# CONTENTS

**No. 1 JULY, 1944**

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>RUSSELL HENRY CHITTENDEN.</td>
<td><em>Frontispiece</em></td>
<td>2</td>
</tr>
<tr>
<td>JAMES H. JONES.</td>
<td>The production of hypercalcemia with small amounts of vitamin D</td>
<td>7</td>
</tr>
<tr>
<td>LAWSON FRANCIS MARCY.</td>
<td>The efficiency of utilization of phosphorus by the albino rat</td>
<td>17</td>
</tr>
<tr>
<td>H. H. KIBLER AND SAMUEL BRODY.</td>
<td>Metabolic changes in growing chickens. Two figures</td>
<td>27</td>
</tr>
<tr>
<td>J. M. MclINTIRE, B. S. SCHWEIGERT, E. J. HERBST AND C. A. ELVEHJEM.</td>
<td>Vitamin content of variety meats</td>
<td>35</td>
</tr>
<tr>
<td>D. BREERE JONES AND J. P. DIVINE.</td>
<td>The protein nutritional value of soybean, peanut, and cottonseed flours and their value as supplements to wheat flour</td>
<td>41</td>
</tr>
<tr>
<td>JOHN G. REINHOLD, JOSEPH T. L. NICHOLSON AND K. O'SHEA ELSOM, with the technical assistance of Charlotte Chornock.</td>
<td>The utilization of thiamine in the human subject: The effect of high intake of carbohydrate or of fat. Three figures</td>
<td>51</td>
</tr>
<tr>
<td>CYRUS E. FRENCH, GEORGE H. BEERYMAN, JOHN T. GOOLBY, HAROLD A. HARPER, DAVID M. HARKNESS AND EDWARD J. TRACKER.</td>
<td>The production of vitamins in germinated peas, soybeans, and other beans</td>
<td>63</td>
</tr>
</tbody>
</table>
No. 2 AUGUST, 1944

ERNEST G. RITZMAN AND THORNE M. CARPENTER. The effects of glucose, fructose, and galactose on the respiratory exchange of the goat ..... 71

J. K. LOOSLI, JOHN F. LINGENFELTER, J. WM. THOMAS AND L. A. MAYNARD. The role of dietary fat and linoleic acid in the lactation of the rat ..... 81

LEONARD KAREL AND C. W. CHAPMAN. The vitamin C level of the blood plasma in guinea pigs. One figure 89

FRIEDA L. MAYER AND MILICENT L. HATHAWAY. Further studies on the vitamin C metabolism of preschool children 93

L. E. CLIFCORN. The nutritive value of canned foods. I. Introduction and sampling procedure 101

ANNE PRESSLEY, CLARA RIDDER, M. C. SMITH AND EMILY CALDWELL. The nutritive value of canned foods. II. Ascorbic acid and carotene or vitamin A content 107

MARGARET IVES, J. R. WAGNER, C. A. ELVEJEM AND F. M. STRONG. The nutritive value of canned foods. III. Thiamine and niacin 117

MARY LOUISE THOMPSON, ELIZABETH CUNNINGHAM AND ESMOND E. SNELL. The nutritive value of canned foods. IV. Riboflavin and pantothenic acid 123

MIRIAM K. BRUSH, WINIFRED F. HINMAN AND EVELYN G. HALLIDAY. The nutritive value of canned foods. V. Distribution of water soluble vitamins between solid and liquid portions of canned vegetables and fruits 131

ERRATUM

Journal of Nutrition, v. 28, no. 2, August, 1944

Karel, Leonard and C. W. Chapman

The vitamin C level of the blood plasma in guinea pigs.

Footnote 1; page 92, in the legend below table 2 the word "not" which follows "a probability of" should be eliminated.
CONTENTS

No. 3 SEPTEMBER, 1944

G. J. MANNERING, DEMOSTHENES ORSINI AND C. A. ELVEHJEM. Effect of the composition of the diet on the riboflavin requirement of the rat ........ 141

G. J. MANNERING AND C. A. ELVEHJEM. Food utilization and appetite in riboflavin deficiency. Three figures ......................... 157

VERNON F. MCBROBERTS AND ALBERT G. HOGAN. Adequacy of simplified diets for the pig. One figure ........................................ 165

F. W. HILL, L. C. NORRIS AND G. F. HEUSER. Studies of unidentified vitamins required by the chick ........................................... 175

ERNEST B. FORBES, RAYMOND W. SWIFT, LAWSON F. MARCY AND MARY T. DAVENPORT. Protein intake and heat production ................. 189

JACK E. LEONARDS AND ALFRED H. FREE. Intestinal absorption of galactose in the rat as affected by suboptimal intakes of thiamine. One figure .. 197

