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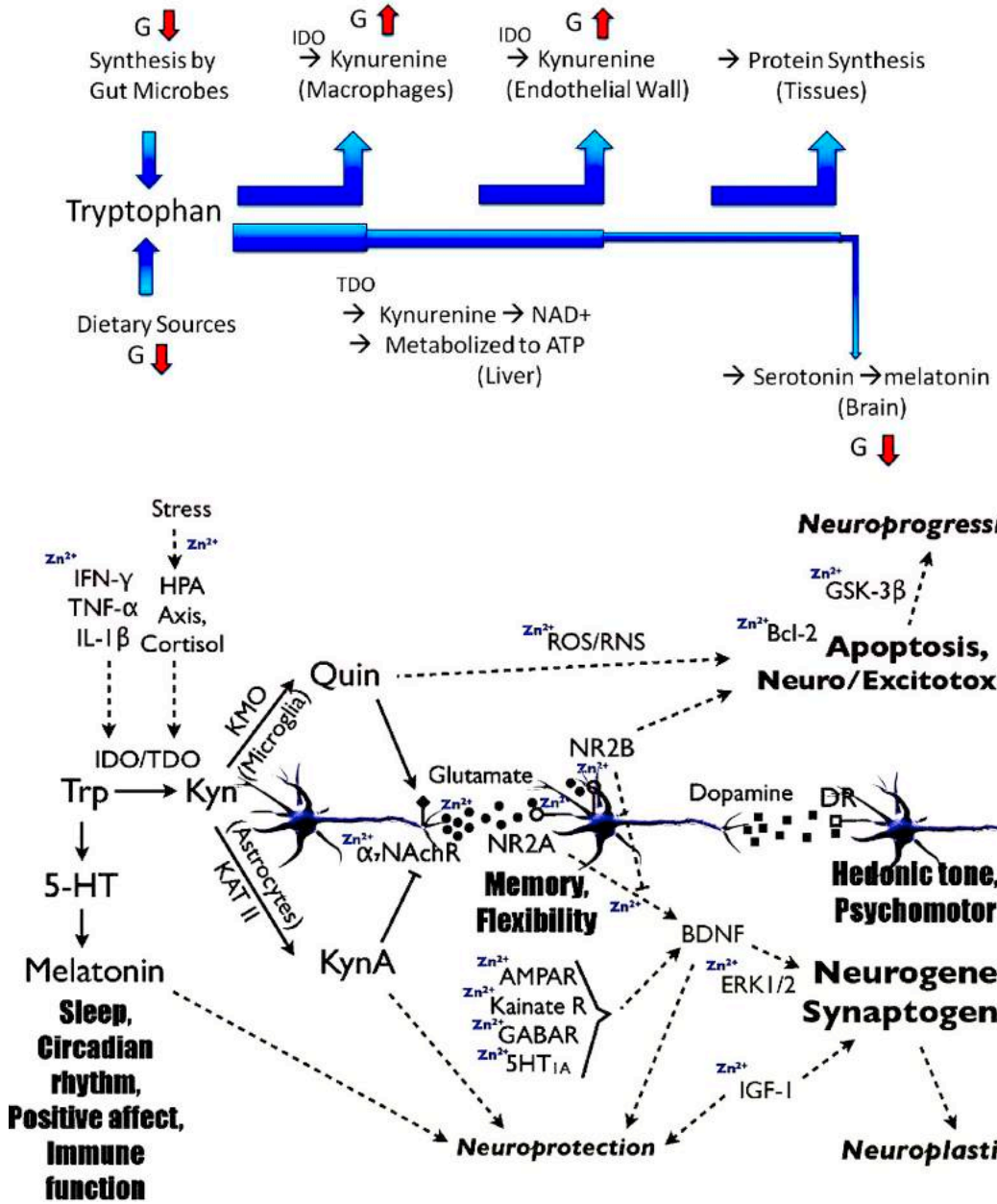
GLYPHOSATE ROUNDUP READY BINDS, CHELATES, ZINC, MANGANESE, SELENIUM, CHROMIUM, COBALT PDF - Google Search

