

ADRENAL MEDULIA

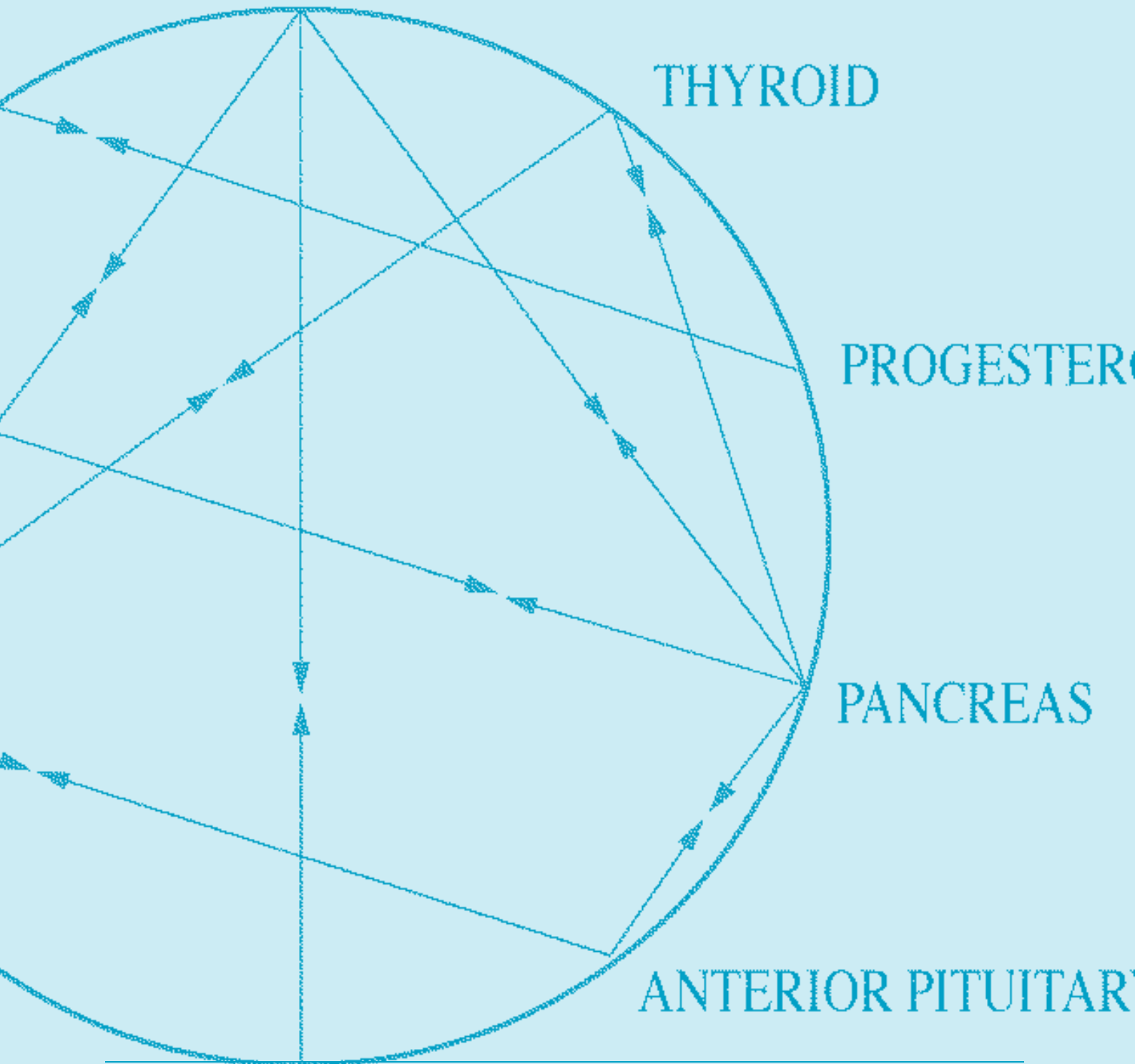
THYROID

PROGESTERONE

PANCREAS

ANTERIOR PITUITARY

POSTERIOR PITUITARY







가 ( 가

/ ) 가

가

가

D, C

25 g , 60%

가

가

가

00.15~0.2%

DNA RNA

가

100~150 mg

가

,가

2 가

가

(

),

가 C  
가

, DNA RNA

, thorozone,

librium, norpramin, diuril, orinase, tegretol, tapazol, indocin

가

E B1

가

3

가

,가

1.5~2.5 g

),

가







, , , .

