

[PUBLISH]

IN THE UNITED STATES COURT OF APPEALS

FOR THE ELEVENTH CIRCUIT

\_\_\_\_\_  
No. 01-11320

\_\_\_\_\_  
D.C. Docket No. 00-00068-CR-RV

FILED  
U.S. COURT OF APPEALS  
ELEVENTH CIRCUIT  
MAY 02, 2002  
THOMAS K. KAHN  
CLERK

UNITED STATES OF AMERICA,

Plaintiff-Appellee,

versus

MARK FISHER,

Defendant-Appellant.

\_\_\_\_\_  
No. 01-11395

\_\_\_\_\_  
D. C. Docket No. 00-00068-CR-003

UNITED STATES OF AMERICA,

Plaintiff-Appellee,

versus

DEVON SUTTON, a.k.a. Devon  
Daniel Sutton,

Defendant-Appellant.

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No. 01-13039

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D. C. Docket No. 00-00068-CR-001

UNITED STATES OF AMERICA,

Plaintiff-Appellee,

versus

ARTHUR ROBERTSON,

Defendant-Appellant.

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Appeals from the United States District Court  
Southern District of Alabama

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**(May 2, 2002)**

Before ANDERSON, Chief Judge, DUBINA, Circuit Judge, and MILLS\*, District Judge.

MILLS, District Judge:

FACTS

On October 2, 2000, Appellants entered conditional pleas<sup>1</sup> to the charge of misprision of a felony:

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\*Honorable Richard Mills, U.S. District Judge for the Central District of Illinois, sitting by designation.

<sup>1</sup>The pleas were entered on the condition that Appellants be allowed to appeal the district court's denial of their joint Motion to Dismiss the Indictment.

Whoever, having knowledge of the actual commission of a felony cognizable by a court of the United States, conceals and does not as soon as possible make known the same to some judge or other person in civil or military authority under the United States, shall be fined under this title or imprisoned not more than three years, or both.

18 U.S.C. § 4. The Government charged Appellants with knowledge of the commission of a felony involving the substance gamma-butyrolactone (“GBL”).

Although GBL is not a controlled substance, the Government alleged that it was a controlled substance analogue of a Schedule I controlled substance – gamma-hydroxybutyrate acid (“GHB”). GHB is more commonly known as the “date-rape drug.” According to the Drug Enforcement Administration (“DEA”), GHB can produce drowsiness, dizziness, nausea, visual disturbances, unconsciousness, seizures, severe respiratory depression and coma.<sup>2</sup> Addition of Gamma-Hydroxybutyric Acid to Schedule I, 65 Fed. Reg. 13235-13238 (March 13, 2000) (to be codified at 21 C.F.R. pts. 1301 and 1308).

Appellant Mark Fisher owns and operates Gold’s Gym in Mobile, Alabama

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<sup>2</sup>The DEA’s Final Rule, published in the Federal Register, contained additional information about the dangerous effects associated with GHB.

Overdose usually requires emergency medical treatment, including intensive care for respiratory depression and coma. Several Poison Control Centers have characterized and reported cases of GHB-dependence and withdrawal to the DEA. To date, DEA has documented over 5,700 overdoses and law enforcement encounters with GHB in 45 states. DEA has also documented 65 GHB-related deaths.

Addition of Gamma-Hydroxybutyric Acid to Schedule I, 65 Fed. Reg. 13235-13238 (March 13, 2000) (to be codified at 21 C.F.R. pts. 1301 and 1308).

and Pensacola, Florida. Gold's Gym provides facilities for exercising, bodybuilding, and weight training and sells a number of commercial products that are popular with patrons of physical fitness centers. One of the products sold was called "Verve."<sup>3</sup> Verve, a common industrial chemical, contained GBL which metabolized into GHB when ingested into the human body. GHB is believed by some to assist the release of growth hormones which in turn stimulate muscle growth. In addition, a human pharmaceutical formulation of GHB is being developed as a treatment for catalepsy, a condition associated with narcolepsy, a serious and debilitating disease .<sup>4</sup> Pub. Law No. 106-172, § 2(5) (2000).

