Osteopathic Nutrition
What A.T. Still Said And What We Can Say Now

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Thus all organs will show disease in proportion to the quality of arterial blood upon which they are fed and from which they receive their nourishment. In order to have good arterial blood the lungs must receive good wholesome food from the abdomen.

Osteopathic Research and Practice 1910; Organs As Functionaries
The heart, the brain, the whole nervous system, all must have perfectly pure nourishment or fail to perform their function just in proportion to the degree of imperfection in the blood.

Osteopathic Research And Practice 1910
The organs must have good blood all the time and plenty of it.
Osteopathic R and P

We embraced the “plenty of it” part (OMM); what about the “good blood all the time” part?
Health is Nature.

To find health should be the object of the doctor. Anyone can find disease.

Philosophy and Mechanical Principles of Osteopathy
Nutritional Medicine

- The use of dietary modifications and administration of nutrients and natural substances for preventing and treating illness.

- Natural substances (derived from nature) - unpolluted air with high oxygen content, whole, organic foods, pure, chemical-free alkaline water, minerals, vitamins, cofactors, enzymes, probiotics, phytonutrients, essential oils, amino acids
To obtain good results, we must blend ourselves with and travel in harmony with Nature’s truths.
The doctor of osteopathy has much to think about when he consults natural remedies, and how they are supplied and administered, and as disease is the effect of tardy deposits in some or all parts of the body, reason would bring us to a search for a solvent of such deposits, which hinder the natural motion of blood and other fluids in functional works, and with that solvent we are to keep the body pure from any substance that would check vital action.

Phil. and Mech. Principles
If the demand for the substance is absolute, its chance to act and answer that call and obey the command must not be hindered while in preparation, nor its journey to its destination, for upon its power all action may depend.

Philosophy and Mechanical Principles of Osteopathy
“If the demand for the substance is absolute…”

Magnesium - involved in protein synthesis, amino acid activation, fatty acid synthesis, glycolysis, cyclic AMP synthesis, ATP structure stabilization, K and Ca channel regulation, autonomic control of the heart, transmission of the genetic code, muscle contractility, nerve transmission, activation of about 300 enzymes

B-6 (P-5-P) - amino acid metabolism, neurotransmitter synthesis (dopamine, GABA, norepi), biosynthesis of hemoglobin, sphingolipid formation, collagen maturation
essential fatty acids LA(nuts, seeds, plants), ALA(flax oil, grasses, chlorella), EPA, DHA(fish oil)  phospholipids (prostaglandins E1, E3  leukotriene B5)

Maroon JC, Bost JW, Surg Neurol, 2006;65(4) 326-31  60% overall pain decrease, 60% joint pain decrease, 59% discontinued NSAIDs after 2400mg/d fish oil X 2 weeks then 1200mg/d for avg. of 75 days.

White matter in the brains of MS patients contains < 50% of the DHA content compared with controls Mayer, M, Fola Biologica 1999;45:133-141
“...not hindered while in preparation...”

The typical Western diet may be deficient in one or more essential nutrients.

The macronutrients (proteins, fats, carbohydrates) from food that then become the substrates of metabolism as well as the precursors of micronutrients (vitamins, minerals, amino acids, co-factors)

Depends on food quality - nutrient density, lack of pesticide and herbicide residues, minimal processing

And in the health and function of the GI tract - dental health, chewing, gastric acidity, gut flora ecology, enterocyte integrity
“...nor its journey to its destination...”

- reduced cellular oxygenation
- disrupted mitochondrial function
- decrease ATP production
- anaerobic fermentation (glycolysis)
- or uncoupled ox/phos
- or ox/phos insufficiency
- increased genomic instability
- metabolic/genomic origin of cancer

Thomas N. Seyfried, PhD., Cancer as a Metabolic Disease; 2012 John Wiley and Sons, Inc.
“...for upon its power all action may depend.”

Magnesium
The body of man is God’s drug-store and has in it all liquids, drugs, lubricating oils, opiates, acids and anti-acids, and every sort of drug that the wisdom of God thought necessary for human happiness and health.

Autobiography of AT Still
Has not nature’s God been thoughtful enough to place in man all the elements and principles that the word “remedy” means?

Autobiography of AT Still
The total dopamine content in the brain is formed by B-6-dependent decarboxylation.

P-5-P is essential for the conversion of glutamic acid to GABA.

Folate functions as a coenzyme in the biosynthesis of norepinephrine and serotonin.

Pantothenic acid is essential for acetyl-co-a synthesis.

B6 and niacin are NAD precursors. NADH can produce 6 molecules of DA.
Deficiency of N-3 fatty acids leads to decreased DHA in the frontal cortex and striatum. DHA is replaced by N-6 f.a.’s predominant in the standard American diet (SAD). This replacement was found to result in a 55% increase in DA and a 13% increase in D2 receptor binding. Farquarson, Lancet 1992
The region of the heart is his headquarters where orders affecting the whole living government, man’s body, are given and received. Osteopathy R and P Section titled “Life In Form”
Heartmath

• “...negative emotions lead to increased disorder in the heart’s rhythms and in the autonomic nervous system, thereby adversely affecting the rest of the body.’

• “...In contrast, positive emotions create increased harmony and coherence in heart rhythms and improve balance in the nervous system.”

• the heart influences not only the neuroautonomics but also higher perception

• J. Andrew Armour, MD - neurocardiology
The heart produces the strongest electrical and magnetic activity of any tissue in the body.

The brain’s electromagnetic field is hundreds of times weaker than the heart’s field.
“....it is a fact of physics that energy fields are unbounded. The biomagnetic field of the heart extends indefinitely into space. While its strength diminishes with distance, there is no point at which we can say the field ends.”

James L. Oschman; Energy Medicine - The Scientific Basis; Churchill Livingstone  2000