CONTENTS

No. 1 JULY, 1934

W. D. SALMON AND J. G. GOODMAN. Studies of the raw egg white syndrome in rats. One figure ........................................ 1

H. R. GUILBERT AND G. H. HART. Storage of vitamin A in cattle. One figure ...................................................... 25

H. R. GUILBERT AND W. R. HINSHAW. Vitamin A storage in the livers of turkeys and chickens. One figure ...................... 45

HELEN T. PARSONS AND JANE G. LEASE. Variations in the potency of certain foodstuffs in the cure of dermatitis induced in rats by dietary egg white .................................................. 57

A. K. PRZEDEL. The relation of avitaminosis C to blood clotting ...... 69

BOSSLENEE ARNOLD HETLER. The development of xerophthalmia and the keratinization of epithelial tissue on withdrawal of vitamin A from the diet of the monkey (Macacus rhesus), guinea pig, rabbit, and adult albino rat. Six text figures and four plates (twenty-two figures) ...... 75

R. F. LIGHT, L. T. WILSON AND C. N. FREY. Vitamin D in the blood and milk of cows fed irradiated yeast .......................... 105

E. W. CRAMPTON AND J. W. HOPKINS. The use of the method of partial regression in the analysis of comparative feeding trial data. Part I ... 113

No. 2 AUGUST, 1934

AMY L. DANIELS AND OLIVE E. WRIGHT. Iron and copper retentions in young children .................................................. 125

KATHRYN HORST, LAFAYETTE B. MENDEL AND FRANCIS G. BENEDICT. The influence of previous diet, growth and age upon the basal metabolism of the rat ......................................................... 139

J. T. HAUCH. Studies on the effect of high doses of irradiated and non-irradiated ergosterol on the albino rat ............................. 163

EATON M. MACKAY AND LOIS LOCKARD MACKAY. Factors which determine renal weight. XVI. The nature of the protein intake. One figure .... 187

R. W. SWIFT, O. J. KAHLBERG, LEROY VORIES AND E. B. FORBES. The utilization of energy producing nutriment and protein as affected by individual nutrient deficiencies. I. The effects of cystine deficiency. Two figures .................................................... 197
CONTENTS

ARTHUR E. SIEBES AND CLEMMY O. MILLER. Disappearance of vitamin C from the adrenals of scorbutic guinea pigs .................................................. 221

W. F. DREA. Spectrum analysis of milk ashes .................................................. 229

J. B. HAAG. An adaptation of the paired-feeding method for the determination of the supplementary value of proteins .................................................. 235

EDNA R. BISHOP. The calcium and phosphorus content of some Alabama vegetables .................................................................................. 239

MATTHEW MOLITCH AND RICHARD F. COUSINS. Variation of basal metabolic rate per unit surface area with age. One figure ..................... 247

No. 3 SEPTEMBER, 1934

BEATRIX G. EDWARDS AND MARK R. EYERLY. Exogenous melituria in man Three figures .................................................. 253

R. ADAMS DUTCHER, PHILIP L. HARRIS, EVA R. HANTEL AND N. B. GUERRANT. Vitamin studies. XIX. The assimilation of carotene and vitamin A in the presence of mineral oil. Seven charts ........................................ 269

D. W. JOHNSON AND L. S. PALMER. The appetite stimulating and growth promoting property of liver .................................................. 285

F. J. MCCLURE, LEOY VORIS AND E. B. FORBES. The utilization of energy producing nutriment and protein as affected by individual nutrient deficiencies. II. The effects of vitamin B deficiency. One figure ..................... 295

C. D. MARSHALL DAY AND H. J. SEDWICK. The fat-soluble vitamins and dental caries in children .................................................................................. 309

E. W. CRAMPTON AND J. W. HOPKINS. The use of the method of partial regression in the analysis of comparative feeding trial data. Part II 329

HELEN A. HUNSCHER, EVA DONELSON, BETTY NIMS ERICKSON AND ICEE G. MACY. Results of the ingestion of cod liver oil and yeast on calcium and phosphorus metabolism of women .................................................. 341

H. C. SHERMAN AND E. N. TODHUNTER. The determination of vitamin A values by a method of single feeding. Two figures ........................................ 347

R. C. BENDER, G. E. FLANIGAN AND G. C. SUPPLEE. A vitamin B deficient ration. One chart .................................................. 357

G. C. SUPPLEE, R. C. BENDER AND G. E. FLANIGAN. The vitamin B supplementation of milk. One chart .................................................. 365

No. 4 OCTOBER, 1934

ALFRED E. KOEHLER AND SONIA E. ALLEN. The nutritive value of lactose. One figure .................................................. 377

ALBERT G. HOGAN AND LUTHER R. RICHARDSON. Irradiated vitamin B complex and dermatitis. One figure .................................................. 385
CONTENTS