Appellant Fisher filed a Motion to Dismiss the Indictment arguing that the application of Public Law 106-172 through the Analogue Act was unconstitutionally vague, arbitrary, capricious, and denied Appellant due process.<sup>5</sup> Specifically, Appellants argued that Public Law 106-172 and subsequently filed DEA rules did not put Appellants on notice that GBL was a controlled substance analogue. The district court denied Appellants' Motion holding:

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<sup>3</sup>Appellant Devon Sutton purchased Verve from Gold's Gym and sold it to others, including a manager and bartender at a bar in Mobile, Alabama. Appellant Arthur Robertson sold Verve while he was employed as a manager at Gold's Gym.

<sup>4</sup> Catalepsy is defined as a sudden loss of muscle power following a strong emotional stimulus. MERRIAM WEBSTER'S COLLEGIATE DICTIONARY 179 (10th ed. 1996).

<sup>5</sup>All Appellants joined this motion at its hearing.

[T]he court is of the opinion that the GBL is a controlled substance analogue of GHB, a Schedule I controlled substance, and that the notice to defendants was constitutionally adequate, for the reasons set forth in the government's written and oral responses. In making this ruling, the court specifically notes that no party contests the constitutionality of Public Law 106-172 (the Hillory J. Farias and Samantha Reid Date-Rape Drug Prohibition Act of 2000) and that no party denies that notice of the illegality of GHB was published in the Federal Register on March 13, 2000. Most importantly, it is undisputed that although GBL has no pharmacological effects on the human body in and of itself, it is quickly converted to GHB once it is ingested in the human body. Thus it readily appears that the only reason a person would ingest GBL would be to obtain the pharmacological effects that GHB produces on the human body. Arguments to the contrary belie the medical evidence and common sense.

United States v. Fisher, No. 00-00068 (D. Ala. Oct. 2, 2000) (order denying motion to dismiss indictment).

Appellants raise two issues. (1) Whether the Analogue Act 21 U.S.C. § 813, as applied to GBL, is unconstitutionally vague in that it provides inadequate notice of illegal behavior and allows arbitrary and discriminatory law enforcement? And (2) whether GBL is a controlled substance analogue of GHB?<sup>6</sup> Courts that

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<sup>6</sup>Appellant Sutton raises the additional issue that he did not have adequate constitutional notice because the March 13, 2000 DEA Rule appeared in the Federal Register only one day before his arrest. Looking at the docket sheet submitted with Appellant's appeal, it appears a bench warrant was issued for Appellant's arrest on April 18, 2000, more than a month after the Rule appeared in the Federal Register. Whether it was one day or thirty-six, it is well settled that when regulations are published in the Federal Register they give legal notice of their contents to all who may be affected thereby. Federal Crop Insurance Corp. v. Merrill, 332 U.S. 380 (1947); 44 U.S.C. § 1507.

A document required by section 1505(a) of this title to be published in the Federal Register is not valid as against a person who has not had actual knowledge of it until the duplicate originals or certified copies of the document have been filed with the Office of the Federal Register and a copy made available for public inspection as provided by

have addressed the constitutionality of the Analogue Act have evaluated it as it applies to a specific substance. Therefore, these issues are wrapped up together into the single issue of whether Appellants had constitutional notice that GBL was a controlled substance analogue of GHB?

The district court's decision that 21 U.S.C § 813 is not unconstitutionally vague is reviewed under a de novo standard. United States v. Carlson, 87 F.3d 440, 443 (11th Cir. 1996). The court's factual finding that GBL is a controlled substance analogue of GHB is reviewed for clear error. United States v. Reid, 69 F.3d 1109, 1113 (11th Cir. 1995).

