

Title (en)

BETA-HYDROXYBUTYRIC ACID COMPOSITIONS AND METHODS FOR ORAL DELIVERY OF KETONE BODIES

Title (de)

BETA-HYDROXYBUTTERSÄURE-ZUSAMMENSETZUNGEN UND VERFAHREN ZUR ORALEN VERABREICHUNG VON KETONKÖRPERN

Title (fr)

COMPOSITIONS D'ACIDE BÊTA-HYDROXYBUTYRIQUE ET PROCÉDÉS D'ADMINISTRATION ORALE DE CORPS CÉTONIQUES

Publication

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Application

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Abstract (en)

[origin: WO2022040644A2] Beta-hydroxybutyric acid compositions for oral delivery are substantially free of beta-hydroxybutyrate salts and are effective in rapidly raising blood ketone levels without causing acute acidosis or gastrointestinal (GI) distress when consumed in sufficiently dilute form and/or as a gel or suspension. By excluding beta-hydroxybutyrate salts (e.g., less than 1% by weight) containing alkali or alkaline earth metal ions, beta-hydroxybutyric acid solutions, gels, or suspensions can deliver exogenous ketone bodies without significantly altering electrolyte balance. Although aqueous beta-hydroxybutyric acid solutions are moderately acidic with a pH of about 3.5 to 4, when diluted with sufficient water, the water acts as a pseudo buffering agent that offsets otherwise harsh acidic effects when consumed orally. Gels and suspensions can also ameliorate acidic effects by partially encapsulating the beta-hydroxybutyric acid. Beta-hydroxybutyric acid can be enriched with the R- or the S-enantiomer, a racemic mixture, pure R-beta-hydroxybutyric acid, or pure S-beta-hydroxybutyric acid.

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