

- Soc. Exp. Biol. Med.*, **66**, 474 (1947).
- (12) Blomstrand, R., *Acta Physiol. Scand.*, **32**, 99 (1954).
- (13) Burr, G. O., and Burr, M., *J. Biol. Chem.*, **82**, 345 (1929).
- (14) *Ibid.*, **86**, 587 (1930).
- (15) Christensen, F., Dam, H., and Engel, P. F., *Acta Physiol. Scand.*, **38**, 373 (1957).
- (16) Dam, H., Prange, I., and Søndergaard, E., *Ibid.*, **34**, 141 (1955).
- (17) Funch, J. P., Aaes-Jørgensen, E., and Dam, H., *Brit. J. Nutrition*, **11**, 426 (1957).
- (18) Hansen, A. E., Adam, D. J. D., Boelsche, A. N., Haggard, M. E., Wiese, H. F., Pratt, E. L., and Hunter, V., *Federation Proc.*, **16**, 387 (1957).
- (19) Holman, R. T., *Svensk Kem. Tidskr.*, **68**, 282 (1956).
- (20) Holman, R. T. (in press).
- (21) Holman, R. T., and Aaes-Jørgensen, E., *Proc. Soc. Exp. Biol. Med.*, **93**, 175 (1956).
- (22) Holman, R. T., and Hayes, H., *Anal. Chem.*, **30**, 1422 (1958).
- (23) Johnston, P. V., Johnson, O. C., and Kummerow, F. A., *Proc. Soc. Exp. Biol. Med.*, **96**, 760 (1951).
- (24) Keys, A., Buzina, R., Grande, F., and Anderson, J. T., *Circulation*, **15**, 274 (1957).
- (25) Klenk, E., II Internat. Conf. Biol. Problems of Lipids, Ghent, 1955, Abstracts, p. 24.
- (26) Mead, J. F., and Fillerup, D. L., *J. Biol. Chem.*, **227**, 1009 (1957).
- (27) Mead, J. F., and Howton, D. R., *Ibid.*, **229**, 575 (1957).
- (28) Mead, J. F., and Slaton, W. H., *Ibid.*, **219**, 705 (1956).
- (29) Mead, J. F., Steinberg, G., and Howton, D. R., *Ibid.*, **205**, 683 (1953).
- (30) Nunn, L. C. A., and Smedley-MacLean, I., *Biochem. J.*, **32**, 2178 (1938).
- (31) Peifer, J. J., and Holman, R. T., *Arch. Biochem. Biophys.*, **57**, 520 (1955).
- (32) Ramalingaswami, V., and Sinclair, H. M., *Brit. J. Dermatol.*, **65**, 1 (1953).
- (33) Reiser, R., *J. Nutrition*, **42**, 325 (1950).
- (34) Rieckhoff, I. G., Holman, R. T., and Burr, G. O., *Arch. Biochem.*, **20**, 331 (1949).
- (35) Scott, R. P., and Thomas, W. A., *Proc. Soc. Exp. Biol. Med.*, **96**, 24 (1957).
- (36) Smedley-MacLean, I., "The Metabolism of Fat," Methuen & Co., London, 1943.
- (37) Steinberg, G., Slaton, W. H., Jr., Howton, D. R., and Mead, J. F., *J. Biol. Chem.*, **220**, 257 (1956).
- (38) *Ibid.*, **224**, 841 (1957).
- (39) Tappel, A. L., Boyer, P. O., and Lundberg, W. O., *J. Biol. Chem.*, **199**, 267 (1952).
- (40) Thomasson, H. J., *Intern. Z. Vitaminforsch.*, **25**, 62 (1953).
- (41) Widmer, C., and Holman, R. T., *Arch. Biochem.*, **25**, 1 (1950).
- (42) Widmer, C., and Holman, R. T. (to be published).

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