가 .

가 .

E

가

,가가

. 가 가

가,

가

가

A, K, 가

( ),





2. , , ,

, , , C

, DNA 가 가 , 가 4,000 ,

- 1. , , , , , , , , , 가 가 ,
- 2. 가 가 가 .
- 3. :

- 1. , , ,
- 2. , , , , , , , , ,
- 3. , , , , , , , , ,

가 .

, C, ,

, , , , , , , , , , 가 , ,

- 1. : , , , , , , , , , 1. :가 , , , , , , , , ,
- 2. : , , , , , , , , , 2. : , , , , , , , , ,
- 3. : , , , , , , , , ,

가

1. :
2. , , , , , ,

( ) ,

, , , , , C

, , , , IQ

1. , , , ,

,

2.

a. : , , , , , ,

,

b. : , , , , ,

,

c. : , , , ,

3. : , , , , ,

, IQ

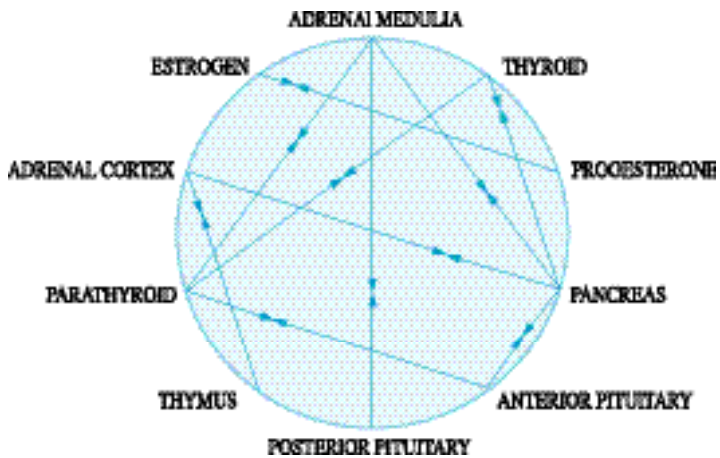
, , , C, E,

.

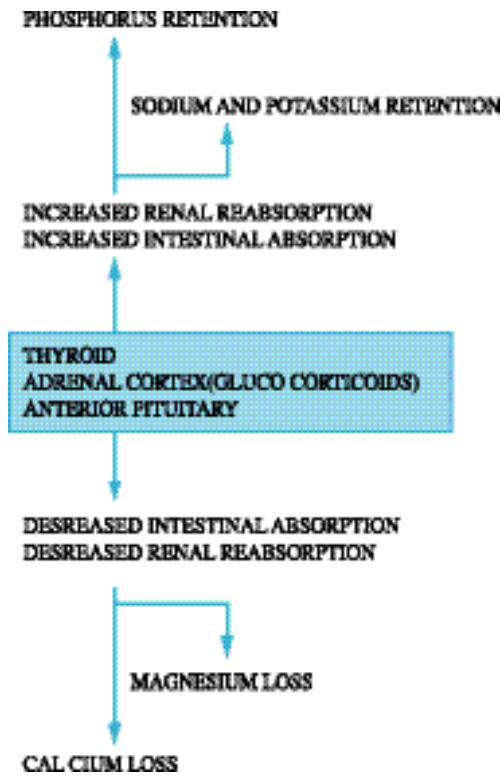
, , , ,

,

가 가  
 ( 7-1)  
 가  
 가  
 (Sb, U, As, Be, Hg, Cd, Pb, Al ),  
 (Ca, Mg, Na, K, Cu, Zn, P, Fe, Mn, Cr, Se, B, Co, Mo, S), 가  
 (Ge, Ba, Bi, Rb, Li, Ni, Pt, Tl, Ll, V, Sr, Sn, Ti, W,  
 Zr)  
 가

