1 UNITED STATES DISTRICT COURT 2 CENTRAL DISTRICT OF CALIFORNIA 3 4 LAZARO RODRIGUEZ; 5 Plaintiff, CASE NO.: 6 7 8 CLASS ACTION COMPLAINT 9 GIANT SPORTS PRODUCTS, LLC; **JURY TRIAL DEMANDED** 10 11 12 Defendant, 13 14 15 **CLASS ACTION COMPLAINT** 16 Plaintiff Lazaro Rodriguez ("Plaintiff"), individually and on behalf of 17 18 himself and all others similarly situated, by his undersigned attorneys, upon 19 personal knowledge as to himself, upon information and belief, and based upon the 20 investigation of his Counsel as to the remaining allegations, allege as follows: 21 22 I. INTRODUCTION 23 This is a class action on behalf of all persons and entities in the United 1. 24 States and the State of California who purchased the product Giant Sports 25 26 Delicious Protein (the "Product") from Defendant who misrepresents the amount 27 of protein available in the Product. 28

CLASS ACTION COMPLAINT

2. The whey protein industry is a growing and extremely competitive business environment: "during the forecast period, [the market for] protein products is expected to grow by 62% to reach US\$7.8 billion in 2018." http://www.euromonitor.com/sports-nutrition-in-the-us/report

- 3. However, the price of wholesale whey protein keeps increasing and is usually purchased for roughly \$15-\$18/kilo, making the profit margins on whey protein powder products very low.
- 4. Defendant designed, manufactured, warranted, advertised and sold the Product throughout the United States, including in the State of California.
- 5. In an effort to reduce protein manufacturing costs, Defendant adds cheaper free form amino acids and non-protein ingredients to increase the nitrogen content of the Product's protein powder. Nitrogen is the "tag" used by a common protein content test to determine the amount of protein in a product; but this is neither a direct measure of the actual protein content in a product nor a measure of the type of nitrogen containing compounds in a product.
- 6. This act is commonly referred to as "protein-spiking", "nitrogen-spiking" or "amino-spiking", and was evidenced recently in the 2007 pet food incident, which lead to domestic recalls of these products, and the 2008 Chinese milk powder scandal, when melamine, a nitrogen-rich chemical, was added to raw materials to fake high protein contents.

- 7. As a result of Defendant's practices, the consumer is left with a product that contains approximately over 60% less whey protein than Defendant represented.
- 8. This practice has been condemned by the American Herbal Products Association (AHPA), an organization of dietary supplement manufacturers, which has issued a standard for manufacturers for measuring the True Protein content of their products which:
  - a) Defines protein as "a chain of amino acids connected by peptide bonds" for labeling purposes;
  - b) The use of calculations to include only proteins that are "chains of amino acids connected by peptide bonds; and
  - c) To exclude any "non-protein nitrogen-containing substances" when counting total protein content.

www.ahpa.org/Default.aspx?tabid=441, April 1, 2014

9. Even one of the largest distributors in the United States of whey protein products, General Nutrition Centers, Inc. ("GNC") has publicly criticized the kind of conduct engaged in by Defendants, essentially claiming it to be misleading to consumers. According to GNC, consumers cannot be sure that they are getting 100 percent protein in their products since companies don't always show how they figure total grams of protein per serving.

www.gnclivewell.com/realprotein.

10. Lab results show that even with the inclusion of free form amino acids, Defendant's Product is still only 58% of the claimed protein content. And further, Defendant's product contains only 82% of the claimed protein content when the lab testing uses the nitrogen content level.

11. Despite the knowledge that "protein-spiking" is misleading to consumers, Defendant continues to advertise, distribute, label, manufacture and market the Product in a misleading and deceptive manner.

### II. PARTIES

- 12. During the Class period, Lazaro Rodriguez and Class Members purchased the Product through numerous online and brick/mortar retail stores. Plaintiff Rodriguez and Class Members suffered an injury in fact caused by the false, fraudulent, unfair, unlawful, deceptive and misleading practices set forth in this Complaint. Lazaro Rodriguez is a resident of the County of Los Angeles, State of California, and the events set forth in the Complaint took place therein, who, on or about October 1, 2012 and August 6, 2014, purchased the Product for his own use and not for resale from Bodybuilding.com and Nutrahealthsupply.com.
- 13. Upon information and belief Giant Sports Products, LLC is a Limited Liability Company licensed in the State of New Jersey, with a principal place of business address at 990 Cedar Bridge Avenue, Ste B7-280, Brick, New Jersey 08723.

### III. JURISDICTION AND VENUE

- 14. <u>Subject Matter Jurisdiction.</u> This Court has subject matter jurisdiction over Plaintiff's claims pursuant to 28 U.S.C. § 1332(d) because the combined claims of the proposed class members exceed \$5,000,000<sup>1</sup> and because Defendant Giant Sports Products, LLC is a citizen of a different state from the members of the Class.
- 15. <u>Personal Jurisdiction.</u> This Court has personal jurisdiction over Defendant Giant Sports Products, LLC because it has purposefully availed itself of California markets through sales of its products to California citizens, and the wrongful acts alleged in this Complaint were committed in California.
- 16. <u>Venue.</u> Venue is proper in this District pursuant to: (1) 28 U.S.C. § 1391(b)(2) in that a substantial part of the events or omissions giving rise to Plaintiff's claims occurred in this District; and (2) 28 U.S.C. § 1391(b)(3) in that Defendant is subject to personal jurisdiction in this District.

<sup>&</sup>lt;sup>1</sup> Defendant's Product is sold through numerous different online and brick/mortar retailers, including but not limited to; Vitamin Shoppe, GNC, and numerous online and brick/mortar retailers throughout the United States and the State of California. There are likely hundreds of thousands of class members composing the proposed classes with tens of millions of dollars spent on the Product due to the far reaching distribution channels and high consumer demand for whey protein products.

### IV. STATEMENT OF FACTS

### The Differences Between Whey Protein & Free Form Amino Acids

- 17. Whey is a complete protein source, which means it contains all the essential amino acids your body needs to build protein-based compounds such as muscle tissue, skin, fingernails, hair and enzymes. Daily protein need depends on your size, gender and activity levels, although it likely amounts to somewhere between 46 grams and 56 grams. For elite athletes, daily protein requirements are well over 100 grams, which is often difficult to get just from eating food. Of course, persons may need to supplement their protein intake for reasons of ill-health as well.
- 18. Whey protein powder is especially rich in branched-chain amino acids
  -- leucine, isoleucine and valine -- which are metabolized directly within your
  muscles as opposed to being processed in your liver first.
- 19. The 2005 dietary reference intake (DRI) guidance clearly defines protein as macromolecules with links of amino acids, and does not mention amino acids or creatine. Although amino acids are the building blocks of protein, they do not have the same beneficial effects of whole protein. Part of the reason for this has to do with protein digestion and absorption.

20. There have been several studies that have shown that protein is absorbed more rapidly than amino acids.<sup>2</sup>

- 21. A study was conducted to determine whether the effects of whey protein ingestion on muscle protein accrual are due solely to its constituent essential amino acid content. The study was a comparison of three trial groups. The first provided 15g of intact whey protein (whey protein powder). The other 2 trials provided either the individual essential amino acids (7g) or the individual non-essential amino acids (8g) found in whey. The researchers determined that whey protein ingestion improves skeletal muscle protein accrual through mechanisms that are beyond those attributed to its essential amino acid content.<sup>3</sup>
- 22. Another study found that "the lack of recovery after immobilization-induced atrophy during ageing is due to an 'anabolic resistance' of protein synthesis to amino acids during rehabilitation." The study's results "highlight a novel approach to induce muscle mass recovery following atrophy in the elderly by giving soluble milk protein or high protein diets."

<sup>&</sup>lt;sup>2</sup> Di Pasquale MG. Amino Acids and Proteins for the Athlete: The Anabolic Edge, Second Edition. Boca Raton, FL: CRC Press; 2008:190.

<sup>&</sup>lt;sup>3</sup> Katsanos C, *et al*. Whey protein ingestion in elderly results in greater muscle protein accrual than ingestion of its constituent essential amino acid content. Nutr. Res. Oct. 2008; 28(10):651-658.