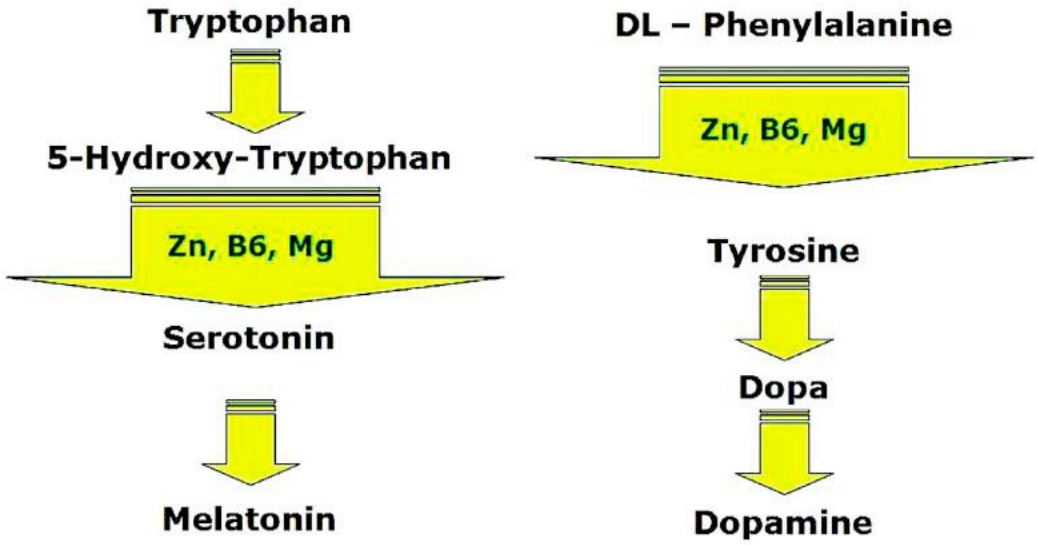
GLYPHOSATE ROUNDUP READY BINDS, CHELATES PDF - Google Search
With the significant increase in genetically modified organisms or “GMO” crops (e.g., RoundUp Ready® crops), the wide-spread use of the herbicide glyphosate (i.e., RoundUp® herbicide) has raised concerns. Glyphosate may not break down in the soil after contacting plants. The herbicide kills many types of soil microbes, including microbes that make micronutrients plant-available. **Glyphosate strongly chelates micronutrients in the soil, including copper, iron, magnesium, manganese, nickel, cobalt and zinc.** Thus, the use of GMO crops can decrease herbicide costs at the expense of plant health. Accordingly, and potentially, what these GMO crops (Corn, Soy, Millet, Cassava, Rice, Sugar Cane Beets, Wheat and many others) when consumed by Mammals and Man are a food source that is less nutritious and a biochemical chain reaction disaster, that binds, blocks and disrupts essential micronutrient minerals, enzymes and hormones that provide metabolic energy and free radical protection of the mitochondria of all our life giving cells!
Below is a visual chain reaction story of how this herbicide has potentially caused all neurologically related diseases, autoimmune diseases, sleep disorders, depression, metabolic diseases and all forms of cancer….ever since its exception and continued utilization!