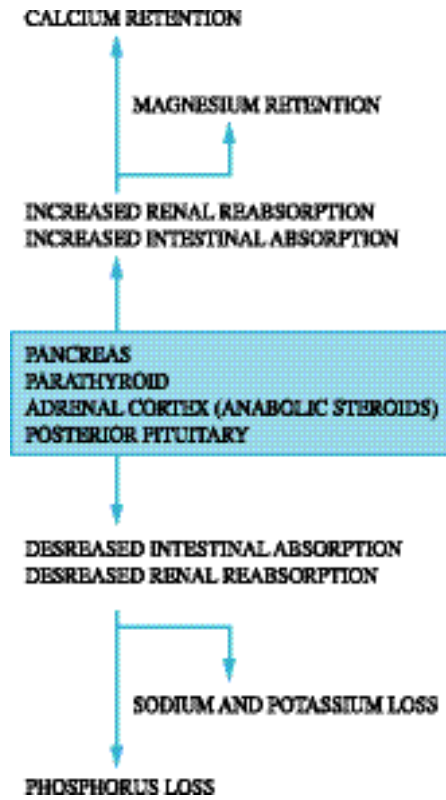


7-1.



7-2.

<p>7-2</p> <p>가 가</p> <p>가</p> <p>, 가</p> <p>.</p> <p>(PHOSPHORUS RETENTION)</p> <p>(SODIUM AND POTASSIUM RETENTION)</p> <p>가(INCREASED RENAL REABSORPTION)</p> <p>가(INCREASED INTESTINAL ABSORPTION)</p> <p>(THYROID)</p> <p>:</p>	<p>(ADRENALCORTEX : GLUCOCORTICOIDS)</p> <p>(ADRENAL MEDULLA)</p> <p>(ANTERIOR PITUITARY)</p> <p>(CATABOLIC GLANDS)</p> <p>(DECREASED INTESTINAL ABSORPTION)</p> <p>(DECREASED RENAL REABSORPTION)</p> <p>(MAGNESIUM LOSS)</p> <p>(CALCIUM LOSS)</p> <p>7-3</p> <p>가</p> <p>,</p> <p>가</p> <p>(CALCIUM RETENTION)</p> <p>(MAGNESIUM RETENTION)</p>
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7-3.

가(INCREASED RENAL REABSORPTION) .  
 가(INCREASED INTESTINAL ABSORPTION) 가  
 (PANCREAS)  
 (PARATHYROID)  
 : (ADRENAL  
 CORTEX : ANABOLIC STEROIDS) 가 .  
 (POSTERIOR PITUITARY)  
 (ANABOLIC GLANDS) /  
 (DECREASED INTESTINAL ABSORPTION)  
 (DECREASED RENAL REABSORPTION) , ,  
 (SODIUM AND POTASSIUM LOSS) 가  
 (PHOSPHORUS LOSS) 가 /  
 , 가 / 4.2



:1 . / 가 가 가 .  
 ( ) ,  
 / 가  
 ( / 가  
 , , / 가 가 .  
 ,  
 ). , , , .  
 가 . 가  
 가 . ,  
 가 . ( ),  
 . ( ), ( ),  
 ( ) ( )  
 가 .  
 가 / 가 가  
 . ( , )  
 .  
 C가 ,  
 D  
 . Ashmead  
 “ Chelated Mineral Nutrition in Plants, Animals, and Man ”  
 “ 18가 ” 가  
 가  
 . , , 가  
 가  
 .  
 .  
 . 가 가 B 가  
 / 가 . /



6~8

가 20

”

가

가

가

가

가

가

가

가

가

가

가

2

가

가

“

”

(Exhaustion)

OO

1

가

가

(attention deficit disorder),

(hyperactivity),

(aggression),

(violence),

가

Krebs Glycolysis cycles

. Cycle

. 가

(The Mind/Body Split)

가

가

(mental racing)

가

가

가

가

가

, Carl Pfeiffer

“ (burn-out)”

가

.“ Burnout”