<sup>&</sup>lt;sup>4</sup> Magne H, *et al*. Contrarily to whey and high protein diets, dietary free leucine supplementation cannot reverse the lack of recovery of muscle mass after prolonged immobilization during ageing. J. Physiol. Apr 15, 2012; 590(Pt 8): 2035-2049.

23. Further, in a review study the authors concluded that, "the bound form of an EAA [essential amino acid] may be more efficiently utilized than when delivered in its free-form."<sup>5</sup>

<sup>&</sup>lt;sup>5</sup> Terada T, Inui K. Peptide transporters: structure, function, regulation and application for drug delivery. Curr Drug Metab. 2004;5:85-94.

### **Giant Sports Delicious Protein's Misleading Claims**

24. Defendant's Product is labeled as including 27 grams of protein per serving:

•	36g		
Servings Per Container:	25		
Amount Per Serving			Amt Per 100
Calories	137.00		380.00
Calories from Fat	16.00		44.00
		% Daily Value*	Amt Per 100
Total Fat (g)	1.80	2.80	5.00
Saturated Fat (g)	0.80	4.40	2.20
Trans Fat (g)	0.00	0.00	0.00
Polyunsaturated Fat (g)	0.00	0.00	0.00
Monounsaturated Fat (g)	0.50	1.75	1.40
Cholesterol (mg)	13.00	4.00	36.00
Sodium (mg)	198.00	8.30	550.00
Potasium (mg)	283.00	8.00	787.00
Total Carbohydrates (g)	4.00	1.00	11.00
Dietary Fiber (g)	1.25	4.50	3.50
Sugar (g)	1.00	+	3.00
Protein (g)	27.00	50.00	73.00
Vitamin A (IU)	10.80	0.25	30.00
Vitamin C (mg)	0.25	0.42	0.70
Calcium (mg)	49.00	5.00	136.00
Iron (mg)	1.00	5.50	2.80
Vitamin E (IU)	0.17	1.70	0.47
Vitamin B2 (mg)	0.10	5.90	0.28
Vitamin B3 (mg)	0.03	0.10	0.08
Pantothenate (mg)	0.20	2.00	0.60
Phosphorus (mg)	68.00	6.80	190.00
Magnesium (mg)	26.00	6.50	75.00
Zinc (mg)	0.31	2.10	0.87
Copper (mg)	0.16	8.20	0.44
†Daily Value not established			

Ingredients: Giant Delicious Protein Blend (Whey Protein Concentrate, Milk Protein Isolate, Whey Protein Isolate, Micellar Casein, Calcium Caseinate, Whey Protein Hydrolysate, Taurine, Betaine, L-Leucine, L-Isoleucine, L-Valine, Giant Pro Enzyme Complex™ (Lactase, Arrylase, & Protease)

Inactive Ingredients: Cocoa, Natural & Artificial Flavors, Sodium Caseinate, Mono- and Diglycerides, Corn Syrup Solids, Carrageenan, Xanthan Gum, Cellulose Gum, Sodium Chloride, Lecithin (Soy), Sucralose, Acesulfame Potassium

Contains Milk and Lecithin (Soy) Ingredients

<sup>\*</sup> These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

<sup>\*\*</sup> Contains 54 grams of protein per two (2) full servings.

- 25. However, Defendant's total protein count of 27 grams of protein per serving is not just whey protein but also contains, through "protein-spiking", the free form amino acids<sup>6</sup> L-Leucine, L-Isoleucine, L-Valine and Glycine<sup>7</sup>; the non-protein amino acids Betaine and Taurine<sup>8</sup>; and the non-amino acid compound Creatine Monohydrate.
- 26. Once these "protein spiking" agents are removed from the formula of analysis, and the "bound" amino acid count is determined, the true content of whey protein in the Product can be determined.
- 27. After Scientific testing of the Product Giant Sports Delicious Protein, the actual total content per serving of protein is actually around 12 grams (as calculated from the total amino acids minus the free amino acids) as opposed to 27 grams of protein claim by Defendant for the Product. See Exhibit A.

<sup>&</sup>lt;sup>6</sup> Free form amino acids are isolated amino acids which are added separately into the Product formula.

<sup>&</sup>lt;sup>7</sup> Glycine is an amino acid, a building block for protein.

<sup>&</sup>lt;sup>8</sup> Taurine is a non-essential amino acid produced in the body from the amino acid cysteine. It is found naturally in eggs, meat, fish and dairy products. In the body, free taurine levels are abundant in the liver, kidney, muscle, and brain. It is the second most abundant free amino acid in muscle after glutamine. Unlike glutamine, however, taurine is not incorporated into muscle proteins. *See* Hendler, SS and Rorvik, D. Physician's Desk Reference for Nutritional Supplements. 2001, Thompson PDR, Montvale, NJ.; *See also* Brosnan, JT and Brosnan, ME. The sulfur-containing amino acids: an overview. Journal of Nutrition, 2006, 136:1636S-1640S. *See also* Di Pasquale, MG. Amino acids and proteins for the athlete: The anabolic edge. 2008, CRC Press, Boca Raton, FL.

28. The FDCA speaks to the misleading nature of the labeling of a multi-ingredient product under 21 C.F.R. § 101.18(b), which states:

The labeling of a food which contains two or more ingredients may be misleading by reason (among other reasons) of the designation of such food in such labeling by a name which includes or suggests the name of one or more but not all such ingredients, even though the names of all such ingredients are stated elsewhere in the labeling.

- 29. The Defendant misleads consumers by repeatedly referencing protein, including in the name of the Product, but never disclaiming the limited amount of complete protein that the Product actually delivers or making clear that the Product's protein content is only fractionally complete protein.
- 30. Under the "Supplement Facts" section of the label, referenced above, under "Ingredients", the Defendant lists the "Giant Delicious Protein Blend" to contain several ingredients which simply are not protein, such as: Betaine, Taurine, L-Leucine, L-Isoleucine and L-Valine.
- 31. The inclusion of Betaine, Taurine, L-Leucine, L-Isoleucine and L-Valine is misleading to a consumer because these compounds are simply not protein.
- 32. Even with these non-protein free form amino acids, the so-called protein content of the Product is still approximately 17.7 grams per serving based on "Total Aminos". See Exhibit A.

- 33. And further, even when the Defendant's incorporate these "spiking agents" into the Product, the protein content is still only 24.9 grams based upon elemental nitrogen analysis.
- 34. Protein is comprised of twenty types of amino acids, each with different chemical properties. A protein molecule is made from a long chain of these amino acids, each linked to its neighbor through a covalent peptide bond.<sup>9</sup>
- 35. Defendant makes the following false and/or misleading statements on the actual label of the Product:
  - a) "27 Grams of High Quality Protein";
  - b) "Only 2 Servings Provides >100% RDA for Protein";
  - c) "A Whopping 6.75:1 Protein-to-Carbohydrate Ratio"; and
  - d) "Giant Sports Delicious Protein contains 81.8% high quality whey/milk proteins..."

<sup>&</sup>lt;sup>9</sup> *See* Alberts B, Johnson A, Lewis J, et al. Molecular Biology of the Cell. New York: Garland Science; 2002.

17

18

19

20

21

2223

24

2526

27

28

81.8% 27 Grams of High Quality Protein\* Only 4 Grams of Carbohydrates Per Serving Only 2 Grams of Fat Per Serving Giant Sports Delicious Protein contains 100% Gluten Free 81.8% high quality whey/milk proteins, 6 Stage Protein Blended Formula For Optimized, Timed only 12.1% carbohydrates with no added Nitrogen Retention and Continual Muscle Remodeling sugars or maltodextrin, and only 6.1% fat per serving - compare this to the "other No Added Sugars or Maltodex trins in Order to Help brands" and see yet another reason why Minimize Visceral Fat Storage\* Giant Sports Delicious Protein is the best protein powder on the market - it's not Aids in Endurance and Recovery\* just delicious...it's good for you too! Helps to Increase Muscle Mass and Strength\* Helps to Increase Muscle Fullness and Appearance\* Enhanced With Added BCAA's For Heightened Muscle Development\* Contains Proprietary Giant Pro Enzyme Complex\* For Greater Digestion and Absorption' Only 2 Servings Provides >100% RDA For Protein A Good Source of Calcium GIANTS SPORTS DELICIOUS PROTEIN A Whopping 6.75:1 Protein-to-Carbohydrate Ratio IS SPECIFICALLY FORMULATED FOR: BODYBUILDING Incredibly Delicious Taste - Mixes Instantly TEAM SPORTS GMP Certified - 100% Satisfaction Guaranteed WEIGHT MANAGEMENT **FITNESS & FIGURE** MIXED MARTIAL ARTS **ENDURANCE SPORTS** 

- 36. The claim, "27 Grams of High Quality Protein", is false based upon the scientific testing of the Product, by "Total Amino" count, "Bound Amino" count and the nitrogen level.
- 37. The claim, "Only 2 Servings Provides >100% RDA for Protein", is false because the actual Recommended Daily Allowance for protein is 50 grams according to 21 CFR 101.9(c)(7)(iii). The protein content for 2 servings of the Product is only 50 grams based on nitrogen content, 35 grams based on "Total Aminos" and 24 grams based on "Bound Aminos", none of which are greater than 100% RDA for Protein.