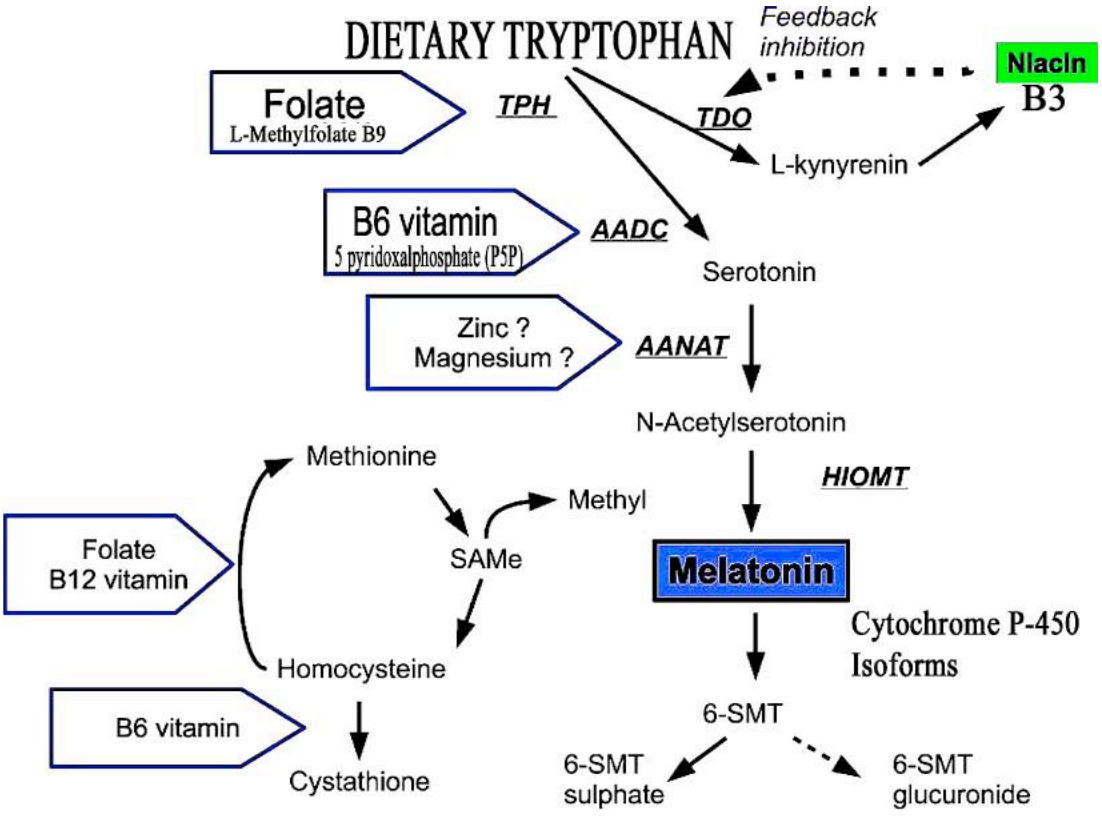
In its most basic application, Glyphosate disrupts every enzymatic DNA and RNA function by chelating the most essential minerals that we need for these functions…..**copper, iron, magnesium, manganese, nickel, cobalt and zinc.**
It also cuts off and effects the bioavailability of all B-Vitamins and the protein conversion amino acid Trytophan, which then effects Serotonin and Melatonin synthesis….resulting in a cascade of neurological dysfunctions, diseases and cancers.

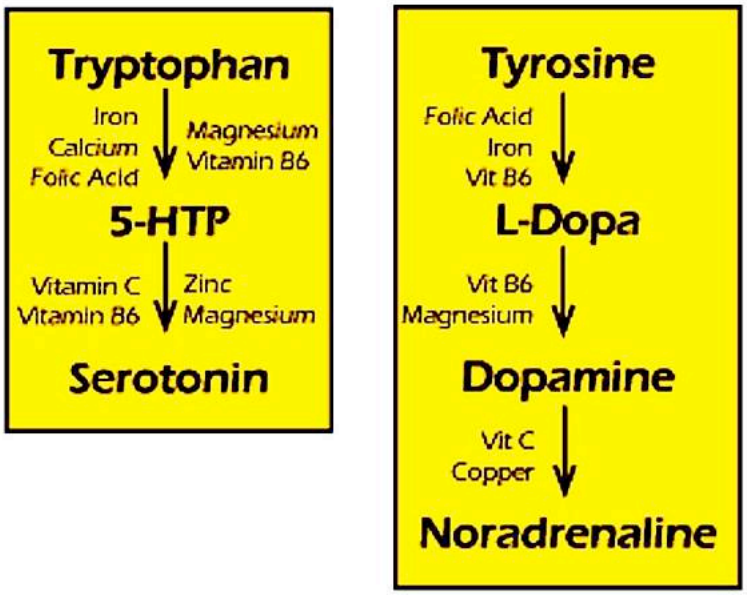
Figure 2. Illustration of tryptophan pathways in the body and the adverse effect of glyphosate on tryptophan bioavailability. IDO: indole amine dioxygenase; TDO: Tryptophan dioxygenase; G: glyphosate.