“ Burnout”

7-1

(PMS)

(Dry skin)

(Short attention span)

(Constipation)

(Cold hands, feet)

(Memory problems)

(Burnout)

{burnout}

가

.“ Burnout”

가

가

.“ Burnout”

/

“

”

”

“

”

”

가,

“ Burnout”

가

가

가

.“ Burnout”

가

가

.“ Burnout”

가



가

가

가

가

가

가

가

(TMA)

/ (Oxidation Types)

가

(Tissue Mineral Analysis, TMA)

가

(slow oxidation)

. Hans Selye

(fast oxidation)

(alarm)

(fast)

(slow)

(fight or flight)

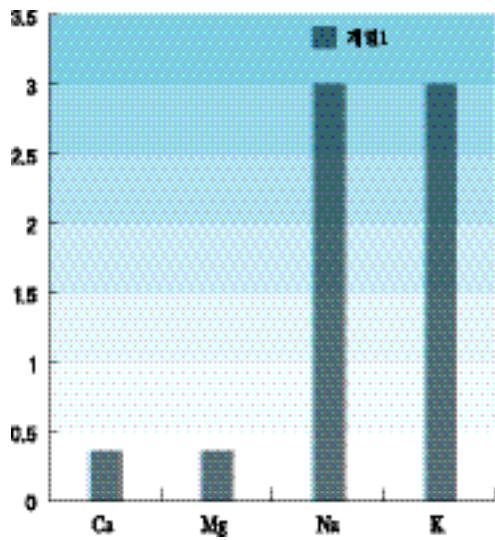
(oxidation type)

가

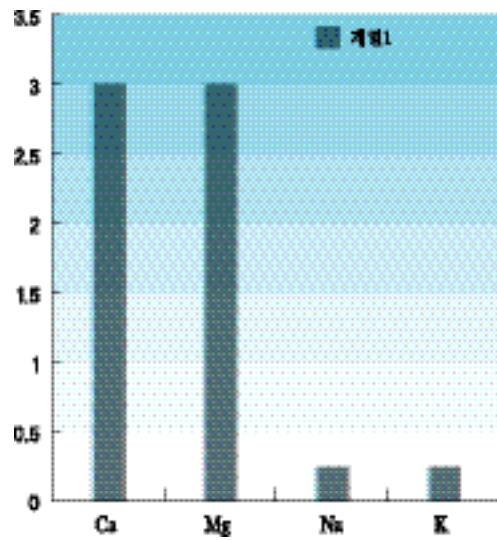
George Watson

7-2 (Health History Checklist)

: O , V , X .		
1. (Premenstrual syndrome)	11. 가 .	22. ,
2. (Fatigue & Exhaustion)	12. .	23. ( , )
3. ( )	13. .	24. ,
4. 가 .	14. , ,	25. ( , , , )
5. ( )	15. , (Calcium spurs)	26. ( , , )
6. .	16. .	27. ( , , )
7. .	17. .	28. .
8. .	18. .	29. .
9. .	19. .	30. .
10. 가 .	20. ,	31. .
	21. ( , , )	



7-5.



7-6.

Watson

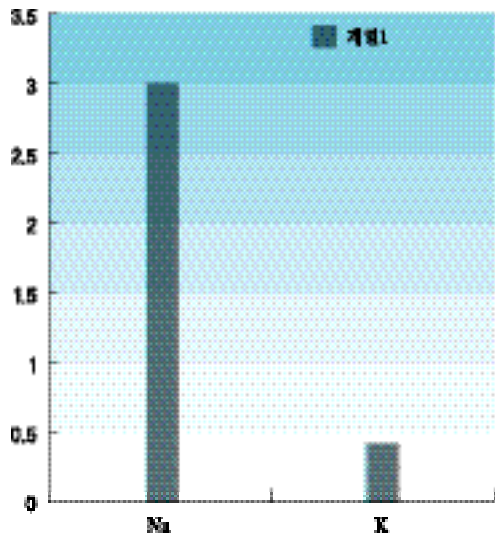
( 7-5, 6).

