US005723446A

United States Patent [19]

Gray et al.

[11] Patent Number: 5,723,446

[45] Date of Patent: *Mar. 3, 1998

[54] **ENTERAL FORMULATION DESIGNED FOR OPTIMIZED NUTRIENT ABSORPTION AND WOUND HEALING**

[75] Inventors: **Debora Gray**, Evanston; **Nancy S. Schmelkin**, Buffalo Grove; **John Alexander**, Kenilworth; **David A. Mark**, Oak Park; **Diana Twyman**, Chicago, all of Ill.

[73] Assignee: **Nestec Ltd.**, Vevey, Switzerland

[*] Notice: The term of this patent shall not extend beyond the expiration date of Pat. No. 5,714,472.

[21] Appl. No.: **680,703**

[22] Filed: **Jul. 17, 1996**

Related U.S. Application Data

[63] Continuation of Ser. No. 172,857, Dec. 23, 1993, abandoned.

[51] **Int. Cl.**[6] **A61K 38/00**; A23J 1/00; A23G 3/00

[52] **U.S. Cl.** **514/21**; 514/2; 514/23; 514/54; 514/538; 514/560; 514/94.3; 426/72; 426/607; 426/656; 426/658; 424/DIG. 13

[58] **Field of Search** 514/21.2, 23.54, 514/558, 560, 943; 426/72, 607, 656, 658; 424/DIG. 13

[56] **References Cited**

U.S. PATENT DOCUMENTS

4,670,268	6/1987	Mahmoud	426/72
4,753,963	6/1988	Jaudacek et al.	514/552
4,920,098	4/1990	Cotter et al.	514/2
4,931,300	6/1990	Monte	426/335
5,053,387	10/1991	Alexander	514/2
5,055,446	10/1991	Alexander et al.	514/2
5,156,875	10/1992	Monte	426/532
5,166,189	11/1992	Trunbo et al.	514/2
5,221,668	6/1993	Henningfield et al.	514/23
5,223,285	6/1993	De Michele et al.	426/72
5,260,279	11/1993	Greenberg	514/21
5,438,042	8/1995	Schmidl et al.	514/21

FOREIGN PATENT DOCUMENTS

0189160 7/1986 European Pat. Off. .

OTHER PUBLICATIONS

Ross Laboratories Brochure, *Specialized Elemental Nutrition With Glutamine—The Role of ALITRAQ™ Specialized Elemental Nutrition With Glutamine* (1991).

Ross Laboratories Brochure, *Introducing ALITRAQ™ Specialized Elemental Nutrition With Glutamine* (1992).

Ross Laboratories Brochure, *Introducing PERATIVE™* (1992).

Sandoz Nutrition Brochure, *IMPACT®* (1993).

Sandoz Nutrition Brochure, *INTRODUCING IMPACT®* (1989).

Sandoz Nutrition Brochure, *IMPACT®* (1991).

Mead Johnson, *Enteral Nutritionals Product Handbook*, bearing Nos. A2688–2693.

Mead Johnson Enteral Nutritionals Brochure bearing No. B00083.

Mead Johnson Brochure bearing Nos. B00322–B00323.

Mead Johnson, *Metabolic and Nutrition Support for Trauma and Burn Patients A Symposium*, Abstracts, pp. 1–13 (1982).

Nutritional Care of Metabolically Stressed Patients, Proceedings from the Metabolic and Nutrition Support for Trauma and Burn Patients Symposium, White Sulphur Springs, West Virginia, pp. 1–77 (1983).

Principles of Nutritional Support: Proceedings From the Metabolic and Nutrition Support for Trauma and Burn Patients Symposium, White Sulphur Springs, West Virginia, pp. 1–25 (1982).

Symposium Highlights Metabolic and Nutrition Support for Trauma and Burn Patients, White Sulphur Springs, West Virginia, pp. 1–26 (1982).

TraumaCal, Feeding the Hypermetabolic Patient, Clinical Experience, A Symposium, pp. 1–74 (1983).

TraumaCal Product Cards bearing Nos. B000001–B000010.

TraumaCal Documents bearing Nos. B00088–B00105.

TraumaCal Document bearing No. B00181.

TraumaCal Document bearing Nos. B00261–B00265.

TraumaCal Document bearing No. B00293.

TraumaCal Document bearing Nos. B00384–B00385.

TraumaCal Label bearing No. B00441.

TraumaCal Brochure bearing Nos. B00567–B00570.

Cerra et al, *Surgery*, vol. 98, No. 4, pp. 632–639, Oct. 1985.

Wilmore et al, Surgery, vol. 104, No. 5, pp. 917–923, Nov. 1988.

Alexander, Abstract (Medline—Search Report) (Arch. Surg., vol. 128, No. 11, pp. 1242–1245, Nov. 1993).

Primary Examiner—Cecilia J. Tsang
Assistant Examiner—Abdel A. Mohamed
Attorney, Agent, or Firm—Hill, Steadman & Simpson

[57] **ABSTRACT**

The present invention provides an enteral nutritional formulation that meets the nutrient requirements of intensive care patients who may have compromised absorption capacity. The present invention meets the unique nutrient needs of the patient that are generated due to tissue repair and healing requirements. To this end, in an embodiment the present invention provides a method for treating and/or providing nutritional support to intensive care patients comprising the steps of administering a therapeutically effective amount of a composition comprising: a protein source; a carbohydrate source; and a lipid source including a source of medium chain triglycerides, a source of omega-3 fatty acids, and a source of omega-6 fatty acids.

26 Claims, No Drawings