

“NUTRITION IN APPLIED VISUAL SCIENCE”

We Open a case Book

By

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Recently Ralph Barstow reminded us the word Doctor is of Latin origin. So the Romans had a word for their teachers, Docere or Doctus, teacher or to teach. The word is particularly applicable to Optometrists, Doctors of Optometry – Instructors in the Art and Science of Visual Care.

We know, “The greatest stress of our culture is to secure vicarious meaning from the written or printed symbol of our mother tongue”. Skeffington further states, “This is the most demanding culture known to civilization”. Therefore, we know that vision must be trained to a high level of performance at this stress point, or range of sixteen to twenty-two inches.

We know that in Syntonics we stir up activity within the eye (autonomic nervous function), much the same as asthegyratory action in a washing machine, and as we train the performance of vision we know that nutrition definitely acts as supportive therapy. Vitamins and food minerals are requisites to complete visual care, just as nutrition and the “training table” are requisites in the conditioning of the athlete. Therefore, it is not only a privilege but a professional duty to instruct in, and to use nutrition for we are specialists in the care of vision.

In considering the case of the Retarded child, let us enumerate a number of steps clearly outlined by N. C. Kephart in visual and mental development of the child.

1. “The most descriptive phase I can think of is to say that when the new born child looks out upon the world all he sees is a few ill-defined blobs. They are a series of light density gradients, but they have no meaning and no structure.
2. “We manipulate our environment in terms of space. We do our thinking and reasoning in terms of space. An elaborated space world becomes a storage system for ideas and thoughts. If the space structure is restricted the child lives in a small and restricted universe.”
3. “Without words the child cannot call up today the particular sate of development of the perception he had yesterday. Language becomes a tool to label and name. Thus space provides the structure and language the system by which we store our ideas and images. Henceforth, we cannot think without words.”
4. “Then language becomes communication for a purpose, next there is development of concepts. We must relate things relative to each other. We must structure the space world before we can develop the attention reflex.”

October 24, 1957 Little G. C., age 6 years, 10 months was referred in for visual care with these complaints:

Doesn't hold attention, eyes don't seem to focus (looks as if in shock), vision poor, second attempt at first grade – couldn't hold attention so teachers gave up trying to teach her.

Visual analysis:

Child retarded to 3 years of age level.
Monocular vision (sciascope). Blepharitis lids,
#4 = 1.75 to -2.00 Sphere O.U.
#5 = plus .50 to plus .75 Sphere O.U.

Other observations made were psychometric.

Now think of Step #1 (Kephart). Vision had no meaning and no structure. Her space world had to be developed, therefore, she lived in an extremely surreal and restricted world. (Step #2, Kephart).

She talks very little, only one to three or four words at a time. Therefore, language was used principally as a name or label language.

There being an extremely poor or faulty space world, there was no attention reflex.

A program of visual care was instituted, plus or relaxing lenses for close work, Syntonics and supportive vitamin Program combined with only fair cooperation from the parents in case management, has brought some remarkable changes in two and a half years. While this child will always be retarded, improvement is very satisfactory. We have retraced these steps (above mentioned), and now there is a nice development of concepts. Shortly before the Assembly she made this statement, "I am in the second grade, and I should be in the fourth grade". Syntonics used Rx 1 and Vitamin supportive program Rx2.

August 27, 1956, Mrs. B.W., age 25, as the type, was referred for vision analysis, with the following complaints and history:

Four years ago, she started to have severe frontal headaches. Physical examination revealed good health (negative), Physician referred her to an eye doctor who gave her glasses. Glasses helped for a time, then seemed to make headaches worse. Past several months headaches worse than used to be, lasting all day – but usually a good nights sleep corrects the headache. Another physical shows health good. When headaches, is very nervous and seems to have headaches several times a week. Gave up wearing glasses about two years ago. When twelve years old had jaundice. Becoming short sighted. Visual examination revealed a B₁ case and the demands of our culture (near use of vision) had probably started the short sightedness – N. V., O. U. 20/40 -, R 20/50, L 20/40-.

A program of visual care was instituted including relaxing lenses four near work, Syntonics, and a full vitamin mineral supportive program.

The patient had lived in and grew up in occupied Europe and showed a severe need of nutrition in corrective procedure Rx3 and Syntonics Rx4.