#### ANALYSIS

“As generally stated, the void-for-vagueness doctrine requires that a penal statute define the criminal offense with sufficient definiteness that ordinary people can understand what conduct is prohibited and in a manner that does not encourage arbitrary and discriminatory enforcement.” Kolender v. Lawson, 461 U.S. 352,

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section 1503 of this title. Unless otherwise specifically provided by statute, filing of a document, required or authorized to be published by section 1505 of this title, except in cases where notice by publication is insufficient in law, is sufficient to give notice of the contents of the documents to a person subject to or affected by it.

44 U.S.C. § 1507. In the past, parties have argued that it is unreasonable to expect ordinary people to obtain copies of the Federal Register. While this argument has some appeal, the U.S. Supreme Court has indicated that notices published in the Federal Register are adequate. Lyng v. Payne, 476 U.S. 926, 941 (1986). Lyng indicated that the Supreme Court believes the Federal Register is an appropriate vehicle for communicating action by federal agencies. Hopp v. United States, 661 F.Supp. 800, 801-802 (S.D. Ia. 1987).

357 (1983). “Although the doctrine focuses both on actual notice to citizens and arbitrary enforcement, we have recognized recently that the more important aspect of vagueness doctrine ‘is not actual notice, but the other principal element of the doctrine--the requirement that a legislature establish minimal guidelines to govern law enforcement.’” Kolender, 461 U.S. at 357 quoting Smith v. Goguen, 415 U.S. 566, 574 (1974). Statutes without identifiable standards “allow[] policemen, prosecutors, and juries to pursue their personal predilections.” Smith, 415 U.S. at 575. Except where First Amendment rights are involved, vagueness challenges must be evaluated in the light of the facts of the case at hand. See United States v. Mazurie, 419 U.S. 544, 550 (1975).

### The Analogue Act<sup>7</sup>

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<sup>7</sup> “A controlled substance analogue shall, to the extent intended for human consumption, be treated, for the purpose of any Federal Law as a controlled substance in schedule I.” 21 U.S.C. § 813.

Except as provided in subparagraph (C), the term “controlled substance analogue” means a substance—

- (i) the chemical structure of which is substantially similar to the chemical structure of a controlled substance in schedule I or II;
- (ii) which has a stimulant, depressant, or hallucinogenic effect on the central nervous system that is substantially similar to or greater than the stimulant, depressant, or hallucinogenic effect on the central nervous system of a controlled substance in schedule I or II; or
- (iii) with respect to a particular person, which such person represents or intends to have a stimulant depressant, or hallucinogenic effect on the central nervous system that is substantially similar to or greater than the stimulant, depressant, or hallucinogenic effect on the central nervous system of a controlled substance in schedule I or II.

21 U.S.C. § 802(32)(A) (2000).

The Fifth Circuit has addressed whether the Analogue Act is unconstitutionally vague. See United States v. Granberry, 916 F.2d 1008 (5th Cir. 1990). The court held:

[D]espite Granberry’s contention to the contrary, the term “controlled substance analogue” in § 813 is clearly and specifically defined, in terms readily comprehensible to the ordinary reader. It provides adequate notice of what conduct is prohibited. The statute makes plain that drugs which have been chemically designed to be similar to controlled substances, but which are not themselves listed on the controlled substance schedules, will nonetheless be considered as schedule I substances if (1) they are substantially similar chemically to drugs that are on those schedules; (2) if they produce similar effects on the central nervous system as drugs that are on those schedules; or (3) are intended or represented to produce effects similar to those produced by drugs that are on those schedules. There is nothing vague about the statute.

Granberry, 916 F.2d at 1010.

The Eleventh Circuit has cited Granberry with approval. United States v. Carlson, 87 F.3d 440, 443 (11th Cir. 1996). In Carlson, defendants argued that the definition of a controlled substance analogue was unconstitutionally vague as applied to 3,4-Methylenedioxymethamphetamine (MDMA). Specifically, defendants argued that the phrase “substantially similar” was not adequately defined and that they did not receive fair warning that their conduct was illegal. Carlson, 87 F.3d at 443. The court rejected defendants’ argument and held that the Analogue Act was not unconstitutionally vague. Id. at 444.

