



US005641531A

United States Patent [19]

[11] Patent Number: **5,641,531**

Liebrecht et al.

[45] Date of Patent: **Jun. 24, 1997**

[54] **NUTRITIONAL LIQUID SUPPLEMENT BEVERAGE AND METHOD OF MAKING SAME**

4,309,417	1/1982	Staples	426/583
4,486,413	12/1984	Wiesenberger et al.	426/656
4,992,282	2/1991	Mehansho et al.	426/772
5,106,836	4/1992	Clemens et al.	426/656
5,322,703	6/1994	Selinger et al.	426/583

[75] Inventors: **Jeffery Wayne Liebrecht**, Columbus;
Terrence Bruce Mazer, Reynoldsburg;
Michael Allen Chandler, Gahanna;
Gerald Edward Schopinsky,
Westerville; **Normanella Torres**
Dewille, Upper Arlington, all of Ohio

FOREIGN PATENT DOCUMENTS

0486425 5/1992 European Pat. Off. A23L 1/29

[73] Assignee: **Abbott Laboratories**, Abbott Park, Ill.

Primary Examiner—Helen Pratt
Attorney, Agent, or Firm—D. O. Nickey; T. D. Brainard

[21] Appl. No.: **534,906**

[57] ABSTRACT

[22] Filed: **Sep. 28, 1995**

A protein containing nutritional supplement that contains from 1 to 10% by weight of whey protein isolate, at least one source of carbohydrate, vitamins, trace minerals and ultra trace minerals and ultra trace minerals. The pH of the liquid nutritional supplement is from about 2.8 to about 3.3 and is essentially devoid of added macro-nutrients and fat. A supplement which is clear and low in viscosity, is produced by preparing (1) an acidified aqueous solution of whey protein isolate having a pH of about 2.8 to about 3.3 and (2) an aqueous solution of carbohydrate; and thereafter combining the two solutions.

[51] **Int. Cl.⁶** **A23C 21/10**

[52] **U.S. Cl.** **426/583; 426/72; 426/590;**
426/656; 426/658

[58] **Field of Search** 426/583, 656,
426/590, 658, 72

[56] **References Cited**

U.S. PATENT DOCUMENTS

3,922,375 11/1975 Dalan et al. 426/590

15 Claims, No Drawings