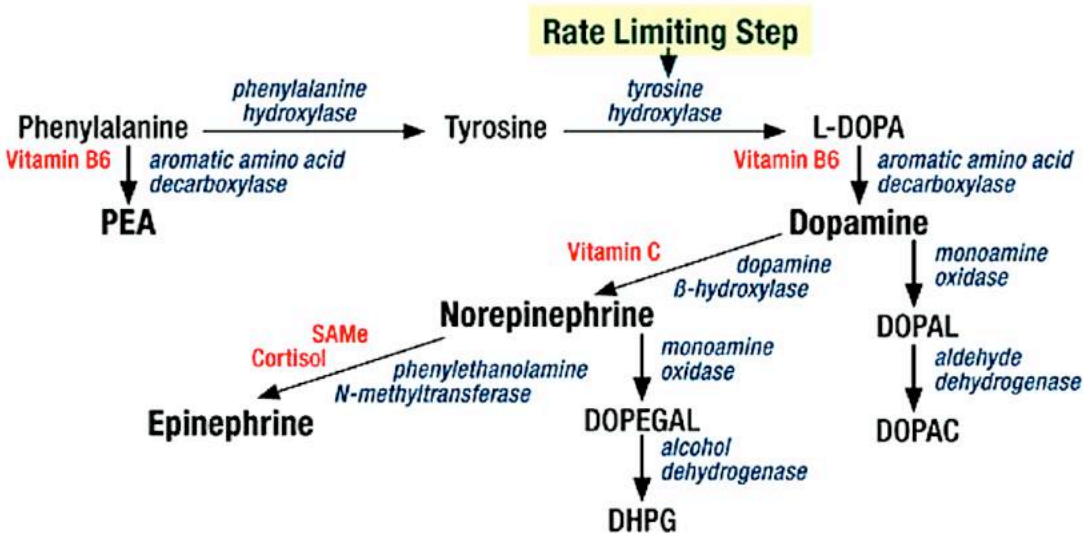


The chemistry of neurotransmitters









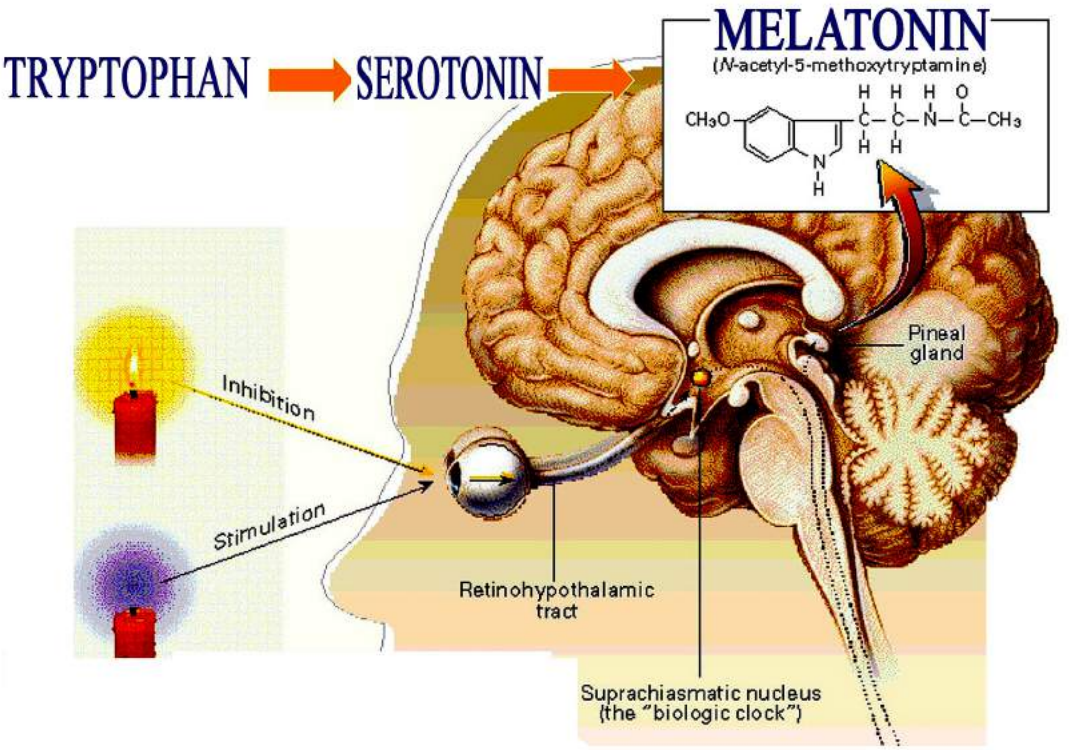
DISEASES AND CANCER RELATED TO TRYPTOPHAN, SEROTONIN AND MELATONIN DEPLETION, DEFICIENCIES PDF - Google Search