A district court in Colorado reached a contrary result in a case involving

alphaethyltryptamine (“AET”). In United States v. Forbes, 806 F.Supp. 232 (1992), defendants were charged with distribution of AET in violation of 21 U.S.C. §§ 813, 841, 846. The indictment alleged that AET was a controlled substance analogue because it had a substantially similar chemical structure to dimethyltryptamine (“DMT”) and diethyltryptamine (“DET”), both schedule I controlled substances. Forbes, 806 F.Supp. at 233. The court dismissed the indictment because there was no scientific consensus that AET had a chemical structure that was substantially similar to DMT or DET. Id. at 239. Therefore, the district court held that the Analogue Act, as applied to AET, was unconstitutionally vague. Id.

Appellants here argue that the Analogue Act was unconstitutionally vague as applied to GBL because Public Law 106-172 and subsequently issued DEA rules did not state any criteria by which a layperson could determine that GBL was a controlled substance analogue. They assert that the statute’s lack of specificity failed to give them constitutional notice that GBL was an illegal substance and consequently, the public is subjected to arbitrary and/or discriminatory law enforcement.

#### Public Law 106-172 and DEA Rules

In Public Law 106-172, Congress found that the abuse of GHB was “an

imminent hazard to the public safety.” Pub. Law No. 106-172, § 3(a)(1) (2000).

Accordingly, Congress ordered the Attorney General to issue a final order placing the drug in Schedule I. On March 13, 2000, the Drug Enforcement Administration, under authority delegated by the Attorney General, issued its Final Rule naming GHB a Schedule I Controlled Substance. Addition of Gamma-Hydroxybutyric Acid to Schedule I, 65 Fed. Reg. 13235-13238 (March 13, 2000) (to be codified at 21 C.F.R. pts. 1301 and 1308).<sup>8</sup>

Although Congress did not designate GBL as a controlled substance, it recognized the dangerous proclivities of the chemical. In Section 2 of Public Law 106-172, Congress made the following finding: “If taken for human consumption, common industrial chemicals such as gamma butyrolactone [GBL] and 1,4-butanediol are swiftly converted by the body into GHB. Illicit use of these and other GHB analogues and precursor chemicals is a significant and growing law enforcement problem.” Pub. Law No. 106-172, § 2 (4) (2000).

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<sup>8</sup>The DEA’s Final Rule contained the following statement regarding GBL: The DEA has received reports that GBL, the solvent precursor for GHB, is being abused due to its rapid conversion to GHB soon after ingestion. On January 21, 1999, the FDA issued a request for a voluntary recall of all GBL-containing products sold in health food stores and warned the public of its danger to the public health. FDA has also declared 1,4-butanediol, a chemical related to both GHB and GBL, a Class I Health Hazard. On May 11, 1999, the FDA issued another warning on 1,4 butanediol, GHB and GBL stating that these substances pose a significant health hazard. Public Law 106-172 also placed certain controls on GBL. These will be the subject of a separate Federal Register Notice. Addition of Gamma-Hydroxybutyric Acid to Schedule I, 65 Fed. Reg. 13235-13238 (March 13, 2000) (to be codified at 21 C.F.R. pts. 1301 and 1308).

In addition, Congress added GBL to the “List I Chemicals.” Pub. Law No. 106-172, § 3(b)(2)(c) (2000); 21 U.S.C. § 802(34)(X). List I chemicals are chemicals that are used in manufacturing controlled substances. 21 U.S.C. § 802(34). Finally, Congress added a section to the definition of a controlled substance analogue. Pub. Law. No. 106-172, § 5(a); 21 U.S.C. § 802(32)(B). The new section states, “The designation of gamma butyrolactone or any other chemical as a listed chemical pursuant to paragraph (34) or (35) does not preclude a finding pursuant to subparagraph (A) of this paragraph that the chemical is a controlled substance analogue.” 21 U.S.C. § 802(32)(B).

