Omega-3 Polyunsaturated Fatty Acids as Interface for Mind and Body

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Major depressive disorder (MDD) is a devastating and not only affect the individual, but their families and the society as a whole. About 10-15% of the patients commit suicide. Moreover, many admired ones suffer from MDD lifelong. Despite having more than 50 kinds of antidepressants available, the treatment outcome is not satisfactory, since more than half of the patient fail to achieve recovery after taking medication for 1 year.

Omega-3 polyunsaturated fatty acids (PUFAs) had been suggested to have a crucial role in MDD from epidemiological, clinical, animal and cellular studies. Our lab had many publications on studies investigating the role of Omega-3 PUFAs in depression, especially with the Interferon induced depression model; which is also the best example to represent the inflammation theory of depression.

How to personalize omega-3 PUFAs treatment? The aim would be to find the population that is effective in using omega-3 PUFAs as treatment, such as inflammation specific disorders, including interferon induced depression, or depression in cardiovascular diseases. Moreover, another aim to use omega-3 PUFAs as treatment is the efficacy and safety in special populations, such as children and adolescents, pregnancy women with depression, patients with depression, and prevention for ultra-high risk groups.