Patient given several periods of Syntonics over span of past eight months. Vision has improved approximately 20% O.U. and each eye, and complete recovery from headaches, with this exception being without her vitamins Rx5 for several days will bring back a headache. There is still a great need for a further vitamin program Rx6. This case is being continued to bring a high level of vision performance at both distance and near.

Patient, Mrs. G. T., age 23. Patient fitted with contact lenses, good wearing time and comfortable vision – but photophobia quite severe, also temperature changes (out-door – in door) causes stress and lenses must be removed and replaced.

Rx7 aided greatly in reducing symptoms of difficulty, raising resistance and normalizing metabolism (corneal scleral).

Patient M.S., male 29 years old, aircraft mechanic. Symptoms and complaints:

Eyes bloodshot most of time, worse if stays up late at night, entire sclera becomes blood red. Sees double when work becomes fine in detail and also if watches T.V. more than forty-five minutes. Vision fatigue. Eyes have been this way since a youngster in the lower grades in school. Has a number of pair of glasses but they do not help. Trouble is increasing and becoming short sighted.

Vision analysis:

#3 = 12 to 20° esophoria, # 13 = 12 to 24° esophoria. #11 & # 17 = very low. Analysis causes more fatigue and diplopia. Vision decreased as became tired.

Program of visual care:

Gave bifocals (Plano O.U., plus 1.25 add) as relaxing lenses.

Syntonic Orthoptic Rx8

Tel Eye Trainer or Rotoscope 5", Stereo-depth, accommodative rock, Base in training.

After six vision Training sessions gave Vitamins Rx9. Training became more effective.

Observation on 4/23/57 shows a marked and satisfactory improvement and good case management.

Difficulties reduced and patient states he feels he has improved about 35 to 40%. He states the group foreman at the plant is pleased with improved and faster work.

Let us remember "Vision is achievement". This case is being continued.

CONCLUSIONS

The performance of vision can be considered a function of the nervous system (voluntary and autonomic). Vitamins are chemical substance in nutrition that feeds the nervous system. Therefore, all vitamins are eye vitamins.

It is well to remember that the great stress of our culture, reading and detail work at sixteen to twenty-two inches, is not a stress or strain within the eye, but in the tensions and pressure in or on the organism, and expressed through vision. We recognize, measure, and record the abilities to meet this great demand and teach (remember definition of Doctor) or train the individual to have adequate or a high level of visual performance. Nutrition is a definite part of the program of visual care.

Because many multi-vitamin and mineral formulas acting synergistically seem to be almost specific in their effect on ocular conditions frequently manifested in the clinical practice of Optometry, it is a requisite that we become nutritional Counselors.

Metabolic processes are controlled by enzymes, and vitamins and minerals are one group of enzymes vital to the eye and to vision.

Jeremiah, the Prophet, wrote, "There are none so blind as those who will not see". Let us think of this statement as it fits us, we must not develop blind spots in practice, for:

Optometry is the Science and Art of Visual Care.

Donald J. Mayer, PhD., F.C.S.O.

Current O.E.P. Literature by Skeffington.

Current O.E.P. Literature by Ralph Barstow.

Physiology of the Nervous System, by J. Fulton.

Biochemistry of the Eye, By Pirie and Von Heyington.

The Syntonic Principle of Practice, by Spitler.

Vision and the Retarded Child, by N. C. Kephart.

Rx 1 N/L3" MU7" N/L3" Mu Delta5, MuU7

Vitamin Supportive Program # 2

VM 14, a protein formula

VM 2A plus, vitamin A and minerals.

VM BG, the B complex and heavier riboflavin.

VM 17, Glutamic acid Hydrochloride formula used as a mineral catalyst.

Program of Vitaminerals: Rx3

VM 2A plus, VM 9, VM 2C plus, VM E plus, also having had jaundice gave VM 22, VM 15, VM B.G. and VM 3.

Syntonic procedure: Rx4

N/L3 AU 5", Mu Delta 5", Lambda 8", Mu Theta Sigma. 8"

N/L 3" Delta Omega 7" Omega N 5" Delta N 8" N 5"

Rx5 VM 15 and VM 22

Rx6 Niacin, the amino acids, and a general liver stimulant

Rx7 VM 2A plus, VM 2Aplus, VM 2 BG, VM 22

Syntonic Rx8 N/L 3' Mu Delta 5", Delta Theta 5", Mu Theta S 8"

N/L 3" Alpha Omega " U 5" Mu Delta 5" Mu U 7"

Rx9 Vitamins A C and E with minerals VM 2A plus VM 2c plus VME plus