Appellants argue that because the DEA’s March 13, 2000 Final Rule stated that the controls placed on GBL by Public Law 106-172 would be the subject of a separate Federal Register Notice, GBL had no legal status until the DEA filed that separate Federal Register Notice. Therefore, as of March 13, 2000, Appellants claim they had no notice that GBL was illegal.

On April 24, 2000, the DEA issued its anticipated Final Rule on GBL designating it a List I chemical in compliance with Public Law 106-172. In a paragraph entitled, “Is GBL Subject to Any Other Controls under the [Controlled Substances Act]?” the DEA made the following statement: “GBL and 1,4-butanediol are structurally and pharmacologically similar to GHB and are often

substituted for GHB. Under certain circumstances they may satisfy the definition of a controlled substance analogue.” Placement of Gamma-Butyrolactone in List I of the Controlled Substances Act, 65 Fed. Reg. 21645-21647 (April 24, 2000) (to be codified at 21 C.F.R. pt. 1310).

Appellants argue that even when the DEA issued the Final Rule on GBL, it simply clouded the issue because it said GBL would be a GHB analogue, “under certain circumstances,” without further explanation. To further complicate things, Appellants argue, the definition of a controlled substance analogue, contained in 21 U.S.C. 802(32), is unconstitutionally vague. Appellants argue that the legal status of GBL is indefinite due to Public Law 106-172, the DEA’s April 24, 2000 Final Rule, and the Analogue Act and that this ambiguity allows for arbitrary enforcement.

This Court finds that the public was given notice that all GHB analogues were illegal when Public Law 106-172 was enacted on February 18, 2000<sup>9</sup> and again when the DEA’s Final Rule appeared in the Federal Register on March 13, 2000, at the direction of Congress, designating GHB a Schedule I controlled

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<sup>9</sup>Public Law 106-172, known as the “Hillary J. Farias and Samantha Reid Date-Rape Drug Prohibition Act of 1999,” was signed into law on February 18, 2000. It did not become illegal to possess GHB until March 13, 2000 when the DEA issued its Final Rule designating GHB as a Schedule I controlled substance.

substance.<sup>10</sup> The next step in this constitutional analysis is to decide whether an ordinary person could look at the definition of controlled substance analogue and determine that GBL is an analogue of GHB.<sup>11</sup> Although statements found in Public Law 106-172 and the DEA's Final Rules indicate that both Congress and the DEA considered GBL to be an analogue of GHB,<sup>12</sup> the only thing that matters is that

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<sup>10</sup>Publication in the Federal Register constitutes notice to the public. See footnote 7.

<sup>11</sup>Appellants argue that Congress did not address whether GBL is illegal and that the DEA issued ambiguous rules on the subject. This is a red herring. Because a controlled substance analogue statute exists, the only step Congress had to take to make GHB analogues illegal was to schedule GHB a controlled substance. It did not have to specifically identify GHB analogues or place all GHB analogues on a list. The Analogue Act and its definition of controlled substance analogue is the source for identifying GHB analogues. If no Analogue Act existed, only those chemicals scheduled by Congress as controlled substances would be illegal and Appellants' argument would have force. Unfortunately for Appellants, the Analogue Act does exist. Therefore, under current law, all substances that meet the definition of a controlled substance analogue are illegal. No list of controlled substance analogues is necessary. Failure to specifically identify a substance as a controlled substance analogue is of no consequence. Contrary to Appellants' argument, statements on the issue made by Congress or the DEA do not cloud the issue at all. These statements actually gave Appellants additional notice that at least two separate bodies of government consider GBL to be an analogue. Statements by Congress or the DEA are not necessary to our analysis – they are only insightful.

