles.

By the age of 70, we have 75% less N.O in our body.

9. More than 40 studies have shown a beneficial effect of Omega 3 in Triglyceride levels.

10. Omega 3 maintain DNA health by slowing down the age related (accelerated) Telomere shortening as well as reversing the shortened Telomeres. This has a profound effect on aging & diseases.

11. Besides improving joint health, Omega 3 also helps in improving vision by reducing Age Related Macular Degeneration.

12. While regular, moderate, unprotected sun exposure is extremely vital for health, sun exposure in the presence of Omega 3 deficiency increases oxidative stress to the skin and promotes early onset wrinkles

There are other benefits to omega 3 EFA as well. Though Fish Oil is the best source of Omega 3, the fish should be cold water wild caught fish for the best benefits. Some Fish oil manufacturers also offer molecularly distilled pure oils certified by the International Fish Oil Standards. Vegetarians could choose to take Flaxseed Oil. Chia seeds also have omega 3 but this is not a rich source. In order to get adequate amounts of Omega 3 for its Anti-inflammatory and other benefits, one has to consume fish at least 3-4 times a week or about 3 pounds of fish a week. This is tough for most making supplementation necessary.

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