



January 27, 1999

WARNING LETTER AND REQUEST FOR RECALL

HAND DELIVERED

Mr. William H. Dailey, Esq.
Attorney for RenewTrient Research
16161 Ventura Boulevard, Suite 748
Encino, California 91436

Dear Mr. Dailey:

This letter concerns the product RenewTrient distributed by your client, RenewTrient Research, Cocoa Beach, Florida. The product label declares as an ingredient 2(3H)-Furanone di-hydro, also known as gamma-butyrolactone (GBL).

Representatives of the Food and Drug Administration (FDA), Florida District Office spoke with you on January 20, 1999, to express FDA's concerns about the safety and legality of your client's product and to determine your client's intentions with respect to the continued marketing of the product. By letter dated January 21, 1999, you advised our Florida District Office that your client is not willing to cease distribution of RenewTrient and recall product already in the marketplace.

As discussed below, FDA has serious public health concerns about products such as your client's that contain GBL as an ingredient. Because of these concerns, FDA has made available a talk paper to alert the public. FDA is prepared to pursue appropriate legal sanctions under the Federal Food, Drug, and Cosmetic Act (Act), including seizure, injunction, and criminal prosecution, as necessary to protect the public health.

GBL is a potent pharmacological agent that is closely related to, and rapidly metabolizes into, the drug substance gamma-hydroxybutyrate (GHB). GHB is a drug substance that is legally available in the United States only as an investigational new drug for specified uses. There is considerable information available concerning the known physiological effects and toxicity of GHB. Its primary pharmacological effect is that of a central nervous system depressant. Toxicity is characterized by coma, depressed respiratory rate, low body temperature, slow heart rate, and vomiting.

FDA has received at least 55 reports of adverse effects associated with the use of a number of different products, including RenewTrient, that contain GBL. Many of these reports indicate significant effects on mental status. In 19 cases, the consumers

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were reported unconscious or comatose, and a number of these persons required intubation for assisted breathing. Other reported adverse events include seizures, vomiting, muscle spasms, respiratory depression (decreased breathing rate), and bradycardia (slow heart rate). One death of a GBL consumer was reported as being related to "idiopathic cardiac arrhythmia" and drug-induced sleep. The mean age of individuals reporting an adverse event was 29 years (range, 11 - 71 years), with at least five reported adverse events occurring in individuals under 18 years of age. The adverse events thus far reported for GBL-containing products are consistent with the known toxicity of GHB as reported in scientific literature.

GBL, like GHB, is a powerful hypnotic substance known to produce significant and potentially dangerous sedating effects. Therefore, FDA considers GBL-containing products, such as RenewTrient, to be drugs as described in section 201(g)(1) of the Act. Such products are also new drugs, as defined in section 201(p) of the Act, which require FDA approval under section 505(a) of the Act prior to marketing. The marketing of new drugs without an approved new drug application is prohibited under section 301(d) of the Act.

RenewTrient is also misbranded under section 502 of the Act. Among other reasons, the label and labeling of RenewTrient do not bear adequate directions for use under section 502(f). The introduction or delivery for introduction into interstate commerce of misbranded drugs is prohibited under section 301(a) of the Act. The misbranding of a drug while held for sale after shipment in interstate commerce is prohibited under section 301(k) of the Act.

The agency recognizes that RenewTrient is represented as a dietary supplement. The product does not meet the definition of a dietary supplement under section 201(ff) of the Act, however, because it is not marketed and used to augment or otherwise supplement the diet. GBL-containing products like RenewTrient are being marketed and used to achieve the powerful pharmacologic, hypnotic, and sedative effects associated with GHB. Such products are not dietary supplements as described in section 201(ff)(1) of the Act.

Even if RenewTrient could meet the definition of a dietary supplement, it is also a drug, and can be regulated as such. Moreover, even as a dietary supplement, it would violate other provisions of the Act. For example, the data collected thus far by the agency show that RenewTrient presents a significant and unreasonable risk to consumers under section 402(f)(1)(A) of the Act.

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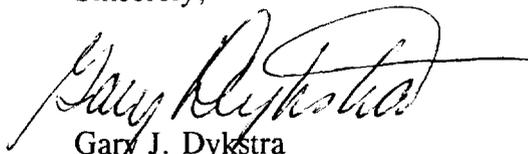
We request that your client take prompt action to correct these and any other violations associated with RenewTrient and any other GBL-containing products marketed by RenewTrient Research.

FDA is also requesting that your client immediately cease manufacturing and distributing RenewTrient and that your client initiate a recall to the consumer level. We recommend that your client follow FDA's "Enforcement Policy-Recalls (Including Product Corrections) -- Guidelines on Policy, Procedures and Industry Responsibilities" issued June 16, 1978, in conducting your recall, copy enclosed. Representatives of our Florida District Office will be available to provide assistance in the development of a recall communication as well as the strategy for retrieving and disposing of the recalled product. Our judgment concerning the effectiveness of your client's recall will largely be based upon your client's implementation of the recall guidelines.

Failure to immediately cease manufacture and distribution of the product and conduct an immediate and effective recall could result in enforcement action by FDA without further notice. The Act provides for seizure of violative products, injunction against the manufacturers and distributors of violative products, as well as criminal sanctions against persons responsible for causing violations of the Act.

We request that your client advise us in writing, within **twenty-four hours** of receipt of this letter, as to the specific steps that have been or will be taken to correct these violations, including an explanation of each step taken to assure that similar violations do not recur and the steps taken to recall the product. Your reply should be directed to Douglas Tolen, Director, Florida District, Food and Drug Administration, 555 Winderly Place, Suite 200, Maitland, Florida 32751. You may submit your initial response via facsimile to (407) 475-4768.

Sincerely,

A handwritten signature in black ink, appearing to read "Gary J. Dykstra", with a long horizontal flourish extending to the right.

Gary J. Dykstra
Acting Associate Commissioner
for Regulatory Affairs

Enclosure: Recall procedures