Glyphosate chelation **PDF** Google Search Glyphosate chelation is not selective. **...** /The **relation**- ship between the **depletion** of rat liver **tryptophan** pyrrolase haem **... tryptophan depletion** leads to **serotonin and melatonin depletion** in the brain **...** heart **disease**, depression, autism, infertility, **cancer** and Alzheimer's **disease**…..Oct 16, 2013 - Disrupted gut bacteria; **Depleted serotonin** supply; **Deficiency** in **... Tryptophan** ⍓ **serotonin** ⍓ **melatonin ... deficiency** is **linked** to obesity, autism, Alzheimer's **disease**, **....** *http://sustainablepulse.com/wp-content/uploads/GMO-health.**pdf ...** Glyphosate is an endocrine disruptor that promotes breast **cancer***….Widespread **serotonin deficiency** is at least partially responsible for the **...** rationale to explain common age-**related** disorders such as depressed mood and **...** L-**tryptophan** serves as a precursor not only to **serotonin**, but also **melatonin** and niacin. **... diseases**, and HIV infection are associated with **tryptophan depletion**, even **...**hydroxytryptamine, 5-HT) and onwards to **melatonin** had been clarified and the **...** Whilst interest in the role of **tryptophan** and **serotonin** to the autistic **...** development of the vitamin **deficiency disease**, pellagra (E52, ICD-10) as a **.....** It has been shown that a diet **depleted** of **tryptophan** is not beneficial for children with ASDs. A deficient production of **melatonin** can result in anxiety and mood disorders, lowered **...** Phase Syndrome; Immunological Disorders; Cardiovascular **Disease**; **Cancer ...** Abnormalities of **melatonin** circadian function have been closely **linked** to a **....** 5HTP is intermediate in the **tryptophan** to **serotonin**/**melatonin** pathway…**Serotonin**

decreases **due** to enzymatic breakdown (14) which occurs with a **...** When a **serotonin deficiency** exists, sleep disturbances (8, 9), anxiety, **...** L-**tryptophan** can no longer be converted into **serotonin**, **melatonin**, or be **....** of interferon-induced **tryptophan** catabolism in **cancer**, auto-immune **diseases ...melatonin**, **serotonin**, and a variety of KP products including **... Tryptophan** pathways in neurodegenerative **disease**. International Journal of **...** their genesis partly through **serotonin deficiency** in turn mediated by **tryptophan depletion** from KP acti- vation (see **...** ase (TDO) particularly in **relation** to the factors that can modulate **...**

In the present review we summarize the relationship between the amino acid, tryptophan, the neurotransmitter, serotonin, and the indole, melatonin, with the rhythms of sleep/wake and the immune response along with the possible connections between the alterations in these rhythms due to aging and the so-called “serotonin and melatonin deficiency state.” The decrease associated with aging of the brain and circulating levels of serotonin and melatonin seemingly contributes to the alterations of both the sleep/wake cycle and the immune response that typically accompany old age. The supplemental administration of tryptophan, e.g. the inclusion of tryptophan-enriched food in the diet, might help to remediate these age-related alterations due to its capacity of raise the serotonin and melatonin levels in the brain and blood. Herein, we also summarize a set of studies related to the potential role that tryptophan, and its derived product melatonin, may play in the restoration of the aged circadian rhythms of sleep/wake and immune response, taking the ringdove (Streptopelia risoria) as a suitable model.