N. B. GUERRANT AND B. ADAMS DUTCHER. Some effects of the composition of the diet on the vitamin B and the vitamin G requirement of the growing rat. Eight figures ........................................ 397

BYRON D. BOWEN, FRED E. GRIFFITH, JR., AND GRACE E. SLY. The effect of a high fat meal on the respiratory quotient and heat production of normal and obese individuals. Two figures ......................... 421

C. M. McCAY. With the assistance of C. C. KU, J. C. WOODWARD AND B. S. SINGHAL. Cellulose in the diet of rats and mice. Two figures ........... 435

FLORA HANNING. A comparison of vitamins B and G in canned strained foods .............................................................................. 449

DONALD G. BEMP AND FRANKLIN C. BING. Inanition as a factor in vitamin G deficiency .......................................................... 457

W. O. FROHLING AND JURO WYENO. Carotene and vitamin A requirements for White Leghorn chicks. Four text figures and one plate ......... 463

MILTON B. HANDELSMAN, LEWIS A. GOLDEN AND JOSEPH H. PRATT. The effect of variations in the diet on the absorption of food in the absence of pancreatic digestion. One figure ...................... 479

No. 5 NOVEMBER, 1934

GLADYS J. EVERSON AND AMY L. DANIELS. A study of manganese retentions in children ................................................................. 497

MARTHA B. PITTMAN, RUTH B. McCAMMON AND MYRNA HOLMAN. Utilization of meat by human subjects. I. The utilization of the nitrogen and phosphorus of loin and heel cuts of beef ..................................... 503

MAX KRISS, E. B. FORBES AND R. C. MILLER. The specific dynamic effects of protein, fat and carbohydrate as determined with the albino rat at different planes of nutrition ........................................ 509

E. B. FORBES, MAX KRISS AND R. C. MILLER. The energy metabolism of the albino rat in relation to the plane of nutrition. Three figures ... 535

YASHA VENAR AND T. WINGATE TODD. The efficacy of vitamin D administration in aqueous preparation. Four figures ...................... 553

ARTHUR GROLLMAN AND W. M. FIROR. Studies on the adrenal. VII. The relation of the adrenal cortical hormone to the vitamins. Five figures 569

ARTHUR D. HOLMES, MADELEINE G. PIGOTT AND WENDELL H. PACKARD. The effect of supplementary iodine on the nutritive value of chick rations. Four figures .................................................. 583

KURT W. FRANKE. A new toxicant occurring naturally in certain samples of plant foodstuffs. I. Results obtained in preliminary feeding trials 597
KURT W. FRANKE. A new toxicant occurring naturally in certain samples of plant foodstuffs. II. The occurrence of the toxicant in the protein fraction .......................................................... 609

No. 6 DECEMBER, 1934

KURT W. FRANKE AND VAN R. POTTER. A new toxicant occurring naturally in certain samples of plant foodstuffs. III. Hemoglobin levels observed in white rats which were fed toxic wheat. Three figures ........... 615

KURT W. FRANKE AND ALVIN L. MOXON. A new toxicant occurring naturally in certain samples of plant foodstuffs. IV. Effect of proteins on yeast fermentation. Three figures ........................................... 625

E. MEAK, C. SMITH, J. FESSLER, H. LAMBERT AND T. HARPER. The effect of prunes and the water extract of prunes on the plasma CO₂ combining capacity and composition of the urine when included in acid, neutral and uncontrolled diets .............................................................. 633

DONALD J. BARNES, FRANCES COPE, HELEN A. HUNSCHER AND ICRE G. MACY. Human milk studies. XVI. Vitamin D potency as influenced by supplementing the diet of the mother during pregnancy and lactation with cow's milk fortified with a concentrate of cod liver oil. (A test on rachitic infants and rats.) Four plates ........................................... 647

PEARL P. SWANSON AND ARTHUR H. SMITH. Inorganic salts in nutrition. IX. Correlation between suppressed growth and the development of polycythemia induced by feeding a ration poor in salts. Two charts ... 659

MAX KRISH AND RUSSELL C. MILLER. The derivation of factors for computing the gaseous exchange and the heat production in the metabolism of casein by the albino rat ..................................................... 669

MARGARET ELIZABETH SMITH. The effect of vitamin A deficiency on the concentration of the blood lipids of albino rats .............................................................. 675

WALTER C. RUSSELL, M. W. TAYLOR AND D. F. CHICHESTER. The relation between the antirachitic factor and the weight of the gall bladder and contents of the chicken ..................................................... 689

ELEANOR D. MARON. The basal metabolism of European women in South India and the effect of change of climate on European and South Indian women. Four figures ..................................................... 695

K. V. ROTTENSTERN AND L. A. MAYNARD. The assimilation of phosphorus from disodium phosphate, c.p., tricalcium phosphate, c.p., bone di-calcium phosphate and cooked bonemeal ........................................... 715

H. J. SLOAN. The seasonal variation in the antirachitic effectiveness of sunshine ........................................................... 731