

Effect of special nutrition on the mental Development of institutionalized children.

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The awareness of the relation of nutrition To sound physical and mental development is Greater at any time in history . scientists have Confirmed the importance of good nutrition in the early childhood. Malnutrition has been foundto result in delayed mental development and backwardness in learning

A number of studies have been done to explore the effect of nutrition on the mental capacity of children . poull (1938) found that when the nutritional level was raised for 41 malnourished children for a period of 18-24 weeks , the children gained about 10 points in I.Q. while the control group did not change in I.Q level. The largest gain I.Q was for younger children .

Harrell, (1946) in one of the most carefully controlled trials took an experimental group of 55 children with an equal number in the control group matched for height , weight sex , I.Q , education achievement . length of thiamine (vit.B1)in table form was given to the experimental group for 1 year while the control group received placebo. at the of the treatment , the experimental group was signification superior in reading achievement , visual acuity, coad substitution and general education achievement .

The study present the effects of an enriched diet on the mental development of institutionalized children , who are nutritionally vulnerable .

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Specially contributed to the antiseptic

Materials and Methods:-

40 children of both sexes in the age range of 6 to 10 with no known physical or mental handicaps were selected from an orphanage in madras, which admits children below year. A through clinical examination was done to rule out major illness . apart from minor nutritional deficiencies like vit. A deficiency , no major nutritional disorders were found among the selected children the educational status ranged between 1st and 4th standed . binet –kamat test. (1964)revision)which is an adaption of the Stanford-binet test to Indian condition was selected for intelligence assessment . the I.Q.S of the selected children ranged between 60-90 (90-110 normal) . the children were randomly allocated to experimental group (25 children) and control group (15 children) in the addition to the diet already being given . the experimental group received the following special diet.

- 1.5.72gms . of extre protein
- 2.106 extra calories from fried grams and rice flakes
- 3. 3mgms . of extra iron.
- 4.100 IU of vitaminA (extra)

After intelligence assessment and random allocation to the 2 group . the experimental group was given the special diet for 1 year in addition to the

usual diet. At the end of the treatment period , assessments were repeated.

Discussion and result;-

The statistical analysis of the data is given below :

As the present study showed no striking effect in I.Q AS A CONSEQUENCE of the enriched diet, contrary to literature, it was decided

(Showing the statistical analysis of the data pertaining to intelligence quotients)

GROUP	Sample size	Men level Initial	Of I.Q Final	Means Difference	“t”	p
Exeperimental Group	25	74.3	77.5	3.2	8.8	p≥.2 not significanty
Control Group	15	72.8	75.6	2.8		

As can be seen form the table , the effect of the special diet on I.Q . minimal or negligible(p>0.2

To calculate the nutritional standard of the ordinary diet that the children were receiving it was found that the nutritional reason why the enriched diet did not produce any significant effect .

While analysing the causes still further it was felt that besides nutrition, there may be other and more important factors , contributing to the mental developing of orphanage children

In this connection , spitz’s (1946) observations are worth recalling. He found that despite good nutrition, excellent condition of sanitation and good care , the mortality rate was high among infants with maternal

deprivation. The infants displayed market decleration

In perceptual-motor development. They were socially withdrawn and depressed and failed to make good progress in mental and physical growth . spitz termed the infants,s anaclitic depression and interpreted the depression as consequence of the infant’s strong need for a meaningful human relationship.

Thus it is apparent that environmental factors that promote optimal stability meaning relationship, acceptance of the child as a personality in his own right etc ., are far more important than nutrition alone for the healthy mental

development of institutionalized children...

3 spitz R.A anaclitic depression
psychjanalytic study of child 1946 vol p
313-42

Hence a study in which an enriched environment promoting the above factors is provided to the children and observing its effect on the mental development is worth undertaking

Summary and conclusion

Special enriched diet consisting of extra proteins, calories iron and vitamin 'A' in addition to the usual diet, given to 25 institutionalised children did not produce any marked effect on the mental development. The reasons for this are analysed in the context of the observation of many scientists that environmental factors that promote emotional stability, a sense of belonging and security are more important than nutrition..

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