The Major "Clinically Relevant" Fatty Acids: Characteristics, Differences, and Selection

Fatty acid	Major physiologic functions	Patient groups and research applications	Common daily doses	Adverse effects ¹
ALA (omega-3 from flaxseed oil)	• Anti- inflammatory benefits ^{1,2}	cardioprotective ³ may reduce the frequency and severity of migraine headaches ⁴	• 3000-7000 mg per day	• NONE
EPA (omega-3 from fish oil)	 Anti- iinflammatory Anti- thrombotic Normalizes neurologic function 	 lupus⁵ cancer⁶ borderline personality disorder⁷ mental depression^{8,9,10} schizophrenia¹¹, osteoporosis (when used with GLA).¹² 	• 500-5,000 mg per day	should be discontinued before surgery to reduce the risk of bleeding complications
DHA (omega-3 from fish oil)	Anti- inflammatory Cardio- protective Normalizes neurologic function	 bipolar disorder¹³ Crohn's disease¹⁴ rheumatoid arthritis^{15,16,17} lupus¹⁸ cardiovascular disease¹⁹ psoriasis²⁰ cancer²¹ "anti-stress" benefits^{22,23} reduces all-cause mortality in cardiac patients²⁴ 	• 500-5,000 mg per day	may make antidepressant medications unnecessary
GLA (omega-6 from evening primrose oil, borage seed oil, black currant seed oil)	• anti- inflammatory	 eczema²⁵ breast cancer (when used with tamoxifen²⁶) premenstrual syndrome²⁷ rheumatoid arthritis^{28,29} diabetic neuropathy³⁰, migraine headaches (when used with ALA³¹) respiratory distress syndrome (when used with EPA).³² 	• 300-3,000 mg	may exacerbate temporal lobe epilepsy (one case report)