- 38. The claim, "A Whopping 6.75:1 Protein-to-Carbohydrate Ratio", is false because the carbohydrate content of the Product is 4 grams. The actual Protein-to-Carbohydrate Ratio based on "Nitrogen Levels" is 6.25:1, based on "Total Aminos" is roughly 4.375:1 and based on "Bound Aminos" is roughly 3:1.
- 39. The claim, ""Giant Sports Delicious Protein contains 81.8% high quality whey/milk proteins..." is false because this percentage is substantially lower based on the "Bound Amino" content, which is the test that provides the "True" protein content. The actual percentage of whey/milk proteins is only 33.33%.
- 40. All of these label claims, along with the Product name would clearly mislead a reasonable consumer that the protein content of the Product was derived solely from whey protein.
- 41. Nowhere on the label does it state, or even imply, that the protein content contains any, let alone substantial amounts of free form and non-protein amino acids.
- 42. Plaintiff and Class Members were in fact misled by Defendant's representations regarding the true nature of the protein content and value.
- 43. The difference between the Product promised and the Product sold is significant. The amount of actual protein provided, and the measure of protein per serving, has real impacts on the benefits provided to consumers by the Product, and the actual value of the Product itself.

44. Persons requiring a certain amount of protein supplementation, whether as part of a fitness regimen or for real health needs, are left to ingest less protein than Defendant states will be provided.

### L-Glycine as an Undeclared Ingredient

- 45. Based on the laboratory results, L-Glycine is contained in the Product at a level of 3.926 grams per serving. See Exhibit A.
- 46. The FDA promulgated regulations for compliance with the FDCA and DSHEA at 21 C.F.R. 101, *et seq*.
- 47. These regulations require all ingredients to be listed on the label of dietary supplements sold to the public. 21 C.F.R. 101.4.
- 48. Defendants failed to disclose the ingredient L-Glycine in the labeling of their Product, making it misbranded.
- 49. Defendant's Products are in this respect misbranded under federal and California law. Misbranded products cannot be legally sold and are legally worthless.
- 50. Defendant's false and misleading claims contained herein are in violation of 21 C.F.R. § 101.18(b), making the Product misbranded.
- 51. Defendant's deceptive statements violate 21 U.S.C. § 343(a)(1), which deems food (including nutritional supplements) misbranded when the label contains a statement that is "false or misleading in any particular".

- 52. California prohibits the misbranding of food in a way which parallels the FDCA through the "Sherman Law", <u>Health & Saf. Code § 109875 et seq</u>. The Sherman Law provides that food is misbranded "if its labeling is false or misleading in any particular." *Id*.
- 53. The Sherman Law explicitly incorporates by reference "[a]ll food labeling regulations and any amendments to those regulations adopted pursuant to the FDCA," as the food labeling regulations of California. <u>Cal. Health & Saf.</u>

  <u>Code</u>, § 110100, subd. (a).
- 54. Plaintiff and Class Members would have purchased another protein product, if any at all, or would have only paid for the protein actually delivered with the Product, if they would have not been deceived by the misleading labeling of the Product by Defendant.

### V. CLASS ACTION ALLEGATIONS

55. Plaintiff brings this action individually and as representatives of all those similarly situated pursuant to Rule 23 F.R.C.P. on behalf of the class and subclass ("the Classes"). The Classes are defined as follows:

**National Class:** All persons in the United States that purchased Giant Sports Delicious Protein at any time during the four years before the date of filing of this Complaint to the present.

**California Subclass:** All persons in the State of California that purchased Giant Sports Delicious Protein at any time during the

four years before the date of filing of this Complaint to the present.

- 56. Excluded from the Classes are Defendant, any entity in which

  Defendant has a controlling interest or that have a controlling interest in

  Defendant, and Defendant's legal representatives, assignees, and successors. Also excluded are the judge to who this case is assigned and any member of the judge's immediate family.
- 57. Numerosity. The Classes are so numerous that joinder of all members is impracticable. On information and belief, the Classes have more than 10,000 members. Moreover, the disposition of the claims of the Classes in a single action will provide substantial benefits to all parties and the Court.
- 58. Commonality. There are numerous questions of law and fact common to Plaintiff and members of the Classes. These common questions of law and fact include, but are not limited to, the following:
- a. Whether the marketing, advertising, packaging, labeling, and other promotional materials for the Product are deceptive;
- b. Whether Defendant's actions violate California's law against unfair and deceptive acts or practices, Business and Professions Code §17200, *et seq.*;
- c. Whether Defendant's actions violate California's law against false advertising, Business and Professions Code §17500, *et seq*.

d. Whether Defendant's actions violate California's Consumer Legal Protection Act, Civil Code §1750, *et seq*.

- e. Whether Defendant was Unjustly Enriched at the expense of the Plaintiff and Class Members.
  - f. Whether Defendant Breached Express Warranties.
- 59. Typicality. Plaintiff's claims are typical of the claims of the Classes. Plaintiff's claims, like the claims of the Classes, arise out of the same common course of conduct by Defendant and are based on the same legal and remedial theories.
- 60. Adequacy. Plaintiff will fairly and adequately protect the interests of the Classes. Plaintiffs have retained competent and capable attorneys with significant experience and complex and class action litigation, including consumer class actions. Plaintiff and his counsel are committed to prosecuting this action vigorously on behalf of the Classes and have the financial resources to do so. Neither Plaintiff nor his counsel has interests that are contrary to or that conflict with those of the proposed Classes.
- 61. Predominance. Defendant has engaged in a common course of conduct toward Plaintiff and members of the Classes. The common issues arising from this conduct that affect Plaintiff and members of the Classes predominate over any individual issues. Adjudication of these common issues in a single action has important and desirable advantages of judicial economy.

62. Superiority. A class action is the superior method for the fair and efficient adjudication of this controversy. Classwide relief is essential to compel Defendant to keep such adulterated and misbranded products out of the market and to compensate those who have mislead into purchase of the Product. The interest of individual members of the Classes in individually controlling the prosecution of separate claims against Defendant is small because the damages in an individual action are small. Management of these claims is likely to present significantly fewer difficulties than are presented in many class claims because Defendant acted or failed to act on grounds generally applicable to the Classes. Class treatment is superior to multiple individual suits or piecemeal litigation because it conserves judicial resources, promotes consistency and efficiency of adjudication, provides a forum for small claimants, and deters illegal activities. There will be no significant difficulty in the management of this case as a class action.

63. Injunctive and Declaratory Relief Appropriate. Defendant has acted on grounds generally applicable to the Classes, thereby making final injunctive relief and corresponding declaratory relief with respect to the Class appropriate on a class wide basis.

## 

### VI. CAUSES OF ACTION

### **COUNT I**

Violation of the Consumer Legal Remedies Act Cal. Civ. Code §1750, et. seq. (On Behalf of the California Subclass Members)

- 64. Plaintiff incorporates each preceding paragraph as if fully set forth herein.
- 65. Plaintiff and each member of the Class is a "Consumer" as that term is defined by Cal. Civ. Code § 1761(d).
- 66. The Product is a "Good" as that term is defined by Cal. Civ. Code § 1761(a).
  - 67. Defendant is a "Person" as defined by Cal. Civ. Code § 1761(c).
- 68. The transaction(s) involved here are "Transaction(s)" as defined by Cal. Civ. Code § 1761(e).
- 69. Plaintiff and members of the Class are Consumers who purchased the Product for personal use within the applicable statute of limitations period.
- 70. Plaintiff has standing to pursue this cause of action because Plaintiff has suffered injury-in-fact and has lost money or property as a result of Defendant's actions as set forth here.
- 71. Plaintiff and Class members purchased the Product in reliance on Defendant's labeling claims.

