

[54] AMINO ACID PREPARATION AND THERAPY FOR TREATMENT OF STRESS AND INJURY

[76] Inventor: George L. Blackburn, 100 Memorial Dr., Cambridge, Mass. 02142

[21] Appl. No.: 373,125

[22] Filed: Apr. 29, 1982

Related U.S. Application Data

[63] Continuation of Ser. No. 174,189, Jul. 31, 1980, abandoned.

[51] Int. Cl.³ A61K 31/195

[52] U.S. Cl. 424/319

[58] Field of Search 424/319

[56] References Cited

U.S. PATENT DOCUMENTS

| | | | |
|-----------|---------|--------------------|---------|
| 3,832,465 | 8/1974 | Ghadini | 424/319 |
| 3,920,838 | 11/1975 | Flott et al. | 424/319 |
| 3,950,529 | 4/1976 | Fisher et al. | 424/319 |
| 4,209,531 | 6/1980 | Berry | 424/319 |
| 4,252,822 | 2/1981 | Berry | 424/319 |

FOREIGN PATENT DOCUMENTS

2440194 10/1979 France .

OTHER PUBLICATIONS

Surgery, Aug. 1976, vol. 80, No. 2, pp. 192-200.
Surgery, Aug. 1979, vol. 86, No. 2, pp. 307-315.

Chang et al., The Journal of Biol. Chem. 253010, 3696-3701, (5-78).

Hedden et al., Soc. for Exp. Biology & Medicine 410-415, (1979).

Berrotti et al., Surgical Forum, 27, 7-10, (1976).

Sakamoto et al., Surgical Forum, 30, 67-69, (1979).

Yoshimura et al., The Journ., of Parenteral & Ent. Nutrition, pp. 525-531.

The Health Quarterly (1979), p. 54.

Primary Examiner—Stanley J. Friedman

Attorney, Agent, or Firm—Donald Brown; Robert Goldberg

[57] ABSTRACT

Disclosed is a novel nutritional branched chain amino acid composition and its use for treatment of a patients suffering stress or injury, especially useful for parenteral or enteral alimentation of a patient suffering total or partial dysfunction or disuse of the gastrointestinal tract. The novel composition promotes and even optimizes patient wound healing, immune competence, host defense, and/or survival. The amino acids comprise from about 70 to 100% valine, isoleucine, and leucine, collectively, in a ratio of A:B:C, respectively, where A, B and C each independently has value from about 1 to 2. The novel composition is preferably used in the form of a parenteral infusion solution of from about 2 to 6%, most preferably 4% concentration.

5 Claims, 13 Drawing Figures