/ (Ca/P) 2.6/1

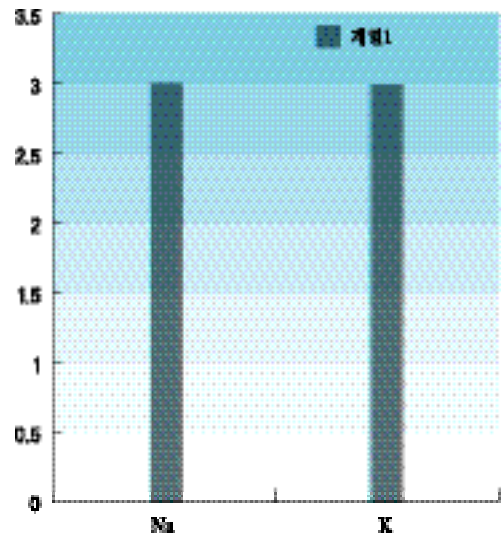
2.6/1







7-8. Na/k Ratio



7-9. Na/k Ratio (resistance)

가 ( , ) 가 .

3 가

“fight or flight” (rage)  
(panic), (terror)

가 .

가 가 (judgmental part)  
(Judge)

/ (inversion)  
2/1( =2.4/1)

가 ,  
( 7-8).

/ ( )

Selye 2 가 .  
가

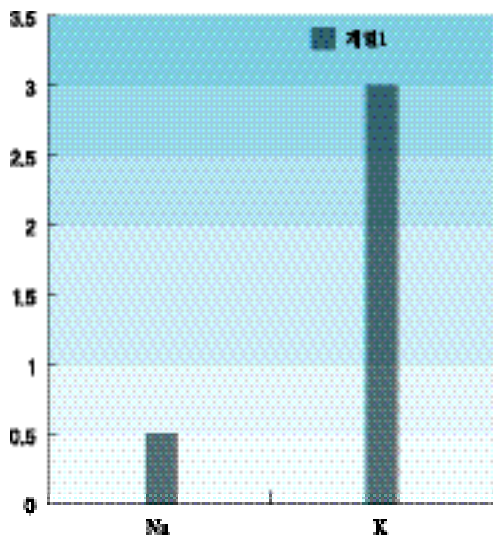
가 . 가

가 .

가 .

( 7-9).

, /



7-10. Na/k : " Fight" or " Flight"

/ . =24 =10  
 =20 =2.5  
 =16  
 가  
 24 mg/% ( )  
 (mg/% ppm 10 ). / (Ca/P)=2.63/1 - /  
 가 / (Ca/Mg)=7/1  
 / (Ca/K)=4.2/1  
 / (Na/K)=2.4/1  
 / (Na/Mg)=4/1  
 / (Zn/Cu)=8/1

가

.20 Paul Eck

David Watt

Eck David Watt

가

Paul

가

가

=42

( : mg%)

=6

/ " "

Eck Watt / 가 가

가

/ 2.4/1

가

Eck Watt /

“ ”

/

/

/

or-Flight”

Fight-

( 7-10).

