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RDT&E TASK REPORT
 OPNAV FORM 3910-1 (REV. 7-60)

OPNAV REPORT 3910-1

1. TASK LONG TITLE Studies on Nutritional Problems in Egypt, Africa and the Middle East		2. TASK NO. PRO05.12-1530
1 A. SHORT TITLE (26 spaces only) Nutritional Anemia (U)		3. SECURITY OF TASK Unclassified
5. REPORT TYPE A. <input type="checkbox"/> INITIAL <input type="checkbox"/> REVISED CONTENT <input checked="" type="checkbox"/> ANNUAL PROGRESS <input type="checkbox"/> TERMINATION		4. DATE MAR 15 1962
n <input checked="" type="checkbox"/> BASIC RESEARCH <input type="checkbox"/> APPLIED RESEARCH <input type="checkbox"/> DEVELOPMENT <input type="checkbox"/> T&E		6. TECHNICAL SUP. AREA Naval Medical and Dental Problems
8. CONTRACTOR OR LABORATORY U.S. Naval Medical Research Unit No. 3 Cairo, Egypt, UAR		7. TASK OFFICE BUMED-713
9. CONTRACT OR WORK ORDER 61751		10. PRINCIPAL INVESTIGATOR A. Miale, LCDR, MC, USN Head, Medical Department
11. TASK DURATION PERIOD FROM (Date) 1960 TO (Date) Cont.		
12. ESTIMATED ANNUAL SUPPORT LEVEL <input checked="" type="checkbox"/> UNDER \$25,000 <input type="checkbox"/> \$25,000-50,000 <input type="checkbox"/> \$50,000-100,000 <input type="checkbox"/> \$100,000-500,000 <input type="checkbox"/> \$500,000-1,000,000 <input type="checkbox"/> OVER \$1,000,000		

13. WORK DESCRIPTION (List significant accomplishments upon completion or termination.)
 S.T. 1: Studies on the Mechanism of Anemia in Parasitic Diseases: A. Miale, LCDR, MC, USN

Radioisotope studies on anemic, parasitized patients using chromium - 51, iron - 59 and zinc - 65 have been initiated. The metabolism of zinc has been studied in relation to anemia and growth failure. The data substantiate the identification of zinc deficiency in man in the presence of iron deficiency. Evaluation of endocrine function in cases with zinc deficiency suggests that pituitary deficiency is a major factor in growth retardation and hypogonadism.

Studies on absorption with radioiron under various experimental situations indicate that absorptive capacity is not impaired even with heavy intestinal parasite loads. Similar studies on absorption of radioiron and radiozinc incorporated into local foods, are in progress. Other aspects of disordered trace metal and enzyme metabolism are under study along with intestinal blood loss measurement, erythrokinetics and blood volume estimations in various parasitic disorders.

14. REPORTS DISTRIBUTED (Give author, title, and appropriate report identification no.)

None.

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