<sup>12</sup>The following statements were made by Congress and the DEA. "If taken for human consumption, common industrial chemicals such as gamma butyrolactone [GBL] and 1,4-butanediol are swiftly converted by the body into GHB. Illicit use of these and other GHB analogues and precursor chemicals is a significant and growing law enforcement problem." Pub. Law No. 106-172, § 2 (4) (2000). "The designation of gamma butyrolactone or any other chemical as a listed chemical pursuant to paragraph (34) or (35) does not preclude a finding pursuant to subparagraph (A) of this paragraph that the chemical is a controlled substance analogue." Pub. Law. No. 106-172, § 5(a)

The DEA has received reports that GBL, the solvent precursor for GHB, is being abused due to its rapid conversion to GHB soon after ingestion. On January 21, 1999, the FDA issued a request for a voluntary recall of all GBL-containing products sold in health food stores and warned the public of its danger to the public health. FDA has also declared 1,4-butanediol, a chemical related to both GHB and GBL, a Class I Health Hazard. On May 11, 1999, the FDA issued another warning on 1,4 butanediol, GHB and GBL stating

GBL meets the controlled analogue definition. Therefore, the Court will use Section 802(32)(A) to determine if ordinary people would be able to determine that GBL is an illegal analogue of GHB. If so, then the Analogue Act is not unconstitutional as applied to GBL. See Kolender, 461 U.S. 352, 357 (1983)(holding that a statute is not void for vagueness if ordinary people can understand what conduct is prohibited).

### The Definition

The district court here found that GBL was a controlled substance analogue of GHB. This factual finding is reviewed for clear error. United States v. Reid, 69 F.3d 1109, 1113 (11th Cir. 1995).

Appellants argue that GBL does not meet the controlled substance analogue definition. 21 U.S.C. § 802(32)(A).<sup>13</sup> Specifically, Appellants allege that the

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that these substances pose a significant health hazard. Public Law 106-172 also placed certain controls on GBL. These will be the subject of a separate Federal Register Notice. Addition of Gamma-Hydroxybutyric Acid to Schedule I, 65 Fed. Reg. 13235-13238 (March 13, 2000) (to be codified at 21 C.F.R. pts. 1301 and 1308). “GBL and 1,4-butanediol are structurally and pharmacologically similar to GHB and are often substituted for GHB. Under certain circumstances they may satisfy the definition of a controlled substance analogue.” Placement of Gamma-Butyrolactone in List I of the Controlled Substances Act, 65 Fed. Reg. 21645-21647 (April 24, 2000) (to be codified at 21 C.F.R. pt. 1310).

<sup>13</sup>Except as provided in subparagraph (C), the term “controlled substance analogue” means a substance—

- (i) the chemical structure of which is substantially similar to the chemical structure of a controlled substance in schedule I or II;
- (ii) which has a stimulant, depressant, or hallucinogenic effect on the central nervous system that is substantially similar to or greater than the stimulant, depressant, or hallucinogenic effect on the central nervous system of a controlled substance in

chemical structure of GBL is not substantially similar to the chemical structure of GHB and that GBL does not have an effect on the central nervous system substantially similar to that of GHB.

The definition of a controlled substance analogue contains three subparagraphs. The first issue in applying the definition is to determine whether these subparagraphs are to be read in the conjunctive or the disjunctive. Appellants argue the definition should be read as requiring subparagraph (i) and either subparagraph (ii) or (iii). The Government argues that the definition should be read disjunctively, effectively creating three separate definitions.

The first rule in statutory construction is to determine whether the “language at issue has a plain and unambiguous meaning with regard to the particular dispute.” Smith v. Magras, 134 F.3d 457, 462 (3d. Cir. 1997). If the statute’s meaning is plain and unambiguous, there is no need for further inquiry. The plain language is presumed to express congressional intent and will control a court’s interpretation.