, /

/

6/1

가

/

/

/

(2.4/1) 가

/ ( ) 4.2/1

/ 4.2/1

/

4.2/1

/

/

가

/ 4/1

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- \* Asterita, Mary. *The Physiology of Stress with Special Reference to the Neuroendocrine System*. New York, Human Sciences Press, Inc., 1985.
- \* Balch, James F. & Balch, Phyllis A. *Prescription for Nutritional Healing*, 2nd Ed. Avery Publishing Group, Inc. Garden City Park, New York, 1997.
- \* Barkley, R. "A review of stimulant drug research with hyperactive children." *Journal of Child Psychology and Psychiatry*, 1977, 18, pp. 137-165.
- \* Barnes, Broda O. & Lawrence Galton. *Hypothyroidism: The Unsuspected Illness*. New York, Harper & Row, 1976.
- \* Brenner, Arnold. "The effects of megadoses of selected B-complex vitamins on children with hyperkinesis: controlled studies with long-term follow-up." *Journal of Learning Disabilities*, May, 1982, 15, pp. 258-264.
- \* Borysenko, Joan. *Minding the Body, Mending the Mind*, New York, Bantam, 1987.
- \* Briggs, John. *Fractals: the Patterns of Chaos*. Simon and Schuster, New York, N.Y., 1992.
- \* Capra, Fritjof. *The Tao of Physics*. Boulder, CO, Shambhala Publications, 1975.
- \* Capra, Fritjof. "The new physics: implications for psychology." *The American Theosophist*, Spring, 1980, pp. 114-120.
- \* Chopra, Deepak. *Quantum Healing: Exploring the Frontiers of Mind/Body Medicine*. New York, Bantam, 1989.
- \* Eck, Paul. Interview with Editors of Healthview Newsletter, 1981. Reprints available through Analytical Research Laboratories, Phoenix, AZ. (602)995-1580
- \* Gleich, J. *Chaos: Making a New Science*. Viking, New York, N.Y., 1987.
- \* Hoffer, Abram. "Supernutrition." In Williams, Roger J. & Kalita, Dwight K. (Eds.) *A Physician's Handbook on Orthomolecular Medicine*. Keats Health Science Books, New Canaan, CT, 1979.
- \* Lazarou, J., Pomeranz, B.H., & Corey, P. N. "Incidence of adverse drug reactions in hospitalized patients: a meta-analysis of prospective studies." *JAMA*, 1998, vol. 279, no. 15, pp. 1200-1205.
- \* Lieberman, Shari & Bruning, Nancy. *The Real Vitamin & Mineral Book: Going Beyond the RDA for Optimal Health*. Avery Publishing Group, Inc. Garden City Park, New York, 1990.
- \* Locke, Steven & Douglas Colligan. *The Healer Within: The New Medicine of Mind and Body*. New York, E.P. Dutton, 1986.
- \* Malter, Richard F. "Implications of a Bio-Nutritional Approach to the Diagnosis, Treatment, and Cost of Learning Disabilities." Paper presented at the national convention, Association for Children with Learning Disabilities, Washington, D.C., February, 1983.
- \* Malter, R. F. "Biofeedback and nutrition." Unpublished paper, Malter Institute for Natural Development, Inc., Schaumburg, IL, March, 1984a.
- \* Malter, R. F. "Copper toxicity: psychological implications for children, adolescents, and adults." Unpublished paper, Malter Institute for Natural Development, Inc., Schaumburg, IL, April, 1984b.
- \* Malter, R. F. "Trace mineral profiles of hyperactive children." Unpublished paper, Malter Institute for Natural Development, Inc., Schaumburg, IL, April, 1984c.
- \* Malter, R. F. "Implications of a bio-nutritional approach to the diagnosis, treatment, and cost of Learning Disabilities." *Somatics*, Autumn-Winter, 1984-85, 38-43.
- \* Malter, R. F. "Nutritional concerns in learning and psychological disorders." Paper presented to APA Div. 42, annual convention of the American Psychological Association, Los Angeles, CA, August, 1985a.
- \* Malter, R. F. "Preventing osteoporosis with calcium supplementation: possible psychological hazards." Unpublished paper, Malter Institute for Natural development, Inc., Schaumburg, IL, August, 1985b.
-