- 72. Defendant has used deceptive representations with respect to the Product in violation of Cal. Civ. Code §1770(a)(4).
- 73. Defendant has misrepresented the sponsorship, approval, characteristics, or ingredients of the Product in violation of Cal. Civ. Code §1770(a)(5).
- 74. Defendant has misrepresented the standard, quality, or grade of the Product in violation of Cal. Civ. Code §1770(a)(7).
- 75. Defendant knew or should have known that their representations of fact are material and likely to mislead consumers.
- 76. Defendant's practices, acts, and course of conduct in marketing and selling the Product are likely to mislead a reasonable consumer acting reasonably under the circumstances to his or her detriment. Like Plaintiff, members of the Class would not have purchased the Product had they known the true amount of whey protein in the Product.
- 77. Plaintiff and members of the Class have been directly and proximately damaged by Defendant's actions.
- 78. Defendant has engaged in, and continue to engage in, business practices in violation of the Consumer Legal Remedies Act, Civ. Code §1750, et seq. by continuing to make false and misleading representations on their labeling of the Product.
  - 79. As a result, Plaintiff, the Class, and the general public are entitled to

6

8

10

15

17

19

20

21

22 23

24

25

26

27

28

injunctive and equitable relief, restitution, and an order for the disgorgement of the funds by which Defendant was unjustly enriched. Plaintiff and the Classes also seek Punitive Damages since Defendant was put on notice of its violations of the California Legal Remedies Act and took no remedial actions.

### COUNT II

### **Violation of False Advertising Law** Cal. Bus. & Prof. Code § 17500, et seq. (On Behalf of the California Subclass Members)

- 80. Plaintiff incorporates each preceding paragraph as if fully set forth herein.
- 81. Plaintiff and the Class have standing to pursue a cause of action for false advertising under Bus. & Prof. Code §17500, et seq. because Plaintiff and members of the Class have suffered an injury-in-fact and lost money as a result of Defendant's actions as set forth herein.
- 82. Defendant advertised, marketed, and otherwise disseminated misleading information to the public through advertising mediums including the Internet statements regarding the Product.
  - 83. Defendant continues to disseminate such statements.
  - 84. Defendant's statements are misleading.
- Defendant knows that these statements were misleading, or could 85. have discovered their misleading nature with the exercise of reasonable care.

- 86. Defendant's misleading statements were part of a scheme or plan to sell the Product to the public the true nature of the protein content as calculated and published in their Supplements Facts.
- 87. Plaintiff and Class members relied on Defendant's marketing, labeling, and other product literature.
  - 88. Defendant's actions violate Cal. Bus. & Prof. Code § 17500, et seq.
- 89. As a direct and proximate result of Defendant's actions, as set forth herein, Defendant has received ill-gotten gains and/or profits, including but not limited to money from Plaintiff and Class members who paid for the Product.

  Therefore, Defendant has been unjustly enriched.
- 90. Plaintiff and Class members seek injunctive relief, restitution, and disgorgement of Defendant's ill-gotten gains as provided for by Cal. Bus. & Prof. Code §17535.
- 91. Plaintiff and Class members seek injunctive relief to compel

  Defendant from continuing to engage in these wrongful practices in the future. No
  other adequate remedy at law exists. If an injunction is not ordered, Plaintiff and
  Class members will suffer irreparable harm and/or injury.

### **COUNT III**

Violation of the Unfair Competition Act Cal. Bus. & Prof. Code § 17200, et seq. (On Behalf of the California Subclass Members)

- 92. Plaintiff incorporates the preceding paragraphs as if fully set forth herein.
- 93. Plaintiff and the Class have standing to pursue a cause of action for false advertising under Bus & Prof. Code §17200, et seq. because Plaintiff and members of the Class have suffered an injury-in-fact and lost money as a result of Defendant's actions as set forth herein.
- 94. Defendant's actions as described herein constitute unfair competition within the meaning of Bus. & Prof. Code §17200, in that Defendant has engaged in unlawful, unfair, or fraudulent business practices by violating California's Sherman Food Drug & Cosmetic Act and California's Consumer Legal Remedies Act.
- 95. Defendant's actions as described herein constitute unfair competition within the meaning of Bus. & Prof. Code §17200, on the additional grounds that Defendant has failed to properly label the Product in accordance with 21 C.F.R. 101, et seq.
- 96. Defendant's actions also constitute unfair competition within the meaning of Bus. & Prof. Code §17200, in that Defendant has made unfair,

deceptive, untrue or misleading statements in advertising mediums, including the Internet, in violation of Bus. & Prof. Code §17500.

- 97. Defendant's actions have caused economic injury to Plaintiff and Class members. Plaintiff and Class members would not have purchased the Product had they known the true nature of the whey protein content.
- 98. Pursuant to Bus. & Prof. Code §17203, Plaintiff and Class members seek an injunction enjoining Defendant from continuing to market, advertise, and sell the Product without first complying with federal and state law and to prevent Defendant from continuing to engage in unfair competition or any other act prohibited by law.
- 99. Plaintiff and Class members also seek an order requiring Defendant to make full restitution and disgorgement of their ill-gotten gains of all money wrongfully obtained from Plaintiff and Class members as permitted by Bus. & Prof. Code §17203.

### **COUNT IV**

# Unjust Enrichment (On Behalf of the National Class and Subclass)

- 100. Plaintiff incorporates the preceding paragraphs as if fully set forth herein.
- 101. Plaintiff and Class Members conferred benefits on Defendant by purchasing the Product.

### **CLASS ACTION COMPLAINT**

- derived from Plaintiff's and Class Members' purchase of the Product. Retention of those monies under these circumstances is unjust and inequitable because

  Defendant's labeling of the Product was misleading to consumers, which caused injuries to Plaintiff and Class Members because they would have not purchased the Product if the true facts would have been known.
- 103. Because Defendant's retention of the non-gratuitous benefits conferred on them by Plaintiff and Class Members is unjust and inequitable, Defendant must pay restitution to Plaintiff and the Class Members for their unjust enrichment, as ordered by the Court.

### **COUNT V**

## Breach of Express Warranty (On Behalf of the National Class and Subclass)

- 104. Plaintiff incorporates the foregoing paragraphs as if fully restated herein.
- 105. Defendant made several different express warranties upon which Plaintiff relied in making his purchase, including the false and misleading claims contained herein.
- 106. Defendant made several express warranties regarding the ingredients contained within the Product.
  - 107. The Plaintiff and Class Members received a product that did not

provide the benefits Defendant's described in their labeling, advertising and marketing.

108. These facts constitute breaches of all applicable express warranties as alleged in this complaint.

### VII. RELIEF REQUESTED

Plaintiff requests for the following relief:

- A. Certification of the proposed National Class;
- B. Certification of the proposed California Subclass;
- C. Appointment of Plaintiff as class representative;
- D. Appointment of the undersigned counsel as counsel for the Class;
- E. A declaration that Defendant's actions complained of herein violate the State of California consumer protection statutes;
  - F. A declaration that Defendant was Unjustly Enriched;
  - G. A declaration that Defendant Breached an Express Warranty;
- H. An order enjoining Defendant from engaging in the unlawful conduct set forth herein;
- I. An award to Plaintiff and the Classes of restitution and disgorgement as requested by Plaintiff's second and third causes of action;
- J. An award to Plaintiff and the Class of attorneys' fees and costs, as allowed by law and/or equity;