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- (iii) schedule I or II; or  
with respect to a particular person, which such person represents or intends to have a stimulant depressant, or hallucinogenic effect on the central nervous system that is substantially similar to or greater than the stimulant, depressant, or hallucinogenic effect on the central nervous system of a controlled substance in schedule I or II.

21 U.S.C. § 802(32)(A).

As in all cases involving statutory construction, our starting point must be the language employed by Congress, and we assume that the legislative purpose is expressed by the ordinary meaning of the words used. Thus absent a clearly expressed legislative intention to the contrary, that language must ordinarily be regarded as conclusive.

American Tobacco Co. v. Patterson, 456 U.S. 63, 68 (1982).

A plain reading of the statute would indicate that the definition should be read in the alternative. It reads (i); (ii); or (iii). However, appellate courts have concluded differently. McKinney v. United States, 79 F.2d 105, 107-108 (8th Cir. 1996) assumes without holding that the definition is a two-prong test, with a conjunction between clause (i) and (ii). The Fifth Circuit in Granberry paraphrased the definition in the disjunctive.

The district courts that have addressed the issue also came to different conclusions. Appellants rely on United States v. Forbes, 806 F.Supp. 232, 234-236 (D.C. Colo. 1992), which held the definition must be in the conjunctive to avoid absurd results. In United States v. Greig, 144 F.Supp.2d 386 (D. V.I. 2001), the Court held the definition was in the disjunctive. The Southern District of New York recently issued an opinion holding the definition was in the conjunctive. United States v. Roberts, No. 01 CR 410 RWS, unpublished opinion (S.D.N.Y. Dec. 14, 2001).

We find there is no reason to take sides on this issue as GBL satisfies both

subparagraphs (i) and (ii). 21 U.S.C. § 802(32)(i)-(ii).

Defendant Fisher's expert, Rodney Guttman, Ph.D., submitted an affidavit in which he testified that the chemical structures of GBL and GHB are not substantially similar. In addition, Dr. Guttman testified that recent data indicates GBL has little, if any, effect on the brain. Dr. Guttman also testified that "the stimulant, depressant, or hallucinogenic effect on the central nervous system by GBL and GHB are not substantially similar." However, Dr. Guttman continues by saying:

[b]ecause GHB is a metabolite of GBL, care must be taken when evaluating data taken from certain studies as the effects of GBL may be attributable to GHB rather than GBL itself. For example, it is sometimes stated that GBL has greater effects than GHB. This statement is only partially correct as the effects described are not actually due to GBL but the metabolically active product, GHB. (Supplemental Affidavit of Dr. Guttman.)

While academics may distinguish between how the originally ingested substance affects the body as compared to how the substance's metabolite affects the body, the Court will not make such a distinction. Once GBL is ingested, the body transforms it into a GBL metabolite: GHB. This transformation is not without consequence; along with it comes all the harmful effects associated with GHB. For this reason, it is ludicrous to argue that GBL has no effect on the central nervous system. After ingestion, a person, by will or by choice, cannot prevent GBL from metabolizing into GHB. The district court's assessment of the facts was not clearly

erroneous.

It is undisputed that GBL has no pharmacological effects in a vacuum. However, the human body is not a vacuum. It is also undisputed that upon ingestion, GBL converts into a GBL metabolite: GHB. Therefore, this Court finds that GBL upon ingestion meets the definition of a controlled substance analogue as its chemical structure and effect on the central nervous system are substantially similar to GHB, a Schedule I Controlled Substance. 21 U.S.C. § 802(32)(A)(i)-(ii). People of ordinary intelligence would easily be able to determine that a substance, which is converted upon ingestion into a metabolite with a substantially similar chemical structure and effect on the central nervous system as a schedule I controlled substance, would meet the definition of a controlled substance analogue.

We affirm the district court's holding and find that the Analogue Act 21 U.S.C. § 813, as applied to GBL, is not unconstitutionally vague. Appellants had constitutional notice that GBL was a controlled substance analogue of GHB.

**AFFIRMED.**