- \* Malter, R. F. "Energy, stress, and 'burn-out': a new perspective on addictions. "Unpublished paper, Malter Institute for Natural Development, Inc., Schaumburg, IL, June, 1986.
- \* Malter, R. F. "The concept of a health-energy continuum: implications for maintaining health. "Unpublished paper, Malter Institute for Natural Development, Inc., Schaumburg, IL, Aug., 1987.
- \* Malter, R. F. "Zinc/copper ratios and brain function: implications for education and special education. " Unpublished paper, Malter Institute for Natural Development, Inc., Schaumburg, IL, April, 1988. Reprinted in Newsletter of Trace Elements, Inc., Dallas, TX, 1988.
- \* Malter, R. F. "The cumulative toxic metal hypothesis and attention deficit disorders. "Unpublished paper, Malter Institute for Natural Development, Inc., March, 1990.
- \* Malter, R. F. & Malter, R. Shrinking the Judge: Freeing the Inner Child. Education & Health Resources, Hoffman Estates, IL, 1998.
- \* Malter, R. F. "Trace mineral analysis and psychoneuroimmunology. "Journal of Orthomolecular Medicine, 2nd quarter, 1994, Vol. 9, No. 2, 79-93.
- \* Mason, Karl E. "A conspectus of research on copper metabolism and requirements of man. "Journal of Nutrition, November, 1979.
- \* Mehta, S. W. & Eikum, R. "Effect of estrogen on serum and tissue levels of copper and zinc. "Advances in Experimental Medicine & Biology. 258: 155-62, 1989.
- \* Malter, R. F. "The Influence of "Junk "Science in Manipulating and Shaping the Healthcare Marketplace " Journal of Orthomolecular Medicine, 2nd quarter, Vol. 16, No. 2, 2001, pp 91-93
- \* Page, Melvin. Degeneration and Regeneration. St. Petersburg Beach, FL, 1949.
- \* Pfeiffer, Carl. Mental and Elemental Nutrients: A Physician 's Guide to Nutrition and Health Care. New Canaan: Keats, 1975.
- \* Pfeiffer, C. Nutrition and Mental Illness: An Orthomolecular Approach to Balancing Body Chemistry. Rochester, VT, Healing Arts Press, 1987.
- \* Pfeiffer, C. & Mailloux, R. "Excess copper as a factor in human diseases. "Journal of Orthomolecular Medicine, 1987, 2, no. 3, 171-182.
- \* Pihl R. & Parkes, M. "Hair element content in learning disabled children. "Science, 1977, 198, 204-206.
- \* Rimland, B. & Larson, G. "Hair mineral analysis and behavior: an analysis of 51 studies. "Journal of Learning Disabilities, May, 1983, 16, 279-285.
- \* Seelig, Mildred S. "Cardiovascular consequences of magnesium deficiency and loss : pathogenesis, prevalence and manifestations. Magnesium and chloride loss in refractory potassium repletion. "American J. of cardiology, 63:4G-21G,1989.
- \* Watson, George. Nutrition and Your Mind. New York: Harper & row, 1972
- \* Watts, D. L. "The nutritional relationships of copper. "Journal of Orthomolecular Medicine. 4, 2, 1989.
- \* Watts, D. L. "Trace elements and neuropsychological problems as reflected in tissue mineral analysis (TMA) patterns. Journal of Orthomolecular Medicine, 5, 3, 1990.
- \* Watts, D. L. Trace Elements and Other Essential Nutrients: Clinical Application of Tissue Mineral Analysis. Trace Elements, Inc., Dallas, Texas, 1997.
- \* Watson, George. Nutrition and Your Mind. New York: Harper & row, 1972.
- \* Watts, D. L. "The nutritional relationships of iron. "Journal of Orthomolecular Medicine. 3, 3, 1988.
- \* Watts, D. L. "Nutritional interrelationships: minerals-vitamins-endocrines. "Journal of Orthomolecular Medicine, 1990.
- \* Williams, Roger J. "Supernutrition as a strategy for the control of disease. "in Williams, Roger J. & Kalita, Dwight K. (Eds.) A Physician 's Handbook on Orthomolecular Medicine. (pp. 11-14). Keats Health Science Book, New

- Canaan, CT, 1979.
- \* Williams, Roger J., *Nutrition Against Disease*. Pitman, New York, 1971.
  - \* Williams, Roger J., *Biochemical Individuality*. John Wiley & Sons, New York, 1963.
  - \* Williams, Roger J. & Kalita, Dwight K. (Eds.) *A Physician's Handbook on Orthomolecular Medicine*. Keats Health Science Books, New Canaan, CT, 1979.
  - \* Williams, Roger J., Heffley, James D., Yew, Man-Li, & Bode, Charles W. "A Renaissance of Nutritional Science is Imminent." in Williams, Roger J. & Kalita, Dwight K. (Eds.) *A Physician's Handbook on Orthomolecular Medicine*. (pp. 4-10) Keats Health Science Books, New Canaan, CT, 1979.
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