Keywords: immune function, melatonin, serotonin, sleep-wake cycle, ringdove, tryptophan



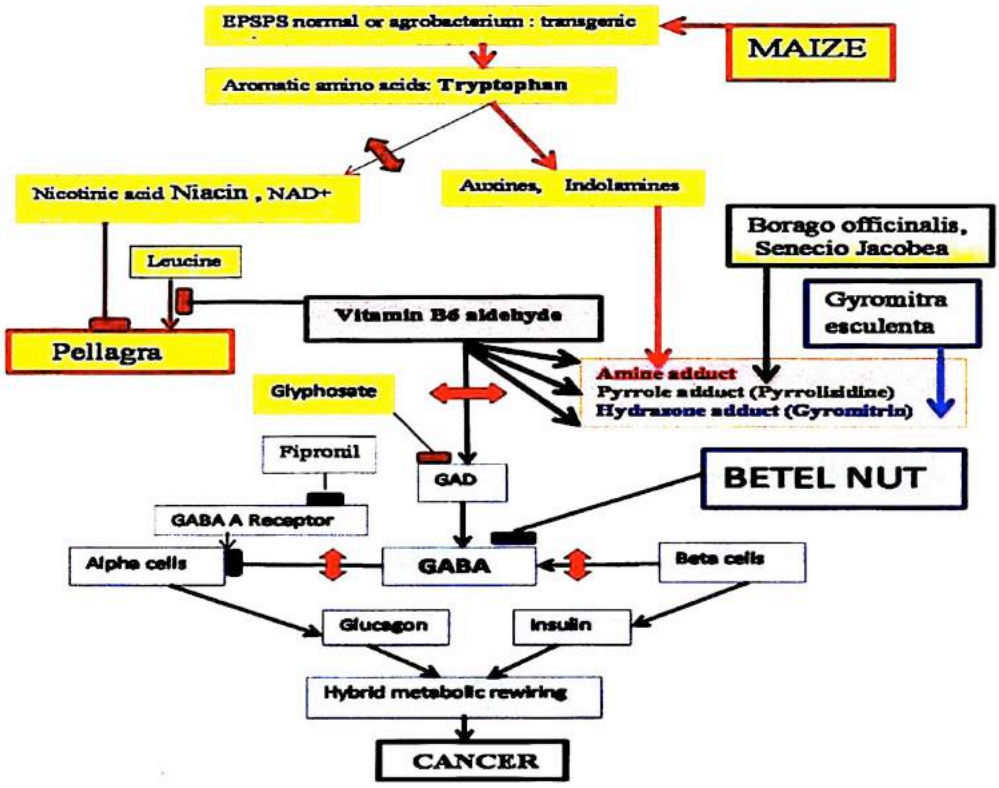

EPSPS normal or agrobacterium : transgenic
MAIZE
Aromatic amino acids: Tryptophan
Nicotinic acid Niacin , NAD+
Auxines, Indolamines
Borago officinalis, Senecio Jacobea
Leucine
Vitamin B6 aldehyde
Gyromitra esculenta
Pellagra
Amine adduct
Pyrrole adduct (Pyrrolisidine)
Hydrazone adduct (Gyromitrin)
Glyphosate
Fipronil
GAD
BETEL NUT
GABA A Receptor
Alpha cells
GABA
Beta cells
Glucagon
Insulin
Hybrid metabolic rewiring
CANCER

Table 1: Diseases and disorders associated with reduced melatonin secretion in humans