1	K. Leave to amend this Complaint to conform to the evidence present	ed				
2	at trial; and					
3	L. Orders granting such other and further relief as the Court deems					
4						
5	necessary, just, and proper.					
6	VIII. DEMAND FOR JURY					
7	Plaintiff demands a trial by jury for all issues so triable.					
8						
9	DATED: October 29, 2014					
10						
11						
12	By: <u>/s/ Jonathan Shub</u> Jonathan N. Shub (SBN 237708)					
13	Scott Alan George ( <i>Pro Hac Vice</i>					
14	Application Forthcoming) <b>SEEGER WEISS LLP</b>					
15	1515 Market Street, Suite 1380					
16	Philadelphia, PA 19102					
17	Phone: (215) 564-2300 Fax: (215) 851-8029					
18	jshub@seegerweiss.com					
19	sgeorge@seegerweiss.com					
20						
21	Nick Suciu III ( <i>Pro Hac Vice</i> Application Forthcoming)					
22	BARBAT, MANSOUR & SUCI	U				
23	<b>PLLC</b> 434 West Alexandrine #101					
24	Detroit, MI 48201					
25	(313) 303-3472 nicksuciu@bmslawyers.com					
26	incasuciu(w binisia w yets.com					
27						
28						

### **D FOR JURY**

Bassma Zebib (SBN 276452) LAW OFFICE OF BASSMA ZEBIB 811 Wilshire Blvd, Ste. 1708 Los Angeles, CA 90017 Telephone: (310) 920-7037 zebiblaw@gmail.com Attorneys for Plaintiff Lazaro Rodriguez 

# EXHIBIT A



10005 Muirlands Blvd., Suite G | Irvine, CA 92618 Phone: (949) 419-0288 | Fax: (949) 419-0294 www.chromadex.com

### **Analytical Results Sheet**

Customer:

Oliver Law Group PC

Report Number:

CDXA-ARS-20917-00

Address (City, State):

Rochester, MI

**Project Number:** 

ORD66767

Sample Name: Sample Lot:

Giant Sport Delicious Protein

GSDV10714

Date Received:

08-Jul-2014

**CDXA Number:** 

CDXA-14-4180

Purchase Order:

Not Provided

Assay: Part Number:

Elemental Analysis on C, H, N CDA-00100116-ARS

Date of Report: Page:

05-Aug-2014

Method:

Combustion

Test Location:

1 of 1 Sub51

Analyte	Units	Spec.	Result	Reporting Limit
Carbon	%		42.49	105
Hydrogen	%		6.67	
Nitrogen	%		11.07	(CS)

Richard Vigi

QA Verified: Kristie Kokeny

Approved:

Signed original on file at CDXA

This product analysis is subject to our "Standard Terms and Conditions for the Purchase and Sale of ChromaDex Products and or Services," a copy of which has been provided to our client and is incorporated herein by this reference. As more specifically set forth therein, this product analysis is for the benefit of our client only, may not be relied upon by any other party without our prior written consent, relates solely to the sample(s) provided to us by our client and therefore cannot by applied to any other material or sample. Unless otherwise noted, samples were received in acceptable condition and analyzed as received. This document may not be printed in part without the explicit permission of ChromaDex.

ND - Not Detected

BRL - Below reporting limit (compound detected below RL)

CDXA-ATR-6490-01 Page 7 of 7

### REFERENCES

ChromaDex SOP "Routine Laboratory Calculations"

Analytical Method: 99.1-CDXA-2.0-000318 "Creatine, Creatinol-O-Phosphate, and Creatinine by HPLC."

<u>Laboratory Notebook</u> <u>Page(s)</u> 392 039

#### REVISION HISTORY

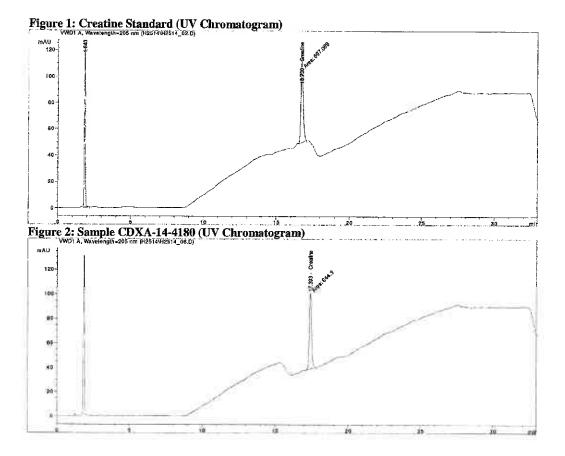
Revision Number	Document/Changes
00	New report
01	Updated results for corrected serving size of 36g per customer request.

CDXA-ATR-6490-01

Page 6 of 7

### DATA

### FIGURES



CDXA-ATR-6490-01 Page 5 of 7

### INSTRUMENT PARAMETERS

Instrument Agilent 1100 Series HPLC System

Detection UV-Vis

Mobile Phase A 2mM Ammonium Formate, pH 4.0

Mobile Phase B 5% 2mM Ammonium Formate, pH 4.0 in ACN

Gradient Program Time (min) %A %B

0.0 0 100 5.0 0 100 25.0 45 55 30.0 45 55 33.0 0 100 45 0 100

Column Cogent Diamond Hydride, 150 x 3mm x 4.0

Flow Rate 1.0 mL/min UV Detection 205 nm Injection Volume 1 µL Temperature 30 °C

CDXA-ATR-6490-01 Page 4 of 7

### STANDARD PREPARATION

### **Stock Standard Solution**

Approximately 7.20 mg of Creatine was weighed into a 25 mL volumetric flask. 25 mL of diluent was added and the solution sonicated for 15 minutes. The solution was allowed to re-equilibrate to room temperature and mixed well.

### SAMPLE PREPARATION

### Customer Sample(s) CDXA-14-4180

Sample was prepared by weighing approximately 500 mg of sample into a 50 mL volumetric flask. 50 mL of diluent was added and the flask sonicated for 15 minutes. The samples were filtered through a 0.45 µm PTFE filter into an HPLC vial for analysis.

CDXA-ATR-6490-01 Page 3 of 7

### ANALYTICAL METHOD

STANDARD(S) All standards supplied by ChromaDex, unless otherwise specified.

Part #

Creatine

ASB-00003857

### LABORATORY SUPPLIES

Analytical Balance Ultrasonication Bath Assorted and Volumetric glassware Syringes and Syringe Filters HPLC/GC glass vials and caps

### SOLVENTS AND REAGENTS

Acetonitrile (ACN) Tetrahydrofuran (THF) Milli-Q Water Formic Acid Ammonium Formate

### SOLUTION PREPARATION

### Mobile Phase A (2mM Ammonium Formate, pH 4.0)

Solution was prepared by adding 125 mg of Ammonium Formate to ~900 mL of Milli Q Water in a 1000mL volumetric flask and mixing well. The pH was adjusted to 4.0 using formic acid. The solution was then diluted to volume with Milli-Q water, mixed well and transferred to a 1 L mobile phase container.

### Mobile Phase B (5% 2mM Ammonium Formate, pH 4.0 in ACN)

Solution was prepared by adding 50 mL of 2mM Ammonium Formate, pH 4 to 950 mL of ACN in a 1000mL volumetric flask and mixing well.

### Diluent (50:50 Water:THF)

Diluent was prepared by adding 250 mL of Milli-Q water and 250 mL of THF into a 500 mL volumetric flask and mixing well.

CDXA-ATR-6490-01

Page 2 of 7

### SUMMARY

## SAMPLE(S)

Giant Sport Delicious Protein

Lot # GSDV10714 CDXA # CDXA-14-4180

## • RESULTS

Table 1	_ Regul	te CDYA	-14-4180
Labie i	- nesuii	IS LIJAM	- 14-41XII

Analyte	Units	Spec.	Result A*	Result B*	Reporting Limit
Creatine	mg/serving	N/A	834	1170	22

Serving Size: 36g

ND - Not detected above reporting Limit

BRL - Below reporting limit (compound detected below RL)

<sup>\*</sup>Sample was prepped multiple times due to high variability due to sample matrix. All results being reported.