EDWARD NIELSEN AND A. BLACK. Biotin and folic acid deficiencies in the mouse. One plate (four figures) ..................................... 203

WILLIAM M. CAHILL, LAWRENCE J. SCHROEDER AND ARTHUR H. SMITH. Digestibility and biological value of soybean protein in whole soybeans, soybean flour, and soybean milk ................................ 209
No. 4 OCTOBER, 1944

J. M. McIntire, B. S. Schweigert and C. A. Elvehjem. The choline and pyridoxine content of meats .................................................. 219

B. H. Ershoff and H. J. Deuel, Jr. Inadequacy of lactose and beta-lactose as dietary carbohydrates for the rat ........................................... 225


James W. Archdeacon and John R. Murlin. The effect of thiamine depletion and restoration of muscular efficiency and endurance. Two figures 241

Anne W. Wertz and C. Edith Weir. The effect of institutional cooking methods on the vitamin content of foods. I. The thiamine content of potatoes .................................................. 255

C. R. Grau and H. J. Almquist. Requirement of tryptophane by the chick. One figure .................................................. 263

Emmett Bennett. The fractionation of phosphorus compounds in certain vegetables .................................................. 269

R. C. Darling, R. E. Johnson, G. C. Pitts, F. C. Consolazio and P. F. Robinson. With the technical assistance of A. Kibler and M. Bartlett. Effects of variations in dietary protein on the physical wellbeing of men doing manual work .................................................. 273

Maxwell M. Wintrobe, Richard H. Follis, Jr., Stewart Humphreys, Harold Stein and Marjorie Lauritsen. Absence of nerve degeneration in chronic thiamine deficiency in pigs. One figure .................................................. 283

Henrik Dam. Ineffectiveness of vitamin E in preventing cholesterol deposition in the aorta .................................................. 289

Henrik Dam. Toxicity of fractions of hog liver fatty acids to chicks fed a vitamin E deficient diet. Two figures .................................................. 297

Mead Johnson and Company ‘‘R-complex’’ award .................................................. 303

Borden award in nutrition .................................................. 304
CONSENTS VU

No. 5 NOVEMBER, 1944

D. W. WOOLLEY. The nutritional significance of inositol .................. 305

THORNE M. CARPENTER. The effects of sugars on the respiratory exchange of cats ......................................................... 315

H. J. ALMQUIST AND C. R. GRAU. The amino acid requirements of the chick. Three figures ......................................................... 325

JAMES H. SHAW, B. S. SCHWEIGERT, J. M. MCINTIRE, C. A. ELVEHJEM AND PAUL H. PHILLIPS. Dental caries in the cotton rat. I. Methods of study and preliminary nutritional experiments. One figure .................. 333

CARL A. KUETHER, IRA R. TELFORD AND JOSEPH H. ROE. The relation of the blood level of ascorbic acid to the tissue concentrations of this vitamin and to the histology of the incisor teeth in the guinea pig. Five figures 347

R. W. SWIFT. The effect of feed on the critical temperature for the albino rat. One figure ......................................................... 359

LEONARD I. PUGSLEY, GORDON WILLS AND W. ALLISTER CRANDALL. The biological assay of vitamin A by means of its influence on the cellular contents of the vagina of rats. One figure .................................. 365

Borden award in nutrition ......................................................... 381

Mead Johnson and Company "B-Complex" award ............................. 382
HAZEL E. MUNSELL, ANA MARÍA CUADROS AND RAMÓN M. SUÁREZ. A study of plasma ascorbic acid values with relation to the type of diet used in Puerto Rico by groups of individuals of widely varied economic status. 383

HAROLD B. STREET. Dietary anemia in the pigeon. Four figures 395

LAN CHEN KUNG. Complex carbohydrates of some Chinese foods 407

ALICE B. KLINE AND MARY S. EHEART. Variation in the ascorbic acid requirements for saturation of nine normal young women 413

CHARLES A. DENTON, C. A. CABELL, HARRY BASTRON AND RUSSELL DAVIS. The effect of spray-drying and the subsequent storage of the dried product on the vitamin A, D, and riboflavin content of eggs. One figure 421

HAZEL C. MURRAY AND ROBERT STRATTON. Vitamin C content of wild greens 427

J. B. WAGNER AND C. A. ELVEHJEM. A study of canine hysteria produced by feeding certain baked dog foods and wheat gluten flour. Four figures 431

LEONARD A. MAYNARD. Editorial Review. The Atwater system of calculating the caloric value of diets 443

Mead Johnson and Company "B-Complex" award 453

Borden award in nutrition 454