



US005270297A

United States Patent [19]

[11] Patent Number: **5,270,297**

Paul et al.

[45] Date of Patent: **Dec. 14, 1993**

[54] **ENDURANCE AND REHYDRATION COMPOSITION**

4,900,566 2/1990 Howard 426/810
4,961,937 10/1990 Rudel 426/554

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[57] **ABSTRACT**

[21] Appl. No.: **919,355**

A composition which provides for rehydration and endurance in persons having symptoms of physiological stress comprises a blend of simple sugars and more complex carbohydrates and, at least magnesium, in the form of an amino acid chelate. Preferably the carbohydrate source is a blend of crystalline fructose and glucose polymers in a weight ratio of between about 4:1 and 1:4. Other ingredients, including anabolic nutrients, vitamins, electrolyte ions (e.g. potassium, sodium, chloride), and other minerals, such as calcium amino acid chelate, may be added as desired to provide an optimal rehydration and endurance formulation. When administered, the carbohydrate blend and amino acid chelates facilitate rehydration and the delivery of nutrients and calorie energy to appropriate sites within the body for efficient utilization.

[22] Filed: **Jul. 23, 1992**

[51] Int. Cl.⁵ **A23L 3/08; A61K 31/70**

[52] U.S. Cl. **514/23; 426/810**

[58] Field of Search **514/23; 426/810**

[56] **References Cited**

U.S. PATENT DOCUMENTS

456,903	7/1891	Ordway	426/810
3,821,432	6/1974	Mohammed	426/810
4,599,152	7/1986	Ashmead	204/72
4,725,427	2/1988	Ashmead et al.	426/591
4,759,940	7/1988	Cattaneo et al.	426/810
4,774,089	9/1988	Ashmead	514/499
4,830,716	5/1989	Ashmead	204/72
4,863,898	9/1989	Ashmead et al.	514/893

25 Claims, No Drawings