

**Brain Food: How to Eat Smart**  
**Philadelphia Biblical University—Agora, 2011**  
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NOTE: There is little evidence to date that these mental health conditions can be prevented or cured by diet alone, nor that any are caused solely by the absence or presence of particular elements of the diet (Van de Weyer, 2005). Correlation is not equivalent to causation.

	<b>Epidemiological Studies</b> Population studies examining the factors contributing to the presence or absence of a condition or disease.	<b>Physiological Studies</b> Controlled experiments examining the body's performance or functioning.	<b>Clinical Research Trials</b> Controlled experiments examining the effect of nutritional intervention on target symptoms.
	<b>Condition positively correlated with:</b>	<b>Condition positively correlated with:</b>	<b>Improvement in condition positively correlated with:</b>
<b>Attention-Deficit Hyperactivity Disorder (ADHD)</b>	Male gender; Lack of breast feeding; Cigarette smoking by mother; Symptoms of essential fatty acid deficiency (e.g. abnormal thirst, eczema, asthma)	Essential fatty acid (esp. $\Omega$ -3) deficiency not related to intake; Zinc deficiency not related to intake; Iron deficiency	"Few-foods" diet (db) <sup>a</sup> ; $\Omega$ -3 and $\Omega$ -6 supplements; Zinc supplements alone <i>or</i> with medication (db); Magnesium supplements (db)
<b>Depression including: Major depression Post-partum depression Seasonal affective disorder Bipolar disorder</b>	Low intake of essential fatty acids, specifically fish/shellfish; Exchanging traditional diets of Arctic regions for processed foods; Folate dietary intake deficiency; Premature birth or low birth weight	Low ratio of tryptophan to other competing amino acids; Low level of B-complex vitamins; Low level of $\Omega$ -3 fatty acids; High ratio of $\Omega$ -6 to $\Omega$ -3 fatty acids; High level of free radical activity	Tryptophan in combination with anti-depressants; Folate and zinc supplements; $\Omega$ -3 supplements, particularly EPA plus DHA

<sup>a</sup>(db) = Double-blind study: An experimental procedure in which neither the subjects of the experiment nor the persons administering the experiment know the critical aspects of the experiment; this guards against both experimenter bias and placebo effects.

	<b>Epidemiological Studies</b>	<b>Physiological Studies</b>	<b>Clinical Research Trials (db) = double-blind study</b>
	<b>Condition positively correlated with:</b>	<b>Condition positively correlated with:</b>	<b>Improvement in condition positively correlated with:</b>
<b>Schizophrenia</b>	High intake of birds/land animals (high in saturated fat); Dietary sugar intake; Prenatal deficiency in polyunsaturated fats (PUFAs);	Low levels of PUFAs in body tissues; High levels of phospholipase-2 (the enzyme that breaks down cell membranes); Abnormal metabolism of fatty acids; Low levels of anti-oxidant enzymes in the brain; Low levels of folate	Higher intake of $\Omega$ -3 fatty acids; Increased intake of EPA relative to DHA (db) along with anti-psychotic medication; Folate supplements
<b>Dementia, particularly Alzheimer's</b>	High intake of total fat, saturated fat, and hydrogenated fat; High caloric intake; Long-term obesity; Low vegetable intake;	Low levels of polyunsaturated fats in brain and blood; Low levels of anti-oxidants; High levels of fat oxidation; Low levels of folate, Vitamin B <sub>12</sub> and low levels of homocysteine	Vitamin E supplements along with drug treatment (modest gains only); Mixed PUFA supplement (modest gains; one study only w/small sample size)
	<b>Condition inversely related to:</b>  Vitamin E and C supplements taken together; Vegetarian diets; High dietary folate intake		