

# Abetalipoproteinemia and Related Disorders Foundation (ABL + Foundation)

## Template Letter of Medical Necessity for VITAMIN K Coverage

Patients with abetalipoproteinemia and other familial hypobetalipoproteinemia disorders possess gene mutations required to package lipids into particles for absorption and transportation throughout the body. Fat-soluble vitamins, including vitamins E, A and K are also dependent on these pathways for absorption. Consequently, patients develop severe deficiencies of these vitamins and the clinical outcomes can be catastrophic, including debilitating neurologic impairment, blindness and life-threatening bleeding.

Vitamin K is a cofactor in the production of several active clotting factors by the liver that are essential for proper hemostasis. **Vitamin K deficiency** may result in severe and lethal bleeding. Of particular concern, internal bleeding including intracranial hemorrhage, may occur spontaneously or from relatively minor injuries. High-dose (5-35mg/week) oral supplementation with vitamin K preparations is required in patients with abetalipoproteinemia and other hypobetalipoproteinemia disorders to prevent lethal complications (1, 2).

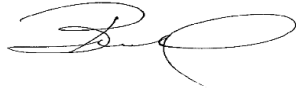
For patients with abetalipoproteinemia and other hypobetalipoproteinemia disorders, vitamin K is not a micronutrient supplement, instead an essential therapeutic treatment.

As the ABLRDF Medical Advisory Panel, our members include established researchers and medical professionals who care for patients with these disorders. We attest that a high dose of vitamin K taken lifelong is medically necessary to prevent devastating complications in patients with abetalipoproteinemia and other hypobetalipoproteinemia disorders.

Sincerely,



Dennis D. Black, MD, AGAF  
J. D. Buckman Professor of Pediatrics  
Professor of Physiology  
Vice Chair for Research  
University of Tennessee Health Science Center  
Director, Children's Foundation Research Institute  
Vice President for Research, Le Bonheur Children's Hospital  
Room 471R, Children's Foundation Research Tower  
50 North Dunlap  
Memphis, TN 38103  
Phone: 901-287-5355  
FAX: 901-287-4478  
E-mail: dblack@uthsc.edu



**Cindy Bredefeld, DO, FACE**

Attending Physician, Division of Endocrinology, Diabetes & Metabolism  
Diplomate, American Board of Clinical Lipidology  
Director, Diabetes Clinical Trials  
Assistant Professor of Clinical Medicine, NYU Long Island School of Medicine  
[cindy.bredefeld@nyulangone.org](mailto:cindy.bredefeld@nyulangone.org)



Mitchell F. Brin, MD, FAAN, FANA, FAHS  
Clinical Professor of Neurology  
University of California, Irvine  
[mbrin@uci.edu](mailto:mbrin@uci.edu)



Richard J. Deckelbaum, MD, CM, FRCP(C)  
Robert R. Williams Professor of Nutrition  
Professor of Pediatrics, Professor of Epidemiology  
Director, Institute of Human Nutrition  
Vagelos College of Physicians and Surgeons  
Columbia University Irving Medical Center  
New York, NY



M. Mahmood Hussain  
President  
Abetalipoproteinemia & Related Disorders Foundation  
Professor and Endowed Chair  
Department of Foundations of Medicine

NYU Long Island School of Medicine  
Director, Diabetes and Obesity Research Center  
NYU Winthrop Research Institute  
NYU Winthrop Hospital  
101 Mineola Blvd., Mineola NY

1. Zamel R, Khan R, Pollex RL, and Hegele RA. Abetalipoproteinemia: two case reports and literature review. *Orphanet J Rare Dis.* 2008;3:19.
2. Bredefeld C, Hussain MM, Aversa M, Black DD, Brin MF, Burnett JR, et al. Guidance for the diagnosis and treatment of hypolipidemia disorders. *J Clin Lipidol.* 2022.