<sup>\*</sup>Reference:DEV-14-056



10005 Mulrlands Blvd., Suite G | Irvine, CA 92618 Phone: (949) 419-0288 | Fax: (949) 419-0294 www.chromadex.com

## **Analytical Test Report**

Customer:

Oliver Law Group PC

Report Number:

CDXA-ATR-6490-01

Address (City, State):

Rochester, MI

Project Number:

ORD66767

Purchase Order:

Not Provided

Date Received:

08-Jul-14

Date of Report:

07-Oct-14

Test Location:

Boulder, CO

Assay:

Creatine by HPLC

Part Number:

CDA-00100156-ATR

Prepared By:

Kiel Henderson Analytical Chemist

07-Oct-14

Date

Reviewed By:

Kristie Kokeny
Quality Assurance

07-Oct-14

Date

Richard Vigil

Digitally signed by Richard Vigil

DN: cm=Richard Vigil, o=ChromaDex (nc., ou=Group Leader, Analytical Services, email=richardv@chromadex.com, c=US

Date: 2014.10.07 14:51;48 -06'00'

Approved By:

Manager, Analytical Services

07-Oct-14

Date

Signed original on file at CDXA

CDXA-ATR-6299-01 Page 6 of 6

#### REFERENCES

Analytical Method: 99.1-CDXA-2.0-000320 "Taurine by HPLC" (Draft)

<u>Laboratory Notebook</u> <u>Page(s)</u> 383 46, 48

#### REVISION HISTORY

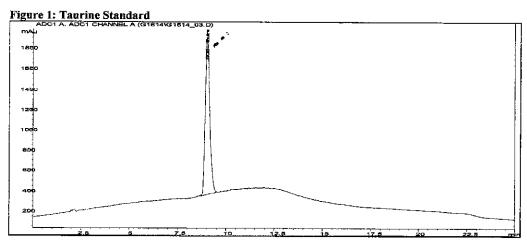
Revision Number	Document/Changes
00	New report
01	Changed serving size from 32 grams to 36 grams and updated results per customer request.

CDXA-ATR-6299-01

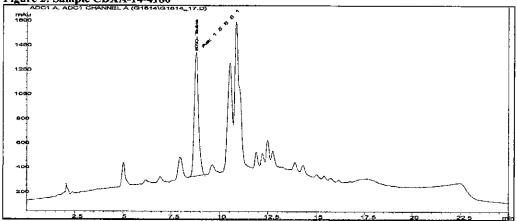
## DATA

Page 5 of 6

### **FIGURES**







CDXA-ATR-6299-01 Page 4 of 6

#### SAMPLE PREPARATION

The sample was prepared by weighing 300 mg into 50 mL volumetric flasks. The flasks were brought to volume with diluent and then sonicated for 25 minutes. An aiiquot or each sample was tiltered through a 0.45 µm PTPE tilter into a HPLC viai for analysis.

#### INSTRUMENT PARAMETERS

Instrument Agilent 1100 Series HPLC System CAD

Mobile Phase A 10 mM Ammonium Formate (aq) pH= 4.0

Mobile Phase B ACN

**Gradient Program** Time (min) %A %В 0 20 80 5 20 80 20 50 50 ZΨ οv 22 25 20 80

Column Se-Quant ZIC-HILIC, 150 x 4.6 mm, 5 µm particle size

Flow Rate 1.0 mL/min
Temperature 25 °C
πηθεσιού γοιοπο 5 με

CDXA-ATR-6299-01 Page 3 of 6

## ANALYTICAL METHOD

STANDARD(S) All standards supplied by ChromaDex, unless otherwise specified.

Part #

Taurine

ASB-00020056

#### LABORATORY SUPPLIES

Analytical Balance Ultrasonication Bath Assorted and Volumetric glassware Syringes and Syringe Filters HPLC/GC glass vials and caps

#### SOLVENTS AND REAGENTS

Milli-Q Water Methanol (MeOH) Acetonitrile (ACN) Ammonium Formate Formic Acid

#### SOLUTION PREPARATION

#### Mobile Phase A – 10 mM Ammonium Formate (ag) pH= 4.0

The mobile phase A was prepared by weighing 630 mg of ammonium formate into a 1000 mL volumetric flask, and adding 900 mL of  $H_2O$ . The solution was stirred until the solid dissolved. The solution was diluted to volume with  $H_2O$  and adjusted the pH to 4.0 with formic acid.

#### Diluent - 50:50 (MeOH: H2O)

Diluent was prepared by mixing 500 mL of H<sub>2</sub>O and 500 mL of MeOH.

#### STANDARD PREPARATION

#### **Taurine Check Standard Solution**

Weighed approximately 10 mg of standard into a 10 mL volumetric flask, diluted to volume with diluent and sonicated till dissolved. Prepared 5 linearity standard form this stock

CDXA-ATR-6299-01

Page 2 of 6

## SUMMARY

## SAMPLE(S)

	Lot#	CDXA#
Giant Sport Delicious Protein	GSDV10714	CDXA-14-4180

## • RESULTS

#### Table 1 - CDXA-14-4180

Analyte	Units	Spec.	Result	Reporting Limit
Taurine Serving Size = 36 σ	mg/serving		3229	( <del>14</del>



10005 Muirlands Blvd., Suite G. | Irvine, CA 92618 Phone: (949) 419-0288 | Fax: (949) 419-0294 www.chromadex.com

## **Analytical Test Report**

Oliver Law Group PC Customer: Report Number: CDXA-ATR-6299-01

Address (City, State): Rochester, MI Project Number: ORD66767

Purchase Order: N/A Date Received: 08-Jul-14

Date of Report: 06-Oct-14 Test Location: Boulder, CO

Assay: Taurine by HPLC

Part Number: CDA-00100197-ATR

> Prepared By: **Hadi Cassier** 06-Oct-14 **Analytical Chemist** Date

Reviewed By: 06-Oct-14 Richard Vigil

Manager I, Analytical Services Date

Sarah Garthe
DN: cn=Sarah Garthe, o=ChromaDex
Analytics, ou=Quality Assurance,
email=SarahGephromadex.com, c=US
Date: 2014.10.06 14:52:38-06'00'

Approved By: 06-Oct-14

Quality Assurance Date

Signed original on file at CDXA

CDXA-ATR-6457-01 Page 9 of 9

### REFERENCES

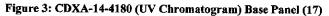
Analytical Method: 99.1-CD-5.0-000186 "Amino Acids by Pre-Column Derivitization HPLC."

Laboratory Notebook	Page(s)
385	97-98
362	156

#### REVISION HISTORY

Revision Number	Document/Changes
00	New report
01	Serving size changed to 36 g and results adjusted

CDXA-ATR-6457-01 Page 8 of 9



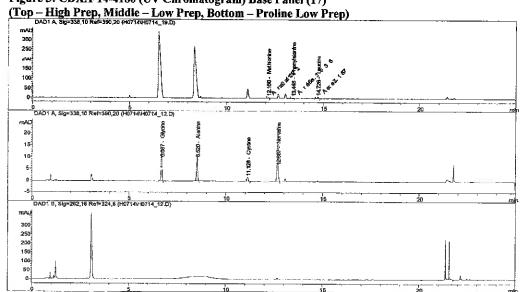
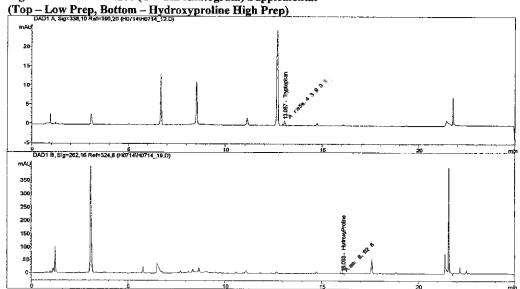


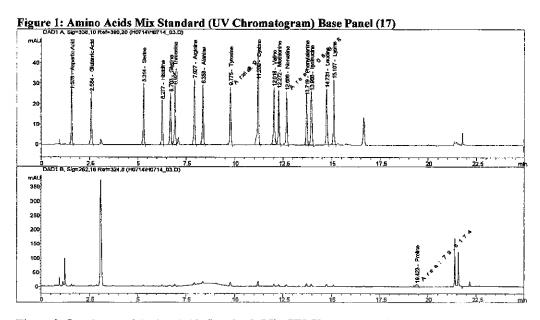
Figure 4: CDXA-14-4180 (UV Chromatogram) Supplemental

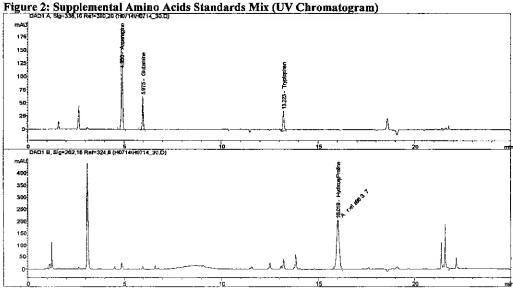


CDXA-ATR-6457-01 Page 7 of 9

## DATA

#### FIGURES





CDXA-ATR-6457-01 Page 6 of 9

#### Autosampler Injector Set-Up and Program:

Draw speed: 200 µL/min Eject speed: 200uL/min Draw Position: 0.0 mm Equilibration Time 2.0 sec