Disease/disorder	Comments	References
Alzheimer's disease	Stage dependent decreases down to complete loss of melatonin rhythm	[79, 81, 84, 88, 89, 92-95]
Pick's disease	Two cases only	[92]
Autism spectrum disorders	Decreases in melatonin or urinary 6-sulfatoxy-melatonin frequent, but not generally observed	[100-106]
Schizophrenia	Only in a subpopulation	[107, 108]
Multiple sclerosis with major depression	Not observed in major depression alone	[109]
Primary obsessive compulsive disorder		[110]
Menière's disease	Possibly related to stress by tinnitus and vertigo	[111]
Macular degeneration		[112]
Cases of severe epilepsy	High interindividual variation. However, increases during seizures	[113, 114] [113, 115]
Coronary heart disease, myocardial infarction, cardiac syndrome X		[116-122]
Fibromyalgia	Decreases observed in women Uncertainties concerning levels Pain reduced by melatonin	[123] [124] [124-128]
Neuralgia		[123]
Migraine	 Pain reduced by melatonin	[129, 130] [128]
Bulimia		[123]
Critical illness		[131-133]
Postoperative stress	Decreases in patients without complications, but strong increases in those with delirium	[134]
Hypothalamic hamartoma		[96]
Craniophapharyngioma		[97-99]
Endometrial cancer		[135]
Non-small cell lung cancer	In part caused by pain?	[136]
Acute intermittent porphyria	Further decreased by seizures	[137, 138]
Hypergonadotrophic hypogonadism		[139, 140]
Diabetes type 2		[141, 142]

Table 2: Diseases, disorders and metabolic changes associated with gene polymorphisms of melatonin membrane receptors, a receptor homolog and enzymes of melatonin biosynthesis

Disease/disorder	Gene	Refs.
Autism spectrum disorders	*HIOMT* (= *ASMT*)	[103, 143, 144]
ADHD (attention-deficit and hyperactivity disorder)	MT_1 (= *MTNR1A*) *HIOMT* (= *ASMT*)	[145] [145]
Schizophrenia	MT_1 (= *MTNR1A*)	[146]
Major depression	*AANAT*	[147]
Recurrent depression	*HIOMT* (= *ASMT*)	[148]
BP (bipolar disorder)	*GPR50*	[149, 150]
SAD (seasonal affective disorder)	*GPR50*	[151]
Rheumatoid arthritis	MT_2 (= *MTNR1B*)	[152]
Adolescent idiopathic scoliosis (perhaps only in combination with other risk factors)	MT_2 (= *MTNR1B*)	[153] [154]
Coronary artery disease	MT_1 (= *MTNR1A*)	[155]
Diabetes type 2, prediabetes	MT_2 (= *MTNR1B*)	[156-180]
Elevated fasting triglycerides	*GPR50*	[181]
Elevated fasting glucose	MT_2 (= *MTNR1B*)	[157-160, 162, 167-170, 177-179]
Elevated cholesterol	MT_2 (= *MTNR1B*)	[180]
Polycystic ovary syndrome	MT_1 (= *MTNR1A*) MT_2 (= *MTNR1B*)	[182] [183]

Table 3.6.1 Neurological disorders caused by nutrient deficiency

Nutrient	RDA[a]	Neurological disorder when deficient
Macronutrients		
Total energy	2200 (kcal)	In childhood: long-term mental deficit
Vitamins		
Vitamin B1 Thiamine	1.1 mg	Beri-beri, polyneuropathy, Wernicke's encephalopathy
Vitamin B3 Niacin	15 mg NE	Pellagra including dementia and depression
Vitamin B6 Pyridoxine	1.6 mg	Polyneuropathy
Vitamin B12 Cobalamine	2.0 µg	Progressive myelopathy with sensory disturbances in the legs
Folate	180 µg	Neural tube defects (myelomeningocele) of the fetus, cognitive dysfunction in children and elderly?
Minerals		
Iodine	150 µg	Iodine deficiency disorders
Iron	15 mg	Delayed mental development in children
Zinc	12 mg	Delayed motor development in children, depression
Selenium	55 mg	Adverse mood states

[a] Recommended daily allowance for an adult.