Vial 1 = Borate Buffer (HPLC vial, screw-cap)

Vial 2 = Injection Diluent

Vial 3 = OPA (GC vial w/ insert, crimp-cap)
Vial 4 = FMOC (GC vial w/ insert, crimp-cap)

Vial 5 = Water (HPLC vial, no cap)
Vial 6 = Water (HPLC vial, no cap)

Vial 7 = Acetonitrile (HPLC vial, no cap)

Row	Action
1	Needle wash in Vial 6, 1 times
2	Needle wash in Vial 5, 1 times
3	Needle wash in Vial 7, 1 times
4	Draw 2.5 µL from Vial 1 def. speed, def. offset
5	Draw 1.0 µL from Sample, def. speed, def. offset
6	Mix 3.5 µL "in seat", max. speed, 5 times
7	Wait 0.20 minutes
8	Draw 1.0 µL from Vial 3
9	Mix 4.5 µL in seat, max. speed, 10 times
10	Wait 1.00 min
11	Draw 0.4 µL from Vial 4 def. speed, def. offset
12	Mix 4.9 µL in seat, max. speed, 10 times
13	Wait 1.00 min
14	Draw 32. µL from Vial 2 def. speed, def. offset
15	Mix 36.9 µL in seat, max. speed, 8 times
16	Inject
17	Wait 0.20 min

18

Valve bypass

CDXA-ATR-6457-01 Page 5 of 9

#### INSTRUMENT PARAMETERS

Instrument Agilent 1100 Series HPLC System

Detection UV-Vis

Mobile Phase A 10 mM Na₂B₄O<sub>7</sub> pH= 8.2 Mobile Phase B 45:45:10 ACN-MeOH-Water

Gradient Program Time (min) %A %B

0.0 98 2 0.5 2 98 20.0 43 57 20.1 0 100 23.5 0 100 23.6 98 2 25 98 2

Column Agilent Zorbax Eclipse Plus C18 RR, 150 x 4.6mm, 3.5 µm

Flow Rate 1.5 mL/min

Detectior Settings: UV Detection

OPA Amino Acids: 338 nm, 10 nm bandwidth (bw)

FMOC-Amino Acids Reference 390, 20 262 nm, 16 nm bw Reference 324, 8

Injection Volume Injector Program

Column Temperature 40 °C

CDXA-ATR-6457-01 Page 4 of 9

#### Injection diluent

Add 40 ul of concentrated H<sub>3</sub>PO<sub>4</sub> to 10 ml of water

#### STANDARD PREPARATION

Amino Acid Mix A Stock Standard – Includes the Amino Acids Alanine, Arginine, Aspartic Acid, Cystine, Glutamic Acid, Glycine, Histidine, Isoleucine, Leucine, Lysine, Methionine, Phenylalanine, Proline, Serine, Threonine, Tyrosine, and Valine

A mixed amino acid standard containing 17 amino acids was purchased from Agilent and arrived in 0.1N HCl. Calibration standards were then prepared from this mixed stock by diluting with 0.1 N HCl.

#### Hydroxyproline Check Standard

Standard was prepared by weighing 5 mg of standard into a 50 mL volumetric flask. Brought to volume with diluent and sonicated for 30 minutes.

#### Internal Standard

Solution was prepared by weighing 50 mg of Norvaline into a 50 mL volumetric flask. Brought to volume with diluent and mixed well.

# Supplemental mixed standard-Asparagine, Glutamine, Tryptophan, and Hydroxyproline

Mixed standard solution was prepared by adding an aliquot of each standard into a 20 mL scintillation vial. 10 mL of diluent were added, and the solution was sonicated for 30 minutes.

#### SAMPLE PREPARATION

#### Sample Preparation

Sample was prepared at two levels by weighing 25 mg and 1250 mg of sample into 50 mL volumetric masks, so mL or unuent were added to the masks, and the solutions were sonicated for 30 minutes. The solutions were filtered, 900  $\mu$ L of each filtrate was combined with 100  $\mu$ L of IS and mixed well.

CDXA-ATR-6457-01 Page 3 of 9

## ANALYTICAL METHOD

STANDARD(S) All standards supplied by ChromaDex, unless otherwise specified.

#### Part/Lot #

Ready to Inject Amino Acid Mix
Norvaline
Hydroxyproline
Asparagine
Glutamine
Agilent-5061-3330
Agilent-BCBL0180V
Agilent-BCBK363V
Agilent-BCBH3779V
Agilent-BCBK3328V
Tryptophan
Agilent-BCBB7661

#### LABORATORY SUPPLIES

Analytical Balance Ultrasonication Bath Assorted and Volumetric glassware Syringes and Syringe Filters HPLC glass vials and caps

#### SOLVENTS AND REAGENTS

Milli-Q Water
Methanol (MeOH)
Sodium Phosphate, dibasic (Na<sub>2</sub>HPO<sub>4</sub>)
2 N KOH
Acetonitrile (ACN)
Hydrochloric acid (HCl)
OPA (o-phthalaldehyde) – Derivatization reagent for primary amino acids
FMOC (9-fluorenyl-methyl chloroformate) – Derivatization reagent for secondary amino acids
Borate buffer (0.4N in water)
Phosphoric Acid (H<sub>3</sub>PO<sub>4</sub>)

#### SOLUTION PREPARATION

#### Diluent - 0.1 N HCI

The diluent was prepared by transferring 8.4 mL of HCl to a 1000 mL volumetric flask and diluting it to volume with water.

#### Mobile Phase A - 10 mM Na<sub>2</sub>HPO<sub>4</sub>, 10 mM Na<sub>2</sub>B<sub>4</sub>O<sub>7</sub> pH= 8.2

Solution was prepared by adding 2.8 grams  $Na_2HPO_4$  and 7.6 grams of  $Na_2B_4O_7$  to 2000 mL of water and stirring until completely dissolved. The pH was adjusted to 8.4 with 2.4 ml of HCI, followed by drop-wise addition of HCI until the pH was 8.2.

#### Mobile Phase B - 45:45:10 ACN-MeOH-Water

Solution was prepared by combining 900 mL Acetonitrile, 900 mL Methanol, and 200 mL Milli-Q water and mixing well.

CDXA-ATR-6457-01 Page 2 of 9

#### SUMMARY

#### SAMPLE(S)

Lot # CDXA #
Giant Sport Delicious Protein GSDV10714 CDXA-14-4180

#### • KESULIS

Table 1 -- CDXA-14-4180

Analyte	Units	Spec	Result	Reporting Limit
Aspartic acid	mg/serving		ND	9.7
Glutamic acid	mg/serving		ND	11
Serine	mg/serving		ND	7.7
Histidine	mg/serving		ND	12
Glycine	mg/serving		3050	
Threonine	mg/serving		ND	8.7
Arginine	mg/serving		ND	14
Alanine	mg/serving		ND	6.5
Tyrosine	mg/serving		ND	14
Cystine	mg/serving		1520	
Valine	mg/serving		ND	8.5
Methionine	mg/serving		49.4	***
Phenylalanine	mg/serving		45.0	<del>***</del> **
Isoleucine	mg/serving		ND	9.5
Leucine	mg/serving		72.5	92)
Lysine	mg/serving		ND	11
Proline	mg/serving		ND	16
Hydroxyproline	mg/serving		39.8	77 h
Asparagine	mg/serving		ND	3.0
Glutamine	mg/serving		ND	3.0
Tryptophan	mg/serving		946	

Serving Size = 36 g

NU - Not detected above reporting Limit

BRL - Below reporting limit (compound detected below RL)



10005 Muirlands Blvd., Suite G 1 Irvine, CA 92618 Phone: (949) 419-0288 | Fax: (949) 419-0294 www.chromadex.com

## **Analytical Test Report**

Customer:

Oliver Law Group PC

Report Number:

CDXA-ATR-6457-01

Address (City, State):

Rochester, MI

**Project Number:** 

ORD66767

Purchase Order:

Not Provided

Date Received:

08-Jul-14

Date of Report:

06-Oct-14

Test Location:

Boulder, CO

Assay:

Amino Acids Base Panel of 21

Glycine by HPLC

Part Number:

CDA-00100666-ATR

CDA-00100151-ATR

Prepared By:

**Devon Cruz** 

06-Oct-14 Date

Chemist

Reviewed By:

Richard Vigil

06-Oct-14

Manager, Analytical Services

Date

Digitally signed by Sarah Garthe DN: cn=Sarah Garthe, o=ChromaDex Sarah Garthe Analytic, ou=Quality Assurance, mail=SarahGechromades.com, Date: 2014.10.06 14:17:45-06'00'

Approved By:

Quality Assurance

06-Oct-14

Date

Signed original on file at CDXA



10005 Muirlands Blvd., Suite G | Irvine, CA 92618 Phone: (949) 419-0288 1 Fax: (949) 419-0294 www.chromadex.com

# **Analytical Results Sheet**

Customer:

Oliver Law Group PC

Report Number:

CDXA-ARS-20813-01\*

Address (City, State):

Rochester, MI

Project Number:

ORD66767

Sample Name:

Giant Sport Delicious Protein

GSDV10714

Date Received:

08-Jul-14

Sample Lot: CDXA Number:

CDXA-14-4180

Purchase Order:

Not Provided

Assav: Part Number: Total Amino Acid Profile by HPLC

Date of Report:

02-Oct-14

Method:

CDA-00100140-ARS TAALC\_S:10

Test Location:

Sub12

Analyte	Units	Spec.	Result	Reporting Limit
Aspartic Acid	mg/srv		1260	
Threonine	mg/srv		774	( <del>) (4)</del>
Serine	mg/srv		691	_
Glutamic Acid	mg/srv		2531	3 <b>4</b>
Proline	mg/srv		1271	- <del></del>
Glycine	mg/srv		3926	
Alanine	mg/srv		893	_
Valine	mg/srv		774	_
Isoleucine	mg/srv		767	<del></del>
Leucine	mg/srv		1283	-5
ıyrosine	Hyrory		497	1.55
Phenylalanine	mg/srv		511	
Lysine	mg/srv		1077	- <del></del>
Histidine	mg/srv		277	-
Arginine	mg/srv		555	
Cystine	mg/srv		237	
Methionine	mg/srv		330	

Serving Size: 36 g

QA Verified: Adriana Torres

Kristie Kokeny

Signed onginal on file at CDXA

This product analysis is subject to our "Standard Terms and Conditions for the Purchase and Sale of ChromaDex Products and or Services," a copy of which has been provided to our client and is incorporated herein by this reference. As more specifically set form merein, this product analysis is for the benefit of our client only, may not be relied upon by any other party without our prior written consent, relates solely to the sample(s) provided to us by our client and therefore cannot by applied to any other material or sample. Unless otherwise noted, samples were received in acceptable condition and analyzed as received. This document may not be printed in part without the explicit permission of ChromaDex

ND - Not Detected

BRL - Below reporting limit (compound detected below RL)

<sup>\*01</sup> revision to update serving size to 36 g per client request.



10005 Muirlands Blvd., Suite 6 | Irvine, CA 92618 Phone: (949) 419-0288 | Fax: (949) 419-0294 www.chromadex.com

## **Analytical Results Sheet**

Customer: Oliver Law Group PC Report Number: CDXA-ARS-20871-01\*

Address (City, State): Rochester, MI Project Number: ORD66767

Sample Name: Giant Sport Delicious Protein

Sample Lot: GSDV10714 Date Received: 08-Jul-14 CDXA Number: CDXA-14-4180 Purchase Order: Not specified

Assay: Total Nitrogen Date of Report: 02-Oct-14
Part Number: CDA-00101164-ARS Page: 1 of 1
Method: Kjeldahl AOAC 954.01 Test Location: Sub15

Analyte Units Spec. Result Reporting Limit

Nitrogen g/srv – 3.84

Serving size: 36g

\*01 revision to update serving size to 36 g per client request.

Approved: Kristie Kokeny The Co-Aristie Mokeny Approved: Kristie Kokeny

Digitally signed by Kristie Kokeny
Discon-Kristie Kokeny, ou-Cirromadex, Inc.
ou-Custif Naturance,
email-bristiekechromadex.com. cells
Signed on gran 2011-100.1 fille at CDXA

This product analysis is subject to our "Standard Terms and Conditions for the Purchase and Sale of ChromaDex Products and or Services," a copy of which has been provided to our client and is incorporated herein by this reference. As more specifically set form merein, mis product analysis is for the benefit of our client only, may not be relied upon by any other party without our prior written consent, relates solely to the sample(s) provided to us by our client and therefore cannot by applied to any other material or sample. Unless otherwise noted, samples were received in acceptable condition and analyzed as received. This document may not be printed in part without the explicit permission of ChromaDex.

ND - Not Detected

QA Verified: Adriana Torres

BRL - Below reporting limit (compound detected below RL)

CDXA-PR-154-00 Page 3 of 3

#### REFERENCES

- 1) CDXA-ARS-20871-01; Nitrogen by Kjeldahl
- 2) CDXA-ARS-20813-01; Total Amino acids Profile by HPLC
- 3) CDXA-ATR-6457-01; Amino acids Base Panel of 21
- 4) CDXA-ATR-6299-01; Taurine by HPLC
- 5) CDXA-ATR-6490-01; Creatine by HPLC
- 6) CDXA-ARS-20917-00; Elemental Analysis

## REVISION HISTORY

Revision Number Document/Changes

00 Reference CDXA-PR-153-00 ORD66767 for report change.

CDXA-PR-154-00 Page 2 of 3

## SUMMARY

#### ABSTRACT

One sample was received from Oliver Law Group for a multitude of analyses.

 Giant Sport Delicious Protein (lot# GSDV10714); ChromaDex sample# CDXA-14-4180.

#### OBJECTIVE

To perform necessary tests to investigate potential adulteration in "Giant Sport Delicious Protein (lot# GSDV10714)" provided by Oliver Law Group.

#### INTRODUCTION

The sample from Oliver Law Group was analyzed for Nitrogen content by the Kjeldahl method; elemental analysis for Carbon, Hydrogen & Nitrogen content; free and Total amino acid content; raurine, Giycine and Creatine content.

#### DISCUSSION

The sample from Oliver Law Group was analyzed for nitrogen content by the Kjeldahl method; elemental analysis for Carbon, Hydrogen & Nitrogen content; free and Total amino acid content; Taurine, Glycine and Creatine content. The results for the individual analyses are included in the appended reports. A summary is included below in Table 1.

Table 1: Sample: CDXA-14-4180

Analysis	Units	Result
Nitrogen by Kjeldahl	g/srv (36g)	3.84
Total Amino acids	mg/srv (36g)	17654
Free Amino acids	mg/srv(36g)	5722.7
Taurine (free)	mg/srv(36g)	3230
Glycine (free)	mg/srv(36g)	3050
Creatine	mg/srv(36g)	834; 1170
Elemental Analysis	%	42.49% C; 6.67% H; 11.07% N



10005 Muirlands Blvd., Suite G | I rvine, CA 92618 Phone: (949) 419-0288 | Fax: (949) 419-0294 www.chromadex.com

## **Process Report**

Customer: Oliver Law Group PC Report Number: CDXA-PR-154-00

Address (City, State): Rochester, MI Project Number: ORD68622

Purchase Order: N/A Date Received: 08 Jul 14

Date of Report: 7-Oct-14 Test Location: Boulder, CO

Assay: Report Change for Analysis of Samples from Oliver Law Group

Part Number: CDA-RPTCHG

Reviewed By:

Aron Erickson
R&D Director

Digitally signed by Sarah Garthe
Discrepsianh Garthe
Discrepsianh Garthe
Discrepsianh Garthe, one-ChromaDex
Apabrics one-Dustry Assarance

Sarah Garthe
Approved By:

DN: cn=Sarah Garthe, o=ChromaDex Analytics, ou=Quality Assurance, email=SarahG@chromadex.com, c=US Date: 2014.10.07 15:26:51 -06'00'

Quality Assurance

07-Oct-14 Date

Signed original on file at CDXA